

MEMORANDUM

Project No. AS210426-A-10

June 19, 2024

To: Jim Orr, Oregon Department of Environmental Quality

cc: Tamara Holden and Xiaofei Ren, Monroe Apartments Owner LLC

From:



Jasmin Toro, EI
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Carla Brock, RG
Principal Geologist
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Re: Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon (ECSI #887) – Winter 2024 Vapor Intrusion Assessment Results

Aspect Consulting (Aspect) has prepared this memorandum to present the results of the February 2024 vapor intrusion (VI) assessment at the Former L.D. McFarland Company, Ltd. (LDM) Creosote Wood Treating Facility in Milwaukie, Oregon (The Site). The LDM property (Property) includes two parcels, referred to as Parcel 1 and Parcel 2 (Figure 1). The Oregon Department of Environmental Quality (DEQ) provides cleanup oversight under the requirements of the August 14, 2001 Stipulation and Consent Decree No. CCV0108179 (Consent Decree; State of Oregon, 2001).

Parcel 1 has been remediated to DEQ residential use exposure scenarios as part of the Phase I remedial action, completed in 2001. A Certificate of Completion for the Phase I work was received from DEQ in a letter dated July 11, 2002 (DEQ, 2002). Parcel 2 has been remediated to DEQ occupational/commercial use exposure scenarios as part of the Phase II remedial action, completed in 2023 as described in the “Phase II Closeout Report” (Aspect, 2024a).

An initial VI assessment was conducted in August 2023, shortly after the completion of the Phase II remedial action, to evaluate potential VI risk to the Clubhouse, a new structure constructed on Parcel 2, as part of the Property redevelopment (Aspect, 2023a). The second semiannual VI assessment was completed in February 2024 to evaluate potential VI risk to the Clubhouse under differing seasonal conditions. This document describes the results of the VI assessment, completed in general accordance with the *Guidance for Assessing and Remediating Vapor Intrusion in Buildings* (DEQ, 2010) and the “Initial VI Assessment Work Plan¹” (Aspect, 2023b; herein referred

¹ In addition to the indoor air sampling scope outlined in the Work Plan, DEQ requested an exhaust stack sample to be analyzed as part of the vapor intrusion assessment (DEQ, 2023a). The exhaust stack sampling procedure is described in the long-term Vapor Intrusion Work Plan appended to the “Parcel 2 Operation and Maintenance Plan” (Aspect, 2024b).

to as the Work Plan). The second semiannual VI assessment was completed as described in the Work Plan, with one exception. Indoor air samples planned for collection from Parcel 1's Building 2 to evaluate potential interference from new building materials were instead collected from Parcel 1's Building 4. One indoor air sample was collected in Building 4's east electrical utility room and one ambient air sample was collected from the east exterior of Building 4. DEQ approved this modification prior to the sampling event (DEQ, 2023b).

Background

On October 20, 2021, the LDM Property was purchased from Tyee Management Company, LLC by Monroe Apartments Owner LLC, as documented in the Closing Notice to DEQ (Tyee, 2021). The LDM Property was vacant until late October 2021, when construction for the Seven Acres Apartments (formerly Monroe Apartments) development began. The Phase II remedial action consisted of excavating Parcel 2 primary utility corridors and backfilling with clean import fill, capping Parcel 2, and managing Parcel 2 soil vapor. To manage Parcel 2 soil vapors, a PrePrufe chemical vapor barrier and radon mitigation system² (referred to as the passive venting system), collectively comprising a VI mitigation system, was installed beneath the Clubhouse.

The chemical vapor barrier membrane and passive venting system was installed beneath the Clubhouse in response to a soil gas investigation (Bridgewater, 2018) conducted within Interim Action Excavation 5 (Figure 1) which is assumed to be the naphthalene source area.³ The soil gas investigation naphthalene detection exceeded DEQ's risk-based concentrations (RBCs) for urban residential exposure (39 micrograms per cubic meter [$\mu\text{g}/\text{m}^3$]) and occupational exposure (360 $\mu\text{g}/\text{m}^3$) and is, therefore, of potential concern with respect to VI into the Clubhouse building located approximately 50 feet north of the source area. The passive venting system was constructed such that it can be easily converted to an active sub-slab depressurization system (SSDS) if a VI concern is identified in the Clubhouse.

The purpose of the VI assessment is to evaluate the performance of the chemical vapor barrier to protect Clubhouse indoor air from VI. This memo presents site conditions prior to sampling, sampling procedures and analysis, analytical data results, and recommendations. Laboratory standard operation procedures and the laboratory quality assurance manual are included in the Work Plan (Aspect, 2023b). Quality Assurance/Quality Control is described in the Phase II Sampling and Analysis Plan (Aspect, 2020).

Site Conditions

A pre-sampling site assessment was conducted two weeks prior to collecting samples to identify building construction characteristics, heating and ventilation systems, and background sources of possible chemical contaminants that may influence the results of indoor sampling. The Seven Acres property manager, Brittney Vandercar, and Seven Acres maintenance lead, Kevin Reece, were

² As stated in the Phase II Design Report, the radon mitigation system is not required for the purpose of radon mitigation, since the Clubhouse does not meet the occupancy threshold of the 2019 Oregon Structural Specialty Code; however, it is a well-established technology for mitigating sub-slab soil vapor intrusion into structures and is just as effective for volatile organic contaminants such as naphthalene as it is for radon.

³ As documented in Bridgewater's soil gas investigation technical memorandum, the naphthalene concentration in a soil gas sample collected just outside the excavation footprint (sample HS1) did not exceed DEQ's RBCs. This result supports the assumption that the naphthalene source area is limited to the excavation footprint.

interviewed during the site assessment. Based on our interview, no changes to building use or recent construction that might impact the assessment were observed. Existing construction drawings were used to complete the building evaluation form. Instructions for building occupants were provided to the Seven Acres management team and building occupants at least 48 hours prior to the sampling event. The assessment evaluation is documented in Attachment A

Air Sampling Methods

Indoor and Ambient Air Sampling

Aspect completed indoor air sampling over a 24-hour period on February 19 and 20, 2024. Indoor air sampling consisted of collecting two samples inside Parcel 2's Clubhouse Building and one sample inside Parcel 1's Building 4 to evaluate potential interference from new building materials. One ambient (outdoor) air sample was collected outside the Clubhouse and another outside Building 4. Sampling locations are shown in Figure 1.

Ambient weather conditions on the sampling dates and barometric pressure leading up to sampling dates, as recorded in Portland, Oregon, are provided in Attachment B. Seven days prior to sampling, the average temperature was 48°F and total precipitation was 0.04 inch. Barometric pressure decreased leading up to the sampling event from 30.2 inches mercury (inHg) on February 16 to 29.7 inHg on February 19, then increased during the sampling event to a high of 29.9 inHg on February 20. The wind speed was documented at 23 miles per hour (mph) from the southeast with temperatures ranging from 38°F to 41°F at the start of the sampling event on February 19th. The wind speed was 3 mph from the east with temperatures ranging from 43°F to 52°F at the end of sampling on February 20. Humidity ranged from 66 to 86 percent over the sampling period with 0.88 inches of precipitation.

Sampling locations and observations are as follows:

- Clubhouse indoor and ambient air samples were collected at breathing zone height between 3 and 4.5 feet above ground. Indoor air samples targeted the areas with the greatest potential for VI. One indoor air sample (CH-IA1) was collected near the center of the building in the Clubroom. A second sample (CH-IA2) was collected on the south side of the building within the work room between occupied offices and the maintenance room. An ambient (outdoor) air sample (CH-AA) was collected outside of the Clubhouse on the east side of the building exterior, in an upwind location, away from wind obstructions.
- The Clubhouse building was occupied during business hours at the time of the sampling event. The Clubhouse HVAC system was operating, windows were not used, and doors were infrequently opened. The sample locations were visibly assessed for potential sources of cross-contamination and a photoionization detector (PID) was used to screen background levels of volatile organic compounds (VOCs) in the vicinity of each sample area. PID readings maintained at 0.0 parts per million (ppm) inside and outside the Clubhouse.
- Building 4 indoor and ambient air samples were collected at breathing zone height at 3 feet above ground. The Building 4 indoor air sample was deployed in the southeast section of the first floor in the east electrical riser room. An ambient (outdoor) air sample (B4-AA)

was collected outside of Building 4 on the east side of the building exterior, in an upwind location away from wind obstructions.

- The Building 4 indoor location was an unoccupied, unfurnished utility space (electrical riser room) with no available HVAC or fan. The door was infrequently opened when inspecting the samplers. The sample location was visibly assessed for potential sources of cross-contamination and a PID was used to screen background levels of VOCs in the riser room. PID readings maintained at 0.0 ppm inside and outside of Building 4.

Effluent Stack Sampling

A permanent sample port was installed in the passive venting system effluent stack in the Clubhouse attic prior to the initial VI assessment. On February 20, 2024, a sample of the effluent was collected for analysis (CH-ES) to evaluate concentrations of naphthalene in soil vapors collected in the passive venting piping prior to emission above the Clubhouse roof. PID readings in the Clubhouse attic were consistently 0.0 ppm during the sampling event.

Sampling & Analysis

The sampling was performed in general accordance with the *Guidance for Assessing and Remediating Vapor Intrusion in Building* (DEQ, 2010). The indoor and ambient air samples were collected in 6-liter vacuum Summa canisters, and the effluent stack sample was collected in a 1-liter vacuum canister. The canisters were individually certified “clean” by Friedman & Bruya, Inc. (F&B), a certified analytical laboratory in Seattle, Washington. Each indoor and ambient air canister was outfitted with a 0.2 micrometer (μm) filter, a vacuum gage, and dedicated flow regulators set at a fill rate for a 24-hour sampling event. The effluent stack sample was outfitted with a 0.2 μm filter, a vacuum gage, and a dedicated flow regulator set at a fill rate of 150-200 milliliter per minute (mL/min) for a 6-minute sampling event. The effluent stack sample was collected directly from the sample port by connecting PTFE tubing to the sample port with silicone tubing. Samples were transferred under appropriate chain-of-custody documentation to the analytical laboratory, F&B. All samples were analyzed for naphthalene by EPA Method TO-15 in accordance with F&Bs Standard Operating Procedures (Aspect, 2023b).

Analytical Results

Indoor, ambient, and effluent stack air sample results are summarized in Table 1. Sampling results are screened against the DEQ air inhalation risk-based concentrations (RBCs) for urban residential (0.20 ug/m^3) and occupational (0.36 ug/m^3) receptor scenarios, as defined in the Work Plan (Aspect, 2023b). Analytical laboratory reports are included in Attachment C. A photograph log showing sample locations and current conditions at the buildings is provided as Attachment D. Sampling results are detailed below:

- Naphthalene was detected in both Clubhouse indoor samples at concentrations of 0.17 ug/m^3 and 0.20 ug/m^3 , which are below the urban residential and occupational RBCs (Table 1). The concentrations of naphthalene detected in indoor air are slightly elevated compared to the ambient (outdoor) air sample at the Clubhouse where naphthalene was reported at a concentration of 0.084 ug/m^3 .
- Naphthalene was detected in the Clubhouse effluent sample at a concentration above the urban residential but below the occupational RBC, at 0.32 ug/m^3 .

- Naphthalene was detected in the Building 4 indoor air sample at a concentration of 0.4 ug/m^3 , which is slightly above the urban residential and occupational RBCs of 0.2 and 0.36 ug/m^3 , respectively (Table 1). Naphthalene was detected below both the urban residential RBC and occupational RBC in the Building 4 ambient air sample at 0.1 ug/m^3 .

Based on the ambient air sample results, indoor air within the Clubhouse is representative of urban background conditions and is not impacted by naphthalene in soil on Parcel 2. Building 4 naphthalene detections are likely a result of new building materials and limited ventilation of the sampling location.

Summary of Findings and Recommendations

Results of the VI assessment indicate concentrations of naphthalene detected in Clubhouse indoor air are below DEQ risk-based concentrations. The air sample collected from the passive venting system effluent contains higher concentrations of naphthalene than were detected in indoor air. The elevated naphthalene concentration sampled from the effluent stack and the low concentrations observed in the Clubhouse indoor air samples suggest that the passive venting system is effectively venting naphthalene from beneath the Clubhouse.

Concentrations of naphthalene detected in the Building 4 indoor air sample exceeds the urban residential RBC and occupational RBC. The Building 4 air samples were collected to provide additional monitoring data to evaluate potential interference from new building materials. The naphthalene detections in the Building 4 indoor air samples are likely a result of new building materials and limited ventilation. No additional indoor air sampling is planned for Building 4.

To confirm the effectiveness of the chemical vapor barrier beneath the Clubhouse, the scope of work completed at the Clubhouse for the VI assessment will be repeated in approximately one year, during the winter of 2025. Long-term operation and maintenance of the VI mitigation system, including a schedule for indoor air sampling, details for inspection and maintenance of the VI mitigation system, and triggers for activating the sub-slab depressurization system are described in the “Parcel 2 Operations and Maintenance Plan” (Aspect, 2024b).

References

- Aspect Consulting, LLC (Aspect), 2020, Phase II Sampling and Analysis Plan, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, Prepared for: Johnson Development Associates, December 21, 2020.
- Aspect Consulting, LLC (Aspect), 2023a, Initial Vapor Intrusion Assessment Results, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, October 2, 2023.
- Aspect Consulting, LLC (Aspect), 2023b, Initial Vapor Intrusion Assessment Work Plan, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, February 2, 2023.
- Aspect Consulting (Aspect), 2024a, Phase II Closeout Report, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, Prepared for: Guardian Real Estate Services LLC, June 18, 2024.
- Aspect Consulting (Aspect), 2024b, Parcel 2 Operations and Maintenance Plan, Former L.D. McFarland Creosote Wood Treating Facility, Milwaukie, Oregon, Prepared for: Guardian Real Estate Services LLC, June 18, 2024.

- Bridgewater Group, Inc. (Bridgewater), 2018, Results of Naphthalene Soil Gas Sampling at Former L.D. McFarland Wood Treating Site Milwaukie, Oregon, January 23, 2018
- Oregon Department of Environmental Quality (DEQ), 2002, Phase I Certification of Completion L.D. McFarland Milwaukie Project ECSI No. 887 and No. 3331 Letter between Matt McClincy of DEQ and Les Lonning of L.D. McFarland Company, July 11, 2002.
- Oregon Department of Environmental Quality (DEQ), 2010, Guidance for Assessing and Remediating Vapor Intrusion in Buildings, March 2010
- Oregon Department of Environmental Quality (DEQ), 2023a, Email Correspondence between Jim Orr (DEQ) and Jasmin Toro (Aspect Consulting, LLC), April 3, 2023.
- Oregon Department of Environmental Quality (DEQ), 2023b, Meeting between Jim Orr (DEQ), Ben Bortolazzo (Guardian Real Estate Services LLC), and Carla Brock (Aspect Consulting, LLC), December 27, 2023.
- State of Oregon, Clackamas County Department of Justice, 2001, Case No. CCV0108179 Stipulation and Consent Decree, Portland, Oregon, Filed August 14, 2001.
- Tyee Management Company, LLC (Tyee), 2021, Closing Notice to DEQ Re: State of Oregon v. L.D. McFarland Company, Ltd., Stipulation and Consent Decree (CCV0108179) (the Consent Decree); Closing of Conveyance to Monroe Apartments Owner LLC/Copy of Recorded Deed/Effectiveness of Assignment/Assumption and Release, October 20, 2021.

Limitations

Work for this project was performed for the Guardian Real Estate Services LLC (Client), and this memorandum was prepared in accordance with generally accepted professional practices for the nature and conditions of work completed in the same or similar localities, at the time the work was performed. This memorandum does not represent a legal opinion. No other warranty, expressed or implied, is made.

All reports prepared by Aspect Consulting for the Client apply only to the services described in the Agreement(s) with the Client. Any use or reuse by any party other than the Client is at the sole risk of that party, and without liability to Aspect Consulting. Aspect Consulting's original files/reports shall govern in the event of any dispute regarding the content of electronic documents furnished to others.

- Attachments: Table 1 – Vapor Intrusion Assessment Results
Figure 1 – Site Plan
Attachment A – Building Evaluation Form
Attachment B – Portland Weather Data
Attachment C – Laboratory Analytical Results
Attachment D – Photograph Log

TABLE

Table 1. Initial Vapor Intrusion Assessment Results

Project No. 210426, Milwaukie, Oregon

			Analyte Unit	Naphthalene ug/m3
			Occupational RBC	0.36
			Urban Residential RBC	0.2
Sample Location	Sample Name	Sample Date		
Building 4				
Building 4 Ambient (East)	B4-AA-081423	08/14/2023	0.21 J	
	B4-AA-021924	02/19/2024	0.1 J	
Building 4 (West)	B4-IA1-081423	08/14/2023	2.8	
Building 4 (East)	B4-IA2-081423	08/14/2023	1.4	
	B4-IA-021924	02/19/2024	0.4	
Clubhouse				
Clubhouse Ambient (East)	CH-AA-081423	08/14/2023	0.17 J	
	CH-AA-021924	02/19/2024	0.084 J	
Clubhouse Effluent Stack	CH-ES-081523	08/14/2023	0.15 J	
	CH-ES-021924	02/20/2024	0.32 J	
Clubhouse (North) Clubroom	CH-IA1-081423	08/14/2023	0.17 J	
	CH-IA1-021924	02/19/2024	0.17 J	
Clubhouse (South) Work Room	CH-IA2-081423	08/14/2023	< 0.26	
	CH-IA2-021924	02/19/2024	0.2 J	

Notes:

RBC - Risk Based Concentration

Grey Shaded - Identifies a detected result that exceeds the occupational RBC

Red Text - Identifies a detected result that exceeds the urban residential RBC

"<" - Analyte not detected at or above the Reporting Limit (RL) shown

J - Result value estimated between the Method Detection Limit (MDL) and the RL

ug/m3 = microgram per cubic meter

FIGURE

ATTACHMENT A

Building Evaluation Form

Complete this form for each building involved in indoor air testing

Preparer's Name: AMF Date/Time Prepared: 2/9/24

Preparer's Affiliation: Aspect Consulting Work Phone: _____

Purpose of Investigation: IA Sampling Bldg Evaluation

1. OCCUPANT:

Interviewed: Y/N

Last Name: _____ First Name: _____

Address: _____

County: _____

Home Phone: _____ Alternate Phone: _____

Number of Occupants/persons at this location: _____

Age of Occupants: _____

2. OWNER OR LANDLORD: (Check if same as occupant _____) (Guardian)

Interviewed: Y/N

Last Name: Vandercar First Name: Brittney

Address: Property Manager for 7-acres

County: Brittney.vandercar@gres.com

Home Phone: 503-305-6752 Alternate Phone: _____

Kevin Reece -maintenance (7-acres)
kevin.reece@gres.com

3. BUILDING CHARACTERISTICS:

Type of Building: (Circle appropriate response)
Bldg 4 Residential School Commercial/Multi-use Clubhouse
 Industrial Church Other: _____

If the property is residential, type? (Circle appropriate response)

Ranch 2-Family 3-Family
 Raised Ranch Split Level Colonial
 Cape Cod Contemporary Mobile Home
 Duplex Apartment House Townhouse/Condos
 Modular Log Home Other: _____

If multiple units, how many? Bldg 4 = 12 units _____

If the property is commercial, type?

Business Type(s) _____

Does it include residences (i.e., multi-use)? Y/N If yes, how many? _____

Other characteristics:

Number of floors Bldg 4=4, CH=1 Building age < 1 year
and mezzanine

Is the building insulated Y/N? How air tight? Tight / Average / Not Tight

4. AIRFLOW

Use air current tubes or tracer smoke to evaluate airflow patterns & qualitatively describe:

Airflow between floors
CH = none
B4= breezeway between units/outdoor stairs between floors

Airflow near source

Outdoor air infiltration

Infiltration into air ducts

Lowest level

5. BASEMENT & CONSTRUCTION CHARACTERISTICS (Circle all that apply) both slab on grade

a. Above grade construction: wood frame concrete stone brick

b. Basement type: full crawlspace slab other _____

c. Basement floor: concrete dirt stone other _____

d. Basement floor: unsealed sealed
covered with _____

e. Concrete floor: unsealed sealed
sealed with _____

f. Foundation walls: poured block stone
other _____ concrete

g. Foundation walls: unsealed sealed
sealed with waterproofing

h. The basement is: wet damp dry moldy

i. The basement is: finished unfinished partially finished

j. Sump present? Y / N Clubhouse

k. Water in sump? Y / N not applicable

Basement/Lowest level depth below grade: CH = elevator 2' foundation, 4' elevator
B4 = NA, 2' foundation _____ (feet)

Identify potential soil vapor entry points & approximate size (e.g., cracks, utility ports, drains)

Utility (H2O) piping through foundation in Electrical Room (B4)

6. HEATING, VENTING & AIR CONDITIONING (Circle all that apply)

Type of heating system(s) used in this building: (circle all that apply – note primary)

- | | | |
|---------------------|-----------------|---------------------|
| Hot air circulation | Heat pump | Hot water baseboard |
| Space heaters | Steam radiation | Radiant floor |
| Electric baseboard | Wood stove | Outdoor wood boiler |
- Other B4 = portable terminal air conditioner (PTAC), electrical wall heater in electrical room
CH= central AC condensing units

The primary type of fuel used is:

- | | | | |
|----|---|----------|----------|
| CH | <input checked="" type="checkbox"/> Natural gas | Fuel oil | Kerosene |
| | Electric | Propane | Solar |
| | Wood | Coal | |

Domestic hot water tank fueled by: Natural gas hot water heater in attic (CH)
Small electric water heater each unit (B4)

Boiler/furnace located in: Basement Outdoors Main Floor
Other _____

Air conditioning: CH
 Central air Window units Open windows
Heat Pump None Portable (B4)

Are there air distribution ducts present? Y / N
CH

Describe the supply & cold air return ductwork & its condition where visible, including whether there is a cold air return & tightness of duct joints. Indicate the locations on the floor plan diagram.

See email ductwork for CH
NA for B4

7. OCCUPANCY

B4 first floor

CH= 8am-6pm by employees,
8am-10pm residents

Is basement/lowest level occupied?

Almost never

B4=electrical room

Full-time

Occasionally

Seldom

Level General use of each floor (e.g., familyroom, bedroom, laundry, workshop, storage)

~~Basement:~~ _____

1st Floor CH=community and mail; B4= residential, electrical room

2nd Floor B4= residential

3rd Floor B4= residential

4th Floor B4= residential

8. FACTORS THAT MAY INFLUENCE INDOOR AIR QUALITY

- a. Is there an attached garage? Y / N
- b. Does the garage have a separate heating unit? Y / N NA
- c. Are petroleum-powered machines or vehicles stored in the garage (e.g., lawnmower, ATV, car) N Please specify _____
- d. Has the building ever had a fire? Y / N When _____
- e. Is a kerosene or unvented gas space heater present? Y / N Where & Type? _____
- f. Is there a workshop or hobby/craft area? Y / N Where & Type? _____
- g. Is there smoking in the building? Y / N Frequency? _____
- h. Have cleaning products been used recently? Y / N When & Type? B4 units, CH= every Tuesday
- i. Have cosmetic products been used recently? Y / N When & Type? B4 units
- j. Has painting/staining been done in the last 6 months? Y / N Where & When? _____
- k. Is there new carpet, drapes or other textiles? Y / N Where & When? _____

l. Have air fresheners been used recently? Y / N When & Type? Probably B4 units

m. Is there a kitchen exhaust fan? Y / N If yes,
where vented? CH kitchen

n. Is there a bathroom exhaust fan? Y / N If yes,
where vented? CH

o. Is there a clothes dryer? Y / N If yes, is it vented outside? Y / N B4

p. Has there been a pesticide application? Y / N When & Type? _____

Are there odors in the building Y / N If yes
please describe: _____

Do any of the building occupants use solvents or volatile chemicals at work? Y / N NA
(e.g., chemical manufacturing or laboratory, auto mechanic or auto body shop, painting, fuel oil delivery, boiler mechanic, pesticide applicator, cosmetologist, carpet installer)
If yes, what type of solvents are used? _____
If yes, are their clothes washed at work? Y / N

Do any of the building occupants regularly use or work at a dry-cleaning service? (circle appropriate response)

Yes, use dry-cleaning regularly (weekly)

Yes, use dry-cleaning infrequently (monthly or less)

Yes, work at a dry-cleaning service

No

Unknown

Is there a radon mitigation system for the building/structure? Y / N Date of
Installation: CH spring 2022
B4

Is the system active or passive? Active / Passive

9. WATER & SEWAGE

Water Supply: Public water Drilled well Driven well Dug well
Other: _____

Sewage Disposal: Public sewer Septic tank Leach field Dry well
Other: _____

10. RELOCATION INFORMATION (for oil spill residential emergency)

ATTACHMENT B

Portland Weather Data

45.56 °N, 122.62 °W

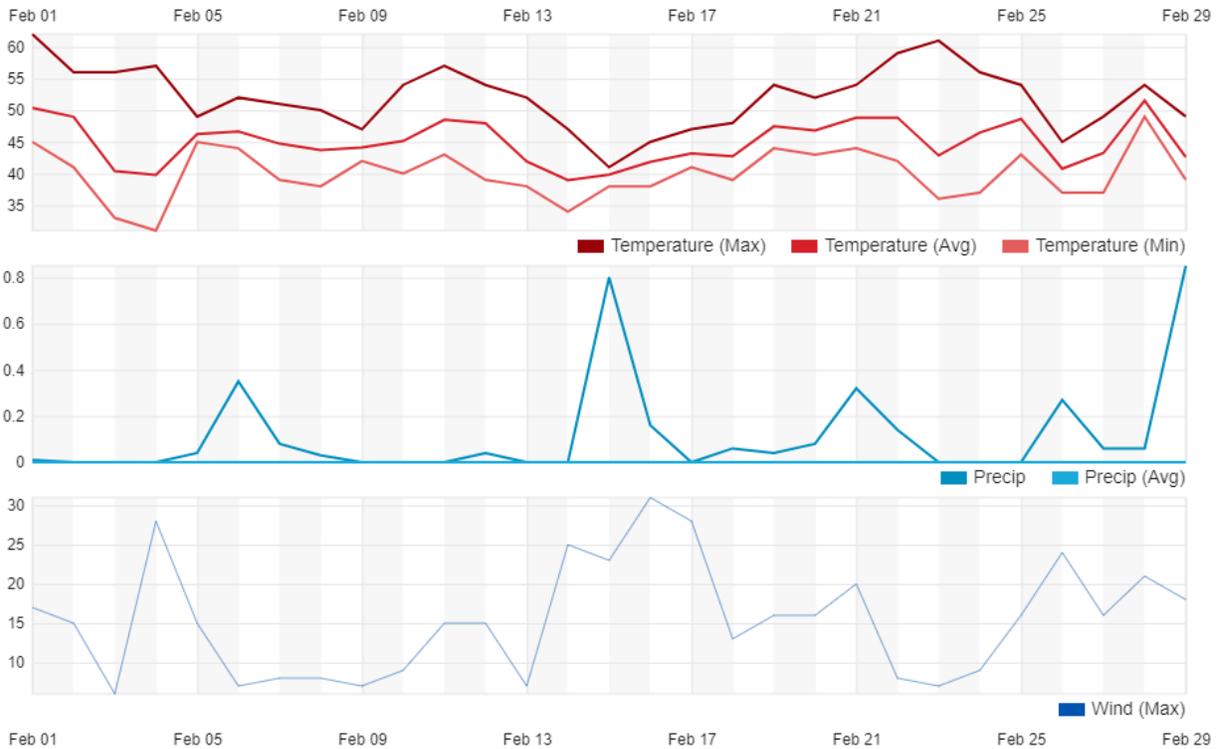
Portland, OR Weather History

70° PORTLAND INTL AIRPORT STATION | CHANGE

TODAY HOURLY 10-DAY CALENDAR **HISTORY** WUNDERMAP

Daily Weekly **Monthly**

February 2024 View



Summary

Temperature (°F)	Max	Average	Min	
Max Temperature	62	52.14	41	
Avg Temperature	51.53	44.94	38.95	
Min Temperature	49	39.97	31	
Dew Point (°F)	Max	Average	Min	
Dew Point	47	37.45	23	
Precipitation (in)	Max	Average	Min	Sum
Precipitation	0.85	0.12	0.00	3.39
Snowdepth	0.00	0.00	0.00	0.00
Wind (mph)	Max	Average	Min	
Wind	31	7.85	0	
Gust Wind	43	3.78	0	
Sea Level Pressure (in)	Max	Average	Min	
Sea Level Pressure	30.32	29.93	29.42	

Daily Observations

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressure (in)			Precipitation
	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	
Feb																
10	54	45.1	40	39	37.1	34	86	74.3	51	9	4.9	0	30.3	30.2	30.1	0.00
11	57	48.5	43	47	41.0	37	86	75.6	57	15	9.4	0	30.1	30.1	30.1	0.00
12	54	47.9	39	42	39.7	36	89	74.5	51	15	5.5	0	30.2	30.1	30.1	0.04
13	52	41.9	38	39	36.7	34	93	82.6	59	7	4.3	0	30.1	30.1	30.0	0.00
14	47	39.0	34	35	32.9	26	93	80.2	44	25	11.0	0	30.0	29.8	29.7	0.00
15	41	39.9	38	37	34.5	31	86	81.4	67	23	14.4	8	30.2	30.0	29.7	0.80
16	45	41.8	38	32	26.5	23	76	55.5	44	31	23.6	14	30.2	30.2	30.1	0.16
17	47	43.2	41	33	28.9	25	73	57.5	47	28	19.9	9	30.1	29.9	29.8	0.00
18	48	42.7	39	38	35.1	32	83	74.5	65	13	8.2	0	29.9	29.8	29.7	0.06
19	54	47.5	44	41	36.8	34	80	66.9	57	16	9.6	3	29.8	29.7	29.6	0.04
20	52	46.8	43	43	39.7	37	89	76.5	66	16	6.6	0	29.9	29.9	29.8	0.08

45.56 °N, 122.62 °W

Portland, OR Weather History

70° PORTLAND INTL AIRPORT STATION | CHANGE

TODAY

HOURLY

10-DAY

CALENDAR

HISTORY

WUNDERMAP

Daily

Weekly

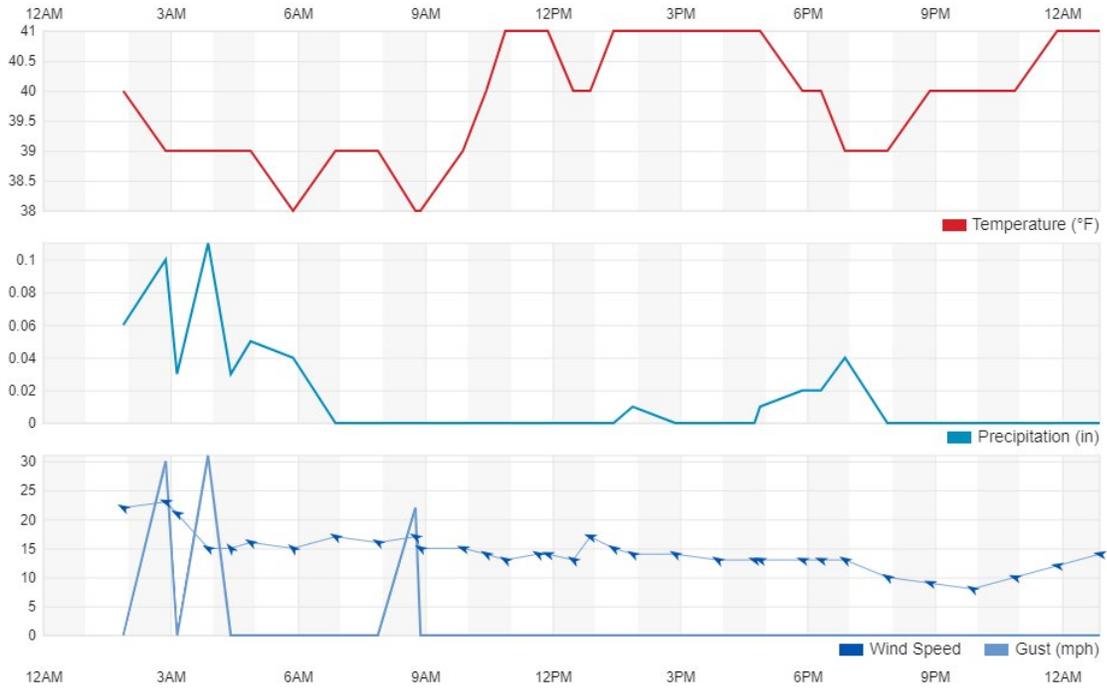
Monthly

February

19

2024

View



Summary

Temperature (°F)	Actual	Historic Avg.	Record	
High Temp	41	51.5	64	
Low Temp	38	36.7	19	
Day Average Temp	39.85	44.1	-	
Precipitation (in)	Actual	Historic Avg.	Record	
Precipitation (past 24 hours from 11:53:00)	0.80	--	-	
Dew Point (°F)	Actual	Historic Avg.	Record	
Dew Point	34.48	-	-	
High	37	-	-	
Low	31	-	-	
Average	34.48	-	-	
Wind (mph)	Actual	Historic Avg.	Record	
Max Wind Speed	23	-	-	
Visibility	10	-	-	
Sea Level Pressure (in)	Actual	Historic Avg.	Record	
Sea Level Pressure	30.16	-	-	

Daily Observations

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Precip.	Condition
1:53 AM	40 °F	35 °F	83 %	ESE	22 mph	0 mph	29.71 in	0.1 in	Light Rain / Windy
2:53 AM	39 °F	35 °F	86 %	ESE	23 mph	30 mph	29.70 in	0.1 in	Rain / Windy
3:09 AM	39 °F	35 °F	86 %	ESE	21 mph	0 mph	29.72 in	0.0 in	Light Rain / Windy
3:53 AM	39 °F	35 °F	86 %	ESE	15 mph	31 mph	29.72 in	0.1 in	Light Rain
4:25 AM	39 °F	35 °F	86 %	SE	15 mph	0 mph	29.77 in	0.0 in	Light Rain
4:53 AM	39 °F	35 °F	86 %	ESE	16 mph	0 mph	29.77 in	0.1 in	Light Rain
5:53 AM	38 °F	34 °F	86 %	SE	15 mph	0 mph	29.80 in	0.0 in	Light Rain
6:53 AM	39 °F	34 °F	82 %	ESE	17 mph	0 mph	29.86 in	0.0 in	Cloudy
7:53 AM	39 °F	34 °F	82 %	ESE	16 mph	0 mph	29.89 in	0.0 in	Mostly Cloudy
8:46 AM	38 °F	33 °F	83 %	ESE	17 mph	22 mph	29.92 in	0.0 in	Mostly Cloudy
8:53 AM	38 °F	33 °F	83 %	ESE	15 mph	0 mph	29.93 in	0.0 in	Mostly Cloudy
9:53 AM	39 °F	34 °F	82 %	ESE	15 mph	0 mph	29.96 in	0.0 in	Mostly Cloudy
10:26 AM	40 °F	34 °F	79 %	ESE	14 mph	0 mph	29.97 in	0.0 in	Mostly Cloudy
10:53 AM	41 °F	35 °F	79 %	ESE	13 mph	0 mph	29.96 in	0.0 in	Mostly Cloudy
11:39 AM	41 °F	35 °F	79 %	ESE	14 mph	0 mph	30.00 in	0.0 in	Mostly Cloudy
11:53 AM	41 °F	36 °F	82 %	ESE	14 mph	0 mph	30.00 in	0.0 in	Mostly Cloudy
12:29 PM	40 °F	36 °F	86 %	ESE	13 mph	0 mph	30.02 in	0.0 in	Light Rain
12:53 PM	40 °F	35 °F	83 %	ESE	17 mph	0 mph	30.02 in	0.0 in	Light Rain
1:26 PM	41 °F	37 °F	86 %	ESE	15 mph	0 mph	30.02 in	0.0 in	Light Rain
1:53 PM	41 °F	36 °F	82 %	ESE	14 mph	0 mph	30.02 in	0.0 in	Light Rain
2:53 PM	41 °F	36 °F	82 %	ESE	14 mph	0 mph	30.01 in	0.0 in	Light Rain
3:53 PM	41 °F	35 °F	79 %	ESE	13 mph	0 mph	30.03 in	0.0 in	Cloudy
4:45 PM	41 °F	35 °F	79 %	ESE	13 mph	0 mph	30.04 in	0.0 in	Light Rain
4:53 PM	41 °F	35 °F	79 %	ESE	13 mph	0 mph	30.04 in	0.0 in	Light Rain
5:53 PM	40 °F	35 °F	83 %	ESE	13 mph	0 mph	30.07 in	0.0 in	Light Rain
6:19 PM	40 °F	35 °F	83 %	ESE	13 mph	0 mph	30.08 in	0.0 in	Light Rain
6:53 PM	39 °F	34 °F	82 %	ESE	13 mph	0 mph	30.08 in	0.0 in	Light Rain
7:53 PM	39 °F	34 °F	82 %	ESE	10 mph	0 mph	30.09 in	0.0 in	Light Rain
8:53 PM	40 °F	34 °F	79 %	ESE	9 mph	0 mph	30.09 in	0.0 in	Light Rain
9:53 PM	40 °F	33 °F	77 %	ESE	8 mph	0 mph	30.13 in	0.0 in	Light Rain
10:53 PM	40 °F	33 °F	77 %	ESE	10 mph	0 mph	30.15 in	0.0 in	Light Rain
11:53 PM	41 °F	32 °F	70 %	E	12 mph	0 mph	30.15 in	0.0 in	Cloudy
12:53 AM	41 °F	31 °F	67 %	E	14 mph	0 mph	30.16 in	0.0 in	Cloudy

45.56 °N, 122.62 °W

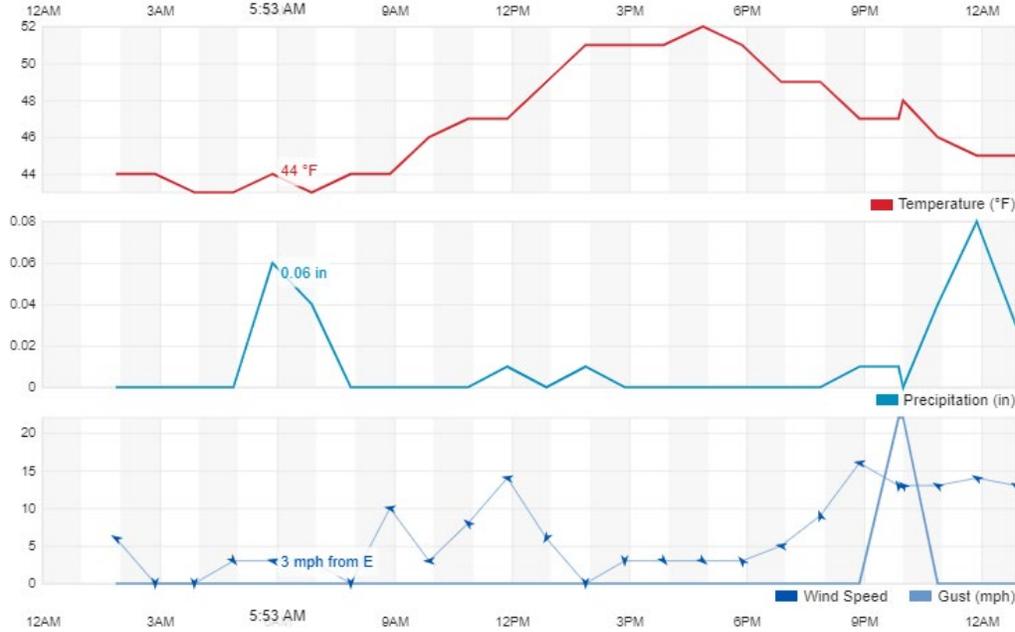
Portland, OR Weather History

71° PORTLAND INTL AIRPORT STATION | CHANGE

TODAY HOURLY 10-DAY CALENDAR HISTORY WUNDERMAP

Daily Weekly Monthly

February 20 2024 View



Summary

Temperature (°F)	Actual	Historic Avg.	Record	▲
High Temp	52	52.4	63	
Low Temp	43	36.9	22	
Day Average Temp	46.8	44.7	-	
Precipitation (in)	Actual	Historic Avg.	Record	▲
Precipitation (past 24 hours from 11:53:00)	0.08	--	-	
Dew Point (°F)	Actual	Historic Avg.	Record	▲
Dew Point	39.72	-	-	
High	43	-	-	
Low	37	-	-	
Average	39.72	-	-	
Wind (mph)	Actual	Historic Avg.	Record	▲
Max Wind Speed	16	-	-	
Visibility	10	-	-	
Sea Level Pressure (in)	Actual	Historic Avg.	Record	▲
Sea Level Pressure	29.91	-	-	

Daily Observations

Time	Temperature	Dew Point	Humidity	Wind	Wind Speed	Wind Gust	Pressure	Precip.	Condition
1:53 AM	44 °F	37 °F	76 %	ESE	6 mph	0 mph	29.79 in	0.0 in	Mostly Cloudy
2:53 AM	44 °F	38 °F	79 %	CALM	0 mph	0 mph	29.80 in	0.0 in	Light Rain
3:53 AM	43 °F	38 °F	82 %	CALM	0 mph	0 mph	29.81 in	0.0 in	Cloudy
4:53 AM	43 °F	39 °F	86 %	NW	3 mph	0 mph	29.82 in	0.0 in	Rain
5:53 AM	44 °F	39 °F	82 %	E	3 mph	0 mph	29.83 in	0.1 in	Light Rain
6:53 AM	43 °F	40 °F	89 %	E	3 mph	0 mph	29.85 in	0.0 in	Rain
7:53 AM	44 °F	38 °F	79 %	CALM	0 mph	0 mph	29.86 in	0.0 in	Mostly Cloudy
8:53 AM	44 °F	38 °F	79 %	E	10 mph	0 mph	29.88 in	0.0 in	Light Rain
9:53 AM	46 °F	39 °F	76 %	E	3 mph	0 mph	29.88 in	0.0 in	Mostly Cloudy
10:53 AM	47 °F	38 °F	71 %	SE	8 mph	0 mph	29.90 in	0.0 in	Mostly Cloudy
11:53 AM	47 °F	40 °F	77 %	E	14 mph	0 mph	29.88 in	0.0 in	Mostly Cloudy
12:53 PM	49 °F	40 °F	71 %	NNE	6 mph	0 mph	29.91 in	0.0 in	Light Rain
1:53 PM	51 °F	42 °F	71 %	CALM	0 mph	0 mph	29.87 in	0.0 in	Mostly Cloudy
2:53 PM	51 °F	41 °F	68 %	VAR	3 mph	0 mph	29.86 in	0.0 in	Mostly Cloudy
3:53 PM	51 °F	43 °F	74 %	NW	3 mph	0 mph	29.86 in	0.0 in	Mostly Cloudy
4:53 PM	52 °F	41 °F	66 %	NW	3 mph	0 mph	29.85 in	0.0 in	Mostly Cloudy
5:53 PM	51 °F	41 °F	68 %	SE	3 mph	0 mph	29.83 in	0.0 in	Mostly Cloudy
6:53 PM	49 °F	40 °F	71 %	E	5 mph	0 mph	29.82 in	0.0 in	Mostly Cloudy
7:53 PM	49 °F	38 °F	66 %	SSE	9 mph	0 mph	29.85 in	0.0 in	Cloudy
8:53 PM	47 °F	41 °F	80 %	E	16 mph	0 mph	29.82 in	0.0 in	Cloudy
9:53 PM	47 °F	40 °F	77 %	SSE	13 mph	22 mph	29.86 in	0.0 in	Light Rain
10:00 PM	48 °F	40 °F	74 %	SE	13 mph	22 mph	29.86 in	0.0 in	Light Rain
10:53 PM	46 °F	41 °F	83 %	ESE	13 mph	0 mph	29.87 in	0.0 in	Rain
11:53 PM	45 °F	41 °F	86 %	ESE	14 mph	0 mph	29.86 in	0.1 in	Light Rain
12:53 AM	45 °F	40 °F	82 %	ESE	13 mph	0 mph	29.86 in	0.0 in	Light Rain

ATTACHMENT C

Laboratory Analytical Results

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

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

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

February 29, 2024

Carla Brock, Project Manager
Aspect Consulting, LLC
710 2nd Ave S, Suite 550
Seattle, WA 98104

Dear Ms Brock:

Included are the results from the testing of material submitted on February 22, 2024 from the Monroe 10999 SE 37th Ave 210426, F&BI 402318 project. There are 10 pages included in this report.

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

Sincerely,

FRIEDMAN & BRUYA, INC.



Michael Erdahl
Project Manager

Enclosures
c: Aspect Data
ASP0229R.DOC

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

CASE NARRATIVE

This case narrative encompasses samples received on February 22, 2024 by Friedman & Bruya, Inc. from the Aspect Consulting, LLC Monroe 10999 SE 37th Ave 210426, F&BI 402318 project. Samples were logged in under the laboratory ID's listed below.

<u>Laboratory ID</u>	<u>Aspect Consulting, LLC</u>
402318 -01	CH-AA-021924
402318 -02	CH-IA1-021924
402318 -03	CH-IA2-021924
402318 -04	B4-IA-021924
402318 -05	B4-AA-021924
402318 -06	CH-ES-021924

All quality control requirements were acceptable.

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	CH-AA-021924	Client:	Aspect Consulting, LLC
Date Received:	02/22/24	Project:	Monroe 10999 SE 37th Ave
Date Collected:	02/19/24	Lab ID:	402318-01
Date Analyzed:	02/27/24	Data File:	022715.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	85	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Naphthalene	0.084 j	0.016 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	CH-IA1-021924	Client:	Aspect Consulting, LLC
Date Received:	02/22/24	Project:	Monroe 10999 SE 37th Ave
Date Collected:	02/19/24	Lab ID:	402318-02
Date Analyzed:	02/27/24	Data File:	022717.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

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

Compounds:	Concentration	
	ug/m3	ppbv
Naphthalene	0.17 j	0.033j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	CH-IA2-021924	Client:	Aspect Consulting, LLC
Date Received:	02/22/24	Project:	Monroe 10999 SE 37th Ave
Date Collected:	02/19/24	Lab ID:	402318-03
Date Analyzed:	02/27/24	Data File:	022718.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

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

Compounds:	Concentration	
	ug/m3	ppbv
Naphthalene	0.20 j	0.038 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	B4-IA-021924	Client:	Aspect Consulting, LLC
Date Received:	02/22/24	Project:	Monroe 10999 SE 37th Ave
Date Collected:	02/19/24	Lab ID:	402318-04
Date Analyzed:	02/27/24	Data File:	022719.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

Surrogates:	% Recovery:	Lower Limit:	Upper Limit:
4-Bromofluorobenzene	85	70	130

Compounds:	Concentration	
	ug/m3	ppbv
Naphthalene	0.40	0.077

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	B4-AA-021924	Client:	Aspect Consulting, LLC
Date Received:	02/22/24	Project:	Monroe 10999 SE 37th Ave
Date Collected:	02/19/24	Lab ID:	402318-05
Date Analyzed:	02/27/24	Data File:	022716.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

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

Compounds:	Concentration	
	ug/m3	ppbv
Naphthalene	0.10 j	0.019 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	CH-ES-021924	Client:	Aspect Consulting, LLC
Date Received:	02/22/24	Project:	Monroe 10999 SE 37th Ave
Date Collected:	02/19/24	Lab ID:	402318-06 1/3
Date Analyzed:	02/27/24	Data File:	022720.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

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

Compounds:	Concentration	
	ug/m3	ppbv
Naphthalene	0.32 j	0.06 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Analysis For Volatile Compounds By Method TO-15

Client Sample ID:	Method Blank	Client:	Aspect Consulting, LLC
Date Received:	Not Applicable	Project:	Monroe 10999 SE 37th Ave
Date Collected:	Not Applicable	Lab ID:	04-0388 MB
Date Analyzed:	02/27/24	Data File:	022714.D
Matrix:	Air	Instrument:	GCMS7
Units:	ug/m3	Operator:	bat

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

Compounds:	Concentration ug/m3	ppbv
Naphthalene	<0.073 j	<0.014 j

FRIEDMAN & BRUYA, INC.

ENVIRONMENTAL CHEMISTS

Date of Report: 02/29/24

Date Received: 02/22/24

Project: Monroe 10999 SE 37th Ave 210426, F&BI 402318

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

Laboratory Code: 402335-04 1/6.2 (Duplicate)

Analyte	Reporting Units	Sample Result	Duplicate Result	RPD (Limit 30)
Naphthalene	ug/m3	<1.6	<1.6	nm

Laboratory Code: Laboratory Control Sample

Analyte	Reporting Units	Spike Level	Percent Recovery LCS	Acceptance Criteria
Naphthalene	ug/m3	71	78	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 below the standard reporting limit. The value reported is an estimate.
- J - The internal standard associated with the analyte is out of control limits. The reported concentration is an estimate.
- jl - The laboratory control sample(s) percent recovery and/or RPD were out of control limits. The reported concentration should be considered an estimate.
- js - The surrogate associated with the analyte is out of control limits. The reported concentration should be considered an estimate.
- k - The calibration results for the analyte were outside of acceptance criteria, biased high, and the analyte was not detected in the sample.
- lc - The presence of the analyte is likely due to laboratory contamination.
- L - The reported concentration was generated from a library search.
- nm - The analyte was not detected in one or more of the duplicate analyses. Therefore, calculation of the RPD is not applicable.
- pc - The sample was received with incorrect preservation or in a container not approved by the method. The value reported should be considered an estimate.
- ve - The analyte response exceeded the valid instrument calibration range. The value reported is an estimate.
- vo - The value reported fell outside the control limits established for this analyte.
- x - The sample chromatographic pattern does not resemble the fuel standard used for quantitation.

402318

SAMPLE CHAIN OF CUSTODY

02/22/24

Page # 1 of 1

Report To Maverika Carla Brock

Company Aspect Consulting

Address 710 3rd Ave Seattle WA

City, State, ZIP 98104

Phone 206-838-6593 Email Carla.brock@aspectconsulting.com

SAMPLERS (signature) 

PROJECT NAME & ADDRESS

Monroe 159th SE 37th Ave (2042a) Milwaukee OR

PO #

21042a

NOTES: Results please email data@aspectconsulting.com

INVOICE TO account@aspectconsulting.com

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		
CH-AA-021924	01	20544	08184	IA / SG	2/19/24	730	0902	5	0907	TO15 Full Scan	TO15 BTEXN	TO15 cVOCs	APH	Helium	1,2,4-Trichlorobenzene
CH-IA1-021924	02	35337	08183	IA / SG		730	0828	6.5	0858						
CH-IA2-021924	03	21440	06083	IA / SG		28.5	0846	6	0902						
BH-IA-021924	04	21437	06082	IA / SG		38.5	0921	5.5	0957						
BH-AA-021924	05	20557	08182	IA / SG	↓	730	0927	8.5	0958						
CH-ES-022024	06	3258	-	IA / SG	2/20/24	26	0850	5	0902						

Friedman & Bruya, Inc.

5500 4th Avenue South

Seattle, WA 98108

Ph. (206) 285-8282

Fax (206) 283-5044

FORMS\COG\COC10-15.DOC

SIGNATURE

Relinquished by: 

Received by: M Khan

PRINT NAME

Alexandre Franco

M Khan

COMPANY

Aspect Consulting

FE BT

DATE

2/20/24

1635

TIME

1430

Received by:

Samples received at 20 °C

ATTACHMENT D

Photograph Log

ASPECT CONSULTING



Photo 1. Clubhouse (north) Clubroom sample location general area during building site assessment (2/9/24).

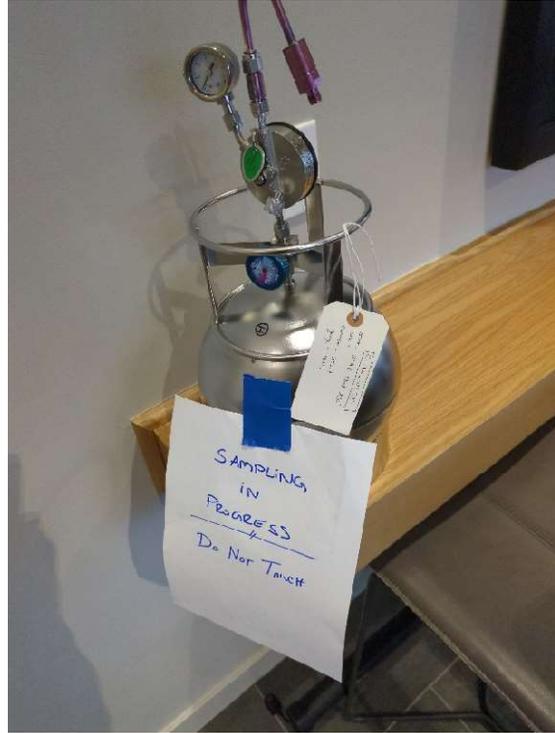


Photo 2. Sample CH-IA1-021924 collection in the Clubhouse (north) Clubroom (2/19/24).

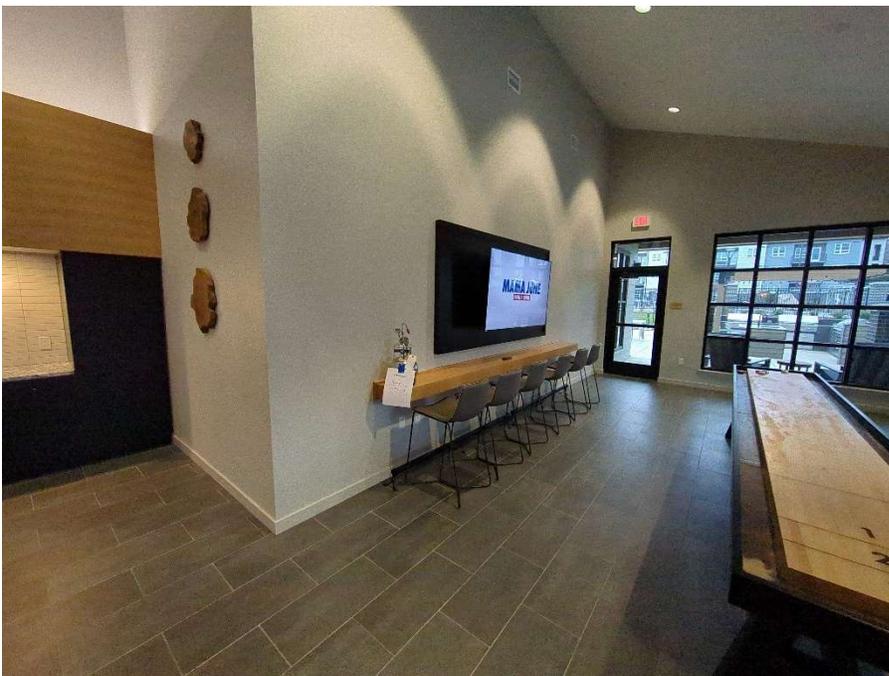


Photo 3. View of sample CH-IA1-021924 collection in the Clubhouse (north) Clubroom (2/19/24).

ASPECT CONSULTING



Photo 4. Sample CH-IA2-021924 collection in Clubhouse (south) Work Room (2/19/24)



Photo 5. Ambient sample CH-AA-021924 collection outside of Clubhouse (east) (2/19/24).



Photo 6. Building 4 (southeast) electrical riser room sampling area during building evaluation (2/9/24).



Photo 7. Building 4 (southeast) electrical riser room sampling area during building evaluation (2/9/24).

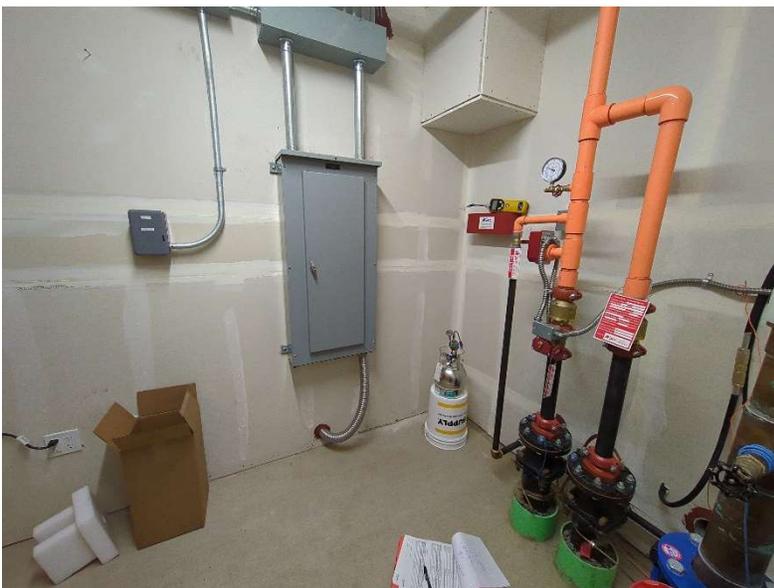


Photo 8. Sample B4-IA1-021924 collection in Building 4 (southeast) electrical riser room (2/19/24).



Photo 9. Ambient sample B4-AA-021924 collection at Building 4 (east) stairwell breezeway (2/19/24).



Photo 10. View of passive venting system effluent stack in Clubhouse attic during site assessment (2/19/24).