



April 23, 2024

Mr. Chang Kim
23886 SE Kent-Kangley Rd.
Maple Valley, WA 98038-6848

RE: Final Compliance Monitoring Summary & NFA Request
4 Corners Cleaners
23886 SE Kent-Kangley Rd.
Maple Valley, WA 98038-6848
AEG Atlas Project # 17-126
VCP ID No. NW3234

Dear Mr. Kim,

AEG Atlas, LLC (AEG) has prepared this report for the purpose of presenting a summary of the confirmation sampling activities at the *4 Corners Cleaners*, located at the above-referenced address in Maple Valley, King County, Washington (Site). A soil vapor extraction (SVE) system was installed on Site in 2019 to remediate soils impacted with tetrachloroethylene (PCE). Confirmation sampling has since been performed for soil, groundwater, and vapor to confirm SVE efforts were successful. Figure 1, *Vicinity Map*, presents the general vicinity of the Site. The Site's current layout and sample locations are illustrated in Figure 2, *Site Map*.

BACKGROUND

PCE impacts at the Site are due to the use and storage of PCE formerly used in the dry cleaner machine and dry-cleaning process. PCE and its anaerobic sequential degradation chain constituents, including trichloroethylene (TCE), cis-1,2-dichloroethylene (DCE), trans-1,2-DCE, and vinyl chloride, are the contaminants of concern (COCs) for the Site. Soil and soil vapor are the media affected. Groundwater is present beneath the Site at depths ranging from 25 to 33 feet below ground surface (bgs), and has been shown to not be impacted.

During the remedial investigation, PCE was the only COC detected in soil above Model Toxics Control Act (MTCA) cleanup levels. PCE exceeded the MTCA Method A cleanup level in AEG soil samples B1-22 (1.8 feet bgs) and B3-23 (1.9 feet bgs). Both borings were located inside the building adjacent the former dry-cleaning machine. The vertical extent of PCE in these borings could not be determined due to the very dense soils encountered and the limitations of the machinery used to drill in these soils inside the building. PCE was also detected in boring B-11 at 18 feet bgs, which is outside the building to the north.

SVE SYSTEM AND COMPLIANCE SAMPLING

In 2019, AEG installed and began operating and monitoring the performance of the SVE system. Since startup, on behalf of AEG, DH Environmental, Inc. (DHE) has continued routine operations and maintenance (O&M) work and the SVE system has been operating normally. The only system shutdowns have been the result of general power failures and intended shutdowns during sampling events.

The system performance has been monitored by sampling a network of four sub-slab vapor pins installed throughout the inside of the business (VP-1 through VP-4). The analytical results of the past four performance sampling events (May & October 2022, and March & October 2023) indicated that all constituents analyzed for were either non-detect or detected below MTCA Method B screening levels. Analytical results of the sub-slab analytical results are presented in Table 3, *Summary of Sub-Slab Vapor Analytical Results*. Analytical results of the SVE System analytical results are presented in Table 4, *Summary of SVE System Air Analytical Results*. Sample locations are illustrated on Figure 2, *Site Map*.

As of the October 18, 2023, monitoring date, the SVE system had been operational at the Site for 1,199 days. Based on the October 2023 sub-slab vapor results, AEG scheduled confirmation soil sampling to evaluate the success of the SVE system in remediating PCE-impacted soil. On November 19 and 20, 2023, AEG advanced six soil borings (B-14 through B-19) using a limited-access, direct-push drill rig (inside the tenant space) and a hollow-stem auger rig (outside) in areas where COCs were previously detected above MTCA screening levels. Borings B-14 through B-16 were advanced inside the building near borings B-1 through B-3 where PCE-impacted soil was present during the initial 2017 investigation. Borings B-17 through B-19 were advanced in the area to the north of the store. A total of 10 soil samples collected from the borings were submitted for laboratory analysis.

Analytical results of soil sample B-17-20 indicated the presence of PCE at 0.089 milligrams per kilogram (mg/kg) at 20 feet bgs, which exceeds the MTCA Method A cleanup level of 0.05 mg/kg. Analytical results from all other soil samples were either non-detect or below MTCA Method A cleanup levels. Since the PCE exceedance detected in B-17-20 (0.089 mg/kg) is less than twice the MTCA Method A cleanup level of 0.05 mg/kg, and it was detected in less than 10% of the samples, the Site is in compliance with MTCA cleanup standards per WAC 173-340-740(7)(e).

Based on the confirmation soil sampling results, the SVE system was turned off on December 8, 2023.

Ecology issued an opinion on April 13, 2022, in response to work performed to that point. As part of their opinion, Ecology requested that quarterly groundwater monitoring resume when operation of the SVE system is complete. As such, groundwater monitoring of the four Site monitoring wells (MW-1, MW-2, MW-3, and MW-5) resumed on January 3, 2024, and sampled again on April 12,

2024. Subcontractor Blaine Tech gauged the four monitoring wells and collected groundwater samples to be analyzed for PCE and breakdown products. Consistent with all groundwater sampling performed to date, analytical results of the groundwater samples were non-detect for all constituents analyzed. Analytical results of the groundwater samples collected to date are presented as compared to MTCA Method A cleanup levels in Table 2, *Summary of Groundwater Analytical Results*.

While two additional quarterly events are budgeted for this project, it is AEG's professional opinion that groundwater sampling to date, including two consecutive quarters of non-detect results after system shutdown, are sufficient to demonstrate groundwater meets MTCA cleanup standards.

RECOMMENDATIONS

Based on the work performed to date at the Site, MTCA cleanup standards have been achieved for all affected media, and continued operation of the SVE system does not appear to be warranted. AEG recommends submitting this memo to Ecology for review in consideration of a No Further Action (NFA) determination. If you have comments or questions, please contact our office at your convenience at 360.352.9835.

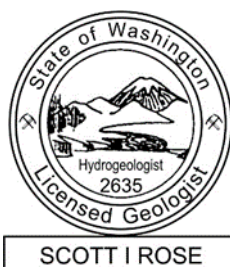
Sincerely,

AEG Atlas, LLC



Scott Rose, L.H.G.

Director of Technical Services



Attachments: Figure 1 – *Vicinity Map*

Figure 2 – *Site Map*

Figure 3 – *Cross-Section Index Map and PCE Plume in Soil*

Figure 4 – *Cross-Section A-A'*

Figure 5 – *Cross-Section B-B'*

Table 1 – *Summary of Soil Analytical Results*

Table 2 – *Summary of Groundwater Analytical Results*

Table 3 – *Summary of Sub-Slab Vapor Analytical Results*

Table 4 – *Summary of SVE System Air Analytical Results*

Appendix A: Supporting Documents:

Boring Logs

Laboratory Datasheets



Voluntary Cleanup Program

Washington State Department of Ecology Toxics Cleanup Program

REQUEST FOR OPINION FORM

Use this form to request a written opinion on your planned or completed independent remedial action under the Voluntary Cleanup Program (VCP). Attach to this form the plans or reports documenting the remedial action. Please submit only one form for each request.

Step 1: IDENTIFY HAZARDOUS WASTE SITE

Please identify below the hazardous waste site for which you are requesting a written opinion under the VCP. This information may be found on the VCP Agreement.

Facility/Site Name: Four Corners Cleaners New Location

Facility/Site Address: 23886 SE Ken-Kangley Roas, Maple Valley

Facility/Site No: 5867

VCP Project No.: NW3234

Step 2: REQUEST WRITTEN OPINION ON PLAN OR REPORT

What type of independent remedial action plan or report are you submitting to Ecology for review under the VCP? Please check all that apply.

- ☐ Remedial investigation plan
- ☐ Remedial investigation report
- ☐ Feasibility study report
- ☐ Property cleanup* plan (* cleanup of one or more parcels located within the Site)
- ☐ Property cleanup* report
- ☐ Site cleanup plan
- ☒ Site cleanup report
- ☐ Other – please specify:

Do you want Ecology to provide you with a written opinion on the planned or completed independent remedial action?

☒ Yes ☐ No

Please note that Ecology's opinion will be limited to:


- Whether the planned or completed remedial action at the site meets the substantive requirements of the Model Toxics Control Act (MTCA), and/or
- Whether further remedial action is necessary at the site under MTCA.

Step 3: REPRESENTATIONS AND SIGNATURE

The undersigned representative of the Customer hereby certifies that he or she is fully authorized to request services from Ecology under the Agreement for this VCP Project.

Name: Scott Rose

Title: Director of Technical Svcs

Signature: 

Date: 4/23/24

Organization: AEG Atlas, LLC

Mailing address: 2633 Parkmont Lane SW, Suite A

City: Olympia

State: WA

Zip code: 98501

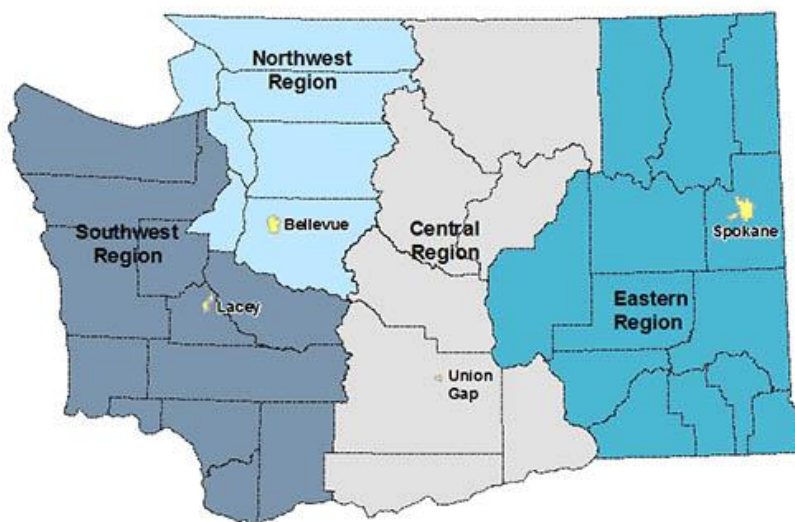
Phone: 360-352-9835

Fax:

E-mail: srose@aegwa.com

Step 4: SUBMITTAL

Please mail your completed form and the independent remedial action plan or report that you are requesting Ecology review to the site manager Ecology assigned to your Site. If a site manager has not yet been assigned, please mail your completed form to the Ecology regional office for the County in which your Site is located.

**Northwest Region:**

Attn: VCP Coordinator
3190 160th Ave. SE
Bellevue, WA 98008-5452

Central Region:

Attn: VCP Coordinator
1250 West Alder St.
Union Gap, WA 98903-0009

Southwest Region:

Attn: VCP Coordinator
P.O. Box 47775
Olympia, WA 98504-7775

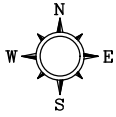
Eastern Region:

Attn: VCP Coordinator
N. 4601 Monroe
Spokane WA 99205-1295

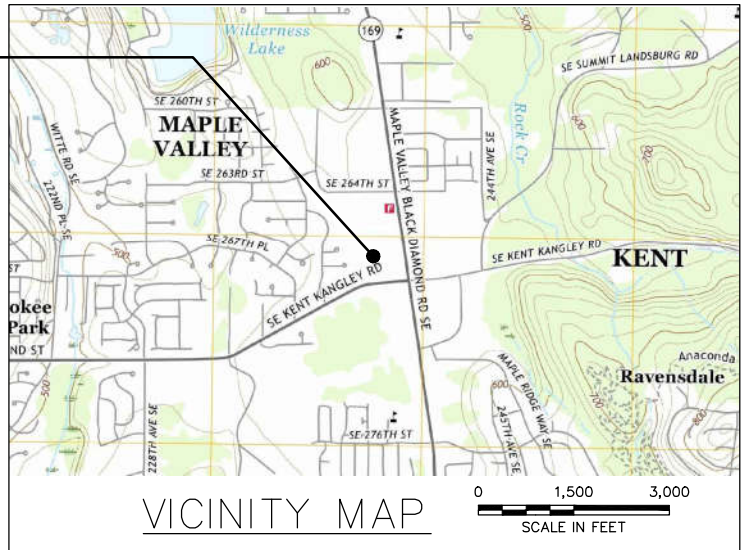
If you need this publication in an alternate format, please call the Toxics Cleanup Program at 360-407-7170. Persons with hearing loss can call 711 for Washington Relay Service. Persons with a speech disability can call 877-833-6341.

FIGURES

FILENAME	DRAWN BY	CHECKED BY	APPROVED BY	PROJECT NUMBER
17-126_1701.DWG	ICD	3/22/2017	CS	3/22/2017
				17-126



PROJECT LOCATION



NOTES

1. THE LOCATIONS OF ALL FEATURES SHOWN ARE APPROXIMATE
2. THIS DRAWING IS FOR INFORMATION PURPOSES. IT IS INTENDED TO ASSIST IN SHOWING FEATURES DISCUSSED IN AN ATTACHED DOCUMENT.

REFERENCE

DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG, LLC.
VICINITY IMAGE SOURCE: U.S. GEOLOGICAL SURVEY-2017, 7.5 MINUTE QUADRANGLE MAP
BLACK DIAMOND, WASHINGTON

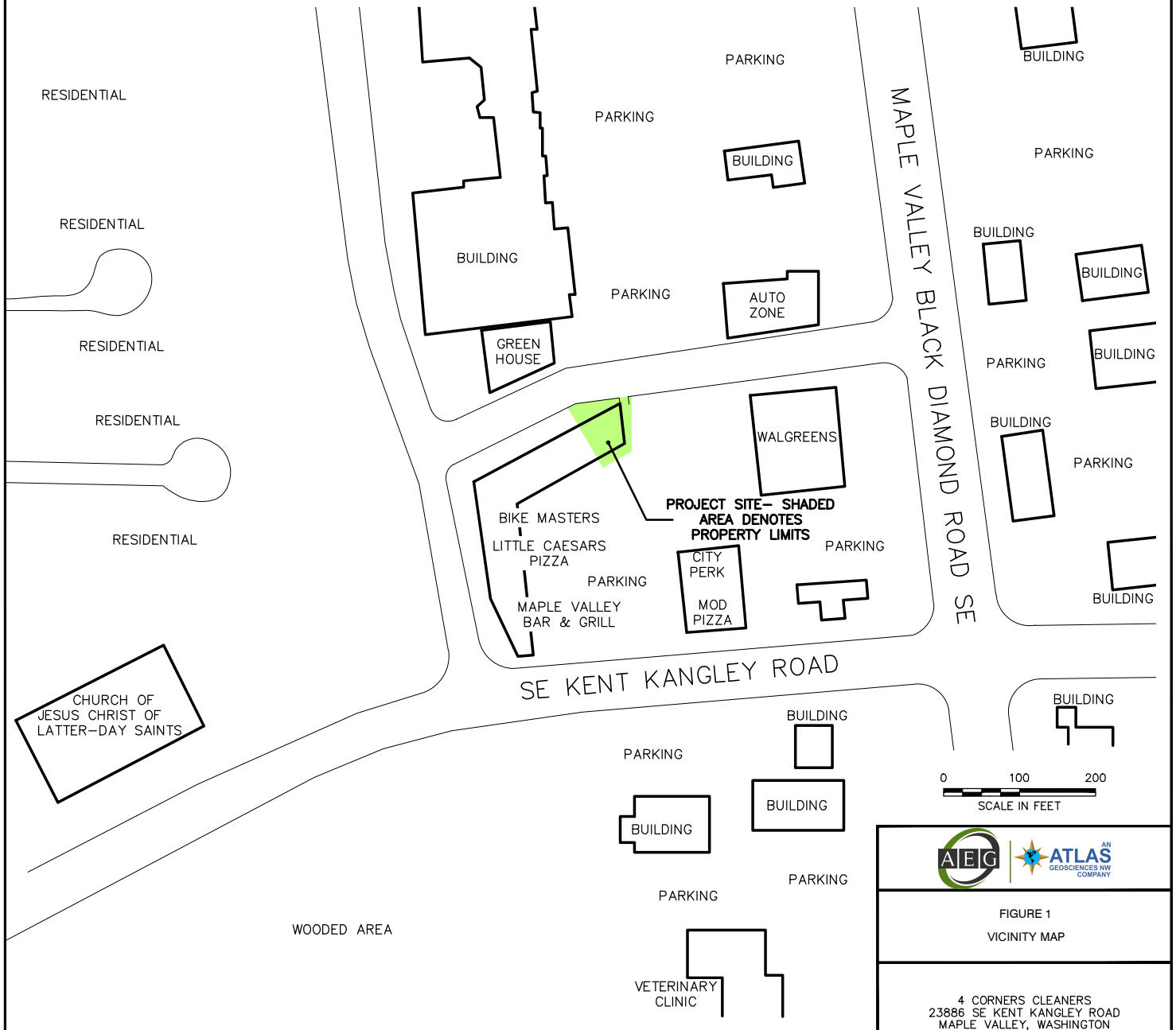
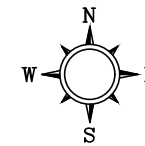


FIGURE 1
VICINITY MAP

4 CORNERS CLEANERS
23886 SE KENT KANGLEY ROAD
MAPLE VALLEY, WASHINGTON



LEGEND

MW-1	◆	MONITORING WELL LOCATION
B-1	●	SOIL BORING LOCATION
SV-1	▲	SUB-SLAB VAPOR SAMPLE LOCATION
SVE-1	■	SOIL VAPOR EXTRACTION WELL LOCATION
VP-1	○	VAPOR MONITORING POINT LOCATION

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DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG ATLAS, LLC.

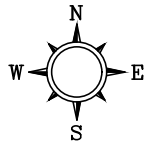
0 7 14
SCALE IN FEET



FIGURE 2

SITE MAP

4 CORNERS CLEANERS
23886 SE KENT KANGLEY ROAD
MAPLE VALLEY, WASHINGTON



LEGEND

- MW-1 MONITORING WELL LOCATION
- B-1 SOIL BORING LOCATION
- SV-1 SUB-SLAB VAPOR SAMPLE LOCATION
- SVE-1 SOIL VAPOR EXTRACTION WELL LOCATION
- VP-1 VAPOR MONITORING POINT LOCATION

A-A' LINE OF LITHOLOGIC CROSS SECTION AND PROJECTION LINE TO BORING/WELL

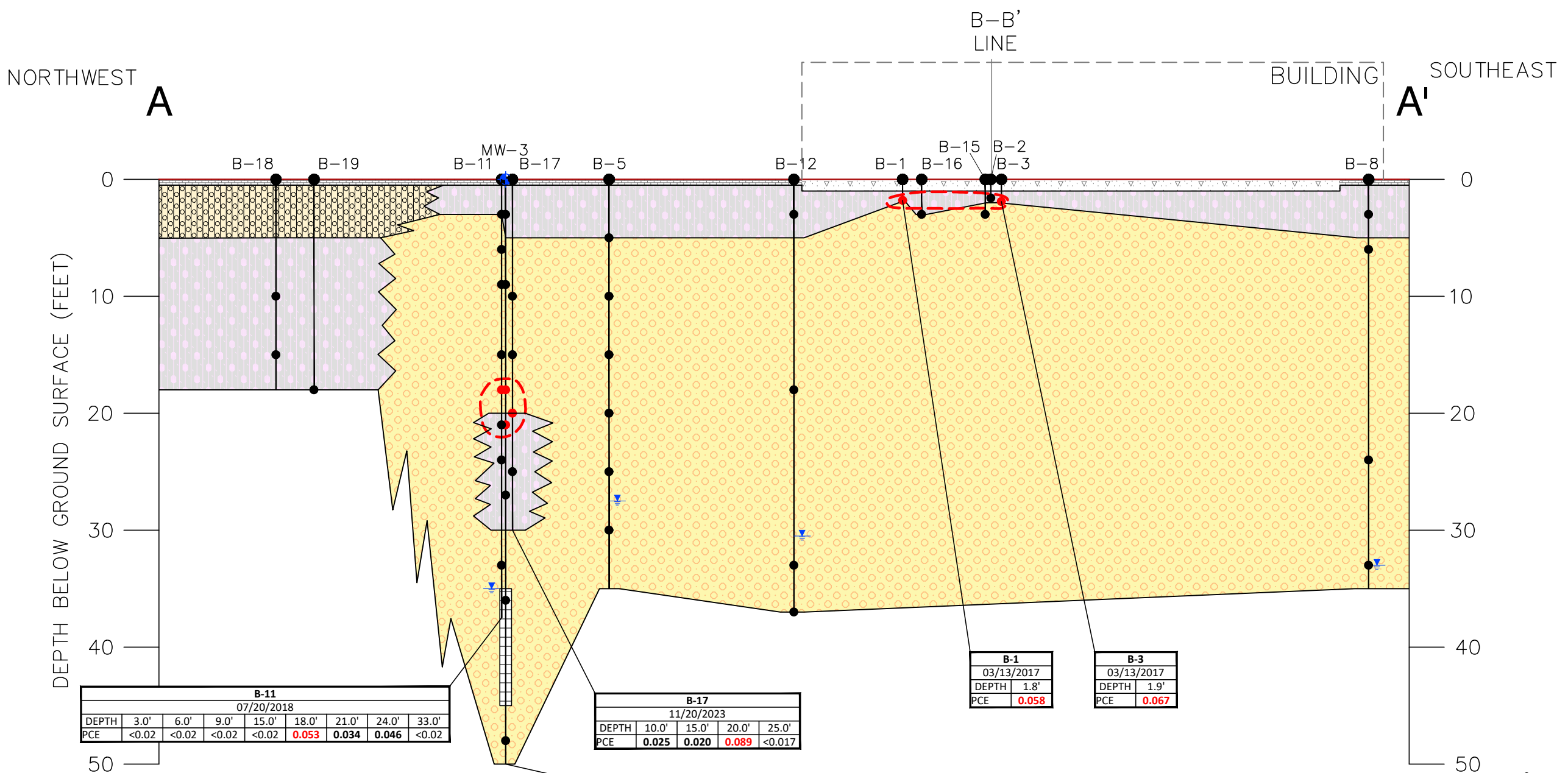
ESTIMATED EXTENT OF HISTORICAL PCE PLUME IN SOIL

0 7 14
SCALE IN FEET



FIGURE 3
CROSS-SECTION INDEX MAP
AND PCE PLUME IN SOIL

4 CORNERS CLEANERS
23886 SE KENT KANGLEY ROAD
MAPLE VALLEY, WASHINGTON



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REFERENCE

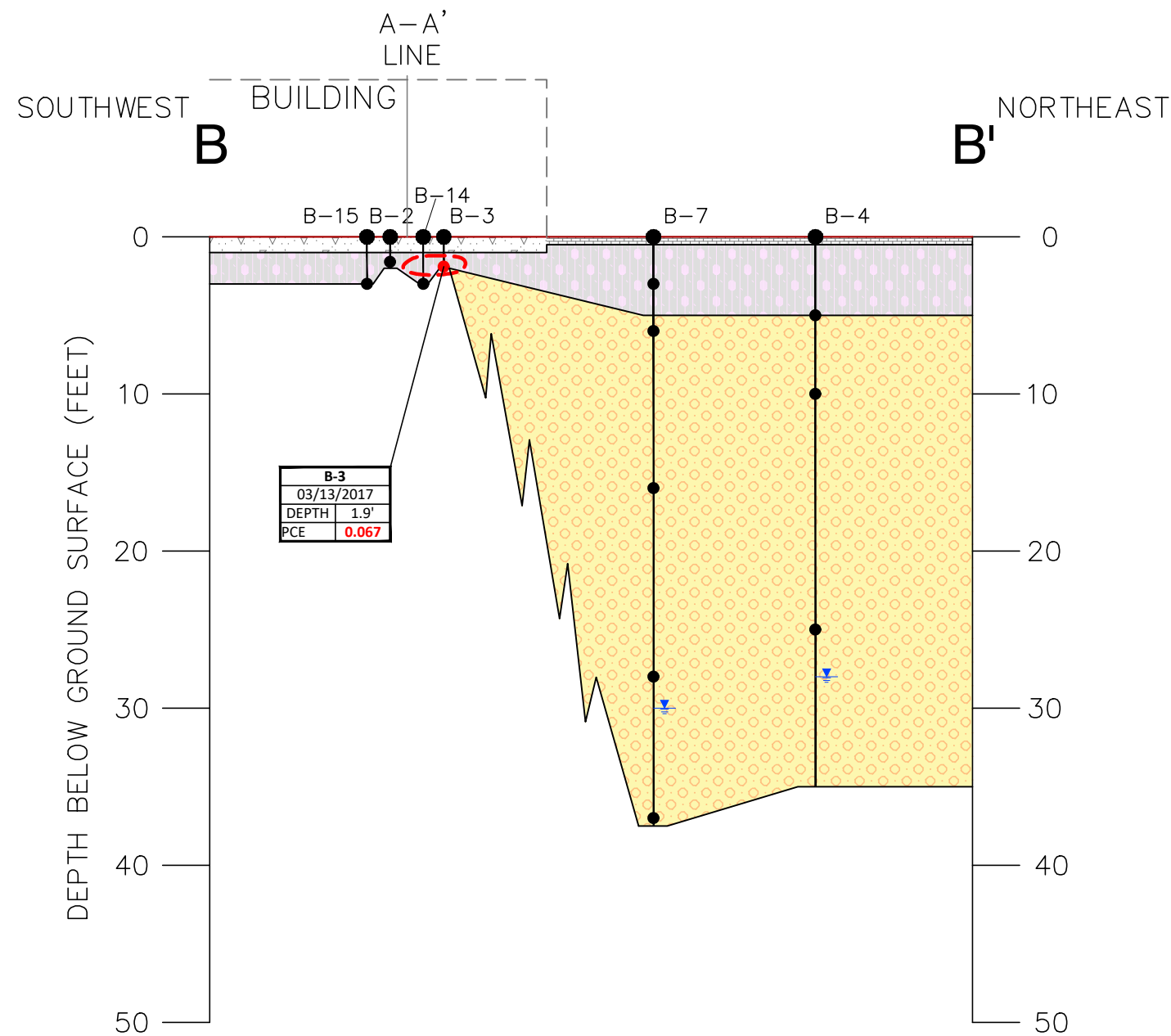
DRAWING CREATED FROM AERIAL PHOTOGRAPH AND NOTES PROVIDED BY AEG ATLAS, LLC.



FIGURE 4

CROSS-SECTION A-A'

4 CORNERS CLEANERS
23886 SE KENT KANGLEY ROAD
MAPLE VALLEY, WASHINGTON



LEGEND

- B-15
- SOIL BORING
- GROUNDWATER LEVEL AT TIME OF DRILLING
- SCREENED INTERVAL
- SOIL SAMPLE LOCATION (< MTCA CLEANUP LEVELS)
- SOIL SAMPLE LOCATION (> MTCA CLEANUP LEVELS)
- MAXIMUM DEPTH EXPLORED

- SOIL CONTACT
- ASPHALT
- CONCRETE
- SM= SILTY SANDS, SAND-SILT MIXTURES
- SP= POORLY-GRADED SANDS, GRAVELLY SANDS
- GM= SILTY GRAVELS, GRAVEL-SAND-SILT MIXTURES
- ESTIMATED EXTENT OF HISTORICAL PCE PLUME IN SOIL

PCE TETRACHLOROETHENE (mg/kg)
< NOT DETECTED ABOVE LIMIT NOTED
mg/kg MILLIGRAMS PER KILOGRAM
DP DEPTH IN FEET
BOLD VALUE INDICATES THE DETECTED CONCENTRATION IS BELOW ECOLOGY MTCA METHOD A CLEANUP LEVELS
RED BOLD VALUE INDICATES THE DETECTED CONCENTRATION EXCEEDS ECOLOGY MTCA METHOD A CLEANUP LEVELS

- NOTES
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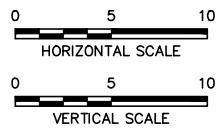


FIGURE 5
CROSS-SECTION B-B'

4 CORNERS CLEANERS
23886 SE KENT KANGLEY ROAD
MAPLE VALLEY, WASHINGTON

TABLES

Table 1 - Summary of Soil Analytical Results
4 Corners Dry Cleaning (17-126)
Maple Valley, Washington

Sample Number	Depth Collected (feet)	Date Collected	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
B1-22	1.8	3/13/2017	0.058	<0.02	<0.05	<0.05	<0.02
B2-20	1.6	3/13/2017	0.044	<0.02	<0.05	<0.05	<0.02
B3-23	1.9	3/13/2017	0.067	<0.02	<0.05	<0.05	<0.02
B4-5	5.0	7/17/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B4-10	10.0	7/17/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B4-25	25.0	7/17/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B5-5	5.0	7/17/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B5-10	10.0	7/17/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B5-15	15.0	7/17/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B5-25	25.0	7/17/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B5-30	30.0	7/17/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B6-5	5.0	7/18/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B6-10	10.0	7/18/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B6-25	25.0	7/18/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B6-35	35.0	7/18/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B7-3	3.0	7/18/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B7-6	6.0	7/18/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B7-16	16.0	7/18/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B7-28	28.0	7/18/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B7-37	37.0	7/18/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B8-3	3.0	7/19/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B8-6	6.0	7/19/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B8-24	24.0	7/19/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B8-33	33.0	7/19/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B9-3	3.0	7/19/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B9-9	9.0	7/19/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B9-15	15.0	7/19/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B9-24	24.0	7/19/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B9-33	33.0	7/19/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B10-3	3.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B10-6	6.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B10-15	15.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B10-27	27.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B10-33	33.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02

Table 1 - Summary of Soil Analytical Results
4 Corners Dry Cleaning (17-126)
Maple Valley, Washington

Sample Number	Depth Collected (feet)	Date Collected	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
B11-3	3.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B11-6	6.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B11-9	9.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B11-15	15.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B11-18	18.0	7/20/2018	0.053	<0.02	<0.05	<0.05	<0.02
B11-21	21.0	7/20/2018	0.034	<0.02	<0.05	<0.05	<0.02
B11-24	24.0	7/20/2018	0.046	<0.02	<0.05	<0.05	<0.02
B11-33	33.0	7/20/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B12-3	3.0	7/23/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B12-18	18.0	7/23/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B12-33	33.0	7/23/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B12-37	37.0	7/23/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B13-3	3.0	7/23/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B13-18	18.0	7/23/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B13-35	35.0	7/23/2018	<0.02	<0.02	<0.05	<0.05	<0.02
B13-37	37.0	7/23/2018	<0.02	<0.02	<0.05	<0.05	<0.02
MW1-3	3.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW1-9	9.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW1-15	15.0	5/18/2020	0.019 J	<0.02	<0.05	<0.05	<0.02
MW1-18	18.0	5/18/2020	<0.02	0.011 J	<0.05	<0.05	<0.02
MW1-20	20.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW1-23	23.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW1-33	33.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW1-36	36.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW1-50	50.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW2-3	3.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW2-9	9.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW2-15	15.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW2-18	18.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW2-21	21.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW2-23	23.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW2-36	36.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW2-43	43.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW2-50	50.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02

Table 1 - Summary of Soil Analytical Results
4 Corners Dry Cleaning (17-126)
Maple Valley, Washington

Sample Number	Depth Collected (feet)	Date Collected	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
MW3-3	3.0	5/18/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW3-9	9.0	5/19/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW3-18	18.0	5/19/2020	<0.02	0.031	<0.05	<0.05	<0.02
MW3-21	21.0	5/19/2020	0.12	<0.02	<0.05	<0.05	<0.02
MW3-27	27.0	5/19/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW3-36	36.0	5/19/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW3-48	48.0	5/19/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW5-3	3.0	5/20/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW5-9	9.0	5/20/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW5-15	15.0	5/20/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW5-18	18.0	5/20/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW5-21	21.0	5/20/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW5-30	30.0	5/20/2020	<0.02	<0.02	<0.05	<0.05	<0.02
MW5-45	45.0	5/20/2020	<0.02	<0.02	<0.05	<0.05	<0.02
B-14-3	3.0	11/19/2023	0.024	<0.012	<0.017	<0.017	<0.012
B-15-3	3.0	11/19/2023	0.014	<0.011	<0.017	<0.017	<0.011
B-16-3	3.0	11/19/2023	0.012	<0.012	<0.018	<0.018	<0.012
B-17-10	10.0	11/20/2023	0.025	<0.016	<0.024	<0.024	<0.016
B-17-15	15.0	11/20/2023	0.020	<0.019	<0.029	<0.029	<0.019
B-17-20	20.0	11/20/2023	0.089	<0.013	<0.020	<0.020	<0.013
B-17-25	25.0	11/20/2023	<0.017	<0.017	<0.026	<0.026	<0.017
B-18-10	10.0	11/20/2023	0.013	<0.013	<0.019	<0.019	<0.013
B-18-15	15.0	11/20/2023	<0.066	<0.013	<0.020	<0.020	<0.013
B-19-18	18.0	11/20/2023	0.042	<0.011	<0.017	<0.017	<0.011
MTCA Method A Cleanup Levels			0.05	0.03	160*	1,600*	0.67*

Notes:

All values are presented in milligrams per kilogram (mg/kg)

< = Not detected at the listed laboratory detection limits

PQL = Practical Quantification Limit (laboratory detection limit)

*Method B cleanup level for direct contact; no Method A cleanup has been established.

Red Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level

Bold indicates the detected concentration is below Ecology MTCA Method A cleanup levels

J = Indicates analyte was positively identified and reported result is an estimate.

PCE = Tetrachloroethene

TCE = Trichloroethene

DCE = Dichloroethene

Table 2 - Summary of Groundwater Analytical Results

4 Corners Cleaners (17-126)

Maple Valley, Washington

Sample Number	Date Collected	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
Boring Groundwater Data						
B4-W	7/17/2018	<1.0	<1.0	<1.0	<1.0	<0.2
B5-W	7/17/2018	<1.0	<1.0	<1.0	<1.0	<0.2
B6-W	7/18/2018	<1.0	<1.0	<1.0	<1.0	<0.2
B7-W	7/18/2018	<1.0	<1.0	<1.0	<1.0	<0.2
B8-W	7/19/2018	<1.0	<1.0	<1.0	<1.0	<0.2
B9-W	7/19/2018	<1.0	<1.0	<1.0	<1.0	<0.2
Monitoring Well Groundwater Data¹						
MW-1	6/23/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	9/14/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	12/11/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	3/19/2021	<1.0	<0.4	<1.0	<1.0	<0.2
	7/15/2022	<1.0	<0.4	<1.0	<1.0	<0.2
	1/12/2023	<1.0	<0.4	<1.0	<1.0	<0.2
	7/7/2023	<1.0	<0.4	<1.0	<1.0	<0.2
	1/3/2024	<1.0	<0.4	<1.0	<1.0	<0.2
	4/19/2024	Vehicle parked on well; inaccessible				
MW-2	6/23/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	9/14/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	12/11/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	3/19/2021	<1.0	<0.4	<1.0	<1.0	<0.2
	7/15/2022	<1.0	<0.4	<1.0	<1.0	<0.2
	1/12/2023	<1.0	<0.4	<1.0	<1.0	<0.2
	7/7/2023	<1.0	<0.4	<1.0	<1.0	<0.2
	1/3/2024	<1.0	<0.4	<1.0	<1.0	<0.2
	4/19/2024	<1.0	<0.4	<1.0	<1.0	<0.2
MW-3	6/23/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	9/14/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	12/11/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	3/19/2021	<1.0	<0.4	<1.0	<1.0	<0.2
	7/15/2022	<1.0	<0.4	<1.0	<1.0	<0.2
	1/12/2023	<1.0	<0.4	<1.0	<1.0	<0.2
	7/7/2023	<1.0	<0.4	<1.0	<1.0	<0.2
	1/3/2024	<1.0	<0.4	<1.0	<1.0	<0.2
	4/19/2024	<1.0	<0.4	<1.0	<1.0	<0.2

Table 2 - Summary of Groundwater Analytical Results

4 Corners Cleaners (17-126)

Maple Valley, Washington

Sample Number	Date Collected	PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
MW-5	6/23/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	9/14/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	12/11/2020	<1.0	<0.4	<1.0	<1.0	<0.2
	3/19/2021	<1.0	<0.4	<1.0	<1.0	<0.2
	7/15/2022	<1.0	<0.4	<1.0	<1.0	<0.2
	1/12/2023	<1.0	<0.4	<1.0	<1.0	<0.2
	7/7/2023	<1.0	<0.4	<1.0	<1.0	<0.2
	1/3/2024	<1.0	<0.4	<1.0	<1.0	<0.2
	4/19/2024	<1.0	<0.4	<1.0	<1.0	<0.2
PQL		1.0	0.4/1.0	1.0	1.0	0.2
MTCA Method A Cleanup Levels		5	5	160*	16*	0.2

Notes:

All values present are micrograms per liter (µg/L)

-- = Not analyzed for constituent

< = Not detected at the listed laboratory detection limits

PQL = Practical Quantification Limit (laboratory detection limit)

Red Bold indicates the detected concentration exceeds Ecology MTCA Method A cleanup level**Bold** indicates the detected concentration is below Ecology MTCA Method A cleanup levels

PCE = Tetrachloroethene

TCE = Trichloroethene

DCE = Dichloroethene

¹Refusal was consistently encountered throughout the area proposed for well MW-4; it was never installed.

* MTCA Method B cleanup level; Method A cleanup level not established

Table 3 - Summary of Sub-Slab Vapor Analytical Results
4 Corners Cleaners (17-126)
Maple Valley, Washington

Sample Number	Date Collected	PCE and Daughter Products				
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
SV-1	3/31/2017	1,600	<10	<10	<10	<10
SV-2	3/31/2017	1,800	<10	<10	<10	<10
SV-3	3/31/2017	1,500	<10	<10	<10	<10
SV-4	3/31/2017	790	<10	<10	<10	<10
SV-5	3/31/2017	940	<10	<10	<10	<10
SV-6	3/31/2017	850	<10	<10	<10	<10
SV-7	3/31/2017	1,700	<10	<10	<10	<10
SV-8	3/31/2017	1,100	<10	<10	<10	<10
SV-9	3/31/2017	2,800	<10	<10	<10	<10
SV-10	3/31/2017	2,100	<10	<10	<10	<10
SV-11	3/31/2017	6,300	<10	<10	<10	<10
SV-12	3/31/2017	2,600	<10	<10	<10	<10
SV-13	3/31/2017	180	<10	<10	<10	<10
SV-14	3/31/2017	2,600	<10	<10	<10	<10
SVE SYSTEM STARTUP OCTOBER 9, 2019						
VP-1 ¹	10/9/2019	586	4.48	<0.793	<0.793	<0.511
	12/16/2019	4.03	1.95	<0.793	<0.793	<0.511
	1/16/2020	264E	3.18	<0.793	<0.793	<0.511
	2/25/2020	198	3.92	<0.793	<0.793	<0.511
	3/16/2020	270	3.7	<2.7	<2.7	<1.7
	5/20/2020	570	4.3	<5.6	<5.6	<3.6
	7/8/2020	580	4.6	<2.8	<2.8	<1.8
	8/26/2020	42	<1.0	<1.5	<1.5	<0.97
	9/16/2020	<45	<0.71	<2.6	<2.6	<1.7
	12/17/2020	420	2.7	<8.3	<8.3	<5.4
	4/20/2021	150	1.8	<2.5	<2.5	<1.6
	6/21/2021	53	1.2	<2.8	<2.8	<1.8
	8/17/2021	68	<2.1	<7.9	<7.9	<5.1
	11/2/2021	240	1.8	<2.5	<2.5	<1.6
	5/9/2022	<28	<0.44	<1.6	<1.6	<1.0
	10/6/2022	<39	<0.62	<2.3	<2.3	<1.5
	3/23/2023	69	1.1	<2.3	<2.3	<1.5
	10/18/2023	130	2.1	<3.3	<3.3	<2.1

Table 3 - Summary of Sub-Slab Vapor Analytical Results

4 Corners Cleaners (17-126)

Maple Valley, Washington

Sample Number	Date Collected	PCE and Daughter Products				
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
VP-2 ¹	10/9/2019	<2.03	<1.07	<0.793	<0.793	<0.511
	12/16/2019	4.77	<1.07	<0.793	<0.793	<0.511
	1/16/2020	101	1.49	<0.793	<0.793	<0.511
	2/25/2020	72	<1.07	<0.793	<0.793	<0.511
	3/16/2020	66	<1.07	<2.7	<2.7	<1.7
	5/20/2020	230	<1.8	<2.7	<2.7	<1.7
	7/8/2020	170	<1.9	<2.8	<2.8	<1.8
	8/26/2020	120	<2.7	<4	<4	<2.6
	9/16/2020	<44	<0.7	<2.6	<2.6	<1.7
	12/17/2020	87	<1.1	<4.0	<4	<2.6
	4/20/2021	190	0.76	<2.3	<2.3	<1.5
	6/21/2021	86	0.78	<2.3	<2.3	<1.5
	8/17/2021	53	<0.75	<2.8	<2.8	<1.8
	11/2/2021	79	<0.73	<2.7	<2.7	<1.7
	5/9/2022	<35	0.90	<2	<2	<1.3
	10/6/2022	<38	<0.6	<2.2	<2.2	<1.4
	3/23/2023	<39	2.40	<2.3	<2.3	<1.5
	10/18/2023	<37	<0.58	<2.1	<2.1	<1.4
VP-3 ¹	10/9/2019	743	1.32	<0.793	<0.793	<0.511
	12/16/2019	2.53	<1.07	<0.793	<0.793	<0.511
	1/16/2020	423	<1.07	<0.793	<0.793	<0.511
	2/25/2020	457	1.13	<0.793	<0.793	<0.511
	3/16/2020	960	<9.4	<14	<14	<8.9
	5/20/2020	1,300	<9.4	<14	<14	<8.9
	7/8/2020	970	<3.8	<5.6	<5.6	<3.6
	8/26/2020	420	1.8	<1.6	<1.6	<1.6
	9/16/2020	720	<5.6	<21	<21	<13
	12/17/2020	690	<2.1	<7.9	<7.9	<5.1
	4/20/2021	890 ve	1.6	<2.3	<2.3	<1.5
	6/21/2021	830 ve	1.8	<2.6	<2.6	<1.7
	8/17/2021	720	2.6	<8.3	<8.3	<5.4
	11/2/2021	950	1.0	<2.7	<2.7	<1.7
	5/9/2022	65	1.1	<1.9	<1.9	<1.2
	10/6/2022	78	1.3	<2.3	<2.3	<1.5
	3/23/2023	260	<0.92	<3.4	<3.4	<2.2
	10/18/2023	190	<0.87	<3.2	<3.2	<2.1

Table 3 - Summary of Sub-Slab Vapor Analytical Results

4 Corners Cleaners (17-126)

Maple Valley, Washington

Sample Number	Date Collected	PCE and Daughter Products				
		PCE	TCE	cis-1,2-DCE	trans-1,2-DCE	Vinyl Chloride
VP-4 ¹	7/8/2020	<32	<1.3	<1.9	<1.9	<1.2
	8/26/2020	290	<13	<19	<19	<13
	9/16/2020	56	<2.4	<3.4	<2.4	<1.5
	12/17/2020	400	<2.1	<7.9	<7.9	<5.1
	4/20/2021	340	1.2	<2.9	<2.9	<1.8
	6/21/2021	280	0.8	<2.5	<2.5	<1.6
	8/17/2021	72	<1.1	<3.9	<3.9	<2.5
	11/2/2021	370	<0.68	<2.5	<2.5	<1.6
	5/9/2022	<31	<0.49	<1.8	<1.8	<1.2
	10/6/2022	<37	<0.58	<2.1	<2.1	<1.4
	3/23/2023	<56	<0.89	<3.3	<3.3	<2.1
	10/18/2023	60	<5.2	<1.9	<1.9	<1.2
MTCA Method B Sub-Slab Screening Levels		320*	11.0*	NL	NL	9.50*
MTCA Method B Sub-Slab Screening Levels Commercial Worker		1,500*	95.0*	NL	NL	44.0*

Notes:

¹ - Collected from the permanent vapor monitoring point.All values are presented in micrograms per cubic meter (µg/m³)

< = Not detected at the listed laboratory detection limits

ve = The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

* Cancer cleanup/screening level (all other constituents listed have non-cancer values)

NL = Not Listed; no sub-slab screening levels have been established for this constituent

Red Bold indicates the detected concentration exceeds MTCA Method B sub-slab screening level**Bold** indicates the detected concentration is below MTCA Method B sub-slab screening levels

PCE = Tetrachloroethene

TCE = Trichloroethene

DCE = Dichloroethene

Table 4 - Summary of SVE System Air Analytical Results
4 Corners Dry Cleaners (17-146)
Maple Valley, WA

Sample ID	Date Collected	TO-15 - Volatile Organic Compounds				
		Vinyl Chloride	trans-1,2-DCE	cis-1,2-DCE	TCE	PCE
INPUT	10/9/2019	<0.511	<0.793	2.19	4.48	10.3
OUTPUT (Post Carbon)	10/9/2019	<0.511	<0.793	<0.793	<1.07	<2.03
INPUT-1	12/16/2019	<0.511	<0.793	<0.793	<1.07	<2.03
INPUT-1	1/16/2020	<0.511	<0.793	<0.793	<1.07	155
INPUT-1	2/25/2020	<0.511	<0.793	<0.793	<1.07	31
OUTPUT (No Carbon)	3/16/2020	<0.069	<1.1	<1.1	1.0	16
OUTPUT (No Carbon)	7/17/2020	<1.2	<1.9	<1.9	<1.3	38
OUTPUT (No Carbon)	8/26/2020	<1.0	<1.6	<1.6	<1.1	4.6j
INFLUENT-121720 (No Carbon)	12/17/2020	<1.7	<2.7	<2.7	<0.86	73
SVE-OUT-42021 (No Carbon)	4/20/2021	<1.4	<2.1	<2.1	1.2	<37
SVE-IN-062121 (No Carbon)	6/21/2021	<1.6	<2.4	<2.4	<0.66	12
INF-08172021 (No Carbon)	8/17/2021	<1.5	<2.4	<2.4	0.74	29 j
INF-110221 (No Carbon)	11/2/2021	<1.7	<2.6	<2.6	<0.71	<45
SVE-IN (05/09/22)	5/9/2022	<1.2	<1.9	<1.9	<0.51	<32
SVE-IN (03/23/23)	3/23/2023	<2.1	<3.3	<3.3	<0.88	<56
SVE-IN (10/18/23)	10/18/2023	<1.9	<3	<3	<0.82	<52
MTCA Method B Sub-Slab Screening Levels		9.50*	NL	NL	11.0*	320*
MTCA Method B Sub-Slab Screening Levels Commercial Worker		44.0*	NL	NL	95.0*	1,500*

Notes:

All values presented in micrograms per cubic meter ($\mu\text{g}/\text{m}^3$)

-- = Not analyzed for constituent

< = Not detected above laboratory limits

* Cancer cleanup/screening level (all other constituents listed have non-cancer values)

Bold indicates the detected concentration is below MTCA Method B screening levels

Red Bold indicates the detected concentration exceeds MTCA Method B screening levels

NL = Not Listed; no cleanup/screening levels have been promulgated for these constituents

j - The analyte concentration is reported below the lowest calibration standard. The value reported is an estimate.

PCE = Tetrachloroethene

TCE = Trichloroethene

DCE = Dichloroethene

APPENDIX A

Supporting Documents
Boring and Well Logs
Laboratory Datasheets

LOG OF BOREHOLE

PROJECT:	4 Corners Cleaners	JOB #	17-126	BORING #	B-14	PAGE	1 OF 1
Location:	23886 SE Kent Kangley Road, Maple Valley, WA		Approximate Elevation:				
Subcontractor / Driller: Cascade/Josh Doty			Equipment / Drilling Method: Geoprobe 420M/Direct Push				
Date:	November 19, 2023		Logged By:	Paul Hitch			

[illegible]

Explanation



Sample Advance / Recovery



No Recovery

- - - - - Contact located approximately



ATD

Groundwater level at time of drilling
or date of measurement

[illegible]

Groundwater level at time of drilling
or date of measurement

LOG OF BOREHOLE

PROJECT:	4 Corners Cleaners	JOB # 17-126	BORING # B-16	PAGE 1 OF 1
Location:	23886 SE Kent Kangley Road, Maple Valley, WA	Approximate Elevation:		
Subcontractor / Driller: Cascade/Josh Doty		Equipment / Drilling Method: Geoprobe 420M/Direct Push		
Date:	November 19, 2023	Logged By:	Paul Hitch	

[illegible]

Explanation



Sample Advance / Recovery



No Recovery

- - - - - Contact located approximately



ATD

Groundwater level at time of drilling
or date of measurement

PROJECT:	4 Corners Cleaners	JOB #	17-126	BORING #	B-17	PAGE	1 OF 1
Location:	23886 SE Kent Kangley Road, Maple Valley, WA			Approximate Elevation:			
Subcontractor / Driller:	Cascade/Wes Kennedy			Equipment / Drilling Method:	Truck-Mounted HSA		
Date:	November 20, 2023			Logged By:	Paul Hitch		

Boring Depth (feet)	Soil Description	Unified Soil Symbol	Sample Depth	Sample Recovery	Sample Number	Time	Blows/Foot	PID Reading	Sheen	Observations
	Asphalt underlain by									
5	Brown Silt, large cobble, moist	GM	5				7-10-12	0.0	N	
10	Brown Silt, large cobble, moist		10		B-17-10	9:50	13-15-50	0.0	N	
15	Brown Silt, wood debris, wet		15		B-17-15	9:55	8-6-11	0.0	N	
20	Brown Silty Sand, well graded, wet	SM	20		B-17-20	10:20	17-50	0.0	N	
25	Brown Silty Gravel, poorly graded, wet	GM	25		B-17-25	10:40	37-50	0.0	N	
30	Brown Sandy Gravel, well graded, wet		30				21-50	0.0	N	

Explanation



Sample Advance / Recovery



No Recovery



Contact located approximately



ATD

Groundwater level at time of drilling
or date of measurement

PROJECT:	4 Corners Cleaners	JOB #	17-126	BORING #	B-18	PAGE	1 OF 1
Location:	23886 SE Kent Kangley Road, Maple Valley, WA			Approximate Elevation:			
Subcontractor / Driller:	Cascade/Wes Kennedy			Equipment / Drilling Method:	Truck-Mounted HSA		
Date:	November 20, 2023			Logged By:	Paul Hitch		

Boring Depth (feet)	Soil Description	Unified Soil Symbol	Sample Depth	Sample Recovery	Sample Number	Time	Blows/Foot	PID Reading	Sheen	Observations
	Asphalt underlain by									
5	Brown Silty Sand, well graded gravel, moist	SM	5				50	0.0	N	
10	Brown Silty Gravel, well graded, moist	GM	10		B-18-10	12:30	50	0.0	N	
15	Brown Silty Gravel, well graded, moist		15		B-18-15	12:40	34-50	0.0	N	
	Refusal at 18 ft bgs									
20										
25										
30										

Explanation



Sample Advance / Recovery



No Recovery



Contact located approximately



ATD

Groundwater level at time of drilling
or date of measurement

PROJECT:	4 Corners Cleaners	JOB #	17-126	BORING #	B-19	PAGE	1 OF 1
Location:	23886 SE Kent Kangley Road, Maple Valley, WA			Approximate Elevation:			
Subcontractor / Driller:	Cascade/Wes Kennedy			Equipment / Drilling Method:	Truck-Mounted HSA		
Date:	November 20, 2023			Logged By:	Paul Hitch		

Boring Depth (feet)	Soil Description	Unified Soil Symbol	Sample Depth	Sample Recovery	Sample Number	Time	Blows/Foot	PID Reading	Sheen	Observations
	Asphalt underlain by									
5	Brown Silty Sand, well graded gravel, moist	SM	5				50 for 4	0.0	N	
10	Brown Silty Gravel, well graded, moist	GM	10				27-50	0.0	N	
15	Brown Silty Gravel, well graded, moist		15				31-50	0.0	N	
18	Brown Silty Gravel, well graded, moist, <u>refusal</u>		18		B-19-18	14:20	50 for 6	0.0	N	
20										
25										
30										

Explanation



Sample Advance / Recovery



No Recovery



Contact located approximately



ATD

Groundwater level at time of drilling
or date of measurement



Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957

Phone (360) 352-2110 • libbyenv@gmail.com

December 08, 2023

Scott Rose

AEG an Atlas Geosciences NW Company

2633 Parkmont Lane SW, Suite A

Olympia, WA 98502

RE: 4 Corners Cleaners

Work Order Number: L23K097

Enclosed are the results of analyses for samples received by our laboratory on 11/21/2023.

Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of within 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please feel free to contact us. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry Chilcutt
Senior Chemist

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

3322 South Bay Road NE

Ph: 360-352-2110

Olympia, WA 98506

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Date: 11/21/23

Page: 1 of 1

Client: AEG Atlas, LLC

Project Manager: Scott Rose

Address: 2633 Parkmont Ln SW, Ste A

Project Name: 4 Corners Cleaners

City: Olympia

State: WA

Zip: 98507

Location: 23886 SE Kent-Kangley Rd City, State: Maple Valley, WA

Phone: 360-352-9835

Fax: _____

Collector: Paul Ditch

Date of Collection: 11/19/23 - 11/20/23

Client Project # 17-126

Email: SROSE@AEGWA.COM

Sample Number	Depth	Time	Sample Type	Container Type													Field Notes	Collection Date
					VOC 8260	PCE & Daughter Prod.	NWTPH-Gx	BTEX (8260) / (8021)	NWTPH-HCID	NWTPH-Dx / Dx	PCB 8082	MTCA 5 Metals	RCRA 8 Metals	c PAH 8270	PAH 8270	Semi Vol 8270		
1 B-14-3	3	0915	Soil	15, 2V	X													11/19/23
2 B-15-3	3	0925			X													
3 B-16-3	3	0940			X													
4 B-17-5	5	0935															Hold	11/20/23
5 B-17-10	10	0950			X												Hold	
6 B-17-15	15	0955			X													
7 B-17-20	20	1020			X													
8 B-17-25	25	1040			X													
9 B-17-30	30	1045															Hold	
10 B-18-5	5	1220			X												Hold	
11 B-18-10	10	1230			X												Hold	
12 B-18-15	15	1240			X													
13 B-19-5	5	1330															Hold	
14 B-19-10	10	1335															Hold	
15 B-19-15	15	1350															Hold	
16 B-19-18	18	1420			X												Hold	
17																		

Relinquished by: Paul Ditch	Date / Time: 11/21/23 (A13)	Received by: Jodie Chapman	Date / Time: 11/21/23 1413	Sample Receipt Good Condition? Y N Cooler Temp. °C Sample Temp. °C Total Number of Containers		Remarks: 12-1-23 Added per Paul via email. 2 Day TAT TAT: 1-Day 2-Day 5-DAY
Relinquished by:	Date / Time:	Received by:	Date / Time:			
Relinquished by:	Date / Time:	Received by:	Date / Time:			



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Notes and Definitions

Item	Definition
R	High Relative Percent Difference observed.
S1	Outlying spike recovery(ies) observed. A duplicate analysis was performed with similar results indicating a possible matrix effect.
S3	Outlying spike recovery observed (high bias). Analyte will be qualified with a ** if detected.
RL	Reporting Limit
ND	Analyte NOT DETECTED at or above the reporting limit
DET	Analyte DETECTED at or above the reporting limit
Qual	Qualifier
All results reported on an "as received" basis unless indicated by "Dry"	
RPD	Relative Percent Difference
%REC	Percent Recovery
Parent	Sample that was matrix spiked or duplicated

Work Order Sample Summary

Lab ID	Sample	Matrix	Date Sampled	Date Received
L23K097-01	B-14-3	Soil	11/19/2023	11/21/2023
L23K097-02	B-15-3	Soil	11/19/2023	11/21/2023
L23K097-03	B-16-3	Soil	11/19/2023	11/21/2023
L23K097-04	B-17-5	Soil	11/20/2023	11/21/2023
L23K097-05	B-17-10	Soil	11/20/2023	11/21/2023
L23K097-06	B-17-15	Soil	11/20/2023	11/21/2023
L23K097-07	B-17-20	Soil	11/20/2023	11/21/2023
L23K097-08	B-17-25	Soil	11/20/2023	11/21/2023
L23K097-09	B-17-30	Soil	11/20/2023	11/21/2023
L23K097-10	B-18-5	Soil	11/20/2023	11/21/2023
L23K097-11	B-18-10	Soil	11/20/2023	11/21/2023
L23K097-12	B-18-15	Soil	11/20/2023	11/21/2023
L23K097-13	B-19-5	Soil	11/20/2023	11/21/2023
L23K097-14	B-19-10	Soil	11/20/2023	11/21/2023
L23K097-15	B-19-15	Soil	11/20/2023	11/21/2023
L23K097-16	B-19-18	Soil	11/20/2023	11/21/2023



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Project: 4 Corners Cleaners
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Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Libby Environmental Sample Detection Summary

Analyte	Result	Qual	Units	RL	Method
Sample: B-14-3			Lab#: L23K097-01		
Tetrachloroethene (PCE)	0.024		mg/kg dry	0.012	8260D
Sample: B-15-3			Lab#: L23K097-02		
Tetrachloroethene (PCE)	0.014		mg/kg dry	0.011	8260D
Sample: B-16-3			Lab#: L23K097-03		
Tetrachloroethene (PCE)	0.012		mg/kg dry	0.012	8260D
Sample: B-17-10			Lab#: L23K097-05		
Tetrachloroethene (PCE)	0.025		mg/kg dry	0.016	8260D
Sample: B-17-15			Lab#: L23K097-06		
Tetrachloroethene (PCE)	0.020		mg/kg dry	0.019	8260D
Sample: B-17-20			Lab#: L23K097-07		
Tetrachloroethene (PCE)	0.073		mg/kg dry	0.013	8260D
Tetrachloroethene (PCE)	0.089		mg/kg dry	0.013	8260D
Sample: B-18-10			Lab#: L23K097-11		
Tetrachloroethene (PCE)	0.013		mg/kg dry	0.013	8260D
Sample: B-18-15			Lab#: L23K097-12		
Tetrachloroethene (PCE)	0.022		mg/kg dry	0.013	8260D
Sample: B-19-18			Lab#: L23K097-16		
Tetrachloroethene (PCE)	0.042		mg/kg dry	0.011	8260D

Note: If no entry is made, then no target compounds were detected.



Libby Environmental, Inc.

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2633 Parkmont Lane SW, Suite A
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Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results

Client Sample ID: B-14-3

Lab ID: L23K097-01 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.012	mg/kg dry	11/29/2023	PB
1,1-Dichloroethene	ND		0.029	mg/kg dry	11/29/2023	PB
trans-1,2-Dichloroethene	ND		0.017	mg/kg dry	11/29/2023	PB
cis-1,2-Dichloroethene	ND		0.017	mg/kg dry	11/29/2023	PB
Trichloroethene (SIM)	ND		0.012	mg/kg dry	11/29/2023	PB
Tetrachloroethene (PCE)	0.024		0.012	mg/kg dry	11/29/2023	PB
Surrogate: Dibromofluoromethane	128%		22.9-220		11/29/2023	PB
Surrogate: 1,2-Dichloroethane-d4	159%		32.2-196		11/29/2023	PB
Surrogate: Toluene-d8	114%		47.3-146		11/29/2023	PB
Surrogate: 4-Bromofluorobenzene	91.4%		38.4-136		11/29/2023	PB
<u>Moisture by ASTM D2216-19</u>						
Moisture	4.5		0.50	%	11/22/2023	JC



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Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results (Continued)

Client Sample ID: B-15-3

Lab ID: L23K097-02 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.011	mg/kg dry	11/29/2023	PB
1,1-Dichloroethene	ND		0.028	mg/kg dry	11/29/2023	PB
trans-1,2-Dichloroethene	ND		0.017	mg/kg dry	11/29/2023	PB
cis-1,2-Dichloroethene	ND		0.017	mg/kg dry	11/29/2023	PB
Trichloroethene (SIM)	ND		0.011	mg/kg dry	11/29/2023	PB
Tetrachloroethene (PCE)	0.014		0.011	mg/kg dry	11/29/2023	PB
Surrogate: Dibromofluoromethane	122%		22.9-220		11/29/2023	PB
Surrogate: 1,2-Dichloroethane-d4	158%		32.2-196		11/29/2023	PB
Surrogate: Toluene-d8	109%		47.3-146		11/29/2023	PB
Surrogate: 4-Bromofluorobenzene	86.4%		38.4-136		11/29/2023	PB
<u>Moisture by ASTM D2216-19</u>						
Moisture	3.6		0.50	%	11/22/2023	JC



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Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results (Continued)

Client Sample ID: B-16-3

Lab ID: L23K097-03 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.012	mg/kg dry	11/29/2023	PB
1,1-Dichloroethene	ND		0.029	mg/kg dry	11/29/2023	PB
trans-1,2-Dichloroethene	ND		0.018	mg/kg dry	11/29/2023	PB
cis-1,2-Dichloroethene	ND		0.018	mg/kg dry	11/29/2023	PB
Trichloroethene (SIM)	ND		0.012	mg/kg dry	11/29/2023	PB
Tetrachloroethene (PCE)	0.012		0.012	mg/kg dry	11/29/2023	PB
Surrogate: Dibromofluoromethane	173%		22.9-220		11/29/2023	PB
Surrogate: 1,2-Dichloroethane-d4	154%		32.2-196		11/29/2023	PB
Surrogate: Toluene-d8	103%		47.3-146		11/29/2023	PB
Surrogate: 4-Bromofluorobenzene	81.4%		38.4-136		11/29/2023	PB
<u>Moisture by ASTM D2216-19</u>						
Moisture	5.0		0.50	%	11/22/2023	JC



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Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results (Continued)

Client Sample ID: B-17-10

Lab ID: L23K097-05 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (VC)	ND		0.016	mg/kg dry	12/04/2023	AA
1,1-Dichloroethene	ND		0.040	mg/kg dry	12/04/2023	AA
trans-1,2-Dichloroethene	ND		0.024	mg/kg dry	12/04/2023	AA
cis-1,2-Dichloroethene	ND		0.024	mg/kg dry	12/04/2023	AA
Trichloroethene (TCE)	ND		0.016	mg/kg dry	12/04/2023	AA
Tetrachloroethene (PCE)	0.025		0.016	mg/kg dry	12/04/2023	AA
Surrogate: Dibromofluoromethane	104%		22.9-220		12/04/2023	AA
Surrogate: 1,2-Dichloroethane-d4	118%		32.2-196		12/04/2023	AA
Surrogate: Toluene-d8	110%		47.3-146		12/04/2023	AA
Surrogate: 4-Bromofluorobenzene	98.6%		38.4-136		12/04/2023	AA
<u>Moisture by ASTM D2216-19</u>						
Moisture	16		0.50	%	12/05/2023	AA



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Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results (Continued)

Client Sample ID: B-17-15

Lab ID: L23K097-06 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.019	mg/kg dry	11/29/2023	PB
1,1-Dichloroethene	ND		0.048	mg/kg dry	11/29/2023	PB
trans-1,2-Dichloroethene	ND		0.029	mg/kg dry	11/29/2023	PB
cis-1,2-Dichloroethene	ND		0.029	mg/kg dry	11/29/2023	PB
Trichloroethene (SIM)	ND		0.019	mg/kg dry	11/29/2023	PB
Tetrachloroethene (PCE)	0.020		0.019	mg/kg dry	11/29/2023	PB
Surrogate: Dibromofluoromethane	109%		22.9-220		11/29/2023	PB
Surrogate: 1,2-Dichloroethane-d4	135%		32.2-196		11/29/2023	PB
Surrogate: Toluene-d8	104%		47.3-146		11/29/2023	PB
Surrogate: 4-Bromofluorobenzene	85.1%		38.4-136		11/29/2023	PB
<u>Moisture by ASTM D2216-19</u>						
Moisture	23		0.50	%	11/22/2023	JC



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Project: 4 Corners Cleaners
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City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results (Continued)

Client Sample ID: B-17-20

Lab ID: L23K097-07 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.013	mg/kg dry	11/29/2023	PB
Vinyl Chloride (VC)	ND		0.013	mg/kg dry	12/04/2023	AA
1,1-Dichloroethene	ND		0.033	mg/kg dry	11/29/2023	PB
1,1-Dichloroethene	ND		0.033	mg/kg dry	12/04/2023	AA
trans-1,2-Dichloroethene	ND		0.020	mg/kg dry	11/29/2023	PB
trans-1,2-Dichloroethene	ND		0.020	mg/kg dry	12/04/2023	AA
cis-1,2-Dichloroethene	ND		0.020	mg/kg dry	11/29/2023	PB
cis-1,2-Dichloroethene	ND		0.020	mg/kg dry	12/04/2023	AA
Trichloroethene (SIM)	ND		0.013	mg/kg dry	11/29/2023	PB
Trichloroethene (TCE)	ND		0.013	mg/kg dry	12/04/2023	AA
Tetrachloroethene (PCE)	0.073		0.013	mg/kg dry	11/29/2023	PB
Tetrachloroethene (PCE)	0.089		0.013	mg/kg dry	12/04/2023	AA
Surrogate: Dibromofluoromethane	117%		22.9-220		11/29/2023	PB
Surrogate: Dibromofluoromethane	103%		22.9-220		12/04/2023	AA
Surrogate: 1,2-Dichloroethane-d4	136%		32.2-196		11/29/2023	PB
Surrogate: 1,2-Dichloroethane-d4	117%		32.2-196		12/04/2023	AA
Surrogate: Toluene-d8	109%		47.3-146		11/29/2023	PB
Surrogate: Toluene-d8	107%		47.3-146		12/04/2023	AA
Surrogate: 4-Bromofluorobenzene	79.4%		38.4-136		11/29/2023	PB
Surrogate: 4-Bromofluorobenzene	92.6%		38.4-136		12/04/2023	AA
<u>Moisture by ASTM D2216-19</u>						
Moisture	9.3		0.50	%	11/22/2023	JC



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City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results (Continued)

Client Sample ID: B-17-25

Lab ID: L23K097-08 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.017	mg/kg dry	11/29/2023	PB
1,1-Dichloroethene	ND		0.043	mg/kg dry	11/29/2023	PB
trans-1,2-Dichloroethene	ND		0.026	mg/kg dry	11/29/2023	PB
cis-1,2-Dichloroethene	ND		0.026	mg/kg dry	11/29/2023	PB
Trichloroethene (SIM)	ND		0.017	mg/kg dry	11/29/2023	PB
Tetrachloroethene (PCE)	ND		0.017	mg/kg dry	11/29/2023	PB
Surrogate: Dibromofluoromethane	110%		22.9-220		11/29/2023	PB
Surrogate: 1,2-Dichloroethane-d4	136%		32.2-196		11/29/2023	PB
Surrogate: Toluene-d8	109%		47.3-146		11/29/2023	PB
Surrogate: 4-Bromofluorobenzene	90.0%		38.4-136		11/29/2023	PB
<u>Moisture by ASTM D2216-19</u>						
Moisture	19		0.50	%	11/22/2023	JC



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Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results (Continued)

Client Sample ID: B-18-10

Lab ID: L23K097-11 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (VC)	ND		0.013	mg/kg dry	12/04/2023	AA
1,1-Dichloroethene	ND		0.032	mg/kg dry	12/04/2023	AA
trans-1,2-Dichloroethene	ND		0.019	mg/kg dry	12/04/2023	AA
cis-1,2-Dichloroethene	ND		0.019	mg/kg dry	12/04/2023	AA
Trichloroethene (TCE)	ND		0.013	mg/kg dry	12/04/2023	AA
Tetrachloroethene (PCE)	0.013		0.013	mg/kg dry	12/04/2023	AA
Surrogate: Dibromofluoromethane	106%		22.9-220		12/04/2023	AA
Surrogate: 1,2-Dichloroethane-d4	117%		32.2-196		12/04/2023	AA
Surrogate: Toluene-d8	110%		47.3-146		12/04/2023	AA
Surrogate: 4-Bromofluorobenzene	98.6%		38.4-136		12/04/2023	AA
<u>Moisture by ASTM D2216-19</u>						
Moisture	8.5		0.50	%	12/05/2023	AA



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Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results (Continued)

Client Sample ID: B-18-15

Lab ID: L23K097-12 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.013	mg/kg dry	11/29/2023	PB
1,1-Dichloroethene	ND		0.033	mg/kg dry	11/29/2023	PB
trans-1,2-Dichloroethene	ND		0.020	mg/kg dry	11/29/2023	PB
cis-1,2-Dichloroethene	ND		0.020	mg/kg dry	11/29/2023	PB
Trichloroethene (SIM)	ND		0.013	mg/kg dry	11/29/2023	PB
Tetrachloroethene (PCE)	0.022		0.013	mg/kg dry	11/29/2023	PB
Surrogate: Dibromofluoromethane	130%		22.9-220		11/29/2023	PB
Surrogate: 1,2-Dichloroethane-d4	154%		32.2-196		11/29/2023	PB
Surrogate: Toluene-d8	108%		47.3-146		11/29/2023	PB
Surrogate: 4-Bromofluorobenzene	89.2%		38.4-136		11/29/2023	PB
<u>Moisture by ASTM D2216-19</u>						
Moisture	9.6		0.50	%	11/22/2023	JC



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Project: 4 Corners Cleaners
Project Number: 17-126
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City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Sample Results (Continued)

Client Sample ID: B-19-18

Lab ID: L23K097-16 (Soil)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (VC)	ND		0.011	mg/kg dry	12/04/2023	AA
1,1-Dichloroethene	ND		0.029	mg/kg dry	12/04/2023	AA
trans-1,2-Dichloroethene	ND		0.017	mg/kg dry	12/04/2023	AA
cis-1,2-Dichloroethene	ND		0.017	mg/kg dry	12/04/2023	AA
Trichloroethene (TCE)	ND		0.011	mg/kg dry	12/04/2023	AA
Tetrachloroethene (PCE)	0.042		0.011	mg/kg dry	12/04/2023	AA
Surrogate: Dibromofluoromethane	98.2%		22.9-220		12/04/2023	AA
Surrogate: 1,2-Dichloroethane-d4	113%		32.2-196		12/04/2023	AA
Surrogate: Toluene-d8	106%		47.3-146		12/04/2023	AA
Surrogate: 4-Bromofluorobenzene	96.9%		38.4-136		12/04/2023	AA
<u>Moisture by ASTM D2216-19</u>						
Moisture	4.7		0.50	%	12/05/2023	AA



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Work Order: L23K097
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Quality Control

Volatile Organic Compounds by EPA Method 8260D

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BXK0121 - VOA

Blank (BXK0121-BLK1)

Prepared & Analyzed: 11/29/2023

Vinyl Chloride (SIM)	ND		0.020	mg/kg wet						
1,1-Dichloroethene	ND		0.050	mg/kg wet						
trans-1,2-Dichloroethene	ND		0.030	mg/kg wet						
cis-1,2-Dichloroethene	ND		0.030	mg/kg wet						
Trichloroethene (SIM)	ND		0.020	mg/kg wet						
Tetrachloroethene (PCE)	ND		0.020	mg/kg wet						
Surrogate: Dibromofluoromethane			23.4	ug/L	20.0		117	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			29.8	ug/L	20.0		149	32.2-196		
Surrogate: Toluene-d8			21.1	ug/L	20.0		105	47.3-146		
Surrogate: 4-Bromofluorobenzene			17.8	ug/L	20.0		89.0	38.4-136		

LCS (BXK0121-BS1)

Prepared & Analyzed: 11/29/2023

Vinyl Chloride (VC)	0.436		0.10	mg/kg wet	0.250		174	29.9-188		
1,1-Dichloroethene	0.483	S3	0.050	mg/kg wet	0.250		193	39.6-181		
trans-1,2-Dichloroethene	0.429		0.030	mg/kg wet	0.250		172	39.6-177		
cis-1,2-Dichloroethene	0.289		0.030	mg/kg wet	0.250		116	29.5-182		
Trichloroethene (SIM)	0.283		0.020	mg/kg wet	0.250		113	28.8-130		
Tetrachloroethene (PCE)	0.161		0.020	mg/kg wet	0.250		64.3	53.1-167		
Surrogate: Dibromofluoromethane			21.7	ug/L	20.0		109	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			25.0	ug/L	20.0		125	32.2-196		
Surrogate: Toluene-d8			22.9	ug/L	20.0		114	47.3-146		
Surrogate: 4-Bromofluorobenzene			20.5	ug/L	20.0		103	38.4-136		

Matrix Spike (BXK0121-MS1)

Parent: L23K097-07

Prepared & Analyzed: 11/29/2023

Vinyl Chloride (SIM)	0.332		0.013	mg/kg dry	0.164	ND	203	30.4-218		
1,1-Dichloroethene	0.336	S1	0.033	mg/kg dry	0.164	ND	205	44.2-190		
trans-1,2-Dichloroethene	0.235		0.020	mg/kg dry	0.164	ND	144	35.2-199		
cis-1,2-Dichloroethene	0.205		0.020	mg/kg dry	0.164	ND	125	36.9-180		
Trichloroethene (SIM)	0.202		0.013	mg/kg dry	0.164	ND	124	43-151		
Tetrachloroethene (PCE)	0.160		0.013	mg/kg dry	0.164	0.0735	53.1	10-217		
Surrogate: Dibromofluoromethane			21.2	ug/L	20.0		106	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			25.9	ug/L	20.0		129	32.2-196		
Surrogate: Toluene-d8			22.8	ug/L	20.0		114	47.3-146		
Surrogate: 4-Bromofluorobenzene			20.7	ug/L	20.0		103	38.4-136		



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Quality Control (Continued)

Volatile Organic Compounds by EPA Method 8260D (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike Dup (BXK0121-MSD1)		Parent: L23K097-07			Prepared & Analyzed: 11/29/2023					
Vinyl Chloride (SIM)	0.352	S1	0.013	mg/kg dry	0.164	ND	215	30.4-218	5.98	35
1,1-Dichloroethene	0.350		0.033	mg/kg dry	0.164	ND	214	44.2-190	3.99	35
trans-1,2-Dichloroethene	0.287		0.020	mg/kg dry	0.164	ND	176	35.2-199	20.1	35
cis-1,2-Dichloroethene	0.202		0.020	mg/kg dry	0.164	ND	123	36.9-180	1.79	35
Trichloroethene (SIM)	0.195		0.013	mg/kg dry	0.164	ND	119	43-151	3.69	35
Tetrachloroethene (PCE)	0.185		0.013	mg/kg dry	0.164	0.0735	68.3	10-217	14.4	35
Surrogate: Dibromofluoromethane			21.7	ug/L	20.0		109	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			28.8	ug/L	20.0		144	32.2-196		
Surrogate: Toluene-d8			22.2	ug/L	20.0		111	47.3-146		
Surrogate: 4-Bromofluorobenzene			20.7	ug/L	20.0		104	38.4-136		
Blank (BXL0012-BLK1)					Prepared & Analyzed: 12/4/2023					
Vinyl Chloride (VC)	ND		0.10	mg/kg wet						
1,1-Dichloroethene	ND		0.050	mg/kg wet						
trans-1,2-Dichloroethene	ND		0.030	mg/kg wet						
cis-1,2-Dichloroethene	ND		0.030	mg/kg wet						
Trichloroethene (TCE)	ND		0.020	mg/kg wet						
Tetrachloroethene (PCE)	ND		0.10	mg/kg wet						
Surrogate: Dibromofluoromethane			22.9	ug/L	20.0		115	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			23.0	ug/L	20.0		115	32.2-196		
Surrogate: Toluene-d8			20.7	ug/L	20.0		104	47.3-146		
Surrogate: 4-Bromofluorobenzene			17.1	ug/L	20.0		85.3	38.4-136		
LCS (BXL0012-BS1)					Prepared & Analyzed: 12/4/2023					
Vinyl Chloride (VC)	0.192		0.10	mg/kg wet	0.250		76.7	29.9-188		
1,1-Dichloroethene	0.282		0.050	mg/kg wet	0.250		113	39.6-181		
trans-1,2-Dichloroethene	0.254		0.030	mg/kg wet	0.250		102	39.6-177		
cis-1,2-Dichloroethene	0.276		0.030	mg/kg wet	0.250		110	29.5-182		
Trichloroethene (TCE)	0.222		0.020	mg/kg wet	0.250		88.6	59.1-140		
Tetrachloroethene (PCE)	0.238		0.10	mg/kg wet	0.250		95.1	53.1-167		
Surrogate: Dibromofluoromethane			22.6	ug/L	20.0		113	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			23.9	ug/L	20.0		119	32.2-196		
Surrogate: Toluene-d8			21.6	ug/L	20.0		108	47.3-146		
Surrogate: 4-Bromofluorobenzene			21.1	ug/L	20.0		106	38.4-136		



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Quality Control (Continued)

Volatile Organic Compounds by EPA Method 8260D (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Duplicate (BXL0012-DUP1)		Parent: L23K097-07RE1			Prepared & Analyzed: 12/4/2023					
Vinyl Chloride (VC)	ND		0.065	mg/kg dry		ND				35
1,1-Dichloroethene	ND		0.033	mg/kg dry		ND				35
trans-1,2-Dichloroethene	ND		0.020	mg/kg dry		ND				35
cis-1,2-Dichloroethene	ND		0.020	mg/kg dry		ND				35
Trichloroethene (TCE)	ND		0.013	mg/kg dry		ND				35
Tetrachloroethene (PCE)	0.0163	R	0.013	mg/kg dry		0.0892			138	35
Surrogate: Dibromofluoromethane			20.8	ug/L	20.0		104	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			23.3	ug/L	20.0		117	32.2-196		
Surrogate: Toluene-d8			21.8	ug/L	20.0		109	47.3-146		
Surrogate: 4-Bromofluorobenzene			19.5	ug/L	20.0		97.4	38.4-136		
Matrix Spike (BXL0012-MS1)		Parent: L23K097-05			Prepared & Analyzed: 12/4/2023					
Vinyl Chloride (VC)	0.234		0.080	mg/kg dry	0.200	ND	117	10-220		
1,1-Dichloroethene	0.226		0.040	mg/kg dry	0.200	ND	113	44.2-190		
trans-1,2-Dichloroethene	0.265		0.024	mg/kg dry	0.200	ND	132	35.2-199		
cis-1,2-Dichloroethene	0.284		0.024	mg/kg dry	0.200	ND	142	36.9-180		
Trichloroethene (TCE)	0.238		0.016	mg/kg dry	0.200	ND	119	14.3-183		
Tetrachloroethene (PCE)	0.288		0.080	mg/kg dry	0.200	0.0250	132	10-217		
Surrogate: Dibromofluoromethane			18.9	ug/L	20.0		94.5	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			21.6	ug/L	20.0		108	32.2-196		
Surrogate: Toluene-d8			20.4	ug/L	20.0		102	47.3-146		
Surrogate: 4-Bromofluorobenzene			21.9	ug/L	20.0		110	38.4-136		



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L23K097
Reported: 12/08/2023 16:53

Quality Control (Continued)

Moisture by ASTM D2216-19

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BXX0119 - Gen Chem

LCS (BXX0119-BS1)

Moisture	18			%	17.0		105	90-115		
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Prepared & Analyzed: 11/22/2023

LCS (BXL0017-BS1)

Moisture	18			%	17.0		105	90-115		
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Prepared & Analyzed: 12/5/2023

Libby Environmental, Inc.

4 Corners Cleaners Project
AEG an Atlas Geosciences NW Company
Libby Work Order # L23K097

Date Received 11/21/2023

Time Received 2:13 PM

3322 South Bay Road NE

Olympia, WA 98506

Phone: (360) 352-2110

FAX: (360) 352-4154

Email: libbyenv@gmail.com

Received By JC

Sample Receipt Checklist

Chain of Custody

- | | | | |
|---|---|---|----------------------------------|
| 1. Is the Chain of Custody is complete? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 2. How was the sample delivered? | <input type="checkbox"/> Hand Delivered | <input checked="" type="checkbox"/> Picked Up | <input type="checkbox"/> Shipped |

Log In

- | | | | |
|---|---|--|------------------------------|
| 3. Cooler or Shipping Container is present. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 4. Cooler or Shipping Container is in good condition. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 5. Cooler or Shipping Container has Custody Seals present. | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A |
| 6. Was an attempt made to cool the samples? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 7. Temperature of cooler (0°C to 8°C recommended) | <u>3.7 °C</u> | | |
| 8. Temperature of sample(s) (0°C to 8°C recommended) | <u>5.0 °C</u> | | |
| 9. Did all containers arrive in good condition (unbroken)? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 10. Is it clear what analyses were requested? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 11. Did container labels match Chain of Custody? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 12. Are matrices correctly identified on Chain of Custody? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 13. Are correct containers used for the analysis indicated? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 14. Is there sufficient sample volume for indicated analysis? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 15. Were all containers properly preserved per each analysis? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 16. Were VOA vials collected correctly (no headspace)? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 17. Were all holding times able to be met? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |

Discrepancies/ Notes

- | | | | |
|---|------------------------------|-----------------------------|---|
| 18. Was client notified of all discrepancies? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
|---|------------------------------|-----------------------------|---|

Person Notified: _____

Date: _____

By Whom: _____

Via: _____

Regarding: _____

19. Comments.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

James E. Bruya, Ph.D.
Yelena Aravkina, M.S.
Michael Erdahl, B.S.
Vineta Mills, M.S.
Eric Young, B.S.

5500 4th Avenue South
Seattle, WA 98108
(206) 285-8282
fbi@isomedia.com
www.friedmanandbruya.com

October 27, 2023

Scott Rose, Project Manager
AEG
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Dear Mr Rose:

Included are the results from the testing of material submitted on October 18, 2023 from the 4-Corners Cleaners Maple Valley, WA 17-126, F&BI 310343 project. There are 11 pages included in this report.

We appreciate this opportunity to be of service to you and hope you will call if you should have any questions.

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: AEG A/P
AEG1027R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on October 18, 2023 by Friedman & Bruya, Inc. from the AEG 4-Corners Cleaners Maple Valley, WA 17-126, F&BI 310343 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>AEG</u>
310343 -01	VP-1
310343 -02	VP-2
310343 -03	VP-3
310343 -04	VP-4
310343 -05	SVE-IN

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	VP-1	Client:	AEG
Date Received:	10/18/23	Project:	4-Corners Cleaners Maple Valley
Date Collected:	10/18/23	Lab ID:	310343-01 1/8.2
Date Analyzed:	10/19/23	Data File:	101915.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<2.1	<0.82
trans-1,2-Dichloroethene	<3.3	<0.82
cis-1,2-Dichloroethene	<3.3	<0.82
Trichloroethene	2.1	0.39
Tetrachloroethene	130	19

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	VP-2	Client:	AEG
Date Received:	10/18/23	Project:	4-Corners Cleaners Maple Valley
Date Collected:	10/18/23	Lab ID:	310343-02 1/5.4
Date Analyzed:	10/19/23	Data File:	101913.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	95	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<1.4	<0.54
trans-1,2-Dichloroethene	<2.1	<0.54
cis-1,2-Dichloroethene	<2.1	<0.54
Trichloroethene	<0.58	<0.11
Tetrachloroethene	<37	<5.4

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	VP-3	Client:	AEG
Date Received:	10/18/23	Project:	4-Corners Cleaners Maple Valley
Date Collected:	10/18/23	Lab ID:	310343-03 1/8.1
Date Analyzed:	10/20/23	Data File:	101916.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	98	70	130

	Concentration	
Compounds:	ug/m3	ppbv
Vinyl chloride	<2.1	<0.81
trans-1,2-Dichloroethene	<3.2	<0.81
cis-1,2-Dichloroethene	<3.2	<0.81
Trichloroethene	<0.87	<0.16
Tetrachloroethene	190	28

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	VP-4	Client:	AEG
Date Received:	10/18/23	Project:	4-Corners Cleaners Maple Valley
Date Collected:	10/18/23	Lab ID:	310343-04 1/4.8
Date Analyzed:	10/19/23	Data File:	101914.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<1.2	<0.48
trans-1,2-Dichloroethene	<1.9	<0.48
cis-1,2-Dichloroethene	<1.9	<0.48
Trichloroethene	<0.52	<0.096
Tetrachloroethene	60	8.9

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SVE-IN	Client:	AEG
Date Received:	10/18/23	Project:	4-Corners Cleaners Maple Valley
Date Collected:	10/18/23	Lab ID:	310343-05 1/7.6
Date Analyzed:	10/20/23	Data File:	101918.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	98	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<1.9	<0.76
trans-1,2-Dichloroethene	<3	<0.76
cis-1,2-Dichloroethene	<3	<0.76
Trichloroethene	<0.82	<0.15
Tetrachloroethene	<52	<7.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	AEG
Date Received:	Not Applicable	Project:	4-Corners Cleaners Maple Valley
Date Collected:	Not Applicable	Lab ID:	03-2424 mb
Date Analyzed:	10/19/23	Data File:	101912.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	95	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.26	<0.1
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Trichloroethene	<0.11	<0.02
Tetrachloroethene	<6.8	<1

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/27/23

Date Received: 10/18/23

Project: 4-Corners Cleaners Maple Valley, WA 17-126, F&BI 310343

Date Extracted: 10/27/23

Date Analyzed: 10/27/23

**RESULTS FROM THE ANALYSIS OF AIR SAMPLES
FOR HELIUM USING METHOD ASTM D1946**

Results Reported as % Helium

<u>Sample ID</u> Laboratory ID	<u>Helium</u>
VP-1 310343-01	<0.6
VP-2 310343-02	<0.6
VP-3 310343-03	<0.6
VP-4 310343-04	0.9
Method Blank 03-2560 MB	<0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/27/23

Date Received: 10/18/23

Project: 4-Corners Cleaners Maple Valley, WA 17-126, F&BI 310343

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR VOLATILES BY METHOD TO-15**

Laboratory Code: 310343-05 1/7.6 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Vinyl chloride	ug/m3	<1.9	<1.9	nm
trans-1,2-Dichloroethene	ug/m3	<3	<3	nm
cis-1,2-Dichloroethene	ug/m3	<3	<3	nm
Trichloroethene	ug/m3	<0.82	<0.82	nm
Tetrachloroethene	ug/m3	<52	<52	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	ug/m3	35	86	70-130
trans-1,2-Dichloroethene	ug/m3	54	102	70-130
cis-1,2-Dichloroethene	ug/m3	54	97	70-130
Trichloroethene	ug/m3	73	96	70-130
Tetrachloroethene	ug/m3	92	107	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 10/27/23

Date Received: 10/18/23

Project: 4-Corners Cleaners Maple Valley, WA 17-126, F&BI 310343

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES
FOR HELIUM
USING METHOD ASTM D1946**

Laboratory Code: 310275-01 (Duplicate)

Analyte	Sample Result (%)	Duplicate Result (%)	Relative Percent Difference	Acceptance Criteria
Helium	<0.6	<0.6	nm	0-20

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Data Qualifiers & Definitions

a - The analyte was detected at a level less than five times the reporting limit. The RPD results may not provide reliable information on the variability of the analysis.

b - The analyte was spiked at a level that was less than five times that present in the sample. Matrix spike recoveries may not be meaningful.

ca - The calibration results for the analyte were outside of acceptance criteria, biased low; or, the calibration results for the analyte were outside of acceptance criteria, biased high, with a detection for the analyte in the sample. The value reported is an estimate.

c - The presence of the analyte may be due to carryover from previous sample injections.

cf - The sample was centrifuged prior to analysis.

d - The sample was diluted. Detection limits were raised and surrogate recoveries may not be meaningful.

dv - Insufficient sample volume was available to achieve normal reporting limits.

f - The sample was laboratory filtered prior to analysis.

fb - The analyte was detected in the method blank.

fc - The analyte is a common laboratory and field contaminant.

hr - The sample and duplicate were reextracted and reanalyzed. RPD results were still outside of control limits. Variability is attributed to sample inhomogeneity.

hs - Headspace was present in the container used for analysis.

ht - The analysis was performed outside the method or client-specified holding time requirement.

ip - Recovery fell outside of control limits due to sample matrix effects.

j - The analyte concentration is reported below the standard reporting limit. The value reported is an estimate.

J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.

jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.

js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.

k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.

lc - The presence of the analyte is likely due to laboratory contamination.

L - The reported concentration was generated from a library search.

nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.

pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.

ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.

vo - The value reported fell outside the control limits established for this analyte.

x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

310343

SAMPLE CHAIN OF CUSTODY

10/18/23

Page # of

Report To SCOTT ROSECompany ACG - AILASAddress 2633 PANKHON LANE SW SUITE ACity, State, ZIP OLYMPIA, WA 98522Phone 360-352-9835 Email scott@acginc.com

SAMPLERS (Signature)

PROJECT NAME & ADDRESS

Y-CORNER'S CLEANERS
maple valley, wa

PO #

17-126

NOTES:

PCE/TCE & DMS/STAN MONITORS

INVOICE TO

ACG

TURNAROUND TIME

Standard
RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

Default: Clean following
final report delivery
Hold (Fee may apply):

SAMPLE INFORMATION

ANALYSIS REQUESTED

Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	Notes
VP-1	01	9560	204	IA / (SG)	10/18/23	30"	11:17	5"	11:19			X		X	
VP Pte-2	02	8529	204	IA / (SG)	10/18/23	29"	10:04	5"	10:12			X		X	
VP Pte-3	03	4180	203	IA / (SG)	10/18/23	30"	10:54	5"	11:02			X		X	
VP-4	04	8528	225	IA / (SG)	10/18/23	30"	10:32	5"	10:42			X		X	
SG, SUE-TN	05	8232	201	IA / (SG)	10/18/23	20"	11:36	4"	11:44			X		X	
				IA / SG											
				IA / SG											
				IA / SG											

Samples received at 21 °C

SIGNATURE

PRINT NAME

COMPANY

DATE

TIME

Friedman & Bruya, Inc.
5500 4th Avenue South

Seattle, WA 98108

Ph. (206) 285-8282

Fax (206) 283-5044

Relinquished by:

[Signature]

TONY BARNICK

OHG / ACG

10/18/23

Received by:

Relinquished by:

ANH PHAN

F83

10/18/23

14:05

Received by:



Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957

Phone (360) 352-2110 • libbyenv@gmail.com

January 09, 2024

Scott Rose

AEG an Atlas Geosciences NW Company

2633 Parkmont Lane SW, Suite A

Olympia, WA 98502

RE: 4 Corners Cleaners

Work Order Number: L24A010

Enclosed are the results of analyses for samples received by our laboratory on 1/3/2024.

Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of within 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please feel free to contact us. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

Sherry Chilcutt
Senior Chemist

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506

Ph: 360-352-2110
Fax: 360-352-4154

Client: **AEG**

Address: **2633 Parkmount Lane SW, Suite A**

City: **Olympia** State: **WA** Zip: **98502**

Phone: **(360) 352-9835** Fax: **(360) 352-8164**

Client Project # **17-126**

Date: **12³⁰ 01/03/24**

Page: **1** of **1**

Project Manager: **Scott Rose**

Project Name: **4 Corners Cleaners**


Location: **23886 Se Kent-Kangley Rd** City, State: **Maple Valley, WA**

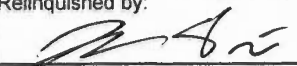

Collector: **Jonah Davis**

Date of Collection: **01/03/24**

Email: **Srose@AEGWA.com**

Page 2 of 10

		Depth	Time	Sample Type	Container Type	PCE/TCE w/ Daughter P...										Field Notes
Sample Number																
1	MU-1	—	0852	G	Vials	X										
2	MU-2	—	0918	↓	↓	X										
3	MU-3	—	1016	↓	↓	X										
4	MU-5	—	0915	↓	↓	X										
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																

Relinquished by: 	Date / Time: 01/03/24 8	Received by: 	Date / Time: 1.3.24 1145	Sample Receipt Good Condition? Y N Temp. °C Seals Intact? Y N N/A Total Number of Containers 		Remarks: TAT: 24HR 48HR 5(DAY)
Relinquished by:	Date / Time:	Received by:	Date / Time:			
Relinquished by:	Date / Time:	Received by:	Date / Time:			

LEGAL ACTION CLAUSE: In the event of default of payment and/or failure to pay, Client agrees to pay the costs of collection including court costs and reasonable attorney fees to be determined by a court of law.

Distribution: White - Lab, Yellow - File, Pink - Originator



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24A010
Reported: 01/09/2024 10:09

Notes and Definitions

Item	Definition
RL	Reporting Limit
ND	Analyte NOT DETECTED at or above the reporting limit
DET	Analyte DETECTED at or above the reporting limit
Qual	Qualifier

All results reported on an "as received" basis unless indicated by "Dry"

Work Order Sample Summary

Lab ID	Sample	Matrix	Date Sampled	Date Received
L24A010-01	MW-1	Water	01/03/2024	01/03/2024
L24A010-02	MW-2	Water	01/03/2024	01/03/2024
L24A010-03	MW-3	Water	01/03/2024	01/03/2024
L24A010-04	MW-5	Water	01/03/2024	01/03/2024



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24A010
Reported: 01/09/2024 10:09

Sample Results

Client Sample ID: MW-1

Lab ID: L24A010-01 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.20	ug/L	01/04/2024	PB
1,1-Dichloroethene	ND		0.50	ug/L	01/04/2024	PB
trans-1,2-Dichloroethene	ND		1.0	ug/L	01/04/2024	PB
cis-1,2-Dichloroethene	ND		1.0	ug/L	01/04/2024	PB
Trichloroethene (SIM)	ND		0.40	ug/L	01/04/2024	PB
Tetrachloroethene (SIM)	ND		1.0	ug/L	01/04/2024	PB
Surrogate: Dibromofluoromethane	123%		22.9-220		01/04/2024	PB
Surrogate: 1,2-Dichloroethane-d4	123%		32.2-196		01/04/2024	PB
Surrogate: Toluene-d8	90.6%		47.3-146		01/04/2024	PB
Surrogate: 4-Bromofluorobenzene	89.4%		38.4-136		01/04/2024	PB



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24A010
Reported: 01/09/2024 10:09

Sample Results (Continued)

Client Sample ID: MW-2

Lab ID: L24A010-02 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.20	ug/L	01/04/2024	PB
1,1-Dichloroethene	ND		0.50	ug/L	01/04/2024	PB
trans-1,2-Dichloroethene	ND		1.0	ug/L	01/04/2024	PB
cis-1,2-Dichloroethene	ND		1.0	ug/L	01/04/2024	PB
Trichloroethene (SIM)	ND		0.40	ug/L	01/04/2024	PB
Tetrachloroethene (SIM)	ND		1.0	ug/L	01/04/2024	PB
Surrogate: Dibromofluoromethane	127%		22.9-220		01/04/2024	PB
Surrogate: 1,2-Dichloroethane-d4	127%		32.2-196		01/04/2024	PB
Surrogate: Toluene-d8	91.0%		47.3-146		01/04/2024	PB
Surrogate: 4-Bromofluorobenzene	87.6%		38.4-136		01/04/2024	PB



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24A010
Reported: 01/09/2024 10:09

Sample Results (Continued)

Client Sample ID: MW-3

Lab ID: L24A010-03 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.20	ug/L	01/04/2024	PB
1,1-Dichloroethene	ND		0.50	ug/L	01/04/2024	PB
trans-1,2-Dichloroethene	ND		1.0	ug/L	01/04/2024	PB
cis-1,2-Dichloroethene	ND		1.0	ug/L	01/04/2024	PB
Trichloroethene (SIM)	ND		0.40	ug/L	01/04/2024	PB
Tetrachloroethene (SIM)	ND		1.0	ug/L	01/04/2024	PB
Surrogate: Dibromofluoromethane	111%		22.9-220		01/04/2024	PB
Surrogate: 1,2-Dichloroethane-d4	117%		32.2-196		01/04/2024	PB
Surrogate: Toluene-d8	78.4%		47.3-146		01/04/2024	PB
Surrogate: 4-Bromofluorobenzene	86.5%		38.4-136		01/04/2024	PB



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24A010
Reported: 01/09/2024 10:09

Sample Results (Continued)

Client Sample ID: MW-5

Lab ID: L24A010-04 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.20	ug/L	01/04/2024	PB
1,1-Dichloroethene	ND		0.50	ug/L	01/04/2024	PB
trans-1,2-Dichloroethene	ND		1.0	ug/L	01/04/2024	PB
cis-1,2-Dichloroethene	ND		1.0	ug/L	01/04/2024	PB
Trichloroethene (SIM)	ND		0.40	ug/L	01/04/2024	PB
Tetrachloroethene (SIM)	ND		1.0	ug/L	01/04/2024	PB
Surrogate: Dibromofluoromethane	118%		22.9-220		01/04/2024	PB
Surrogate: 1,2-Dichloroethane-d4	123%		32.2-196		01/04/2024	PB
Surrogate: Toluene-d8	80.2%		47.3-146		01/04/2024	PB
Surrogate: 4-Bromofluorobenzene	85.1%		38.4-136		01/04/2024	PB



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24A010
Reported: 01/09/2024 10:09

Quality Control

Volatile Organic Compounds by EPA Method 8260D

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
---------	--------	------	----	-------	-------------	---------------	------	-------------	-----	-----------

Batch: BYA0025 - VOA

Blank (BYA0025-BLK1)

Prepared & Analyzed: 1/4/2024

Vinyl Chloride (SIM)	ND		0.20	ug/L						
1,1-Dichloroethene	ND		0.50	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
Trichloroethene (SIM)	ND		0.40	ug/L						
Tetrachloroethene (SIM)	ND		1.0	ug/L						
Surrogate: Dibromofluoromethane			25.1	ug/L	20.0		126	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			26.4	ug/L	20.0		132	32.2-196		
Surrogate: Toluene-d8			17.9	ug/L	20.0		89.7	47.3-146		
Surrogate: 4-Bromofluorobenzene			17.3	ug/L	20.0		86.7	38.4-136		

LCS (BYA0025-BS1)

Prepared & Analyzed: 1/4/2024

Vinyl Chloride (SIM)	5.78		0.20	ug/L	5.00		116	44.2-183		
1,1-Dichloroethene	7.42		0.50	ug/L	5.00		148	39.6-181		
trans-1,2-Dichloroethene	6.84		1.0	ug/L	5.00		137	39.6-177		
cis-1,2-Dichloroethene	6.96		1.0	ug/L	5.00		139	29.5-182		
Trichloroethene (SIM)	4.91		0.40	ug/L	5.00		98.2	28.8-130		
Tetrachloroethene (SIM)	4.72		1.0	ug/L	5.00		94.5	30.4-159		
Surrogate: Dibromofluoromethane			23.6	ug/L	20.0		118	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			23.0	ug/L	20.0		115	32.2-196		
Surrogate: Toluene-d8			18.8	ug/L	20.0		94.1	47.3-146		
Surrogate: 4-Bromofluorobenzene			19.6	ug/L	20.0		98.0	38.4-136		

Duplicate (BYA0025-DUP1)

Parent: L24A012-05

Prepared & Analyzed: 1/4/2024

Vinyl Chloride (SIM)	ND		0.20	ug/L		ND				35
1,1-Dichloroethene	ND		0.50	ug/L		ND				35
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				35
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				35
Trichloroethene (SIM)	ND		0.40	ug/L		ND				35
Tetrachloroethene (SIM)	ND		1.0	ug/L		ND				35
Surrogate: Dibromofluoromethane			23.6	ug/L	20.0		118	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			25.6	ug/L	20.0		128	32.2-196		
Surrogate: Toluene-d8			18.6	ug/L	20.0		92.8	47.3-146		
Surrogate: 4-Bromofluorobenzene			18.2	ug/L	20.0		90.8	38.4-136		



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24A010
Reported: 01/09/2024 10:09

Quality Control (Continued)

Volatile Organic Compounds by EPA Method 8260D (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (BYA0025-MS1)		Parent: L24A012-05			Prepared & Analyzed: 1/4/2024					
Vinyl Chloride (SIM)	5.60		0.20	ug/L	5.00	ND	112	10.7-223		
1,1-Dichloroethene	6.99		0.50	ug/L	5.00	ND	140	21.7-199		
trans-1,2-Dichloroethene	6.54		1.0	ug/L	5.00	ND	131	10-216		
cis-1,2-Dichloroethene	6.62		1.0	ug/L	5.00	ND	132	10-246		
Trichloroethene (SIM)	4.85		0.40	ug/L	5.00	ND	97.0	25.2-172		
Tetrachloroethene (SIM)	4.57		1.0	ug/L	5.00	ND	91.4	43.2-139		
Surrogate: Dibromofluoromethane			23.2	ug/L	20.0		116	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			23.8	ug/L	20.0		119	32.2-196		
Surrogate: Toluene-d8			18.5	ug/L	20.0		92.6	47.3-146		
Surrogate: 4-Bromofluorobenzene			19.5	ug/L	20.0		97.4	38.4-136		
Matrix Spike Dup (BYA0025-MSD1)		Parent: L24A012-05			Prepared & Analyzed: 1/4/2024					
Vinyl Chloride (SIM)	5.46		0.20	ug/L	5.00	ND	109	10.7-223	2.46	35
1,1-Dichloroethene	6.87		0.50	ug/L	5.00	ND	137	21.7-199	1.72	35
trans-1,2-Dichloroethene	6.45		1.0	ug/L	5.00	ND	129	10-216	1.35	35
cis-1,2-Dichloroethene	6.55		1.0	ug/L	5.00	ND	131	10-246	1.14	35
Trichloroethene (SIM)	4.61		0.40	ug/L	5.00	ND	92.2	25.2-172	5.01	35
Tetrachloroethene (SIM)	4.45		1.0	ug/L	5.00	ND	88.9	43.2-139	2.68	35
Surrogate: Dibromofluoromethane			23.6	ug/L	20.0		118	22.9-220		
Surrogate: 1,2-Dichloroethane-d4			24.8	ug/L	20.0		124	32.2-196		
Surrogate: Toluene-d8			18.4	ug/L	20.0		92.1	47.3-146		
Surrogate: 4-Bromofluorobenzene			19.8	ug/L	20.0		99.0	38.4-136		

Libby Environmental, Inc.

4 Corners Cleaners Project
AEG an Atlas Geosciences NW Company
Libby Work Order # L24A010

Date Received 1/3/2024

Time Received 11:45 AM

3322 South Bay Road NE

Olympia, WA 98506

Phone: (360) 352-2110

FAX: (360) 352-4154

Email: libbyenv@gmail.com

Received By AA

Sample Receipt Checklist

Chain of Custody

- | | | | |
|---|--|------------------------------------|----------------------------------|
| 1. Is the Chain of Custody is complete? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 2. How was the sample delivered? | <input checked="" type="checkbox"/> Hand Delivered | <input type="checkbox"/> Picked Up | <input type="checkbox"/> Shipped |

Log In

- | | | | |
|---|---|--|------------------------------|
| 3. Cooler or Shipping Container is present. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 4. Cooler or Shipping Container is in good condition. | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 5. Cooler or Shipping Container has Custody Seals present. | <input type="checkbox"/> Yes | <input checked="" type="checkbox"/> No | <input type="checkbox"/> N/A |
| 6. Was an attempt made to cool the samples? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 7. Temperature of cooler (0°C to 8°C recommended) | <u>-0.4 °C</u> | | |
| 8. Temperature of sample(s) (0°C to 8°C recommended) | <u>10.0 °C</u> | | |
| 9. Did all containers arrive in good condition (unbroken)? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 10. Is it clear what analyses were requested? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 11. Did container labels match Chain of Custody? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 12. Are matrices correctly identified on Chain of Custody? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 13. Are correct containers used for the analysis indicated? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 14. Is there sufficient sample volume for indicated analysis? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 15. Were all containers properly preserved per each analysis? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |
| 16. Were VOA vials collected correctly (no headspace)? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | <input type="checkbox"/> N/A |
| 17. Were all holding times able to be met? | <input checked="" type="checkbox"/> Yes | <input type="checkbox"/> No | |

Discrepancies/ Notes

- | | | | |
|---|------------------------------|-----------------------------|---|
| 18. Was client notified of all discrepancies? | <input type="checkbox"/> Yes | <input type="checkbox"/> No | <input checked="" type="checkbox"/> N/A |
|---|------------------------------|-----------------------------|---|

Person Notified: _____

Date: _____

By Whom: _____

Via: _____

Regarding: _____

19. Comments.



Libby Environmental, Inc.

3322 South Bay Road NE • Olympia, WA 98506-2957

Phone (360) 352-2110 • libbyenv@gmail.com

April 23, 2024

Scott Rose

AEG an Atlas Geosciences NW Company

2633 Parkmont Lane SW, Suite A

Olympia, WA 98502

RE: 4 Corners Cleaners

Work Order Number: L24D083

Enclosed are the results of analyses for samples received by our laboratory on 4/19/2024.

Applicable detection limits and QA/QC data are included. The sample(s) will be disposed of within 30 days unless we are contacted to arrange long term storage.

Libby Environmental, Inc. appreciates the opportunity to have provided analytical services for this project. If you have any further questions about the data report, please feel free to contact us. It was a pleasure working with you on this project, and we are looking forward to the next opportunity to work together.

Sincerely,

A handwritten signature in black ink, appearing to read "Sherry Chilcutt", is displayed on a light gray rectangular background.

Sherry Chilcutt
Senior Chemist

Libby Environmental, Inc.

Chain of Custody Record

www.LibbyEnvironmental.com

4139 Libby Road NE
Olympia, WA 98506

Ph: 360-352-2110
Fax: 360-352-4154

Client: AEG

Address: 2633 Parkmount Lane SW, Suite A

City: Olympia State: WA Zip: 98502

Phone: (360) 352-9835 Fax: (360) 352-8164

Client Project # 17-126

Date: 4/19/24

Page: 1 of 1


Project Manager: Scott Rose

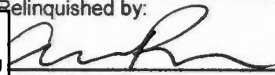
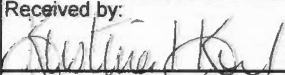
Project Name: 4 Corners Cleaners

Location: 23886 Se Kent-Kangley Rd City, State: Maple Valley, WA

Collector: Aimee Rike Date of Collection: 4/19/24

Email: Srose@AEGWA.com

		Depth	Time	Sample Type	Container Type	PCETCE w/ Daughter P										Field Notes
Sample Number																
1	MW-2	-	1205	GW	VOA	X										
2	MW-3	-	1135	↓	↓	X										
3	MW-5	-	1055	↓	↓	X										
4																
5																
6																
7																
8																
9																
10																
11																
12																
13																
14																
15																
16																
17																

Relinquished by: 	Date / Time: <u>4/19/24 1415</u>	Received by: 	Date / Time: <u>4-19-24 1416</u>	Sample Receipt Good Condition? <u>Y</u> <u>N</u> Temp. <u> </u> °C Seals Intact? <u>Y</u> <u>N</u> <u>N/A</u> Total Number of Containers <u> </u>	Remarks: TAT: 24HR 48HR 5-DAY
Relinquished by:	Date / Time:	Received by:	Date / Time:		
Relinquished by:	Date / Time:	Received by:	Date / Time:		
Relinquished by:	Date / Time:	Received by:	Date / Time:		



Libby Environmental, Inc.

AEG an Atlas Geosciences NW Company
2633 Parkmont Lane SW, Suite A
Olympia, WA 98502

Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24D083
Reported: 04/23/2024 12:18

Notes and Definitions

Item	Definition
RL	Reporting Limit
ND	Analyte NOT DETECTED at or above the reporting limit
DET	Analyte DETECTED at or above the reporting limit
Qual	Qualifier
All results reported on an "as received" basis unless indicated by "Dry"	

Work Order Sample Summary

Lab ID	Sample	Matrix	Date Sampled	Date Received
L24D083-01	MW-2	Water	04/19/2024	04/19/2024
L24D083-02	MW-3	Water	04/19/2024	04/19/2024
L24D083-03	MW-5	Water	04/19/2024	04/19/2024



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Project: 4 Corners Cleaners
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Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24D083
Reported: 04/23/2024 12:18

Sample Results

Client Sample ID: MW-2

Lab ID: L24D083-01 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.20	ug/L	04/22/2024	AA
1,1-Dichloroethene	ND		0.50	ug/L	04/22/2024	AA
trans-1,2-Dichloroethene	ND		1.0	ug/L	04/22/2024	AA
cis-1,2-Dichloroethene	ND		1.0	ug/L	04/22/2024	AA
Trichloroethene (SIM)	ND		0.40	ug/L	04/22/2024	AA
Tetrachloroethene (SIM)	ND		1.0	ug/L	04/22/2024	AA
Surrogate: Dibromofluoromethane	104%		49.6-175		04/22/2024	AA
Surrogate: 1,2-Dichloroethane-d4	107%		31.7-194		04/22/2024	AA
Surrogate: Toluene-d8	103%		52.9-135		04/22/2024	AA
Surrogate: 4-Bromofluorobenzene	97.1%		50.8-121		04/22/2024	AA



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Work Order: L24D083
Reported: 04/23/2024 12:18

Sample Results (Continued)

Client Sample ID: MW-3

Lab ID: L24D083-02 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.20	ug/L	04/22/2024	AA
1,1-Dichloroethene	ND		0.50	ug/L	04/22/2024	AA
trans-1,2-Dichloroethene	ND		1.0	ug/L	04/22/2024	AA
cis-1,2-Dichloroethene	ND		1.0	ug/L	04/22/2024	AA
Trichloroethene (SIM)	ND		0.40	ug/L	04/22/2024	AA
Tetrachloroethene (SIM)	ND		1.0	ug/L	04/22/2024	AA
Surrogate: Dibromofluoromethane	106%		49.6-175		04/22/2024	AA
Surrogate: 1,2-Dichloroethane-d4	107%		31.7-194		04/22/2024	AA
Surrogate: Toluene-d8	104%		52.9-135		04/22/2024	AA
Surrogate: 4-Bromofluorobenzene	94.8%		50.8-121		04/22/2024	AA



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Project: 4 Corners Cleaners
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City/State: Maple Valley, WA
Work Order: L24D083
Reported: 04/23/2024 12:18

Sample Results (Continued)

Client Sample ID: MW-5

Lab ID: L24D083-03 (Water)

Analyte	Result	Qual	RL	Units	Date Analyzed	Analyst Initials
<u>Volatile Organic Compounds by EPA Method 8260D</u>						
Vinyl Chloride (SIM)	ND		0.20	ug/L	04/22/2024	AA
1,1-Dichloroethene	ND		0.50	ug/L	04/22/2024	AA
trans-1,2-Dichloroethene	ND		1.0	ug/L	04/22/2024	AA
cis-1,2-Dichloroethene	ND		1.0	ug/L	04/22/2024	AA
Trichloroethene (SIM)	ND		0.40	ug/L	04/22/2024	AA
Tetrachloroethene (SIM)	ND		1.0	ug/L	04/22/2024	AA
Surrogate: Dibromofluoromethane	120%		49.6-175		04/22/2024	AA
Surrogate: 1,2-Dichloroethane-d4	124%		31.7-194		04/22/2024	AA
Surrogate: Toluene-d8	119%		52.9-135		04/22/2024	AA
Surrogate: 4-Bromofluorobenzene	95.7%		50.8-121		04/22/2024	AA



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Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24D083
Reported: 04/23/2024 12:18

Quality Control

Volatile Organic Compounds by EPA Method 8260D

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
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Batch: BYD0131 - VOA

Blank (BYD0131-BLK1)

Prepared & Analyzed: 4/22/2024

Vinyl Chloride (SIM)	ND		0.20	ug/L						
1,1-Dichloroethene	ND		0.50	ug/L						
trans-1,2-Dichloroethene	ND		1.0	ug/L						
cis-1,2-Dichloroethene	ND		1.0	ug/L						
Trichloroethene (SIM)	ND		0.40	ug/L						
Tetrachloroethene (SIM)	ND		1.0	ug/L						
Surrogate: Dibromofluoromethane			20.6	ug/L	20.0		103	49.6-175		
Surrogate: 1,2-Dichloroethane-d4			21.2	ug/L	20.0		106	31.7-194		
Surrogate: Toluene-d8			21.1	ug/L	20.0		106	52.9-135		
Surrogate: 4-Bromofluorobenzene			19.4	ug/L	20.0		96.9	50.8-121		

LCS (BYD0131-BS1)

Prepared & Analyzed: 4/22/2024

Vinyl Chloride (VC)	3.84		2.0	ug/L	5.00		76.8	27.5-188		
1,1-Dichloroethene	4.74		0.50	ug/L	5.00		94.9	42.4-208		
trans-1,2-Dichloroethene	5.04		1.0	ug/L	5.00		101	37.7-200		
cis-1,2-Dichloroethene	4.89		1.0	ug/L	5.00		97.8	53.2-160		
Trichloroethene (TCE)	4.35		2.0	ug/L	5.00		86.9	63.3-132		
Tetrachloroethene (PCE)	4.49		2.0	ug/L	5.00		89.9	46.9-140		
Surrogate: Dibromofluoromethane			20.4	ug/L	20.0		102	49.6-175		
Surrogate: 1,2-Dichloroethane-d4			21.5	ug/L	20.0		107	31.7-194		
Surrogate: Toluene-d8			21.2	ug/L	20.0		106	52.9-135		
Surrogate: 4-Bromofluorobenzene			22.7	ug/L	20.0		113	50.8-121		

Duplicate (BYD0131-DUP1)

Parent: L24D083-01

Prepared & Analyzed: 4/22/2024

Vinyl Chloride (SIM)	ND		0.20	ug/L		ND				35
1,1-Dichloroethene	ND		0.50	ug/L		ND				35
trans-1,2-Dichloroethene	ND		1.0	ug/L		ND				35
cis-1,2-Dichloroethene	ND		1.0	ug/L		ND				35
Trichloroethene (SIM)	ND		0.40	ug/L		ND				35
Tetrachloroethene (SIM)	ND		1.0	ug/L		ND				35
Surrogate: Dibromofluoromethane			21.5	ug/L	20.0		108	49.6-175		
Surrogate: 1,2-Dichloroethane-d4			22.2	ug/L	20.0		111	31.7-194		
Surrogate: Toluene-d8			21.2	ug/L	20.0		106	52.9-135		
Surrogate: 4-Bromofluorobenzene			19.3	ug/L	20.0		96.6	50.8-121		



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Project: 4 Corners Cleaners
Project Number: 17-126
Project Manager: Scott Rose

City/State: Maple Valley, WA
Work Order: L24D083
Reported: 04/23/2024 12:18

Quality Control (Continued)

Volatile Organic Compounds by EPA Method 8260D (Continued)

Analyte	Result	Qual	RL	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit
Matrix Spike (BYD0131-MS1)		Parent: L24D083-01			Prepared & Analyzed: 4/22/2024					
Vinyl Chloride (VC)	4.03		2.0	ug/L	5.00	ND	80.5	12.9-180		
1,1-Dichloroethene	4.63		0.50	ug/L	5.00	ND	92.6	39.1-203		
trans-1,2-Dichloroethene	4.72		1.0	ug/L	5.00	ND	94.3	40.5-190		
cis-1,2-Dichloroethene	5.26		1.0	ug/L	5.00	ND	105	28.9-177		
Trichloroethene (TCE)	4.20		2.0	ug/L	5.00	ND	83.9	58.3-130		
Tetrachloroethene (PCE)	4.96		2.0	ug/L	5.00	ND	99.3	32-159		
Surrogate: Dibromofluoromethane			20.8	ug/L	20.0		104	49.6-175		
Surrogate: 1,2-Dichloroethane-d4			21.7	ug/L	20.0		109	31.7-194		
Surrogate: Toluene-d8			21.8	ug/L	20.0		109	52.9-135		
Surrogate: 4-Bromofluorobenzene			21.6	ug/L	20.0		108	50.8-121		
Matrix Spike Dup (BYD0131-MSD1)		Parent: L24D083-01			Prepared & Analyzed: 4/22/2024					
Vinyl Chloride (VC)	4.59		2.0	ug/L	5.00	ND	91.9	12.9-180	13.2	35
1,1-Dichloroethene	5.49		0.50	ug/L	5.00	ND	110	39.1-203	17.0	35
trans-1,2-Dichloroethene	5.93		1.0	ug/L	5.00	ND	119	40.5-190	22.9	35
cis-1,2-Dichloroethene	5.72		1.0	ug/L	5.00	ND	114	28.9-177	8.32	35
Trichloroethene (TCE)	4.79		2.0	ug/L	5.00	ND	95.8	58.3-130	13.2	35
Tetrachloroethene (PCE)	5.40		2.0	ug/L	5.00	ND	108	32-159	8.49	35
Surrogate: Dibromofluoromethane			21.1	ug/L	20.0		105	49.6-175		
Surrogate: 1,2-Dichloroethane-d4			21.6	ug/L	20.0		108	31.7-194		
Surrogate: Toluene-d8			21.5	ug/L	20.0		108	52.9-135		
Surrogate: 4-Bromofluorobenzene			22.0	ug/L	20.0		110	50.8-121		

Libby Environmental, Inc.

4 Corners Cleaners Project
AEG an Atlas Geosciences NW Company
Libby Work Order # L24D083

Date Received 4/19/2024

Time Received 2:16 PM

3322 South Bay Road NE

Olympia, WA 98506

Phone: (360) 352-2110

FAX: (360) 352-4154

Email: libbyenv@gmail.com

Received By KLI

Sample Receipt Checklist

Chain of Custody

1. Is the Chain of Custody is complete? ☒ Yes ☐ No
2. How was the sample delivered? ☒ Hand Delivered ☐ Picked Up ☐ Shipped

Log In

3. Cooler or Shipping Container is present. ☒ Yes ☐ No ☐ N/A
4. Cooler or Shipping Container is in good condition. ☒ Yes ☐ No ☐ N/A
5. Cooler or Shipping Container has Custody Seals present. ☐ Yes ☒ No ☐ N/A
6. Was an attempt made to cool the samples? ☒ Yes ☐ No ☐ N/A
7. Temperature of cooler (0°C to 8°C recommended) 0.0 °C
8. Temperature of sample(s) (0°C to 8°C recommended) 3.5 °C
9. Did all containers arrive in good condition (unbroken)? ☒ Yes ☐ No
10. Is it clear what analyses were requested? ☒ Yes ☐ No
11. Did container labels match Chain of Custody? ☒ Yes ☐ No
12. Are matrices correctly identified on Chain of Custody? ☒ Yes ☐ No
13. Are correct containers used for the analysis indicated? ☒ Yes ☐ No
14. Is there sufficient sample volume for indicated analysis? ☒ Yes ☐ No
15. Were all containers properly preserved per each analysis? ☒ Yes ☐ No
16. Were VOA vials collected correctly (no headspace)? ☒ Yes ☐ No ☐ N/A
17. Were all holding times able to be met? ☒ Yes ☐ No

Discrepancies/ Notes

18. Was client notified of all discrepancies? ☐ Yes ☐ No ☒ N/A

Person Notified: _____

Date: _____

By Whom: _____

Via: _____

Regarding: _____

19. Comments.
