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**To:** Elizabeth Kercher, State of Washington Department of Ecology, LUST Project Manager

**From:** Melissa Roskamp, PE,  and Scott Lathen, PE, GeoEngineers, Inc. 

**Date:** October 24, 2025

**File:** 0504-202-01

**Subject:** Stillwater Holdings Chevron Site – Vapor Intrusion Assessment

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## Introduction

This memorandum (memo) describes vapor intrusion (VI) assessment activities conducted at the Stillwater Holdings Chevron Cleanup Site (herein referred to as “Site”), as shown in the Vicinity Map, Figure 1. The Washington State Department of Ecology (Ecology) reference numbers for this Site include Facility Site ID (FSID) No. 28575673 and Cleanup Site ID (CSID) No. 5818. The Site includes the Chevron gas station located at 7 East Rose Street, the Marcus Whitman Hotel and Conference Center located at 6 West Rose Street, and the 106 Building located at 106 North 2<sup>nd</sup> Avenue, in Walla Walla, Washington, as shown in the Site Plan, Figure 2.

In September 2023, a gasoline release was identified as originating from an underground storage tank (UST) at the Chevron gas station. Gasoline contaminated groundwater was found in sumps beneath the Marcus Whitman Hotel and Conference Center and the 106 Building, in monitoring wells surrounding both properties, as well as in soil and groundwater on the Chevron gas station property<sup>1</sup>.

This VI assessment was conducted by GeoEngineers, Inc. (GeoEngineers) for Ecology under Master Contract No. C2500073. The purpose of this assessment was to collect VI data to support the development of the Interim Action cleanup plan in compliance with Washington Administrative Code (WAC) 173-340-430 (Interim Actions) to reduce a threat to human health or the environment by eliminating or substantially reducing one or more pathways for exposure to contaminated groundwater or soil vapor.

## Site Description and Background

In September 2023, Ecology was notified of gasoline odor complaints at the Marcus Whitman Hotel. It was determined that gasoline vapors were entering the hotel building via sumps within the basement and that the gasoline was present in the groundwater. The sumps are located within a sub-basement that is below the rest of the Marcus Whitman Hotel basement and contains a partial dirt floor. Further investigation identified gasoline vapors and gasoline contaminated water in two sumps and a vault in the adjacent 106 Building. Emergency actions were taken to vent potentially explosive levels of volatile organic compounds (VOCs) and recover product from the sumps.

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<sup>1</sup> Work Plan for Additional Subject Property Investigation – DRAFT, Wine Country Store, 7 East Rose Street, Walla Walla, WA. Aspect, November 10, 2023.

The Chevron gas station, located northeast of the Marcus Whitman and adjacent to the 106 Building, was identified as the source of the gasoline release. Thirteen monitoring wells were installed on the Chevron gas station property or the City of Walla Walla right-of-way to delineate and monitor the spill. Emergency Removal Actions have continued at the Site since the identification of the release, including interception of contaminated groundwater in the sumps and treatment through granular activated carbon (GAC) and discharge to municipal sewer. In May 2024, Stillwater Holdings, who owns the Chevron gas station, petitioned Ecology to take over the continued remediation of the Site due to lack of funds.

Emergency interim action remains necessary at the site as an unmitigated response to groundwater contamination or exposure to soil vapors would create a potential risk to public safety and could present a threat to the environment.

## PREVIOUS INVESTIGATIONS AND REMEDIAL ACTIONS

Assessment and remediation actions have been conducted at the Site since identification of the release in September 2023. Ecology and consultants hired by Stillwater Holdings have installed groundwater wells, implemented interim remediation measures and monitored Site air and groundwater concentrations. Assessment and remediation actions are described in GeoEngineers' Vapor Sampling Work Plan (GeoEngineers 2025).

## Vapor Intrusion Assessment

GeoEngineers conducted VI assessment activities in April 2025 following the procedures described in the Vapor Sampling Work Plan (GeoEngineers 2025).

### HVAC ASSESSMENT

An assessment of current HVAC conditions and building venting conditions was performed prior to sampling. Locations of air intakes and returns were confirmed prior to the placement of samples.

- The Marcus Whitman HVAC was operating in cooling mode and all air intake was being drawn from the building roof. Sample OA-1 was placed on the roof to collect a representative ambient air sample and located away from the ventilation being drawn from the Marcus Whitman basement.
- The 106 Building is not fully occupied, and the HVAC system is not currently operating continuously. At the time of sampling the system was set to cooling mode. Rooftop HVAC intakes were inaccessible, so samples OA-2 and OA-3 were placed at street level and located away from the ventilation being drawn from the 106 Building basement.

## INDOOR AND OUTDOOR AIR SAMPLING

GeoEngineers conducted indoor air (IA) and outdoor (ambient) air (OA) sampling activities on April 22 and April 23, 2025, following the procedures described in the Vapor Sampling Work Plan (GeoEngineers 2025). The IA and OA sample locations are shown in Vapor Intrusion Sample Locations, Figure 3, and Marcus Whitman Hotel Basement Sample Locations, Figure 4, and described below:

- IA-01 through IA-06 were located in the basement of the Marcus Whitman Hotel. IA-01 and IA-03 through IA-06 were co-located with sub-slab vapor (SSV) samples SSV-01 and SSV-03 through SSV-06, respectively, and IA-02 was located at the bottom of an elevator shaft;
- IA-07 through IA-09 were located on the ground floor of the Marcus Whitman Hotel;
- IA-10 and IA-11 were located in the basement of the 106 Building;
- IA-12 was located in the Stillwater Holdings Chevron building;
- IA-13 was located on the ground floor of the 106 Building;
- OA-01 was located on the roof of the Marcus Whitman Hotel, within 10 feet of the HVAC intake. Additionally, the sample intake was level with the HVAC intake and there were no obstructions between OA-01 and the HVAC intake; and
- OA-02 and OA-03 were located outside the 106 Building and the Stillwater Holdings Chevron building at ground level. Their locations are shown in Figure 3 and were generally chosen to represent both upwind (OA-02) and downwind (OA-03) of the fuel island dispensers.

The IA and OA samples were collected using 6-liter Summa canisters and flow controllers calibrated to collect approximately 24-hour (IA-01 through IA-09 and OA-01) or 8-hour (IA-10 through IA-13, OA-02 and OA-03) samples. IA-01 through IA-09 and OA-01 were collected over approximately the same 24-hour period, while IA-10 through IA-13, OA-02 and OA-03 were collected over approximately the same 8-hour period.

### *Indoor Air/Outdoor Air Sample Results*

The IA and OA samples were submitted to Friedman and Bruya, Inc. (F&B) in Seattle, Washington, and analyzed for the following:

- Air-phase petroleum hydrocarbons (APH) including EC5-8 aliphatics, EC9-12 aliphatics and EC9-10 aromatics using Environmental Protection Agency (EPA) Method MA-APH; and
- VOCs including benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN) and chlorinated VOCs (CVOCs) including tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (cDCE), trans-1,2-dichloroethylene (tDCE) and vinyl chloride (VC) using EPA Method TO-15.

The IA and OA chemical analytical reports and data validation report are included in Appendix A, Laboratory Chemical Analytical Reports and Data Validation Report. Chemical analytical results for OA-1 through OA-3 are presented in Chemical Analytical Results – Outdoor Air, Table 2. Outdoor air concentrations are likely influenced by their proximity to vehicles on the surrounding roads and Stillwater Holdings Chevron fuel pumps. Chemical analytical results for OA-1 through OA-3 were used to adjust the IA sample results consistent with Ecology’s VI guidance (Ecology 2022), as described below:

- OA-01 concentrations were used to adjust the IA sample results for IA-01 through IA-09 in the Marcus Whitman Hotel.
- OA-02 and OA-03 concentrations were used to adjust the IA sample results for IA-10 through IA-13 in the 106 Building and Stillwater Holdings Chevron building. The lowest detected OA concentration for each analyte between OA-02 and OA-03 was used to adjust the IA-10 through IA-13 sample results.

Consistent with the Vapor Sampling Work Plan, the indoor air chemical analytical results were compared to MTCA Method B Commercial or Residential Cleanup Levels (CULs) depending on the assumed receptor in the sampling location. IA-01 through IA-06 were compared to the MTCA Method B Commercial CULs because the basement of the Marcus Whitman Hotel is typically occupied by hotel staff during standard (8-hour) work shifts. The basement space is not suitable for residential occupancy and is not used by hotel guests. Similarly, IA-10 through IA-13 were compared to the MTCA Method B Commercial CULs because they were collected from commercial spaces typically occupied by workers for 8-hour shifts.

IA-07 through IA-09 were compared to the MTCA Method B Residential CULs because they were collected in areas that could potentially be occupied by hotel guests for a 24-hour period.

The IA chemical analytical results, adjusted for ambient air contributions<sup>2</sup>, are presented and compared to the MTCA Method B Commercial Cleanup Levels (IA-01 through IA-06 and IA-10 through IA-13) in Chemical Analytical Results – Adjusted Commercial Indoor Air, Table 3, or the MTCA Method B Residential CULs (IA-07 through IA-09) in Chemical Analytical Results – Adjusted Residential Indoor Air, Table 4, and are summarized below:

- Total petroleum hydrocarbon (TPH) concentrations (determined by calculating the sum of APH and BTEXN concentrations) in IA-01 through IA-06 from the Marcus Whitman Hotel basement were less than the MTCA Method B Commercial CUL of 390 micrograms per cubic meter ( $\mu\text{g}/\text{m}^3$ ) after adjusting for ambient air contributions, and APH and BTEXN were either not detected or detected at concentrations less than their respective MTCA Method B Commercial CULs in IA-01 through IA-06.
- TPH concentrations in IA-07 through IA-09 from the ground floor of the Marcus Whitman Hotel were less than the MTCA Method B Residential CUL of 46  $\mu\text{g}/\text{m}^3$  after adjusting for ambient air concentrations, and APH and BTEXN were either not detected or detected at concentrations less than their respective MTCA Method B Residential CULs in IA-07 through IA-09.
- TPH concentrations in IA-10, IA-11 and IA-13 from the 106 Building were 604.1  $\mu\text{g}/\text{m}^3$ , 799.3  $\mu\text{g}/\text{m}^3$ , and 493.5  $\mu\text{g}/\text{m}^3$ , respectively, which is greater than the MTCA Method B Commercial CUL of 390  $\mu\text{g}/\text{m}^3$  after adjusting for ambient air concentrations. Additionally, individual concentrations of EC5-8 aliphatics, benzene and naphthalene were greater than the MTCA Method B Commercial CULs of 390  $\mu\text{g}/\text{m}^3$ , 1.5  $\mu\text{g}/\text{m}^3$  and 0.34  $\mu\text{g}/\text{m}^3$ , respectively, after adjusting for ambient air concentrations. Toluene, ethylbenzene and xylenes were either not detected or detected at concentrations less than their respective MTCA Method B CULs in IA-10, IA-11 and IA-13.
- The TPH concentration in IA-12 from the Chevron gas station building was less than the MTCA Method B Commercial CUL, and APH and BTEXN were either not detected or detected at concentrations less than their respective MTCA Method B CULs in IA-12.
- CVOCs were either not detected or were detected at concentrations less than their respective MTCA Method B CULs in the IA samples analyzed.

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<sup>2</sup> Consistent with Ecology's *Guidance for Evaluating Vapor Intrusion in Washington State* (VI Guidance; Ecology 2022), the concentrations of COCs detected in the OA (ambient) air samples were subtracted from the concentrations in the IA samples. Adjusted IA concentrations were determined using: IA concentration – OA concentration. Unadjusted IA sample results are included in the laboratory report in Appendix A.

## SUB-SLAB SOIL VAPOR SAMPLING

GeoEngineers installed permanent sub-slab vapor (SSV) sample points SSV-01 through SSV-09 and SSV-12 on April 22, 2025 at the locations shown in Figures 3 and 4 and described below:

- SSV-01 through SSV-09 were installed in the basement of the Marcus Whitman Hotel as shown in Figure 4; and
- SSV-12 was installed in the Stillwater Holdings Chevron building as shown in Figure 3.
- Two additional SSV samples, SSV-10 and SSV-11, were planned for the 106 Building basement. However, when installing the SSV sample points, it was determined that the concrete slab was at least 15 inches thick because a 15-inch drill bit did not penetrate through the slab. The slab was additionally scanned with ground penetrating radar (GPR), which indicated that the slab was between 16 and 20 inches thick. Based on the thickness of the slab, SSV sample points were not installed in the 106 Building basement.

Vapor Pins® were installed at each SSV location. Prior to collecting the SSV samples, the tightness of the connections was tested using a shut-in test and helium shroud. One-liter Summa canister air sampling devices (Summa canisters) and flow controllers calibrated to collect approximately 5-minute samples were used to collect the SSV samples. After the SSV samples were collected, caps were placed on the Vapor Pins® to prevent sub-slab vapors from intruding into the building through the SSV sample points.

### *Sub-Slab Soil Vapor Sample Results*

The SSV samples were submitted to F&B for analysis of APH and BTEXN using the methods described in Section 3.1.1 above. The SSV samples were additionally analyzed for helium using ASTM International (ASTM) Method D-1946 to assess the tightness of the Summa canister fittings.

Chemical analytical reports and a data validation report are included in Appendix A. The SSV chemical analytical results are presented and compared to the MTCA Commercial Worker Soil Gas Screening Levels (SGSLs) in Chemical Analytical Results – Sub-Slab Vapor, Table 1, and are summarized below:

- APH including EC5-8 aliphatics and/or EC9-12 aliphatics were detected at concentrations ranging from 390 ( $\mu\text{g}/\text{m}^3$ ) to 600 ( $\mu\text{g}/\text{m}^3$ ) in SSV-04 through SSV-08 and SSV-12, which is greater than or equal to the combined APH MTCA Commercial Worker SGSL of 390 ( $\mu\text{g}/\text{m}^3$ ).
- APH were either not detected or detected at concentrations less than the MTCA Commercial Worker SGSL in SSV-01 through SSV-03 and SSV-09.
- BTEXN and CVOCs were either not detected or detected at concentrations less than their respective MTCA Commercial Worker SGSLs in the SSV samples analyzed.
- Helium was not detected in the SSV samples analyzed, which indicates that there was adequate seal during sampling to prevent ambient air from entering the canisters during sampling.

## References

Aspect, 2023. Work Plan for Additional Subject Property Investigation – DRAFT, Wine Country Store, 7 East Rose Street, Walla Walla, WA. Aspect, November 10, 2023.

Aspect, 2024. Draft Engineering Design Report Wastewater Treatment: Marcus Whitman Hotel—Wastewater Treatment System, dated May 8, 2024. GeoEngineers, Inc. 2025a. “Work Plan, Stillwater Holdings Chevron Site – Vapor Sampling Plan, 7 East Rose Street, Walla Walla, Washington.” File No. 0504-202-01. April 7, 2025.

Marcus Whitman Hotel Vapor Intrusion Evaluation Workplan, dated March 27, 2024 and associated Memorandum between Aspect and Ecology, dated February 7, 2024

Washington State Department of Ecology (Ecology). 2013. “Model Toxics Control Act Regulation and Statute, Chapter 173-340 WAC and 70.105D RCW.” Revised 2024.

Washington State Department of Ecology (Ecology). 2022. “Guidance for Evaluating Vapor Intrusion in Washington State: Investigation and Remedial Action.” Publication No. 09-09-047. March 2022.

### Attachments:

Table 1. Chemical Analytical Results – Outdoor Air

Table 2. Chemical Analytical Results – Adjusted Commercial Indoor Air

Table 3. Chemical Analytical Results – Adjusted Residential Indoor Air

Table 4. Chemical Analytical Results – Sub-Slab Soil Vapor

Figure 1. Vicinity Map

Figure 2. Site Plan

Figure 3. Vapor Intrusion Sample Locations

Figure 4. Marcus Whitman Hotel Basement Sample Locations

Appendix A. Laboratory Chemical Analytical Reports and Data Validation Report

**Disclaimer:** Any electronic form, facsimile or hard copy of the original document (email, text, table, and/or figure), if provided, and any attachments are only a copy of the original document. The original document is stored by GeoEngineers, Inc. and will serve as the official document of record.

## Tables

**Table 1**  
**Chemical Analytical Results - Outdoor Air<sup>1</sup>**  
 Stillwater Holdings Chevron Site  
 Walla Walla, Washington

Location	Sample Date	Units	Air-Phase Hydrocarbons <sup>2</sup>			Volatile Organic Compounds <sup>3</sup>										
			APH EC5-8 Aliphatics	APH EC9-12 Aliphatics	APH EC9-10 Aromatics	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Naphthalene	PCE	TCE	cDCE	tDCE	VC
<b>Marcus Whitman Hotel Outdoor Air</b>																
OA-01	4/22/2025	µg/m <sup>3</sup>	<b>53 J</b>	<b>29</b>	<4.4 J	<b>0.38</b>	<1.7	<b>0.27</b>	<b>0.96</b>	<b>0.39</b>	<b>0.058 J</b>	<6.8	<0.11	<0.4	<0.4	<0.13
<b>106 Building/Stillwater Holdings Chevron Outdoor Air</b>																
OA-02	4/22/2025	µg/m <sup>3</sup>	<b>68 J</b>	<15 J	<4.4 J	<b>0.46</b>	<1.7	<b>0.15 J</b>	<b>0.52</b>	<b>0.20</b>	<0.052 J	<6.8	<0.11	<0.4	<0.4	<0.13
OA-03	4/22/2025	µg/m <sup>3</sup>	<b>66 J</b>	<15 J	<4.4 J	<b>1.2</b>	<b>2.4</b>	<b>0.27</b>	<b>1.1</b>	<b>0.41</b>	<0.052 J	<6.8	<0.11	<0.4	<0.4	<0.13

**Notes:**

<sup>1</sup> Samples analyzed by Friedman & Bruya, Inc. located in Seattle, Washington.

<sup>2</sup> Air-phase hydrocarbons (APH) analyzed using Environmental Protection Agency (EPA) Method MA-APH.

<sup>3</sup> Volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN) and tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (cDCE), trans-1,2-dichloroethylene (tDCE) and vinyl chloride (VC) analyzed using EPA Method TO-15.

J = The analyte concentration is reported between the method detection limit (MDL) and the lowest calibration point. The value reported is an estimate.

µg/m<sup>3</sup> = micrograms per cubic meter. '<' = less than the laboratory RL (PCE, TCE, cDCE, tDCE, VC), MDL (BTEXN) or equipment calibration limits (APH).

**Bold** = Analyte was detected.

**Table 2**  
**Chemical Analytical Results - Adjusted Commercial Indoor Air<sup>1</sup>**  
 Stillwater Holdings Chevron Site  
 Walla Walla, Washington

Location	Sample Date	Units	Air-Phase Hydrocarbons <sup>2</sup>			Volatile Organic Compounds <sup>3</sup>										Total Petroleum Hydrocarbons <sup>4</sup>	
			APH EC5-8 Aliphatics	APH EC9-12 Aliphatics	APH EC9-10 Aromatics	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Naphthalene	PCE	TCE	cDCE	tDCE	VC	Adjusted TPH Sum
<b>Marcus Whitman Hotel Basement<sup>5</sup></b>																	
IA-01	4/22/2025	µg/m <sup>3</sup>	<b>57 J</b>	<21 <sup>7</sup>	<b>6.1 J<sup>7</sup></b>	<b>0.60</b>	<b>5.70</b>	<b>0.51</b>	<b>1.54</b>	<b>0.54</b>	<b>0.13</b>	<6.8	<b>0.12</b>	<0.4	<0.4	<0.13	<b>93.1</b>
IA-02	4/22/2025	µg/m <sup>3</sup>	<b>34 J</b>	<28 <sup>7</sup>	<4.4 J	<b>0.50</b>	<b>4.90</b>	<b>0.35</b>	<b>1.24</b>	<b>0.41</b>	<b>0.07</b>	<6.8	<b>0.26</b>	<0.4	<0.4	<0.13	<b>71.7 J</b>
IA-03	4/22/2025	µg/m <sup>3</sup>	<b>12 J</b>	<15 <sup>7</sup>	<4.4 J	<b>0.15</b>	<b>2.30</b>	<b>0.04</b>	<b>0.14</b>	<b>0.01</b>	<b>0.01 J</b>	<6.8	<0.11	<0.4	<0.4	<0.13	<b>31.9 J</b>
IA-04	4/22/2025	µg/m <sup>3</sup>	<b>10 J</b>	<b>30</b>	<4.4 J	<b>0.15</b>	<b>2.60</b>	<b>0.09</b>	<b>0.34</b>	<b>0.13</b>	<b>0.10</b>	<6.8	<0.11	<0.4	<0.4	<0.13	<b>45.6 J</b>
IA-05	4/22/2025	µg/m <sup>3</sup>	<b>21 J</b>	<b>2</b>	<4.4 J	<b>0.18</b>	<b>2.50</b>	<b>0.02</b>	<0.96 <sup>7</sup>	<0.36 <sup>7</sup>	<b>0.15</b>	<6.8	<0.11	<0.4	<0.4	<0.13	<b>29.4 J</b>
IA-06	4/22/2025	µg/m <sup>3</sup>	<b>13 J</b>	<25 <sup>7</sup>	<4.4 J	<b>0.27</b>	<b>3.50</b>	<b>0.11</b>	<b>0.34</b>	<b>0.10</b>	<b>0.031 J</b>	<6.8	<b>0.16</b>	<0.4	<0.4	<0.13	<b>44.6 J</b>
<b>106 Building Basement<sup>6</sup></b>																	
IA-10	4/22/2025	µg/m <sup>3</sup>	<b>554</b>	<b>31</b>	<b>5.8 J</b>	<b>3.54</b>	<b>6.80</b>	<b>0.32</b>	<b>1.6</b>	<b>0.67</b>	<b>0.36</b>	<6.8	<0.11	<0.4	<0.4	<0.13	<b>604.1 J</b>
IA-11	4/22/2025	µg/m <sup>3</sup>	<b>694</b>	<b>27</b>	<b>29</b>	<b>8.64</b>	<b>13</b>	<b>4.33</b>	<b>13.5</b>	<b>9.4</b>	<b>0.45</b>	<6.8	<0.11	<0.4	<0.4	<0.13	<b>799.3</b>
<b>Stillwater Holdings Chevron Ground Floor<sup>6</sup></b>																	
IA-12	4/22/2025	µg/m <sup>3</sup>	<b>144</b>	<15 J	<4.4 J	<b>0.51</b>	<b>2.3</b>	<0.2 J <sup>7</sup>	<b>0.2</b>	<b>0.08</b>	<0.052 J	<6.8	<0.11	<0.4	<0.4	<0.13	<b>157 J</b>
<b>106 Building Ground Floor<sup>6</sup></b>																	
IA-13	4/22/2025	µg/m <sup>3</sup>	<b>454</b>	<b>20 J</b>	<b>6 J</b>	<b>3.44</b>	<b>6.0</b>	<b>0.51 J</b>	<b>1.98</b>	<b>0.80</b>	<b>0.72</b>	<6.8	<0.11	NR	<0.4	<0.13	<b>493.5 J</b>
<b>MTCA Method B Commercial CUL<sup>8</sup></b>				<b>390</b>		<b>1.5</b>	<b>19,470</b>	<b>3,893</b>	<b>389</b>	<b>0.34</b>	<b>44.9</b>	<b>2.85</b>	<b>156</b>	<b>156</b>	<b>1.33</b>	<b>390</b>	

**Notes:**

- <sup>1</sup> Samples analyzed by Friedman & Bruya, Inc. located in Seattle, Washington. Adjusted concentrations derived by subtracting the outdoor air (OA) concentrations from the indoor air (IA) concentrations. Unadjusted IA concentrations are included in Appendix A.
  - <sup>2</sup> Air-phase hydrocarbons (APH) analyzed using Environmental Protection Agency (EPA) Method MA-APH.
  - <sup>3</sup> Volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN) and tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (cDCE), trans-1,2-dichloroethylene (tDCE) and vinyl chloride (VC) analyzed using EPA Method TO-15.
  - <sup>4</sup> Total petroleum hydrocarbons (TPH) derived from the sum of APH and BTEXN concentrations. Non-detect (ND) results were assumed to be half the method detection limit (MDL) for BTEXN or half the equipment background value for APH for the purposes of determining TPH.
  - <sup>5</sup> Detected concentrations in OA-01 (Table 3) were used to adjust IA-01 through IA-06.
  - <sup>6</sup> Detected concentrations in OA-02 or OA-03 (Table 3), whichever were lower, were used to adjust IA-10 through IA-13.
  - <sup>7</sup> The IA concentrations were less than the OA concentrations; therefore after adjustment the IA concentrations were less than 0. Adjusted IA results less than 0 are assumed to be less than the unadjusted IA concentration. The unadjusted IA concentration was used to calculate TPH.
  - <sup>8</sup> MTCA Method B Commercial CUL.
- J = The analyte concentration is reported between the MDL and the lowest calibration point. The value reported is an estimate.  
 µg/m<sup>3</sup> = micrograms per cubic meter. '<' = less than the laboratory RL (PCE, TCE, cDCE, tDCE, VC), MDL (BTEXN) or equipment background (APH).  
**Bold** = Analyte was detected.  
 NR=Value not reported by laboratory.  
  **Bold** with gray shading indicates analyte was detected at concentration greater than the MTCA Method B Commercial CUL.

**Table 3**  
**Chemical Analytical Results - Adjusted Residential Indoor Air<sup>1</sup>**  
**Stillwater Holdings Chevron Site**  
**Walla Walla, Washington**

Location	Sample Date	Units	Air-Phase Hydrocarbons <sup>2</sup>			Volatile Organic Compounds <sup>3</sup>										Total Petroleum Hydrocarbons <sup>4</sup>	
			APH EC5-8 Aliphatics	APH EC9-12 Aliphatics	APH EC9-10 Aromatics	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Naphthalene	PCE	TCE	cDCE	tDCE	VC	Adjusted TPH Sum
<b>Marcus Whitman Hotel Ground Floor<sup>5</sup></b>																	
<b>IA-07</b>	4/22/2025	µg/m <sup>3</sup>	<b>20 J</b>	<28 <sup>6</sup>	<4.4 J	<b>0.29 J</b>	<b>2.8</b>	<b>0.20</b>	<b>0.74</b>	<b>0.29</b>	<0.058 <sup>6</sup>	<6.8	<0.11	<0.4	<0.4	<0.13	<b>54.6</b>
<b>IA-08</b>	4/22/2025	µg/m <sup>3</sup>	<b>5 J</b>	<15 J	<4.4 J	<0.35 <sup>6</sup>	<1.7	<0.18 J <sup>6</sup>	<0.56 <sup>6</sup>	<0.22 <sup>6</sup>	<0.052 J	<6.8	<0.11	<0.4	<0.4	<0.13	<b>16.9 J</b>
<b>IA-09</b>	4/22/2025	µg/m <sup>3</sup>	<b>6 J</b>	<15 J	<4.4 J	<0.38 <sup>6</sup>	<1.7	<0.14 J <sup>6</sup>	<0.52 <sup>6</sup>	<0.19 <sup>6</sup>	<b>0.005 J</b>	<6.8	<0.11	<0.4	<0.4	<0.13	<b>17.8 J</b>
<b>MTCA Method B Residential CUL<sup>7</sup></b>			<b>2,700</b>	<b>46</b>	<b>180</b>	<b>0.32</b>	<b>2,286</b>	<b>457</b>	<b>46</b>	<b>0.074</b>	<b>9.62</b>	<b>0.334</b>	<b>18.3</b>	<b>18.3</b>	<b>0.284</b>	<b>46</b>	

**Notes:**

<sup>1</sup> Samples analyzed by Friedman & Bruya, Inc. located in Seattle, Washington. Adjusted concentrations derived by subtracting the outdoor air (OA) concentration from the indoor air (IA) concentrations. Unadjusted IA concentrations are included in Appendix A.

<sup>2</sup> Air-phase hydrocarbons (APH) analyzed using Environmental Protection Agency (EPA) Method MA-APH.

<sup>3</sup> Volatile organic compounds (VOCs) including benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN) and tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (cDCE), trans-1,2-dichloroethylene (tDCE) and vinyl chloride (VC) analyzed using EPA Method TO-15.

<sup>4</sup> Total petroleum hydrocarbons (TPH) derived from the sum of APH and BTEXN concentrations. Non-detect (ND) results were assumed to be half the method detection limit (MDL) for BTEXN or half the equipment background value for APH for the purposes of determining TPH.

<sup>5</sup> Detected concentrations in OA-01 (Table 3) were used to adjust IA-07 through IA-09.

<sup>6</sup> The IA concentrations were less than the OA concentrations; therefore after adjustment the IA concentrations were less than 0. Adjusted IA results less than 0 are assumed to be less than the unadjusted IA concentration. The unadjusted IA concentration was used to calculate TPH.

<sup>7</sup> MTCA Method B Residential CUL.

J = The analyte concentration is reported between the MDL and the lowest calibration point. The value reported is an estimate.

µg/m<sup>3</sup> = micrograms per cubic meter. '<' = less than the laboratory RL (PCE, TCE, cDCE, tDCE, VC), MDL (BTEXN) or equipment background (APH).

**Bold** = Analyte was detected.

**Bold** with gray shading indicates analyte was detected at concentration greater than the MTCA Method B Commercial IA CUL.

**Table 4**  
**Chemical Analytical Results - Sub-Slab Soil Vapor<sup>1</sup>**  
 Stillwater Holdings Chevron Site  
 Walla Walla, Washington

Location	Sample Date	Units	Air-Phase Hydrocarbons <sup>2</sup>			Volatile Organic Compounds <sup>3</sup>										Total Petroleum Hydrocarbons <sup>4</sup>	
			APH EC5-8 Aliphatics	APH EC9-12 Aliphatics	APH EC9-10 Aromatics	Benzene	Toluene	Ethylbenzene	m,p-Xylene	o-Xylene	Naphthalene	PCE	TCE	cDCE	tDCE	VC	TPH Sum
<b>Marcus Whitman Hotel Basement</b>																	
<b>SSV-01</b>	4/22/2025	µg/m <sup>3</sup>	<b>260 J</b>	<b>250</b>	<22 J	<b>0.29 J</b>	<8.5	<b>0.44 J</b>	<b>1.9</b>	<b>0.87</b>	<0.27 J	<b>170</b>	<b>36</b>	<b>19</b>	<2	<0.65	<b>529</b>
<b>SSV-02</b>	4/22/2025	µg/m <sup>3</sup>	<260 J	<b>310</b>	<22 J	<b>0.051 J</b>	<8.5	<b>1.7</b>	<b>12</b>	<b>7.8</b>	<0.27 J	<b>130</b>	<b>17</b>	<2	<2	<0.65	<b>473</b>
<b>SSV-03</b>	4/22/2025	µg/m <sup>3</sup>	<b>290 J</b>	<b>300</b>	<22 J	<b>0.18 J</b>	<8.3	<b>0.7 J</b>	<b>2.8</b>	<b>1.3</b>	<0.26 J	<34	<b>7.0</b>	<2	<2	<0.64	<b>610</b>
<b>SSV-04</b>	4/22/2025	µg/m <sup>3</sup>	<b>400</b>	<b>600</b>	<22 J	<b>0.24 J</b>	<8.5	<b>1.6</b>	<b>6.6</b>	<b>3.1</b>	<0.27 J	<35	<0.55	<2	<2	<0.65	<b>1,027</b>
<b>SSV-05</b>	4/22/2025	µg/m <sup>3</sup>	<b>280 J</b>	<b>390</b>	<22 J	<b>0.22 J</b>	<8.3	<b>1.3</b>	<b>5.6</b>	<b>2.6</b>	<0.26 J	<34	<0.54	<2	<2	<0.64	<b>695</b>
<b>SSV-06</b>	4/22/2025	µg/m <sup>3</sup>	<b>280 J</b>	<b>460</b>	<24 J	<b>0.77</b>	<9.1	<b>1.5</b>	<b>6.4</b>	<b>2.7</b>	<b>0.43 J</b>	<37	<0.59	<2.2	<2.2	<0.7	<b>768</b>
<b>SSV-07</b>	4/22/2025	µg/m <sup>3</sup>	<b>260 J</b>	<b>550</b>	<22 J	<b>1.9</b>	<8.5	<b>1.5</b>	<b>7.3</b>	<b>4.4</b>	<0.27 J	<b>63</b>	<b>3.3</b>	<2	<2	<0.65	<b>840</b>
<b>SSV-08</b>	4/22/2025	µg/m <sup>3</sup>	<b>260 J</b>	<b>390</b>	<23 J	<b>1.5 J</b>	<8.6	<b>1.5</b>	<b>6.0</b>	<b>2.8</b>	<0.27 J	<b>330</b>	<b>18</b>	<b>3.3</b>	<2.1	<0.66	<b>678</b>
<b>SSV-09</b>	4/22/2025	µg/m <sup>3</sup>	<250 J	<b>260</b>	<22 J	<b>0.44</b>	<8.1	<b>1.1</b>	<b>4.6</b>	<b>2.1</b>	<0.25 J	<33	<0.53	<1.9	<1.9	<0.63	<b>408</b>
<b>Stillwater Holdings Chevron Ground Floor</b>																	
<b>SSV-12</b>	4/22/2025	µg/m <sup>3</sup>	<b>480</b>	<b>170</b>	<22 J	<b>0.61</b>	<8.5	<b>0.49 J</b>	<1.5	<b>0.46</b>	<0.27 J	<35	<0.55	<2	<2	<0.65	<b>668</b>
<b>MTCA Commercial Worker SGSL<sup>5</sup></b>			<b>390</b>			<b>50</b>	<b>650,000</b>	<b>130,000</b>	<b>13,000</b>	<b>11</b>		<b>1,500</b>	<b>95</b>	<b>5,200</b>	<b>5,200</b>	<b>44</b>	<b>1,500</b>

**Notes:**

<sup>1</sup> Samples analyzed by Friedman & Bruya, Inc. located in Seattle, Washington.

<sup>2</sup> Air-phase hydrocarbons (APH) analyzed using Environmental Protection Agency (EPA) Method MA-APH.

<sup>3</sup> Volatile organic compounds (VOCs), including benzene, toluene, ethylbenzene, xylenes and naphthalene (BTEXN) and tetrachloroethylene (PCE), trichloroethylene (TCE), cis-1,2-dichloroethylene (cDCE), trans-1,2-dichloroethylene (tDCE) and vinyl chloride (VC) analyzed using EPA Method TO-15.

<sup>4</sup> Total petroleum hydrocarbons (TPH) derived from the sum of APH and BTEXN concentrations. Non-detect (ND) results were assumed to be half the reporting limit (RL) for the purposes of determining TPH.

<sup>5</sup> Washington State Model Toxics Control Act (MTCA) Commercial Worker Soil Gas Screening Level (SGSL).

µg/m<sup>3</sup> = micrograms per cubic meter. '<' = less than the laboratory RL.

NE = Not established

**Bold** = Analyte was detected.

**Bold** with gray shading indicates analyte was detected at concentration greater than the MTCA Method B Commercial Worker SGSL.

## Figures





**Notes:**

1. Basement samples in Marcus Whitman Hotel not shown on this figure.
2. Groundwater elevation data from Aspect Consulting Stillwater Holdings Chevron Groundwater Data Table - June 12 2024

Source(s):

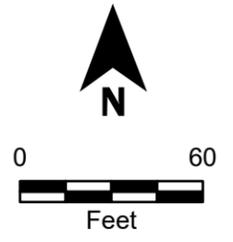
- Walla Walla GIS

Coordinate System: NAD 1983 StatePlane Washington South FIPS 4602 Feet

**Disclaimer:** This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

**Legend**

- Monitoring Well and Groundwater Elevation (feet)
- Decommissioned Monitoring Well
- Sump
- Monitoring Well Not Sampleable
- Road\_Centerlines
- Existing UST and Limits of Excavation
- Decommissioned UST
- Site Buildings
- Walla Walla Tax Parcel
- GRPH, Benzene, Toluene, Ethylbenzene, and/or Xylenes (Total) Detected at concentrations Greater than their respective MTCA Method A Cleanup Levels During the March 2025 Groundwater Monitoring Event



<b>Site Plan</b>	
Stillwater Holdings Chevron Walla Walla, Washington	
	<b>Figure 2</b>

P:\0\_0504202\GIS\050420201\_F02\_SitePlanV2 Date Exported: 06/25/25 by ccabrera



P:\0\_0504202\GIS\0504202\_Project\0504202\_Project.aprx\050420201\_F03\_MSampelLocations Date Exported: 07/09/25 by ccabrera

**Notes:**

1. Basement samples in Marcus Whitman Hotel not shown on this figure.

**Source(s):**

• Walla Walla GIS

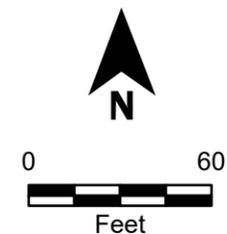
Coordinate System: NAD 1983 StatePlane Washington South FIPS 4602 Feet

**Disclaimer:** This figure was created for a specific purpose and project. Any use of this figure for any other project or purpose shall be at the user's sole risk and without liability to GeoEngineers. The locations of features shown may be approximate. GeoEngineers makes no warranty or representation as to the accuracy, completeness, or suitability of the figure, or data contained therein. The file containing this figure is a copy of a master document, the original of which is retained by GeoEngineers and is the official document of record.

**Legend**

- ◆ Sump
- Outdoor Air Sampling Location
- ◻ Subslab Soil Vapor Location
- △ Indoor Air Sample Location
- ◻ Existing UST and Limits of Excavation
- ◻ Decommissioned UST
- ◻ Site Buildings
- ◻ Walla Walla Tax Parcel

- APH Greater than MTCA Method B Commercial Soil Gas Screening Levels
- ▲ APH and Benzene Greater than MTCA Method B Commercial Cleanup Levels

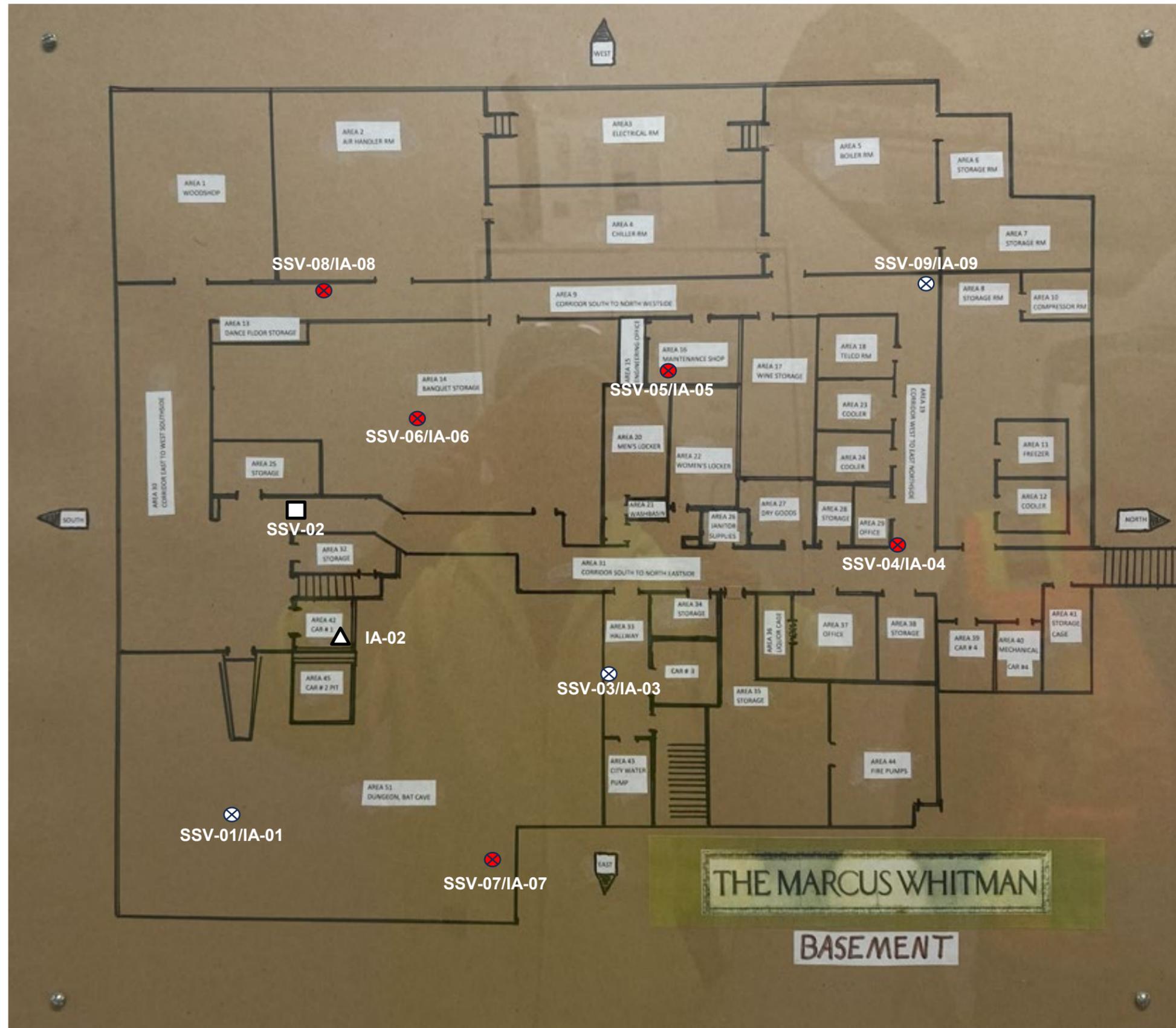


**Vapor Intrusion Sample Locations**

Stillwater Holdings Chevron  
Walla Walla, Washington



**Figure 3**



**Legend:**

- ⊗ - Co-located sub-slab soil vapor and indoor air sample location
- - sub-slab vapor sample location
- △ - indoor air sample location
- ⊗ (with red X) - APH Concentrations greater than the MTCA Method B SGSL



Not to Scale

<b>Marcus Whitman Hotel Basement Sample Locations</b>	
Stillwater Holdings Chevron Walla Walla, Washington	
	<b>Figure 4</b>

**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. GeoEngineers, Inc. cannot guarantee the accuracy and content of electronic files. The master file is stored by GeoEngineers, Inc. and will serve as the official record of this communication.
3. APH = Air-phase petroleum hydrocarbons
4. MTCA = Washington State Model Toxics Control Act
5. SGSL = Soil gas screening level

Data Source: Marcus Whitman Hotel Basement Map

## Appendices

**Appendix A**  
**Laboratory Chemical Analytical Reports and**  
**Data Validation Report**

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya  
Ann Webber-Bruya  
Michael Erdahl  
Vineta Mills  
Eric Young

5500 4th Ave South  
Seattle, WA 98108-2419  
(206) 285-8282  
office@friedmanandbruya.com  
www.friedmanandbruya.com

August 4, 2025

Melissa Roskamp, Project Manager  
GeoEngineers, Inc  
523 E. 2<sup>nd</sup> Ave  
Spokane, WA 99202

Dear Ms Roskamp:

Included is the amended report from the testing of material submitted on April 25, 2025 from the Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504420 project. There are 28 pages included in this report. Per your request, the APH and BTEXN results have been lowered to the method detection limit.

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: mroskamp@geoengineers.com, Justin Orr  
GNR0509R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya  
Ann Webber-Bruya  
Michael Erdahl  
Vineta Mills  
Eric Young

5500 4th Ave South  
Seattle, WA 98108-2419  
(206) 285-8282  
office@friedmanandbruya.com  
www.friedmanandbruya.com

May 9, 2025

Melissa Roskamp, Project Manager  
GeoEngineers, Inc  
523 E. 2<sup>nd</sup> Ave  
Spokane, WA 99202

Dear Ms Roskamp:

Included are the results from the testing of material submitted on April 25, 2025 from the Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504420 project. There are 28 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: mroskamp@geoengineers.com  
GNR0509R.DOC

FRIEDMAN & BRUYA, INC.

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ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 25, 2025 by Friedman & Bruya, Inc. from the GeoEngineers, Inc Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504420 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>GeoEngineers, Inc</u>
504420 -01	SSV-01-042225
504420 -02	SSV-02-042225
504420 -03	SSV-03-042225
504420 -04	SSV-04-042225
504420 -05	SSV-05-042225
504420 -06	SSV-06-042225
504420 -07	SSV-07-042225
504420 -08	SSV-08-042225
504420 -09	SSV-09-042225
504420 -10	SSV-12-042225

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

The TO15 and MA-APH reporting limits were reported to the method or instrument detection limit in several samples. The data were qualified accordingly.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-01-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-01 1/5.1
Date Analyzed:	04/29/25	Data File:	042824.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	260 j
APH EC9-12 aliphatics	250
APH EC9-10 aromatics	<22 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-02-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-02 1/5.1
Date Analyzed:	04/29/25	Data File:	042822.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	<260 j
APH EC9-12 aliphatics	310
APH EC9-10 aromatics	<22 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-03-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-03 1/5.0
Date Analyzed:	04/29/25	Data File:	042816.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	290 j
APH EC9-12 aliphatics	300
APH EC9-10 aromatics	<22 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-04-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-04 1/5.1
Date Analyzed:	04/29/25	Data File:	042821.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	400
APH EC9-12 aliphatics	600
APH EC9-10 aromatics	<22 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-05-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-05 1/5.0
Date Analyzed:	04/29/25	Data File:	042819.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	280 j
APH EC9-12 aliphatics	390
APH EC9-10 aromatics	<22 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-06-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-06 1/5.5
Date Analyzed:	04/29/25	Data File:	042817.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	280 j
APH EC9-12 aliphatics	460
APH EC9-10 aromatics	<24 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-07-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-07 1/5.1
Date Analyzed:	04/29/25	Data File:	042820.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	260 j
APH EC9-12 aliphatics	550
APH EC9-10 aromatics	<22 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-08-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-08 1/5.2
Date Analyzed:	04/29/25	Data File:	042825.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
APH EC5-8 aliphatics	260 j
APH EC9-12 aliphatics	390
APH EC9-10 aromatics	<23 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-09-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-09 1/4.9
Date Analyzed:	04/29/25	Data File:	042818.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	<250 j
APH EC9-12 aliphatics	260
APH EC9-10 aromatics	<22 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	SSV-12-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-10 1/5.1
Date Analyzed:	04/29/25	Data File:	042815.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
APH EC5-8 aliphatics	480
APH EC9-12 aliphatics	170
APH EC9-10 aromatics	<22 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	GeoEngineers, Inc
Date Received:	Not Applicable	Project:	0504-202-01, F&BI 504420
Date Collected:	Not Applicable	Lab ID:	05-0973 mb
Date Analyzed:	04/28/25	Data File:	042814.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	89	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	50 j
APH EC9-12 aliphatics	<15 j
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-01-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-01 1/5.1
Date Analyzed:	04/29/25	Data File:	042824.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.65	<0.25
trans-1,2-Dichloroethene	<2	<0.51
cis-1,2-Dichloroethene	19	4.9
Benzene	0.29 j	0.092 j
Trichloroethene	36	6.7
Toluene	<8.5	<2.2
Tetrachloroethene	170	26
Ethylbenzene	0.44 j	0.10 j
m,p-Xylene	1.9	0.43
o-Xylene	0.87	0.20
Naphthalene	<0.27 j	<0.051 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-02-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-02 1/5.1
Date Analyzed:	04/29/25	Data File:	042822.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.65	<0.25
trans-1,2-Dichloroethene	<2	<0.51
cis-1,2-Dichloroethene	<2	<0.51
Benzene	0.051 j	0.082 j
Trichloroethene	17	3.2
Toluene	<8.5	<2.2
Tetrachloroethene	130	19
Ethylbenzene	1.7	0.38
m,p-Xylene	12	2.7
o-Xylene	7.8	1.8
Naphthalene	<0.27 j	<0.051 j

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-03-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-03 1/5.0
Date Analyzed:	04/29/25	Data File:	042816.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.64	<0.25
trans-1,2-Dichloroethene	<2	<0.5
cis-1,2-Dichloroethene	<2	<0.5
Benzene	0.18 j	0.055 j
Trichloroethene	7.0	1.3
Toluene	<8.3	<2.2
Tetrachloroethene	<34	<5
Ethylbenzene	0.7 j	0.16 j
m,p-Xylene	2.8	0.65
o-Xylene	1.3	0.30
Naphthalene	<0.26 j	<0.050 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-04-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-04 1/5.1
Date Analyzed:	04/29/25	Data File:	042821.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.65	<0.25
trans-1,2-Dichloroethene	<2	<0.51
cis-1,2-Dichloroethene	<2	<0.51
Benzene	0.24 j	0.077 j
Trichloroethene	<0.55	<0.1
Toluene	<8.5	<2.2
Tetrachloroethene	<35	<5.1
Ethylbenzene	1.6	0.36
m,p-Xylene	6.6	1.5
o-Xylene	3.1	0.70
Naphthalene	<0.27 j	<0.051 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-05-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-05 1/5.0
Date Analyzed:	04/29/25	Data File:	042819.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.64	<0.25
trans-1,2-Dichloroethene	<2	<0.5
cis-1,2-Dichloroethene	<2	<0.5
Benzene	0.22 j	0.07 j
Trichloroethene	<0.54	<0.1
Toluene	<8.3	<2.2
Tetrachloroethene	<34	<5
Ethylbenzene	1.3	0.29
m,p-Xylene	5.6	1.3
o-Xylene	2.6	0.59
Naphthalene	<0.26 j	<0.05 j

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-06-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-06 1/5.5
Date Analyzed:	04/29/25	Data File:	042817.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.7	<0.28
trans-1,2-Dichloroethene	<2.2	<0.55
cis-1,2-Dichloroethene	<2.2	<0.55
Benzene	0.77	0.24
Trichloroethene	<0.59	<0.11
Toluene	<9.1	<2.4
Tetrachloroethene	<37	<5.5
Ethylbenzene	1.5	0.34
m,p-Xylene	6.4	1.5
o-Xylene	2.7	0.63
Naphthalene	0.43 j	0.083 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-07-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-07 1/5.1
Date Analyzed:	04/29/25	Data File:	042820.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.65	<0.25
trans-1,2-Dichloroethene	<2	<0.51
cis-1,2-Dichloroethene	<2	<0.51
Benzene	1.9	0.58
Trichloroethene	3.3	0.61
Toluene	<8.5	<2.2
Tetrachloroethene	63	9.3
Ethylbenzene	1.5	0.35
m,p-Xylene	7.3	1.7
o-Xylene	4.4	1.0
Naphthalene	<0.27 j	<0.051 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-08-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-08 1/5.2
Date Analyzed:	04/29/25	Data File:	042825.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

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

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.66	<0.26
trans-1,2-Dichloroethene	<2.1	<0.52
cis-1,2-Dichloroethene	3.3	0.84
Benzene	1.5 j	0.088 j
Trichloroethene	18	3.3
Toluene	<8.6	<2.3
Tetrachloroethene	330	49
Ethylbenzene	1.5	0.33
m,p-Xylene	6.0	1.4
o-Xylene	2.8	0.64
Naphthalene	<0.27 j	<0.052 j

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-09-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-09 1/4.9
Date Analyzed:	04/29/25	Data File:	042818.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.63	<0.24
trans-1,2-Dichloroethene	<1.9	<0.49
cis-1,2-Dichloroethene	<1.9	<0.49
Benzene	0.44	0.14
Trichloroethene	<0.53	<0.098
Toluene	<8.1	<2.2
Tetrachloroethene	<33	<4.9
Ethylbenzene	1.1	0.25
m,p-Xylene	4.6	1.1
o-Xylene	2.1	0.49
Napthalene	<0.25 j	<0.049 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	SSV-12-042225	Client:	GeoEngineers, Inc
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504420
Date Collected:	04/22/25	Lab ID:	504420-10 1/5.1
Date Analyzed:	04/29/25	Data File:	042815.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

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

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.65	<0.25
trans-1,2-Dichloroethene	<2	<0.51
cis-1,2-Dichloroethene	<2	<0.51
Benzene	0.61	0.19
Trichloroethene	<0.55	<0.1
Toluene	<8.5	<2.2
Tetrachloroethene	<35	<5.1
Ethylbenzene	0.49 j	0.11 j
m,p-Xylene	<1.5	<0.34
o-Xylene	0.46	0.11
Naphthalene	<0.27 j	<0.051 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	GeoEngineers, Inc
Date Received:	Not Applicable	Project:	0504-202-01, F&BI 504420
Date Collected:	Not Applicable	Lab ID:	05-0973 mb
Date Analyzed:	04/28/25	Data File:	042814.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	88	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	<0.019 j	<0.006 j
Trichloroethene	<0.11	<0.02
Toluene	<1.7	<0.44
Tetrachloroethene	<6.8	<1
Ethylbenzene	<0.022 j	<0.005 j
m,p-Xylene	<0.29	<0.067
o-Xylene	<0.086	<0.02
Naphthalene	<0.052 j	<0.01 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/09/25

Date Received: 04/25/25

Project: Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504420

Date Extracted: 04/30/25

Date Analyzed: 04/30/25

**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>
SSV-01-042225 504420-01	<0.6
SSV-02-042225 504420-02	<0.6
SSV-03-042225 504420-03	<0.6
SSV-04-042225 504420-04	<0.6
SSV-05-042225 504420-05	<0.6
SSV-06-042225 504420-06	<0.6
SSV-07-042225 504420-07	<0.6
SSV-08-042225 504420-08	<0.6
SSV-09-042225 504420-09	<0.6
SSV-12-042225 504420-10	<0.6
Method Blank 05-0986 MB	<0.6

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/09/25

Date Received: 04/25/25

Project: Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504420

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 504420-01 1/5.1 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	260 j	<260 j	nm
APH EC9-12 aliphatics	ug/m3	250	250	0
APH EC9-10 aromatics	ug/m3	<22 j	<22 j	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	90	70-130
APH EC9-12 aliphatics	ug/m3	67	114	70-130
APH EC9-10 aromatics	ug/m3	67	100	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/09/25

Date Received: 04/25/25

Project: Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504420

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

Laboratory Code: 504420-01 1/5.1 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 25)
Vinyl chloride	ug/m3	<0.65	<0.65	nm
trans-1,2-Dichloroethene	ug/m3	<2	<2	nm
cis-1,2-Dichloroethene	ug/m3	19	19	0
Benzene	ug/m3	0.29	0.28	4
Trichloroethene	ug/m3	36	35	3
Toluene	ug/m3	<8.5	<8.5	nm
Tetrachloroethene	ug/m3	170	170	0
Ethylbenzene	ug/m3	0.44	0.44	0
m,p-Xylene	ug/m3	1.9	1.9	0
o-Xylene	ug/m3	0.87	0.92	6
Naphthalene	ug/m3	<0.27	<0.27	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	ug/m3	35	110	70-130
trans-1,2-Dichloroethene	ug/m3	54	111	70-130
cis-1,2-Dichloroethene	ug/m3	54	110	70-130
Benzene	ug/m3	43	105	70-130
Trichloroethene	ug/m3	73	114	70-130
Toluene	ug/m3	51	108	70-130
Tetrachloroethene	ug/m3	92	117	70-130
Ethylbenzene	ug/m3	59	109	70-130
m,p-Xylene	ug/m3	120	106	70-130
o-Xylene	ug/m3	59	119	70-130
Naphthalene	ug/m3	71	105	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/09/25

Date Received: 04/25/25

Project: Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504420

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

Laboratory Code: 504420-10 (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 between the method detection limit and the lowest calibration point. 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.

504420

SAMPLE CHAIN OF CUSTODY

04/25/25

Page # 1 of 2

TURNAROUND TIME

Report To: Melissa Postamp

Company: GeoEngineers

Address: 523 E. 2nd Ave

City, State, ZIP: Spokane, WA 99202

Phone: (509) 269-2727 Email: m.postamp@geoengineers.com

SAMPLERS (signature)

PROJECT NAME & ADDRESS

Stillwater Holdings Chevron  
Walla Walla, WA

PO #

504-202-01

NOTES:

1 Box

INVOICE TO

GeoEngineers

Standard

RUSH

Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL

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

SAMPLE INFORMATION

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	ANALYSIS REQUESTED	Notes
SSV-01-042225	01	2303	95	IA / (SG)	4/22/25	29	<del>1929</del>	4	1241	X TO15 Full Scan X TO15 BTEXN X APH X Chlorinated VOCs X Helium	*CVOCs: PCE, TCE, DCE, + DCE, VC
SSV-02-042225	02	11339	243	IA / (SG)	4/22/25	28.5	1929	3.5	1834	X TO15 Full Scan X TO15 BTEXN X APH X Chlorinated VOCs X Helium	
SSV-03-042225	03	8525	259	IA / (SG)	4/22/25	30	1712	4	1719	X TO15 Full Scan X TO15 BTEXN X APH X Chlorinated VOCs X Helium	
SSV-04-042225	04	8535	309	IA / (SG)	4/22/25	30	1912	3	1919	X TO15 Full Scan X TO15 BTEXN X APH X Chlorinated VOCs X Helium	
SSV-05-042225	05	4175	70	IA / (SG)	4/22/25	28	1945	1.5	1951	X TO15 Full Scan X TO15 BTEXN X APH X Chlorinated VOCs X Helium	
SSV-06-042225	06	3672	241	IA / (SG)	4/22/25	27	1852	3.5	1857	X TO15 Full Scan X TO15 BTEXN X APH X Chlorinated VOCs X Helium	
SSV-07-042225	07	11142	08	IA / (SG)	4/22/25	29	1908	3	1813	X TO15 Full Scan X TO15 BTEXN X APH X Chlorinated VOCs X Helium	
SSV-08-042225	08	11576	71	IA / (SG)	4/22/25	29	1958	3.5	2004	X TO15 Full Scan X TO15 BTEXN X APH X Chlorinated VOCs X Helium	

Friedman & Bryga, Inc.

5500 4th Avenue South

Seattle, WA 98108

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COGN\CO.CTO-15.DOC

SIGNATURE

Relinquished by:

*[Signature]*

PRINT NAME

Matthew Barber

COMPANY

GET

DATE

4/24/25

TIME

0952

Received by:

*[Signature]*

Nhan Phan

FERT

4/25/25

Relinquished by:

Received by:

Samples received at 21 oC

504420

SAMPLE CHAIN OF CUSTODY

04/25/25

Page # 2 of 2

Report To Melissa Rostkamp

Company Geo Engineers

Address 523 E. 2nd Ave

City, State, ZIP Spokane WA 99202

Phone (509) 709-2827 Email arostkamp@geoengineers.com

SAMPLERS (signature)		PROJECT NAME & ADDRESS Stillwater Holdings Cventon Walla Walla, WA	PO #
NOTES:		0504-202-01	INVOICE TO Geo Engineers

TURNAROUND TIME	
<input checked="" type="checkbox"/> Standard	SAMPLE DISPOSAL Default: Clean following final report delivery Hold (Fee may apply):
<input type="checkbox"/> RUSH	
Rush charges authorized by:	

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	ANALYSIS REQUESTED				Notes
										TO15 Full Scan	TO15 BTEXN	APH	Chlorinated VOCs*	
SSV-09-042225	09	11574	60	IA / SG	4/22/25	29	1931	1	1939	X	X	X	X	
<del>SSV-10</del>				IA / SG						X	X	X	X	
<del>SSV-11</del>				IA / SG						X	X	X	X	
SSV-12-042225	10	RS29	64	IA / SG	4/22/25	1527	1527	3	1533	X	X	X	X	
				IA / SG										
				IA / SG										
				IA / SG										
				IA / SG										

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
<i>[Signature]</i>	Matthew Korman	GET	4/24/25	
<i>[Signature]</i>	Phan Phan	FEBT	4/25/25	0950
Received by:				
Relinquished by:				
Received by:		Samples received at	21	09

# SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504420 CLIENT Geo Eng. INITIALS/DATE: (NP) 4/25/25

If custody seals are present on cooler, are they intact?  NA  YES  NO

Cooler/Sample temperature 21 °C  
Thermometer ID: Fluke 96312917

Were samples received on ice/cold packs?  YES  NO

How did samples arrive?  
 Over the Counter  Picked up by F&BI  FedEx/UPS/GSO

Is there a Chain-of-Custody\* (COC)?  YES  NO Initials/Date: (NP) 4/25  
\*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 1 ⇒ 3 days

Are the samples clearly identified? (explain "no" answer below)  YES  NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below)  YES  NO

Were appropriate sample containers used?  YES  NO  Unknown

If custody seals are present on samples, are they intact?  NA  YES  NO

Are samples requiring no headspace, headspace free?  NA  YES  NO

Is the following information provided on the COC, and does it match the sample label? (explain "no" answer below)

- Sample ID's  Yes  No  Not on COC/label
- Date Sampled  Yes  No  Not on COC/label
- Time Sampled  Yes  No  Not on COC/label
- # of Containers  Yes  No
- Relinquished  Yes  No
- Requested analysis  Yes  On Hold

Other comments (use a separate page if needed)

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Air Samples: Were any additional canisters/tubes received?  NA  YES  NO

Number of unused TO15 canisters\*\* 2 Number of unused TO17 tubes \_\_\_\_\_  
\*\*Fill out Green manifolds billing sheet S/N 2304, 3668

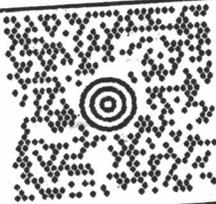
LAURA MCCULLOCH  
5093633125  
GEOENGINEERS, INC.  
523 EAST 2ND AVENUE  
SPOKANE WA 99202

35 LBS

1 OF 5

DWT: 21,21,21

SHIP TO:  
FRIEDMAN AND BRUYA, INC.  
5500 4TH AVENUE SOUTH  
SEATTLE WA 98108



WA 981 9-04



UPS GROUND

TRACKING #: 1Z 9V3 65W 03 9781 1249



BILLING: P/P

Reference #1: 0504-202-01

XOL 25.04.02

NV45 17.0A 0-1/2025\*



TM

FOR UPS SHIPPING ONLY



FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya  
Ann Webber-Bruya  
Michael Erdahl  
Vineta Mills  
Eric Young

5500 4th Ave South  
Seattle, WA 98108-2419  
(206) 285-8282  
office@friedmanandbruya.com  
www.friedmanandbruya.com

August 4, 2025

Melissa Roskamp, Project Manager  
GeoEngineers  
523 E 2<sup>nd</sup> Ave  
Spokane, WA 99202

Dear Ms Roskamp:

Included is the amended report from the testing of material submitted on April 25, 2025 from the Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504421 project. Per your request, the APH and BTEXN results have been lowered to the method detection limit.

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: mroskamp@geoengineers.com, Justin Orr  
GNR0508R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya  
Ann Webber-Bruya  
Michael Erdahl  
Vineta Mills  
Eric Young

5500 4th Ave South  
Seattle, WA 98108-2419  
(206) 285-8282  
office@friedmanandbruya.com  
www.friedmanandbruya.com

May 8, 2025

Melissa Roskamp, Project Manager  
GeoEngineers  
523 E 2<sup>nd</sup> Ave  
Spokane, WA 99202

Dear Ms Roskamp:

Included are the results from the testing of material submitted on April 25, 2025 from the Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504421 project. There are 38 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: mroskamp@geoengineers.com  
GNR0508R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on April 25, 2025 by Friedman & Bruya, Inc. from the GeoEngineers Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504421 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>GeoEngineers</u>
504421 -01	IA-01-042225
504421 -02	IA-02-042225
504421 -03	IA-03-042225
504421 -04	IA-04-042225
504421 -05	IA-05-042225
504421 -06	IA-06-042225
504421 -07	IA-07-042225
504421 -08	IA-08-042225
504421 -09	IA-09-042225
504421 -10	IA-10-042225
504421 -11	IA-11-042225
504421 -12	IA-12-042225
504421 -13	IA-13-042225
504421 -14	OA-01-042225
504421 -15	OA-02-042225
504421 -16	OA-03-042225

Non-petroleum compounds identified in the air phase hydrocarbon (APH) ranges were subtracted per the MA-APH method.

The TO15 and MA-APH reporting limits were reported to the method or instrument detection limit in several samples. The data were qualified accordingly.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-01-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-01
Date Analyzed:	04/30/25	Data File:	043015.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	110
APH EC9-12 aliphatics	21 j
APH EC9-10 aromatics	6.1 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-02-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-02
Date Analyzed:	05/01/25	Data File:	043017.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	87
APH EC9-12 aliphatics	28
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-03-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-03
Date Analyzed:	05/01/25	Data File:	043018.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	88	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	65 j
APH EC9-12 aliphatics	15 j
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-04-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-04
Date Analyzed:	05/01/25	Data File:	043019.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	63 j
APH EC9-12 aliphatics	59
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-05-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-05
Date Analyzed:	05/01/25	Data File:	043020.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	74 j
APH EC9-12 aliphatics	31
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-06-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-06
Date Analyzed:	05/01/25	Data File:	043021.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates: Recovery:		Limit:	Limit:
4-Bromofluorobenzene	89	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	66
APH EC9-12 aliphatics	25
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-07-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-07
Date Analyzed:	05/01/25	Data File:	043022.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	73
APH EC9-12 aliphatics	28
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-08-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-08
Date Analyzed:	05/01/25	Data File:	043023.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	58 j
APH EC9-12 aliphatics	<15 j
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-09-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-09
Date Analyzed:	05/01/25	Data File:	043024.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	99	70	130

Compounds:	Concentration
	ug/m3

APH EC5-8 aliphatics	59 j
APH EC9-12 aliphatics	<15 j
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-10-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-10
Date Analyzed:	05/01/25	Data File:	043025.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	87	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	620
APH EC9-12 aliphatics	31
APH EC9-10 aromatics	5.8 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-11-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-11
Date Analyzed:	05/01/25	Data File:	043026.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	760
APH EC9-12 aliphatics	27
APH EC9-10 aromatics	29

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-12-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-12
Date Analyzed:	05/01/25	Data File:	043027.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3

APH EC5-8 aliphatics	210
APH EC9-12 aliphatics	<15 j
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	IA-13-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-13
Date Analyzed:	05/01/25	Data File:	043028.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	520
APH EC9-12 aliphatics	20 j
APH EC9-10 aromatics	6.0 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	OA-01-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-14
Date Analyzed:	04/30/25	Data File:	043012.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	53 j
APH EC9-12 aliphatics	29
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	OA-02-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-15
Date Analyzed:	04/30/25	Data File:	043013.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration
	ug/m3

APH EC5-8 aliphatics	68 j
APH EC9-12 aliphatics	<15 j
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	OA-03-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-16
Date Analyzed:	04/30/25	Data File:	043014.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration
	ug/m3

APH EC5-8 aliphatics	66 j
APH EC9-12 aliphatics	<15 j
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method MA-APH

Client Sample ID:	Method Blank	Client:	GeoEngineers
Date Received:	Not Applicable	Project:	0504-202-01, F&BI 504421
Date Collected:	Not Applicable	Lab ID:	05-0978 mb
Date Analyzed:	04/30/25	Data File:	043011.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration
	ug/m3
APH EC5-8 aliphatics	<50 j
APH EC9-12 aliphatics	<15 j
APH EC9-10 aromatics	<4.4 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-01-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-01
Date Analyzed:	04/30/25	Data File:	043015.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.98	0.31
Trichloroethene	0.12	0.023
Toluene	5.7	1.5
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.78	0.18
m,p-Xylene	2.5	0.57
o-Xylene	0.93	0.21
Naphthalene	0.19	0.037

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-02-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-02
Date Analyzed:	05/01/25	Data File:	043017.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.88	0.28
Trichloroethene	0.26	0.049
Toluene	4.9	1.3
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.62	0.14
m,p-Xylene	2.2	0.50
o-Xylene	0.80	0.18
Naphthalene	0.13	0.024

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-03-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-03
Date Analyzed:	05/01/25	Data File:	043018.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	88	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.53	0.17
Trichloroethene	<0.11	<0.02
Toluene	2.3	0.62
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.31	0.071
m,p-Xylene	1.1	0.24
o-Xylene	0.4	0.092
Naphthalene	0.068 j	0.013 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-04-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-04
Date Analyzed:	05/01/25	Data File:	043019.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.53	0.16
Trichloroethene	<0.11	<0.02
Toluene	2.6	0.69
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.36	0.082
m,p-Xylene	1.3	0.30
o-Xylene	0.52	0.12
Naphthalene	0.16	0.030

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-05-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-05
Date Analyzed:	05/01/25	Data File:	043020.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.56	0.17
Trichloroethene	<0.11	<0.02
Toluene	2.5	0.66
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.29	0.067
m,p-Xylene	0.96	0.22
o-Xylene	0.36	0.082
Naphthalene	0.21	0.040

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-06-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-06
Date Analyzed:	05/01/25	Data File:	043021.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	88	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.65	0.20
Trichloroethene	0.16	0.030
Toluene	3.5	0.92
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.38	0.088
m,p-Xylene	1.3	0.30
o-Xylene	0.49	0.11
Napthalene	0.089 j	0.017 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-07-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-07
Date Analyzed:	05/01/25	Data File:	043022.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	92	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.67	0.21
Trichloroethene	<0.11	<0.02
Toluene	2.8	0.73
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.47	0.11
m,p-Xylene	1.7	0.39
o-Xylene	0.68	0.16
Naphthalene	0.058 j	0.011 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-08-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-08
Date Analyzed:	05/01/25	Data File:	043023.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	90	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.35	0.11
Trichloroethene	<0.11	<0.02
Toluene	<1.7	<0.44
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.18 j	0.042 j
m,p-Xylene	0.56	0.13
o-Xylene	0.22	0.05
Naphthalene	<0.052 j	<0.01 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-09-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-09
Date Analyzed:	05/01/25	Data File:	043024.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

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

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.38	0.12
Trichloroethene	<0.11	<0.02
Toluene	<1.7	<0.44
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.14 j	0.033 j
m,p-Xylene	0.52	0.12
o-Xylene	0.19	0.044
Naphthalene	0.063 j	0.012 j

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-10-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-10
Date Analyzed:	05/01/25	Data File:	043025.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	87	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	4.0	1.2
Trichloroethene	<0.11	<0.02
Toluene	6.8	1.8
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.59	0.14
m,p-Xylene	2.1	0.49
o-Xylene	0.87	0.20
Naphthalene	0.36	0.069

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-11-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-11
Date Analyzed:	05/01/25	Data File:	043026.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	9.1	2.8
Trichloroethene	<0.11	<0.02
Toluene	13	3.6
Tetrachloroethene	<6.8	<1
Ethylbenzene	4.6	1.1
m,p-Xylene	14	3.2
o-Xylene	9.6	2.2
Naphthalene	0.45	0.085

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-12-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-12
Date Analyzed:	05/01/25	Data File:	043027.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.97	0.30
Trichloroethene	<0.11	<0.02
Toluene	2.3	0.62
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.2 j	0.047 j
m,p-Xylene	0.74	0.17
o-Xylene	0.28	0.064
Naphthalene	<0.052 j	<0.01 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	IA-13-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-13
Date Analyzed:	05/01/25	Data File:	043028.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	96	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
1,2-Dichloroethane (EDC)	0.11	0.026
Benzene	3.9	1.2
Trichloroethene	<0.11	<0.02
Toluene	6.0	1.6
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.66	0.15
m,p-Xylene	2.5	0.57
o-Xylene	1.0	0.23
Naphthalene	0.72	0.14

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	OA-01-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-14
Date Analyzed:	04/30/25	Data File:	043012.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	94	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.38	0.12
Trichloroethene	<0.11	<0.02
Toluene	<1.7	<0.44
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.27	0.062
m,p-Xylene	0.96	0.22
o-Xylene	0.39	0.089
Naphthalene	0.058 j	0.011 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	OA-02-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-15
Date Analyzed:	04/30/25	Data File:	043013.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	0.46	0.14
Trichloroethene	<0.11	<0.02
Toluene	<1.7	<0.44
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.15 j	0.034 j
m,p-Xylene	0.52	0.12
o-Xylene	0.20	0.047
Naphthalene	<0.052 j	<0.01 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	OA-03-042225	Client:	GeoEngineers
Date Received:	04/25/25	Project:	0504-202-01, F&BI 504421
Date Collected:	04/22/25	Lab ID:	504421-16
Date Analyzed:	04/30/25	Data File:	043014.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	93	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	1.2	0.37
Trichloroethene	<0.11	<0.02
Toluene	2.4	0.63
Tetrachloroethene	<6.8	<1
Ethylbenzene	0.27	0.063
m,p-Xylene	1.1	0.24
o-Xylene	0.41	0.095
Naphthalene	<0.052 j	<0.01 j

# FRIEDMAN & BRUYA, INC.

## ENVIRONMENTAL CHEMISTS

### Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	GeoEngineers
Date Received:	Not Applicable	Project:	0504-202-01, F&BI 504421
Date Collected:	Not Applicable	Lab ID:	05-0978 mb
Date Analyzed:	04/30/25	Data File:	043011.D
Matrix:	Air	Instrument:	GCMS8
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
Surrogates:			
4-Bromofluorobenzene	91	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Vinyl chloride	<0.13	<0.05
trans-1,2-Dichloroethene	<0.4	<0.1
cis-1,2-Dichloroethene	<0.4	<0.1
Benzene	<0.019 j	<0.006 j
Trichloroethene	<0.11	<0.02
Toluene	<1.7	<0.44
Tetrachloroethene	<6.8	<1
Ethylbenzene	<0.022 j	<0.005 j
m,p-Xylene	<0.29	<0.067
o-Xylene	<0.086	<0.02
Naphthalene	<0.052 j	<0.01 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/08/25

Date Received: 04/25/25

Project: Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504421

**QUALITY ASSURANCE RESULTS FOR THE ANALYSIS OF AIR SAMPLES  
FOR VOLATILES BY METHOD MA-APH**

Laboratory Code: 504421-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
APH EC5-8 aliphatics	ug/m3	110	110	0
APH EC9-12 aliphatics	ug/m3	21 j	24 j	13
APH EC9-10 aromatics	ug/m3	6.1 j	5.3 j	14

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
APH EC5-8 aliphatics	ug/m3	67	93	70-130
APH EC9-12 aliphatics	ug/m3	67	114	70-130
APH EC9-10 aromatics	ug/m3	67	101	70-130

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 05/08/25

Date Received: 04/25/25

Project: Stillwater Holdings Chevron Walla Walla WA 0504-202-01, F&BI 504421

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

Laboratory Code: 504421-01 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 25)
Vinyl chloride	ug/m3	<0.13	<0.13	nm
trans-1,2-Dichloroethene	ug/m3	<0.4	<0.4	nm
cis-1,2-Dichloroethene	ug/m3	<0.4	<0.4	nm
Benzene	ug/m3	0.98	0.98	0
Trichloroethene	ug/m3	0.12	0.13	8
Toluene	ug/m3	5.7	5.7	0
Tetrachloroethene	ug/m3	<6.8	<6.8	nm
Ethylbenzene	ug/m3	0.78	0.76	3
m,p-Xylene	ug/m3	2.5	2.4	4
o-Xylene	ug/m3	0.93	0.90	3
Naphthalene	ug/m3	0.19	0.19	0

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent	Acceptance
			Recovery LCS	Criteria
Vinyl chloride	ug/m3	35	110	70-130
trans-1,2-Dichloroethene	ug/m3	54	110	70-130
cis-1,2-Dichloroethene	ug/m3	54	107	70-130
Benzene	ug/m3	43	103	70-130
Trichloroethene	ug/m3	73	121	70-130
Toluene	ug/m3	51	120	70-130
Tetrachloroethene	ug/m3	92	129	70-130
Ethylbenzene	ug/m3	59	115	70-130
m,p-Xylene	ug/m3	120	113	70-130
o-Xylene	ug/m3	59	126	70-130
Naphthalene	ug/m3	71	110	70-130

# 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 between the method detection limit and the lowest calibration point. 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.

504421

SAMPLE CHAIN OF CUSTODY

04/25/25

Report To Melissa Rostkamp  
Company GeoEngineers

Address 523 E 2nd Ave  
City, State, ZIP Spokane, WA 99202

Phone (509) 208-2122 Email mroostkamp@geoengineers.com

SAMPLERS (signature)

PROJECT NAME & ADDRESS  
Shilshook Holdings Chevron  
Walk Walk, WA

PO #

0504-202-01

NOTES:

4 Bore s.

INVOICE TO

GeoEngineers

Page # 1 of 2

TURNAROUND TIME

Standard  
 RUSH

Rush charges authorized by:

SAMPLE DISPOSAL

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

SAMPLE INFORMATION

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	ANALYSIS REQUESTED				Helium	Notes
										TO15 Full Scan	TO15 BTEXN	APH	Chlorinated VOCs		
IA-01-042225	01	51800	20437	IA / SG	4/22/25	30	1412	4.5	1573	X	X	X			
IA-02-042225	02	20556	20445	IA / SG	4/22/25	29	1437	4	1334	X	X	X			
IA-03-042225	03	20551	20404	IA / SG	4/22/25	29	1442	4.5	1497	X	X	X			
IA-04-042225	04	49856	20445	IA / SG	4/22/25	30	1422	5	1400	X	X	X			
IA-05-042225	05	49724	06005	IA / SG	4/22/25	30	1431	5	1704	X	X	X			
IA-06-042225	06	32100	06002	IA / SG	4/22/25	29	1418	4.5	1535	X	X	X			
IA-07-042225	07	49828	05319	IA / SG	4/22/25	29	1220	4.5	1115	X	X	X			
IA-08-042225	08	23233	06006	IA / SG	4/22/25	29	1210	3	1109	X	X	X			

SIGNATURE

Relinquished by: [Signature]

PRINT NAME

Ng Hwee Robinson

COMPANY

GET

DATE

4/24/25

TIME

0950

Received by:

[Signature]

Nhan Phan

COMPANY

FE B I

DATE

4/25/25

TIME

0950

Friedman & Bruya, Inc.  
5500 4th Avenue South  
Seattle, WA 98108  
Ph. (206) 285-8282  
Fax (206) 283-5044  
FORMS\OC\COCTO-15.DOC

Samples received at 01 of

504421

# SAMPLE CHAIN OF CUSTODY

04/25/25

Page # 2 of 2

SAMPLES (signature)

Report To Melise Raskamp  
Company Geo Engineers

Address 523 E 2nd Ave

City, State, ZIP Spokane WA 99202

Phone (509) 209-2827 Email mraskamp@geoengineers.com

PROJECT NAME & ADDRESS <u>Stillwater Holdings Chevron</u> <u>Walla Walla, WA</u>	PO # <u>0504-202-01</u>
NOTES:	INVOICE TO <u>Geo Engineers</u>

TURNAROUND TIME \_\_\_\_\_

Standard  
 RUSH

Rush charges authorized by: \_\_\_\_\_

SAMPLE DISPOSAL  
Default: Clean following final report delivery  
Hold (Fee may apply): \_\_\_\_\_

Sample Name	Lab ID	Canister ID	Flow Cont. ID	Reporting Level: IA=Indoor Air SG=Soil Gas (Circle One)	Date Sampled	Initial Vac. (uHg)	Field Initial Time	Final Vac. (uHg)	Field Final Time	ANALYSIS REQUESTED					Notes
										TO15 Full Scan	TO15 BTEXN	APH	Chlorinated VOCs	Helium	
IA-09-042225	09	51821	15207	IA / SG	4/24/25	30	1002	5	1132	X	X	X			
IA-10-042225	10	23232	20470	IA / SG	4/22/25	28.5	0835	5	1549	X	X	X			
IA-11-042225	11	20549	15210	IA / SG	4/22/25	30	0840	5	1619	X	X	X			
IA-12-042225	12	18565	08192	IA / SG	4/22/25	27.5	0719	5	1545	X	X	X			
IA-13-042225	13	18578	20467	IA / SG	4/22/25	30	0822	5	1620	X	X	X			
OA-01-042225	14	49231	07844	Outdoor IA / SG	4/22/25	29.5	0845	4.5	0917	X	X	X			
OA-02-042225	15	37203	07853	Outdoor IA / SG	4/22/25	29	0800	4	1400	X	X	X			
OA-03-042225	16	4088	15208	Outdoor IA / SG	4/22/25	30	0753	3.5	1535	X	X	X			

Friedman & Bruya, Inc.  
5500 4th Avenue South  
Seattle, WA 98108  
Ph. (206) 285-8282  
Fax (206) 283-5044  
FORMS\OOC\COCTO-15.DOC

SIGNATURE		PRINT NAME		COMPANY		DATE	TIME
Relinquished by: <u>[Signature]</u>	<u>Matthew Kober</u>	<u>Matthew Kober</u>	<u>GET</u>	<u>4/24/25</u>			
Relinquished by: <u>[Signature]</u>	<u>Nhan Phan</u>	<u>Nhan Phan</u>	<u>FEBT</u>	<u>4/25/25</u>			<u>0950</u>
Received by: _____							

Samples received at 21 o'clock

# SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 504421 CLIENT Geo Eng. INITIALS/ DATE: (NA) 4/25/25

If custody seals are present on cooler, are they intact?  NA  YES  NO

Cooler/Sample temperature \_\_\_\_\_ Thermometer ID: Fluke 96312917 21 °C

Were samples received on ice/cold packs?  YES  NO

How did samples arrive?  
 Over the Counter  Picked up by F&BI  FedEx/UPS/GSO

Is there a Chain-of-Custody\* (COC)?  YES  NO Initials/ Date: (NA) 4/25  
\*or other representative documents, letters, and/or shipping memos

Number of days samples have been sitting prior to receipt at laboratory 3 days

Are the samples clearly identified? (explain "no" answer below)  YES  NO

Were all sample containers received intact (i.e. not broken, leaking etc.)? (explain "no" answer below)  YES  NO

Were appropriate sample containers used?  YES  NO  Unknown

If custody seals are present on samples, are they intact?  NA  YES  NO

Are samples requiring no headspace, headspace free?  NA  YES  NO

Is the following information provided on the COC, and does it match the sample label?  
(explain "no" answer below)

Sample ID's	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Not on COC/label
Date Sampled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Not on COC/label
Time Sampled	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	<input type="checkbox"/> Not on COC/label
# of Containers	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	
Relinquished	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	_____	
Requested analysis	<input type="checkbox"/> Yes <input type="checkbox"/> On Hold	_____	

Other comments (use a separate page if needed)  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Air Samples: Were any additional canisters/tubes received?  NA  YES  NO

Number of unused TO15 canisters\*\* \_\_\_\_\_ Number of unused TO17 tubes \_\_\_\_\_  
\*\*Fill out Green manifolds billing sheet

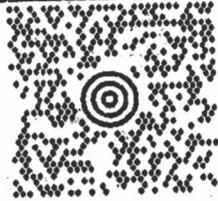
LAURA MCCULLOCH  
5093633125  
GEOENGINEERS, INC.  
523 EAST 2ND AVENUE  
SPOKANE WA 99202

35 LBS

1 OF 5

DWT: 21,21,21

SHIP TO:  
FRIEDMAN AND BRUYA, INC.  
5500 4TH AVENUE SOUTH  
SEATTLE WA 98108



WA 981 9-04



UPS GROUND

TRACKING #: 1Z 9V3 65W 03 9781 1249



BILLING: P/P

Reference #1: 0504-202-01

XOL 25.04.02

NV45 17.0A 04/2025\*



FOR UPS SHIPPING ONLY



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**Project:** Stillwater Holdings Chevron – Environmental Services  
April 2025 Air Samples

**File:** 0504-202-01

**Date:** June 26, 2025

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This report documents the results of a United States Environmental Protection Agency (USEPA)-defined Stage 2A data validation (USEPA Document 540-R-08-005; USEPA, 2009) of analytical data from the analyses of air samples collected as part of the April 2025 sampling event, and the associated laboratory quality control (QC) samples. The samples were obtained from the Stillwater Holdings Chevron facility located at 7 East Rose Street, in Walla Walla, Washington.

## Objective and Quality Control Elements

GeoEngineers, Inc. (GeoEngineers) completed the data validation consistent with the USEPA Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review (USEPA, 2020) (National Functional Guidelines) to determine if the laboratory analytical results meet the project objectives and are usable for their intended purpose. Data usability was assessed by determining if:

- The samples were analyzed using well-defined and acceptable methods that provide reporting limits below applicable regulatory criteria;
- The precision and accuracy of the data are well-defined and sufficient to provide defensible data; and
- The quality assurance/quality control (QA/QC) procedures utilized by the laboratory meet acceptable industry practices and standards.

The data validation included review of the following QC elements:

- Data Package Completeness
- Chain-of-Custody Documentation
- Holding Times
- Surrogate Recoveries
- Method Blanks
- Laboratory Control Samples/Laboratory Control Sample Duplicates
- Laboratory Duplicates

## Validated Sample Delivery Groups

This data validation included review of the sample delivery groups (SDGs) listed below in Table 1.

**TABLE 1. SUMMARY OF VALIDATED SAMPLE DELIVERY GROUPS**

LABORATORY SDG	SAMPLES VALIDATED
504420	SSV-01-042225, SSV-02-042225, SSV-03-042225, SSV-04-042225, SSV-05-042225, SSV-06-042225, SSV-07-042225, SSV-08-042225, SSV-09-042225, SSV-12-042225
504421	IA-01-042225, IA-02-042225, IA-03-042225, IA-04-042225, IA-05-042225, IA-06-042225, IA-07-042225, IA-08-042225, IA-09-042225, IA-10-042225, IA-11-042225, IA-12-042225, IA-13-042225, OA-01-042225, OA-02-042225, OA-03-042225

## Chemical Analysis Performed

Friedman & Bruya, Inc. (F&B), located in Seattle, Washington, performed laboratory analyses on the air samples using one or more of the following methods:

- Volatile Organic Compounds (VOCs) by Method EPA-TO-15;
- Air-phase Petroleum Hydrocarbons (APH) by Method MA-APH; and
- Helium by Method ASTM D1946.

## Data Validation Summary

The results for each of the QC elements are summarized below.

### DATA PACKAGE COMPLETENESS

F&B provided the required deliverables for the data validation according to the National Functional Guidelines. The laboratory followed adequate corrective action processes and the identified anomalies were discussed in the relevant laboratory case narrative.

### CHAIN-OF-CUSTODY DOCUMENTATION

Chain-of-custody (COC) forms were provided with the laboratory analytical reports. The COCs were accurate and complete when submitted to the laboratory.

### HOLDING TIMES

The sample holding time is defined as the time that elapses between sample collection and sample analysis. Maximum holding time criteria exist for each analysis to help ensure that the analyte concentrations found at the time of analysis reflect the concentration present at the time of sample collection. Established holding times were met for each analysis.

### SURROGATE RECOVERIES

A surrogate compound is a compound that is chemically similar to the organic analytes of interest, but unlikely to be found in an environmental sample. Surrogates are used for organic analyses and are added to the samples, standards, and blanks to serve as an accuracy and specificity check of each analysis. The surrogates are added to the samples at a known concentration and percent recoveries are calculated

following analysis. The surrogate percent recoveries for field samples were within the laboratory control limits.

## **METHOD BLANKS**

Method blanks are analyzed to ensure that laboratory procedures and reagents do not introduce measurable concentrations of the analytes of interest. A method blank was analyzed with each batch of samples, at a frequency of 1 per 20 samples. For each sample batch, method blanks for the applicable methods were analyzed at the required frequency. None of the analytes of interest were detected in the method blanks.

## **LABORATORY CONTROL SAMPLES/LABORATORY CONTROL SAMPLE DUPLICATES**

A laboratory control sample (LCS) is a blank sample that is spiked with a known amount of analyte and then analyzed. An LCS is similar to an MS, but without the possibility of matrix interference. Given that matrix interference is not an issue, the LCS/LCSD control limits for accuracy and precision are usually more rigorous than for MS/MSD analyses. Additionally, data qualification based on LCS/LCSD analyses would apply to all samples in the associated batch, instead of just the parent sample. The percent recovery control limits for LCS and LCSD analyses are specified in the laboratory documents, as are the RPD control limits for LCS/LCSD sample sets.

One LCS analysis should be performed for every analytical batch or every 20 field samples, whichever is more frequent. The frequency requirements were met for each analysis and the percent recovery values were within the proper control limits.

## **LABORATORY DUPLICATES**

Internal laboratory duplicate analyses are performed to monitor the precision of the analyses. Two separate aliquots of a sample are analyzed as distinct samples in the laboratory and the RPD between the two results is calculated. Duplicate analyses should be performed once per analytical batch. If one or more of the samples used has a concentration less than five times the reporting limit for that sample, the absolute difference is used instead of the RPD. The RPD control limits are specified in the laboratory documents. Laboratory duplicates were analyzed at the proper frequency and the specified acceptance criteria were met.

## **Overall Assessment**

As was determined by this data validation, the laboratory followed the specified analytical methods. Accuracy was acceptable, as demonstrated by the surrogate and LCS percent recovery values. Precision was acceptable, as demonstrated by the laboratory duplicate RPD values.

No analytical results were qualified. The data are acceptable for the intended use.

## References

U.S. Environmental Protection Agency (USEPA). "Guidance for Labeling Externally Validated Laboratory Analytical Data for Superfund Use," EPA-540-R-08-005. January 2009.

U.S. Environmental Protection Agency (USEPA). Contract Laboratory Program National Functional Guidelines for Organic Superfund Methods Data Review, EPA-540-R-20-005. November 2020.

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