

Vapor Intrusion Phase II Environmental Site Assessment

1244 Long Street, Sweet Home, Oregon

Prepared for:

Oregon Cascades West Council of Governments and City of Sweet Home

June 18, 2026

Project No. M0575.02.002

Prepared by:

Maul Foster & Alongi, Inc.

3140 NE Broadway, Portland, OR 97232

© 2026 Maul Foster & Alongi, Inc.

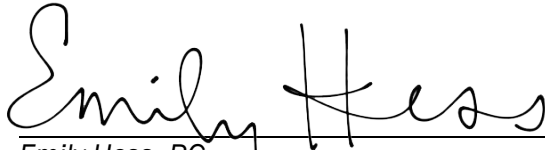


Vapor Intrusion Phase II Environmental Site Assessment

1244 Long Street, Sweet Home, Oregon

*The material and data in this report were prepared
under the supervision and direction of the undersigned.*

Maul Foster & Alongi, Inc.



Emily Hess, RG
Senior Hydrogeologist



Steven Chapman
Staff Geologist, GIT

Contents

Abbreviations.....	v
1 Introduction.....	1
2 Background.....	1
2.1 Property Background	1
2.2 Previous Environmental Findings	2
3 Phase II ESA Summary.....	3
3.1 Building Conditions.....	3
3.2 Air Sample Locations.....	4
3.3 Sample Methods and Analyses	5
3.4 Indoor Air Analytical Results.....	5
4 Conclusions and Recommendations.....	6

Limitations

Figures

- 1-1 Property Location
- 2-1 Property Features

Tables

- 2-1 Soil Vapor Analytical Results
- 3-1 Indoor Air Analytical Results

Appendixes

Appendix A

Photograph Log

Appendix B

Field Sample Data Sheet

Appendix C

Analytical Laboratory Report

Appendix D

Data Validation Memorandum

Appendix E

Ambient Temperature and Pressure Data During the Sample Period

Abbreviations

COPC	contaminants of potential concern
CVOC	chlorinated volatile organic compound
DCE	dichloroethene
DEQ	Oregon Department of Environmental Quality
EPA	U.S. Environmental Protection Agency
ESA	environmental site assessment
HVAC	heating, ventilation, and air conditioning
MFA	Maul Foster & Alongi, Inc.
OCWCOG	Oregon Cascades West Council of Governments
PCE	tetrachloroethene
the Property	1244 Long Street, Sweet Home, Oregon
RBC	risk-based concentration
RBDM	risk-based decision making
TCE	trichloroethene
TPH	total petroleum hydrocarbons
VI	vapor intrusion
VOC	volatile organic compound

1 Introduction

On behalf of the Oregon Cascades West Council of Governments (OCWCOG) and the City of Sweet Home, Maul Foster & Alongi, Inc. (MFA) conducted this vapor intrusion (VI) Phase II environmental site assessment (ESA) to assess VI risk at the building at 1244 Long Street, Sweet Home, Oregon (the Property; see Figure 1-1). The City of Sweet Home is the Property Owner and is proposing to redevelop the Property for commercial use.

This VI Phase II ESA assesses indoor air for contaminants of potential concern (COPCs) that exceed Oregon Department of Environmental Quality (DEQ) risk-based concentrations (RBCs) in soil vapor at the Property. The assessment supports the City of Sweet Home's efforts to manage and mitigate potential chemical exposure for future users of the Property. This report summarizes the previous assessment work conducted at the Property and the results of the VI Phase II ESA conducted to assess VI risk.

OCWCOG is the recipient of an EPA (U.S. Environmental Protection Agency) Brownfields Coalition Assessment Grant (agreement no. 4B-02J52101) and is using the grant to undertake a variety of brownfield site assessment projects in Linn and Benton Counties, including at the Property. The overall objective for OCWCOG is to conduct brownfield site assessments that achieve a representative profile of the environmental conditions at sites using appropriate data to support site planning and redevelopment decision making.

The VI Phase II ESA was conducted consistent with the site-specific work plan¹ and the programmatic quality assurance project plan² that MFA prepared for OCWCOG, and DEQ's VI guidance.³

2 Background

2.1 Property Background

The 0.09-acre Property is located at 1244 Long Street in Sweet Home, Oregon, on Linn County tax lot 13S01E31AC0930002300 (see Figures 1-1 and 2-1). According to the April 2025 City of Sweet Home Zoning Map, the Property is currently zoned C1 – Commercial Central.⁴ According to Linn

¹ MFA. 2026. *Site-Specific Indoor Air Assessment Work Plan/Sampling and Analysis Plan, 1244 Long Street, Sweet Home, OR 97386*. Prepared for Oregon Cascades West Council of Governments and City of Sweet Home. Maul Foster & Alongi, Inc.: Portland, OR. April 9.

² MFA. 2024. *Programmatic Quality Assurance Project Plan, Oregon Cascades West Council of Governments, Linn and Benton Counties EPA Brownfields Coalition Assessment Grant Number 4B-02J52101*. Prepared by Maul Foster & Alongi, Inc.: Portland, Oregon. June 3.

³ DEQ. 2025. *Guidance for Assessing and Remediating Vapor Intrusion into Buildings*. Oregon Department of Environmental Quality: Portland, OR. March.

⁴ City of Sweet Home. 2025. "Sweet Home Zoning Map – April 2025." <https://www.sweethomeor.gov/media/36276>. Accessed October 22.

County,⁵ the current building was constructed in 1948 as a 5,920-square-foot retail store. The City of Sweet Home acquired the Property on August 1, 2024. According to the City of Sweet Home, the Property was a feed store for several decades with retail in the front half of the building and storage of product and chemicals in the back half. The Property is currently a vacant and unused retail space with a structure that comprises the entire parcel.

The adjoining properties were historically used for retail, and service-oriented business purposes. According to Linn County, the structure on the parcel directly west (1234 Long Street) was built in 1950 as a multi-use retail store.⁶ This structure is physically connected to the building on the Property, with no separation between the two structures. According to records reviewed, a dry cleaner operated at this parcel in the 1980s. Since at least 1995, this parcel has been owned and occupied by Cornerstone Fellowship Church.

2.2 Previous Environmental Findings

Previous assessment and data collection activities on the Property include the following:

- **Phase I ESA conducted at the Property in 2025 by MFA.**⁷ The Phase I ESA did not reveal recognized environmental conditions or controlled recognized environmental conditions in connection with the Property, but the following significant data gap was identified:
 - **Proximity to Historic Dry Cleaning Facility.** The building on the Property is physically connected to the building to the west that was a former dry cleaning facility in the 1980s. Solvents such as tetrachloroethene (PCE) and trichloroethene (TCE) are commonly associated with historical dry cleaners, though no records of solvent use or other chemical releases from the dry cleaner were identified in reviewed documents. However, given the period in which dry cleaning operations took place, the adjacency of the dry cleaner to the Property, the high mobility of solvents in groundwater, and the potential for the solvents to volatilize into soil vapor and indoor air, the former dry cleaner has the potential to have impacted the Property. The lack of assessment of this potential impact is considered a significant data gap.
- **Building Material and Soil Vapor Phase II Environmental Site Assessment conducted at the Property in 2026 by MFA.**⁸ The building material and soil vapor Phase II ESA identified the following:
 - **Asbestos-Containing Materials.** One material tested positive for asbestos: sheet vinyl covering 16 square feet of the restroom. This material was observed to be in good condition at the time of survey.
 - **Lead-Based Paint.** The enamel glazing of the restroom sink and six painted surfaces tested positive for lead concentrations at or above 1.0 milligram per centimeter squared.

⁵ Linn County. "2024 Real Property Assessment Report." <https://lc-helionweb.co.linn.or.us/psa/download/?report=AssessmentSummary&accountId=245411&rollType=Real&year=2024>. Accessed October 7, 2025.

⁶ Linn County Assessor. 2025. "Property Search Online." <https://lc-helionweb.co.linn.or.us/psa/detail/245429/R>. Accessed October 29.

⁷ MFA. 2025. *Phase I Environmental Site Assessment, 1244 Long Street, Sweet Home, OR 97386*. Prepared for City of Sweet Home. Maul Foster & Alongi, Inc.: Portland, OR. November 3.

⁸ MFA. 2026. *Building Material and Soil Vapor Phase II Environmental Site Assessment, 1244 Long Street, Sweet Home, OR 97386*. Prepared for Oregon Cascades West Council of Governments and City of Sweet Home. Maul Foster & Alongi, Inc.: Portland, OR. March 10.

- **Universal Waste, Mercury, and Polychlorinated biphenyls.** Fluorescent tubes (suspect for containing mercury) and ballasts (suspect for containing polychlorinated biphenyls) were identified in the structure and are classified as universal waste.
- **Mold.** The indoor airborne mold spore concentrations in the structure were elevated when compared to the outdoor concentrations identified in the control samples. Water damage and water staining were observed throughout the building.
- **Soil Vapor.** Gasoline-range total petroleum hydrocarbons (TPH), PCE, and TCE were detected at concentrations exceeding the VI RBCs for commercial and residential receptors beneath the building slab (see Table 2-1). These RBC exceedances confirm that solvent releases likely occurred at the former dry cleaning facility and have impacted the soil vapor beneath the building slab at the Property.

The detections of chlorinated volatile organic compounds (CVOCs) and gasoline-range TPH in soil vapor did not confirm that these chemicals are present in indoor air. To assess whether chemicals in soil vapor are impacting indoor air quality, MFA recommended that the City of Sweet Home conduct an indoor air assessment of the building. This assessment would consist of the collection of multiple indoor air samples and one outdoor air sample over 14 days.

Based on the chemicals detected during the soil vapor assessment, the COPCs for this site-specific indoor air assessment are:

- Gasoline-range TPH.
- CVOCs: PCE; TCE; 1,1-dichloroethene (DCE); cis-1,2-DCE; trans-1,2-DCE; and vinyl chloride.
- Petroleum-related DEQ risk-based decision making (RBDM) volatile organic compounds (VOCs):⁹ 1,2,4-trimethylbenzene; 1,2-dibromoethane; 1,2-dichloroethane; 1,3,5-trimethylbenzene; benzene; ethylbenzene, isopropylbenzene; n-propylbenzene; methyl tert-butyl ether; naphthalene; toluene; and total xylenes.

3 Phase II ESA Summary

The purpose of this Phase II ESA was to evaluate the indoor air. A site-specific health and safety plan for the activities was prepared in general accordance with the Occupational Safety and Health Act and Oregon Administrative Rules. A copy of the health and safety plan was maintained on site for use by MFA staff during the field activities.

3.1 Building Conditions

MFA reviewed information provided by the City of Sweet Home regarding the existing use and physical conditions of the building, herein referred to as the assessment area. On May 13, 2026, MFA conducted an inspection of the interior areas. The objectives of the inspection were to

⁹ Samples were analyzed for these petroleum-related RBDM VOCs to evaluate whether the detection of gasoline-range TPH is related to dry cleaning solvents or a different petroleum release, such as from a gas station.

document building conditions and uses to inform the placement of air sample collection devices to be representative of the uses and conditions.

Elements of the inspection included:

- Confirming current use of the building.
- Confirming the layout and construction of the building, including floor type.
- Observing the floor of the building for floor vents, floor drains, and seams or cracks in concrete floors that could be a potential pathway for VI into the building interior.
- Identifying the presence of heating, ventilation, and air conditioning systems (HVAC), including air intakes and exhausts.
- Identifying chemical use and storage areas and documenting the types of chemicals used.

The findings of the inspection are listed below.

Current Use of the Assessment Area

According to the City of Sweet Home, the building is vacant and has not been used since 2024.

Assessment Area Construction and Floorplan

The 5,920-square-foot building was developed in 1948 with retail, storage, and distribution space on the first floor. A loft is present in the northern portion of the structure.

According to a representative of the City of Sweet Home, the assessment area is constructed on a concrete slab on grade with concrete walls.

Condition of Floor

The concrete floor has minor cracks present. During deployment of the indoor air sampling devices, MFA did not identify features that could provide a pathway for vapor migration into the building (e.g., presence of joints, significant cracks, floor drains).

HVAC Systems

According to a representative of the City of Sweet Home, there is no cooling system for the building, but there is a gas heater in the southern section of the building. Roof-mounted heating, ventilation, and air conditioning (HVAC) units are not visible in recent area photographs, nor were they observed during the May 2026 inspection.

Chemical Use and Storage

The City of Sweet Home is not aware of any chemicals being stored in the assessment area. During deployment of the indoor air sampling devices, MFA did not identify any chemical storage or notice any unusual odors.

3.2 Air Sample Locations

Based on the building uses and conditions described above, four indoor air and one outdoor air sample locations were proposed for the sampling event.

An outdoor sample location was proposed to be placed near the northwest exterior corner of the assessment area in a secure location. However, the building footprint covers the entire tax parcel of

the Property and this outdoor sample location would need to have been placed on an adjoining property. Access was not provided by Cornerstone Fellowship Church (adjoining property to the west); therefore, an outdoor air sample was not collected.

The indoor sample locations are shown on Figure 2-1. Photographs of each deployed sample canister are provided in Appendix A. The indoor air locations are co-located with the sub-slab soil vapor sample locations that were collected in February 2026, and include the following: southern (LONG-IA-001), west-central (LONG-IA-002), east-central (LONG-IA-003), and northern (LONG-IA-004) portion of the building to achieve spatial distribution across the structure.

Since the building is vacant and unused, the intent was to deploy the sample containers during “worst case” conditions when the gas heater system was not operating, windows were closed, and people were not routinely entering the building. MFA coordinated with the City of Sweet Home to ensure these conditions were maintained during the sample deployment period.

3.3 Sample Methods and Analyses

At each sample location, MFA deployed Entech Silonite 6-liter canisters with a 14-day Entech CS1200 Flow Controller with SC#7 restrictor (regulator) set at a rate of 0.2 milliliters per minute. The canisters were prepared and obtained from Friedman and Bruya, Inc. in Seattle, Washington. At each indoor sample location, the canisters were placed at an elevation above the floor approximating the breathing zone of the occupants.

At deployment, MFA recorded the initial pressure reading of the canister to confirm negative pressure. The regulator was then opened for collection of the 14-day sample. During the 14-day period, the pressure readings of the canisters were periodically checked to confirm a gradual reduction of the negative pressure during the sampling period. At the end of the 14-day period, the regulators were closed, and the canisters were retrieved and analyzed. The canister IDs and beginning and final canister pressures for the samples are provided on the field sampling data sheet in Appendix B.

The canisters were shipped to Friedman and Bruya and analyzed by EPA Method TO-15 for gasoline-range TPH, CVOCs, and RBDM VOCs. Following receipt of the final lab report, MFA imported the data into the project database, conducted a data quality review, prepared a data validation memorandum (DVM), tabulated the data, and compared the data to the DEQ’s chronic and acute RBCs for air in commercial and residential buildings. The laboratory report is provided in Appendix C, and the DVM is provided in Appendix D. Based on the data quality assurance/quality control review described in the DVM, the data, with the appropriate final data qualifiers assigned, are considered acceptable for their intended use. The results are discussed below.

3.4 Indoor Air Analytical Results

The samples results are provided on Table 3-1 and compared to the DEQ’s chronic and acute RBCs for air in residential and commercial buildings. While the current and likely future use of the Property is commercial, residential RBCs were included due to nearby residential land use and in the event residential use of the Property is proposed in the future.

Few chemicals were detected and there were no exceedances of the commercial RBCs for COPCs. There were exceedances of the DEQ residential chronic VI RBC for benzene at all four locations and

for naphthalene at three locations. Gasoline-range TPH and CVOCs, including PCE and TCE, were not detected in the indoor air.

Soil vapor sampling conducted in February 2026 identified COPCs at concentrations exceeding the commercial RBCs for VI (see Table 2-1). The indoor air sample data collected in May 2026 did not identify a risk of exposure for commercial users by this pathway.

The ambient temperature and barometric pressure during the 14-day sample period (May 13 to May 27, 2026), as well as the week preceding, are shown on the figures in Appendix E. The data were obtained from a weather station (CW8892) in Sweet Home, Oregon, located approximately 700 meters to the south-southeast of the Property.

4 Conclusions and Recommendations

The VI Phase II ESA conducted in May 2026 included sampling indoor air to assess VI risk at the building on the Property. The following is a summary of the Phase II ESA findings:

- There were no detections of gasoline-range TPH or CVOCs in the indoor air sample locations above the laboratory method reporting limits.
- There were no detections of COPCs in indoor air at the sample locations that exceed the RBCs for chronic VI in air for commercial buildings RBCs.
- COPC detections in indoor air exceed RBCs for chronic VI in air for residential buildings for benzene and naphthalene.

Based on these findings and those of prior environmental assessments, environmental impacts associated with historical releases from the former dry cleaning facility located directly west of the Property do not appear to be impacting indoor air at concentrations that are a risk to commercial use.

MFA recommends completion of an additional air sampling event in early Fall 2026 at the same sample locations shown in Figure 2-1, and using the same sampling procedures as the May 2026 event. VI rates can vary depending on seasonal atmospheric conditions and groundwater elevations.

The recommended sampling aims to verify that chemical concentrations in the indoor air remain below applicable VI RBCs. Following receipt and validation of the VI assessment data for the second sampling event, MFA will prepare and submit the VI assessment report. The report will include recommendations for additional assessment activities or vapor mitigation measures, if appropriate, based on the sample data.

If gasoline-range TPH and/or CVOCs are detected in indoor air in early Fall 2026 at concentrations exceeding commercial vapor intrusion RBCs, then installation of a vapor mitigation would likely be necessary to eliminate the risk of exposure of future occupants to these chemicals.

Refer to the March 2026 building material and soil vapor Phase II ESA for additional recommendations to mitigate the risk of exposure of future occupants related to the building material conditions previously identified on the Property.

Limitations

The services undertaken in completing this report were performed consistent with generally accepted professional consulting principles and practices. No other warranty, express or implied, is made. These services were performed consistent with our agreement with our client. This report is solely for the use and information of our client unless otherwise noted. Any reliance on this report by a third party is at such party's sole risk.

Opinions and recommendations contained in this report apply to conditions existing when services were performed and are intended only for the client, purposes, locations, time frames, and project parameters indicated. We are not responsible for the impacts of any changes in environmental standards, practices, or regulations subsequent to performance of services. We do not warrant the accuracy of information supplied by others, or the use of segregated portions of this report.

The purpose of an environmental assessment is to reasonably evaluate the potential for or actual impact of past practices on a given site area. In performing an environmental assessment, it is understood that a balance must be struck between a reasonable inquiry into the environmental issues and an exhaustive analysis of each conceivable issue of potential concern. The following paragraphs discuss the assumptions and parameters under which such an opinion is rendered.

No investigation is thorough enough to exclude the presence of hazardous materials at a given site. If hazardous conditions have not been identified during the assessment, such a finding should not, therefore, be construed as a guarantee of the absence of such materials on the site, but rather as the result of the services performed within the constraints of the agreed-upon scope, limitations, and costs.

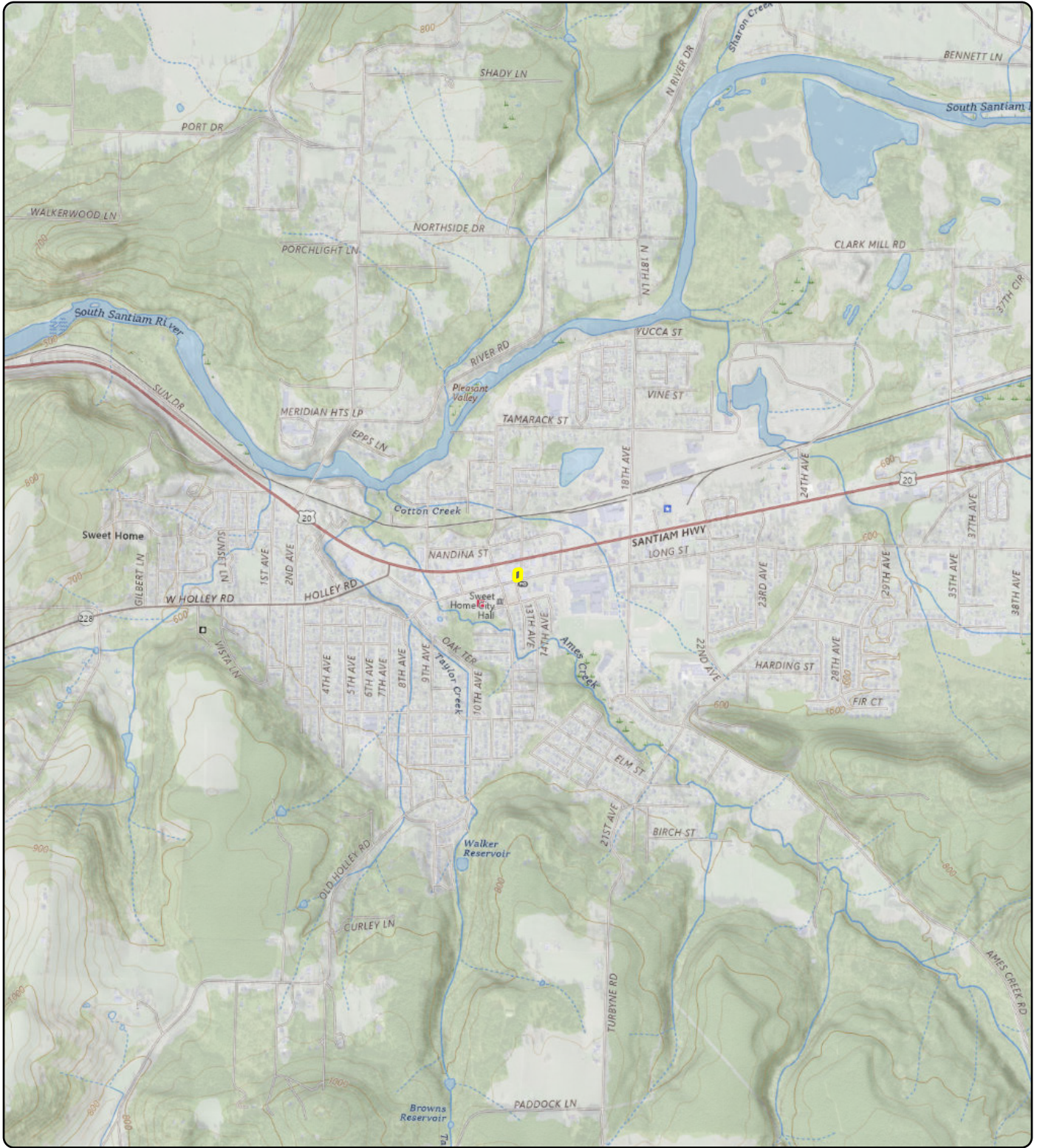
Environmental conditions that cannot be identified by visual observation may exist at the site. Where subsurface work was performed, our professional opinions are based in part on interpretation of data from discrete sampling locations that may not represent actual conditions at unsampled locations.

Except where there is expressed concern by our client, or where specific environmental contaminants have been previously reported by others, the presence of naturally occurring toxic substances, potential environmental contaminants inside buildings, or contaminant concentrations that are not of current environmental concern may not be reflected in this document.

Figures



MAUL
FOSTER
ALONGI



Notes
U.S. Geological Survey 7.5-minute topographic
quadangle: Sweet Home.
Township 13 south, range 1 east, section 31.

Data Source
Property boundary obtained from Linn County.

 **MAUL FOSTER ALONGI**
p. 971 544 2139 | www.maulfooster.com

This product is for informational purposes and may not have been prepared for, or be suitable
for legal, engineering, or surveying purposes. Users of this information should review or
consult the primary data and information sources to ascertain the usability of the information.
© 2025 Maul Foster & Alongi, Inc.

Legend

 Property Boundary

Figure 1-1
Property Location

1244 Long Street
Sweet Home, Oregon





Figure 2-1
Property Features
1244 Long Street
Sweet Home, Oregon

- Legend**
- Property Boundary
 - Tax Lot
 - Indoor Air Sample



Data Sources
Aerial photograph obtained from Google; tax lot data obtained from Linn County.

 **MAUL FOSTER ALONGI**
p. 971 544 2139 | www.maulfooster.com

This product is for informational purposes and may not have been prepared for, or be suitable for legal, engineering, or surveying purposes. Users of this information should review or consult the primary data and information sources to ascertain the usability of the information.
© 2025 Maul Foster & Alongi, Inc.

Tables



MAUL
FOSTER
ALONGI

Table 2-1
Soil Vapor Analytical Results
1244 Long Street, Sweet Home, Oregon

Location:	DEQ RBC in Soil Vapor, Chronic ⁽¹⁾				DEQ RBC in Soil Vapor, Acute ⁽²⁾		LONG-001	LONG-002	LONG-003	LONG-004
Sample Name:	Cancer		Noncancer		Noncancer		LONG-001	LONG-002	LONG-003	LONG-004
Collection Date:	Residential	Commercial	Residential	Commercial	Residential	Commercial	02/04/2026	02/04/2026	02/04/2026	02/04/2026
Petroleum Hydrocarbons (ug/m³)										
Gasoline-range hydrocarbons	NV	NV	10,000	40,000	NV	NV	1,100 U	1,600 U	1,600 U	55,000
CVOCs (ug/m³)										
1,1-Dichloroethene	NV	NV	140	580	6,700	20,000	2.1 U	3.1 U	3.2 U	3.1 U
cis-1,2-Dichloroethene	NV	NV	1,400	5,800	NV	NV	2.1 U	3.1 U	3.2 U	3.1 U
Tetrachloroethene (PCE)	360	1,600	1,400	5,800	1,400	4,000	480	25,000 J+	2,100 J+	3,900 J+
trans-1,2-Dichloroethene	NV	NV	1,400	5,800	26,000	80,000	2.1 U	3.1 U	3.2 U	3.1 U
Trichloroethene (TCE)	16	100	70	290	70	210	0.57 U	110	0.86 U	4.3
Vinyl chloride	5.6	93	1,800	7,500	43,000	130,000	0.68 U	1 U	1 U	0.98 U
Fixed gases (%)										
Carbon dioxide	NV	NV	NV	NV	NV	NV	0.264	0.650	0.344	0.617
Methane	NV	NV	NV	NV	NV	NV	0.095 U	0.095 U	0.115 U	0.115 U
Oxygen	NV	NV	NV	NV	NV	NV	22.6	23.5	22.9	23.3
Notes Shading (color key below) indicates values that exceed screening criteria; non-detects (U) were not compared with screening criteria. DEQ RBC in Soil Vapor, Chronic, Cancer, Residential DEQ RBC in Soil Vapor, Chronic, Cancer, Commercial DEQ RBC in Soil Vapor, Chronic, Noncancer, Residential DEQ RBC in Soil Vapor, Chronic, Noncancer, Commercial DEQ RBC in Soil Vapor, Acute, Noncancer, Residential DEQ RBC in Soil Vapor, Acute, Noncancer, Commercial CVOC = chlorinated volatile organic compound. DEQ = Oregon Department of Environmental Quality. J+ = result is estimated, but the result may be biased high. NV = no value. RBC = risk-based concentration. U = result is non-detect at the method reporting limit. ug/m ³ = micrograms per cubic meter.										
References ⁽¹⁾ DEQ. 2025. Table 1: Chronic Vapor Intrusion Risk-Based Concentrations. Oregon Department of Environmental Quality. March. ⁽²⁾ DEQ. 2025. Table 2: Acute Vapor Intrusion Risk-Based Concentrations. Oregon Department of Environmental Quality. March.										

Table 3-1
Indoor Air Analytical Results
1244 Long Street, Sweet Home, Oregon

Location:	DEQ Chronic Vapor Intrusion RBCs, Air ⁽¹⁾				DEQ Acute Vapor Intrusion RBCs, Air ⁽²⁾		LONG-IA-001	LONG-IA-002	LONG-IA-003	LONG-IA-004
Sample Name:	Cancer		Noncancer		Noncancer		LONG-IA-001	LONG-IA-002	LONG-IA-003	LONG-IA-004
Collection Date:	Residential	Commercial	Residential	Commercial	Residential	Commercial	05/28/2026	05/28/2026	05/28/2026	05/28/2026
TPH (ug/m³)										
Gasoline-range hydrocarbons	NV	NV	300	1,200	NV	NV	200 U	200 U	200 U	190 U
CVOCs (ug/m³)										
1,1-Dichloroethene	NV	NV	4.1	17	200	600	0.40 U	0.40 U	0.40 U	0.37 U
cis-1,2-Dichloroethene	NV	NV	42	180	NV	NV	0.40 U	0.40 U	0.40 U	0.37 U
Tetrachloroethene (PCE)	11	47	42	180	41	120	6.8 U	6.8 U	6.8 U	6.4 U
trans-1,2-Dichloroethene	NV	NV	42	180	790	2,400	0.4 U	0.4 U	0.4 U	0.37 U
Trichloroethene (TCE)	0.48	3	2.1	8.8	2.1	6.3	0.11 U	0.11 U	0.11 U	0.1 U
Vinyl chloride	0.17	2.8	53	220	1,300	3,900	0.13 U	0.13 U	0.13 U	0.12 U
RBDM VOCs (ug/m³)										
1,2,4-Trimethylbenzene	NV	NV	63	260	NV	NV	4.9 U	4.9 U	4.9 U	4.6 U
1,2-Dibromoethane	0.0047	0.02	9.4	39	NV	NV	0.077 U	0.077 U	0.077 U	0.072 U
1,2-Dichloroethane	0.11	0.47	7.3	31	NV	NV	0.061	0.065	0.061	0.076
1,3,5-Trimethylbenzene	NV	NV	63	260	NV	NV	4.9 U	4.9 U	4.9 U	4.6 U
Benzene	0.36	1.6	31	130	29	87	0.42	0.52	0.4	0.46
Ethylbenzene	1.1	4.9	1,000	4,400	22,000	66,000	0.43 U	0.43 U	0.43 U	0.41 U
Isopropylbenzene	NV	NV	420	1,800	NV	NV	9.8 U	9.8 U	9.8 U	9.2 U
m,p-Xylene	NV	NV	100 ^(a)	440 ^(a)	NV	NV	1.0	1.2	0.97	1.0
Methyl tert-butyl ether	11	47	3,100	13,000	8,000	24,000	7.2 U	7.2 U	7.2 U	6.8 U
Naphthalene	0.083	0.36	3.1	13	200	600	0.073 UJ	0.16	0.094 J	0.094 J
n-Propylbenzene	NV	NV	1,000	4,400	NV	NV	4.9 U	4.9 U	4.9 U	4.6 U
o-Xylene	NV	NV	100	440	NV	NV	0.43 U	0.43 U	0.43 U	0.41 U
Toluene	NV	NV	5,200	22,000	7,500	23,000	7.5 U	7.5 U	7.5 U	7.1 U
Xylenes (total) ^(b)	NV	NV	100	440	8,700	26,000	1.2 T	1.4 T	1.2 T	1.2 T
Notes										
Data summation rules are as follows: non-detect results are multiplied by one-half when used for sums. When all results are non-detect, the highest reporting limit is provided as the sum.										
DEQ Chronic Vapor Intrusion RBCs, Cancer, Residential										
CVOC = chlorinated volatile organic compound.										
DEQ = Oregon Department of Environmental Quality.										
J = result is estimated.										
NV = no value.										
RBC = risk-based concentration.										
T = result is calculated.										
^(a) Value for m-xylene.										
^(b) Total xylenes is the sum of m,p-xylene and o-xylene.										
References										
⁽¹⁾ DEQ. 2025. Table 1: <i>Chronic Vapor Intrusion Risk-Based Concentrations</i> . Oregon Department of Environmental Quality. March.										
⁽²⁾ DEQ. 2025. Table 2: <i>Acute Vapor Intrusion Risk-Based Concentrations</i> . Oregon Department of Environmental Quality. March.										

Appendix A

Photograph Log



MAUL
FOSTER
ALONGI



Photographs

Project Name: Indoor Air Phase II ESA.
Project Number: M0575.02.002
Location: 1244 Long Street, Sweet Home, Oregon
Date: May 13, 2026

Photo No. 1.

Description

Deployment of Summa canister at LONG-IA-001, facing south.



Photo No. 2.

Description

Summa canister with sample ID tag attached and showing pressure reading at LONG-IA-001, facing north.



Photographs

Project Name: Indoor Air Phase II ESA.
Project Number: M0575.02.002
Location: 1244 Long Street, Sweet Home, Oregon
Date: May 13, 2026

Photo No. 3.

Description

Deployment of Summa canister at LONG-IA-002, facing north.



Photo No. 4.

Description

Summa canister with sample ID tag attached and showing pressure reading at LONG-IA-002, facing north.





Photographs

Project Name: Indoor Air Phase II ESA.
Project Number: M0575.02.002
Location: 1244 Long Street, Sweet Home, Oregon
Date: May 13, 2026

Photo No. 5.

Description

Deployment of Summa canister at LONG-IA-003, facing north.



Photo No. 6.

Description

Summa canister with sample ID tag attached and showing pressure reading at LONG-IA-003, facing north.





Photographs

Project Name: Indoor Air Phase II ESA.
Project Number: M0575.02.002
Location: 1244 Long Street, Sweet Home, Oregon
Date: May 13, 2026

Photo No. 7.

Description

Deployment of Summa canister at LONG-IA-004, facing east.



Photo No. 8.

Description

Summa canister with sample ID tag attached and showing pressure reading at LONG-IA-004, facing north.



Appendix B

Field Sample Data Sheet



MAUL
FOSTER
ALONGI

Indoor/Outdoor Air Vapor Sampling Data Sheet

Project: CCWCOG

Project Name: 1244 Long St

Project Location: Sweet Home, OR



Sample ID	Sample Date	SUMMA Canister No.	Manifold No.	Sample Size/Rate	Sample Time		Sample Vacuum		Location Description/Notes
					Begin	End	Initial ("Hg)	Final ("Hg)	
LONG-IA-001	5/13/26- 5/27/26	51795	06604	5L 0.2 mL/min	1033	0905	-29.0	-8.0	southern
LONG-IA-002	5/13/26- 5/27/26	35339	20472	5L 0.2 mL/min	1033	0910	-30.0	-8.0	west-central
LONG-IA-003	5/13/26- 5/27/26	40713	05348	5L 0.2 mL/min	1033	0915	-29.5	-6.0	east-central
LONG-IA-004	5/13/26- 5/27/26	20541	21350	5L 0.2 mL/min	1033	0920	-28.5	-4.0	northern

Notes:

"Hg = inch of mercury
 hr = hour
 ID = identification
 L = liter
 no. = number
 ppb = parts per billion

Appendix C

Analytical Laboratory Report



MAUL
FOSTER
ALONGI

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Joseph Mohammed
Eric Young

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

June 10, 2026

Emily Hess, Project Manager
Maul Foster Alongi
330 E Mill Plains Blvd #405
Vancouver, WA 98660

Dear Ms Hess:

Included is the amended report from the testing of material submitted on May 28, 2026 from the OCWCOG 1244 Long St, Sweet Home, OR M0575.02.002 Task 002, F&BI 605512 project. The results for 2-propanol have been removed from the 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
MFA0610R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Elizabeth Webber-Bruya
Ann Webber-Bruya
Michael Erdahl
Joseph Mohammed
Eric Young

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

June 10, 2026

Emily Hess, Project Manager
Maul Foster Alongi
330 E Mill Plains Blvd #405
Vancouver, WA 98660

Dear Ms Hess:

Included are the results from the testing of material submitted on May 28, 2026 from the OCWCOG 1244 Long St, Sweet Home, OR M0575.02.002 Task 002, F&BI 605512 project. There are 9 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
MFA0610R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on May 28, 2026 by Friedman & Bruya, Inc. from the Maul Foster Alongi OCWCOG 1244 Long St, Sweet Home, OR M0575.02.002 Task 002, F&BI 605512 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Maul Foster Alongi</u>
605512 -01	LONG-IA-001
605512 -02	LONG-IA-002
605512 -03	LONG-IA-003
605512 -04	LONG-IA-004

The TO-15 gasoline range concentrations were quantified using a three point calibration.

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	LONG-IA-001	Client:	Maul Foster Alongi
Date Received:	05/28/26	Project:	OCWCOG 1244 Long St
Date Collected:	05/27/26	Lab ID:	605512-01 1/1.0
Date Analyzed:	06/04/26	Data File:	060414.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	Limit:
4-Bromofluorobenzene	97	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
Trichloroethene	<0.11	<0.02
Tetrachloroethene	<6.8	<1
1,1-Dichloroethene	<0.4	<0.1
Methyl t-butyl ether (MTBE)	<7.2	<2
1,2-Dichloroethane (EDC)	0.061	0.015
Benzene	0.42	0.13
Toluene	<7.5	<2
1,2-Dibromoethane (EDB)	<0.077	<0.01
Ethylbenzene	<0.43	<0.1
Isopropylbenzene	<9.8	<2
Propylbenzene	<4.9	<1
m,p-Xylene	1.0	0.23
o-Xylene	<0.43	<0.1
1,3,5-Trimethylbenzene	<4.9	<1
1,2,4-Trimethylbenzene	<4.9	<1
Naphthalene	<0.073 j	<0.014 j
Gasoline Range Organics	<200	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	LONG-IA-002	Client:	Maul Foster Alongi
Date Received:	05/28/26	Project:	OCWCOG 1244 Long St
Date Collected:	05/27/26	Lab ID:	605512-02 1/1.0
Date Analyzed:	06/04/26	Data File:	060415.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper 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
cis-1,2-Dichloroethene	<0.4	<0.1
Trichloroethene	<0.11	<0.02
Tetrachloroethene	<6.8	<1
1,1-Dichloroethene	<0.4	<0.1
Methyl t-butyl ether (MTBE)	<7.2	<2
1,2-Dichloroethane (EDC)	0.065	0.016
Benzene	0.52	0.16
Toluene	<7.5	<2
1,2-Dibromoethane (EDB)	<0.077	<0.01
Ethylbenzene	<0.43	<0.1
Isopropylbenzene	<9.8	<2
Propylbenzene	<4.9	<1
m,p-Xylene	1.2	0.28
o-Xylene	<0.43	<0.1
1,3,5-Trimethylbenzene	<4.9	<1
1,2,4-Trimethylbenzene	<4.9	<1
Naphthalene	0.16	0.030
Gasoline Range Organics	<200	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	LONG-IA-003	Client:	Maul Foster Alongi
Date Received:	05/28/26	Project:	OCWCOG 1244 Long St
Date Collected:	05/27/26	Lab ID:	605512-03 1/1.0
Date Analyzed:	06/04/26	Data File:	060416.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	%	Lower	Upper
Surrogates:	Recovery:	Limit:	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
Trichloroethene	<0.11	<0.02
Tetrachloroethene	<6.8	<1
1,1-Dichloroethene	<0.4	<0.1
Methyl t-butyl ether (MTBE)	<7.2	<2
1,2-Dichloroethane (EDC)	0.061	0.015
Benzene	0.40	0.13
Toluene	<7.5	<2
1,2-Dibromoethane (EDB)	<0.077	<0.01
Ethylbenzene	<0.43	<0.1
Isopropylbenzene	<9.8	<2
Propylbenzene	<4.9	<1
m,p-Xylene	0.97	0.22
o-Xylene	<0.43	<0.1
1,3,5-Trimethylbenzene	<4.9	<1
1,2,4-Trimethylbenzene	<4.9	<1
Naphthalene	0.094 j	0.018 j
Gasoline Range Organics	<200	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	LONG-IA-004	Client:	Maul Foster Alongi
Date Received:	05/28/26	Project:	OCWCOG 1244 Long St
Date Collected:	05/27/26	Lab ID:	605512-04 1/0.94
Date Analyzed:	06/04/26	Data File:	060417.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

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

Compounds:	Concentration ug/m3	ppbv
Vinyl chloride	<0.12	<0.047
trans-1,2-Dichloroethene	<0.37	<0.094
cis-1,2-Dichloroethene	<0.37	<0.094
Trichloroethene	<0.1	<0.019
Tetrachloroethene	<6.4	<0.94
1,1-Dichloroethene	<0.37	<0.094
Methyl t-butyl ether (MTBE)	<6.8	<1.9
1,2-Dichloroethane (EDC)	0.076	0.019
Benzene	0.46	0.14
Toluene	<7.1	<1.9
1,2-Dibromoethane (EDB)	<0.072	<0.0094
Ethylbenzene	<0.41	<0.094
Isopropylbenzene	<9.2	<1.9
Propylbenzene	<4.6	<0.94
m,p-Xylene	1.0	0.24
o-Xylene	<0.41	<0.094
1,3,5-Trimethylbenzene	<4.6	<0.94
1,2,4-Trimethylbenzene	<4.6	<0.94
Naphthalene	0.094 j	0.018 j
Gasoline Range Organics	<190	<47

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Maul Foster Alongi
Date Received:	Not Applicable	Project:	OCWCOG 1244 Long St
Date Collected:	Not Applicable	Lab ID:	06-8274 MB
Date Analyzed:	06/04/26	Data File:	060412.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	95	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
Trichloroethene	<0.11	<0.02
Tetrachloroethene	<6.8	<1
1,1-Dichloroethene	<0.4	<0.1
Methyl t-butyl ether (MTBE)	<7.2	<2
1,2-Dichloroethane (EDC)	<0.04	<0.01
Benzene	<0.16	<0.05
Toluene	<7.5	<2
1,2-Dibromoethane (EDB)	<0.077	<0.01
Ethylbenzene	<0.43	<0.1
Isopropylbenzene	<9.8	<2
Propylbenzene	<4.9	<1
m,p-Xylene	<0.87	<0.2
o-Xylene	<0.43	<0.1
1,3,5-Trimethylbenzene	<4.9	<1
1,2,4-Trimethylbenzene	<4.9	<1
Naphthalene	<0.073 j	<0.014 j
Gasoline Range Organics	<200	<50

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/26

Date Received: 05/28/26

Project: OCWCOG 1244 Long St, Sweet Home, OR, F&BI 605512

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

Laboratory Code: 606036-01 1/9.1 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 25)
Vinyl chloride	ug/m3	<1.2	<1.2	nm
trans-1,2-Dichloroethene	ug/m3	<3.6	<3.6	nm
cis-1,2-Dichloroethene	ug/m3	<3.6	<3.6	nm
Trichloroethene	ug/m3	<0.98	<0.98	nm
Tetrachloroethene	ug/m3	430	450	5
1,1-Dichloroethene	ug/m3	<3.6	<3.6	nm
Methyl t-butyl ether (MTBE)	ug/m3	<66	<66	nm
1,2-Dichloroethane (EDC)	ug/m3	<0.37	<0.37	nm
Benzene	ug/m3	1.9	1.9	0
Toluene	ug/m3	<69	<69	nm
1,2-Dibromoethane (EDB)	ug/m3	<0.7	<0.7	nm
Ethylbenzene	ug/m3	6.9	7.0	1
Isopropylbenzene	ug/m3	<89	<89	nm
Propylbenzene	ug/m3	<45	<45	nm
m,p-Xylene	ug/m3	30	31	3
o-Xylene	ug/m3	13	13	0
1,3,5-Trimethylbenzene	ug/m3	<45	<45	nm
1,2,4-Trimethylbenzene	ug/m3	<45	<45	nm
Naphthalene	ug/m3	<2.4	<2.4	nm
Gasoline Range Organics	ug/m3	<1,900	<1,900	nm

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 06/10/26

Date Received: 05/28/26

Project: OCWCOG 1244 Long St, Sweet Home, OR, F&BI 605512

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

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Vinyl chloride	ug/m3	35	118	70-130
trans-1,2-Dichloroethene	ug/m3	54	113	70-130
cis-1,2-Dichloroethene	ug/m3	54	114	70-130
Trichloroethene	ug/m3	73	108	70-130
Tetrachloroethene	ug/m3	92	111	70-130
1,1-Dichloroethene	ug/m3	54	114	70-130
Methyl t-butyl ether (MTBE)	ug/m3	49	116	70-130
1,2-Dichloroethane (EDC)	ug/m3	55	108	70-130
Benzene	ug/m3	43	120	70-130
Toluene	ug/m3	51	119	70-130
1,2-Dibromoethane (EDB)	ug/m3	100	108	70-130
Ethylbenzene	ug/m3	59	113	70-130
Isopropylbenzene	ug/m3	66	113	70-130
Propylbenzene	ug/m3	66	113	70-130
m,p-Xylene	ug/m3	120	113	70-130
o-Xylene	ug/m3	59	111	70-130
1,3,5-Trimethylbenzene	ug/m3	66	111	70-130
1,2,4-Trimethylbenzene	ug/m3	66	109	70-130
Naphthalene	ug/m3	71	106	70-130
Gasoline Range Organics	ug/m3	200	118	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.

605512

SAMPLE CHAIN OF CUSTODY

05/28/26

Page # 1 of 1

Report to Emily HessCompany Maul Foster AlongiAddress 330 E Mill Plain Blvd #405City, State, ZIP Vancouver, WA 98660Phone 433-0244 Email hess@maulfoster.com

SAMPLES (signature) <u>G Baradon/S. Chapman</u>		PO#	
PROJECT NAME & ADDRESS <u>1244 Long Street Sweet Home OR</u>		INVOICE TO	
OCWC06			
NOTES: Project Number: <u>M0575.02.002</u>			
<u>truck 002</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	Init. Vac. ("Hg)	Field Initial Time	Final Vac. ("Hg)	Field Final Time	MA-APH	TO15 BTEXN	TO15 CVOCs *	TO15 ^{BBDN} Full Scan ^{Vol.}	Helium	GxTPH to15	PID Reading	See below Notes ↓
LONG-IA-001	01	61795	06604	IA / SG	5/13/24 5/23/30	-29.0	1033-8.0	0905			✓	✓	✓	✓			
LONG-IA-002	02	35339	20472	IA / SG		-30.0	1033-8.0	0910			✓	✓	✓	✓			
LONG-IA-003	03	40713	05348	IA / SG		-29.5	1033-6.0	0915			✓	✓	✓	✓			
LONG-IA-004	04	20541	21350	IA / SG	✓	-28.5	1033-4.0	0920			✓	✓	✓	✓			
				IA / SG	NOTES:												
				IA / SG	*All samples analyzed for tetra chloroethene; 1,1-DCEs; C15-1,2-DCEs; trans-1,2-DCE; Vinyl chloride; and absolute range TPH												
				IA / SG	RBDN Vics (1,2,4-trimethylbenzene, 1,2-dichloroethane, 1,3,5-trimethylbenzene, benzene, ethylbenzene, isopropylbenzene, n-propylbenzene, methyl tertiarybutyl ether, xylene, toluene, and total xlenes)												
				IA / SG													
				IA / SG													
				IA / SG													

Friedman & Bruya, Inc.

5500 4th Avenue South

Seattle, WA 98108

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\OOC\OOCFO-15.DOC

SIGNATURE	PRINT NAME	COMPANY	DATE	TIME
Relinquished by: <u>Kim Ryan</u>	<u>Guina Baradon</u>	<u>Maul Foster Alongi</u>	<u>5/23/26</u>	<u>14:15</u>
Received by: <u>Mr</u>	<u>Mr Khan</u>	<u>FBI</u>	<u>05/28/26</u>	<u>10:45</u>
Relinquished by:				
Received by:		Samples received at <u>20</u>	<u>00</u>	

SAMPLE CONDITION UPON RECEIPT CHECKLIST

PROJECT # 605512 CLIENT MFA INITIALS/ AP
DATE: 05/28/26

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

Cooler/Sample temperature 20 °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/ AP
*or other representative documents, letters, and/or shipping memos Date: 05/28/26

Number of days samples have been sitting prior to receipt at laboratory 1 → 15 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)

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

VANCOUVER, WA 98660
UNITED STATES US

BILL THIRD PARTY

Part # 156297-435 RRDB EXP 03/27

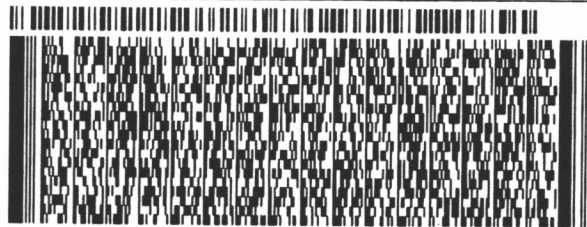
SEATTLE WA 98108

(206) 285-8282

REF: M0575.02.002- 003

YNU:
PO:

DEPT:



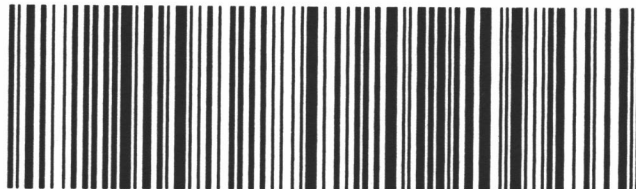
FedEx
Express



THU - 28 MAY 10:30A
PRIORITY OVERNIGHT

85 BFIA

98108
WA-US SEA



Appendix D

Data Validation Memorandum



MAUL
FOSTER
ALONGI

Data Validation Memorandum

Project No. M0575.02.002 | June 10, 2026 | Oregon Cascades West Council of Governments and City of Sweet Home

Maul Foster & Alongi, Inc. (MFA), conducted an independent Stage 2A review of the quality of analytical results for indoor air samples collected between May 13 and May 27, 2026, at the site located at 1244 Long Street, Sweet Home, Oregon.

Friedman & Bruya, Inc. (F&B) performed the analyses. MFA reviewed F&B report number 605512. The analyses performed and the samples analyzed are listed in the following tables.

Analysis	Reference
Volatile organic compounds	EPA TO-15

Notes

EPA = U.S. Environmental Protection Agency.

TO = toxic organics.

Samples Analyzed
Report 605512
LONG-IA-001
LONG-IA-002
LONG-IA-003
LONG-IA-004

Data Validation Procedures

Analytical results were evaluated according to applicable sections of U.S. Environmental Protection Agency (EPA) guidelines for data review (EPA 2020), the site-specific indoor air assessment workplan/sampling and analysis plan (MFA 2026), and appropriate laboratory- and method-specific guidelines (EPA 1986, F&B 2024).

Based on the data quality assurance/quality control review described herein, the data, with the appropriate final data qualifiers assigned, are considered acceptable for their intended use. Final data qualifiers represent qualifiers originating from the laboratory and accepted by the reviewer, and data qualifiers assigned by the reviewer during validation.

Final data qualifiers:

- J = result is estimated.
- U = result is non-detect at the method reporting limit (MRL).
- UJ = result is non-detect with an estimated MRL.

Project Data Quality Objectives

The reviewer confirmed that the laboratory data reviewed in this Data Validation Memorandum met the following sampling and analysis plan (MFA 2026) project data quality objectives.

Data Sensitivity

The reviewer confirmed that the laboratory MRLs met the project data quality objectives for sensitivity.

Data Completeness

Data completeness is measured as the total number of samples collected, from which the valid analytical data are obtained, divided by the total number of samples collected, and multiplied by 100. The reviewer confirmed that the project data quality objective for completeness was met (i.e., greater than 90 percent).

General Qualifications

According to report 605512, the EPA Method TO-15 naphthalene results from samples LONG-IA-001, LONG-IA-003, and LONG-IA-004 were flagged by the laboratory as estimated as the result concentration is reported between the method detection limit and the lowest calibration point. The reviewer qualified the associated sample results, as shown in the table below.

Report	Sample	Analyte	Original Result (ug/m ³)	Qualified Result (ug/m ³)
605512	LONG-IA-001	Naphthalene	0.073 U	0.073 UJ
	LONG-IA-003		0.094	0.094 J
	LONG-IA-004		0.094	0.094 J

Notes

J = result is estimated.

U = result is non-detect at the method reporting limit.

ug/m³ = micrograms per cubic meter.

UJ = result is non-detect with an estimated method reporting limit.

According to report 605512, the EPA Method TO-15 gasoline-range hydrocarbons results were quantified using a three-point calibration. No qualifications were necessary by the reviewer.

Sample Conditions

Sample Custody

Sample custody was appropriately documented on the chain-of-custody (COC) form accompanying the report.

The reviewer confirmed that the gap in custody on the COC form accompanying report 605512 is due to shipment via a third-party service.

Holding Times

Extractions and analyses were performed within the recommended holding times.

Preservation and Sample Storage

The samples were preserved and stored appropriately.

Reporting Limits

The laboratory evaluated results to MRLs.

The reviewer confirmed that when a higher sample volume was used for the extraction, F&B provided the preparation or dilution factor after the laboratory sample identification number.

Blank Results

Method Blanks

Laboratory method blanks are used to evaluate whether laboratory contamination was introduced during sample preparation and analysis. Laboratory method blank analyses were performed at the required frequencies, in accordance with laboratory- and method-specific requirements.

All laboratory method blank results were non-detect to MRLs.

Laboratory Control Sample and Laboratory Control Sample Duplicate Results

Laboratory control sample (LCS) and laboratory control sample duplicate (LCSD) results are used to evaluate laboratory precision and accuracy. LCSD were not included, and batch precision was evaluated based on laboratory duplicate results. The LCS was prepared and analyzed at the required frequency, in accordance with laboratory- and method-specific requirements.

All LCS results were within acceptance limits for percent recovery.

Laboratory Duplicate Results

Laboratory duplicate results are used to evaluate laboratory precision and sample homogeneity. Fremont reported duplicates as replicate samples. The laboratory duplicate sample was prepared and analyzed at the required frequency, in accordance with laboratory- and method-specific requirements.

Laboratory duplicate results greater than five times the MRL were evaluated using laboratory relative percent difference (RPD) control limits. A secondary criterion was used when laboratory duplicate results were non-detect or less than five times the MRL. Results meet the secondary criterion if the absolute difference of the laboratory duplicate sample result and the parent sample result, or the MRL for non-detects, is equal to or less than the MRL value of the parent sample.

All laboratory duplicate results met the acceptance criteria.

Matrix Spike and Matrix Spike Duplicate Results

Matrix spike (MS) and matrix spike duplicate (MSD) results are used to evaluate laboratory precision, accuracy, and the effect of the sample matrix on sample preparation and target analyte recovery. MS and MSD samples are not required for the methods.

Surrogate Results

Surrogate results are used to evaluate laboratory performance of target organic compounds for individual samples.

All surrogate results were within percent recovery acceptance limits.

Field Duplicate Results

Field duplicate results are used to evaluate field precision and sample homogeneity. No field duplicate samples results were submitted for analysis.

Data Package

The data package was reviewed for transcription errors, omissions, and anomalies.

Report 605512 was revised on June 10, 2026, to remove the erroneously reported 2-propanol results. No further actions were required by the reviewer.

No additional issues were found.

References

- EPA. 1986. *Test Methods for Evaluating Solid Waste, Physical/Chemical Methods*. EPA publication SW-846. 3rd ed. U.S. Environmental Protection Agency. Final updates I (1993), II (1995), IIA (1994), IIB (1995), III (1997), IIIA (1999), IIIB (2005), IV (2008), V (2015), VI phase I (2017), VI phase II (2018), VI phase III (2019), VII phase I (2019), and VII phase II (2020).
- EPA. 2020. *National Functional Guidelines for Organic Superfund Methods Data Review*. EPA 540-R-20-005. U.S. Environmental Protection Agency, Office of Superfund Remediation and Technology Innovation: Washington, DC. November.
- F&B. 2024. *Quality Assurance Manual*. Rev. 19. Friedman & Bruya, Inc.: Seattle, WA. October 9.
- MFA. 2026. *Site-Specific Indoor Air Work Plan/Sampling and Analysis Plan*. Prepared for Oregon Cascades West Council of Governments and City of Sweet Home. Maul Foster & Alongi, Inc.: Portland, OR. April 9.

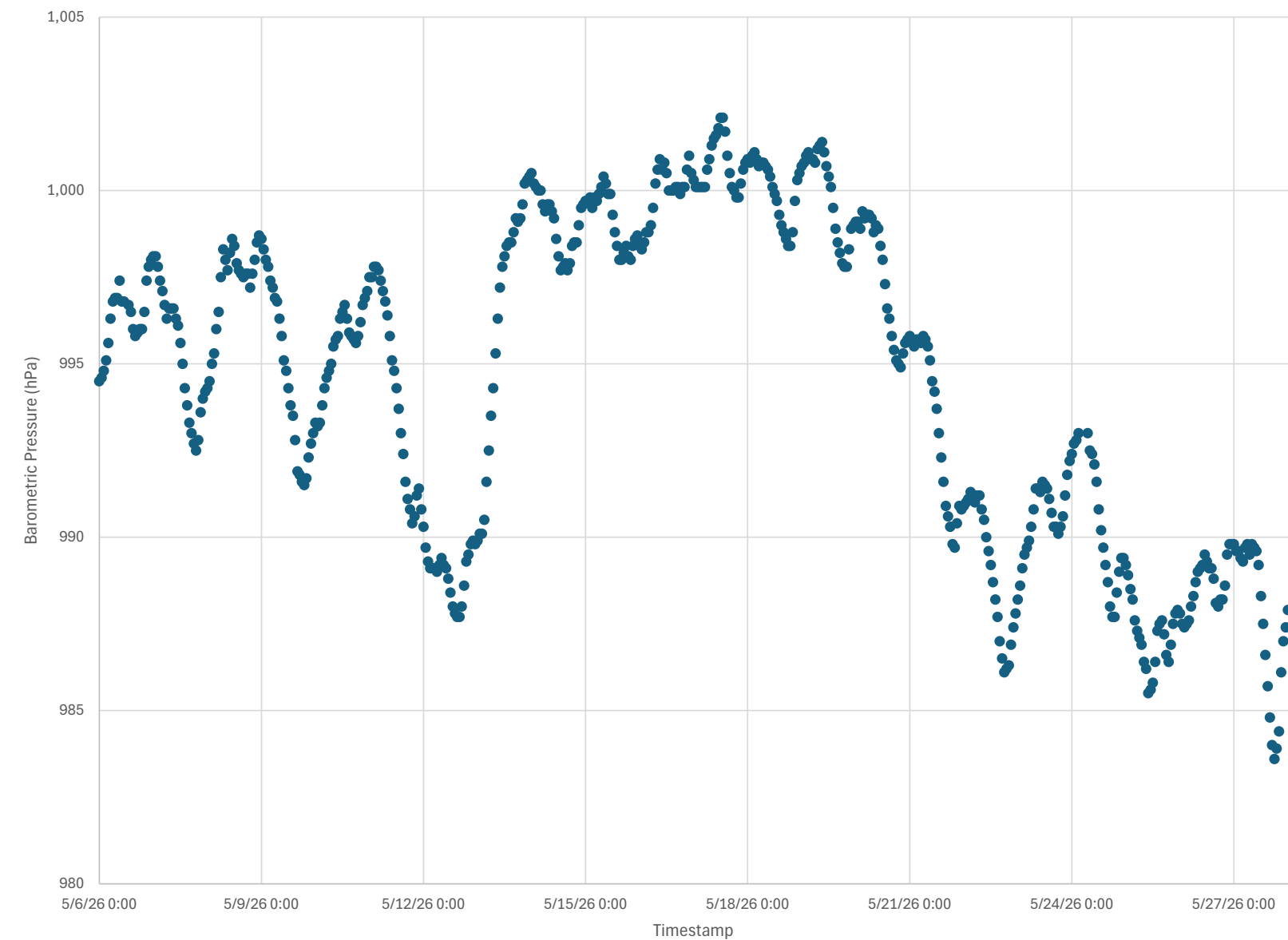
Appendix E

Ambient Temperature and Pressure Data During the Sample Period



MAUL
FOSTER
ALONGI

Station Barometric Pressure (hPa), Sweet Home Station CW8892



Dry-Bulb Temperature (°F), Sweet Home Station CW8892

