State of Oregon
Department of Environmental Quality Memorandum

Date: September 5, 2024

To: FILE

Through: Brad Shultz, Manager and Don Hanson, Lead Worker

From: Sarah Kingery
Western Region

Subject: Knechts Auto Parts (Former), LUST 20-23-0839; Staff Memorandum in support of a No Further Action determination

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ's) recommended No Further Action (NFA) determination for the Knechts Auto Parts (Former), in Eugene. As discussed in this report, contaminant concentrations in soil, groundwater, and soil vapor are below acceptable risk levels.

The proposed NFA determination meets the requirements of Oregon Administrative Rules Chapter 340, Division 122, Sections 0205 to 360; and ORS 465.200 through 465.455.

The proposal is based on information documented in the administrative record for this site. A copy of the administrative record index is presented at the end of this report.

1. BACKGROUND

Site location.
The Site is located at 1082 Highway 99 North in Eugene, Oregon (Figure 1). The tax lot is identified on Lane County Tax Assessors Map 17042333 as Tax Lot No. 1200. The Site is within Section 23 of Township 17 South, Range 4 West of the Willamette Meridian.

Site setting.
The site is approximately 0.41 acre in size. One commercial building is located on the west side of the property and shares a wall with an adjacent commercial building. The remainder of the site is paved. The building space on the west side of the property is occupied by a dry cleaner. The property to the south is occupied by a self-storage business. The east side of the property is bounded by Highway 99 North and the north side of the site is occupied by a parking lot. The site and surrounding properties are zoned Community Commercial (C-2).

Physical setting.
The site is flat and located in the Willamette Valley. Groundwater was encountered at depths ranging from 8.5 to 13.3 feet below ground surface (bgs). Soils encountered during site investigations consisted of gravel fill, sandy gravel, silty sand and silts.

Groundwater flow direction is inferred to be to the northwest based on the flow directions observed at other sites in this area. The nearest surface water is the Willamette River, approximately 1½ miles east of the site.

Site history.
The site was a service station from 1957 to the early 1970s. The service station building was expanded to its current size and location in the 1970s and operated as an auto parts store until May 2023. The building is currently vacant.

2. BENEFICIAL LAND AND WATER USE DETERMINATIONS

Land use.
The Site is zoned Community Commercial which allows for a variety of commercial uses and permits residential land use in certain conditions. The site has been in commercial use since 1957 and that is unlikely to change given the surrounding use. The owner has indicated that a prospective purchaser of the site plans on using the existing building.

Groundwater use.
The Site and surrounding area are currently supplied potable water by the Eugene Water and Electric Board (EWEB).

A & M Engineering and Environmental Services, Inc. (A&M) reviewed well records maintained by the Oregon Water Resource Department (OWRD) to identify existing domestic water supply wells located within a ½-mile radius of the Site. The well search identified twenty water supply wells within a ½-mile radius of the site. The nearest water supply wells to the Site are located approximately 850 feet southeast (upgradient) of the Site with the nearest downgradient well located approximately1,500 feet north-northwest of the Site. DEQ has concluded that it is not reasonably likely that shallow groundwater beneath the Site will be utilized as a potable water source in the foreseeable future.

Surface water use.
The nearest surface water to the site is the Willamette River, approximately 1 ½ miles to the east. There are no surface water bodies on or adjacent to the site. Storm water drains from the site to Highway 99 North where it enters the city of Eugene storm drains.

3. INVESTIGATION AND CLEANUP WORK

A phase I environmental site assessment conducted at the site in October 2023 identified five existing underground storage tanks (USTs) and two fuel dispenser islands associated with the former service station. Subsequent investigations and UST decommissioning occurred between 2023 and 2024. The investigations focused on two 5,000-gallon and one 7,500-gallon gasoline USTs and a 650-gallon kerosene UST and two former fuel dispenser islands. Also investigated was a subsurface anomaly identified during a ground penetrating radar assessment and soil vapor conditions beneath the southern end of the building slab. The anomaly is suspected to be the location of a former UST.

Seventeen borings were advanced using push probe equipment (A&M Figure 3). Twenty soil samples were obtained from around the USTs, piping and dispensers. Two soil vapor samples were collected from beneath the building slab. Eight groundwater grab samples were collected from the borings.

Soil samples from borings SB-1 through SB-7 were analyzed for gasoline, diesel, and oil-range hydrocarbons by DEQ Method NWTPH-G, D and O; Metals by USEPA 6010D; and Volatile Organic Compounds (VOCs) by USSEPA Method 8260B. Because diesel and oil-range hydrocarbons were not detected analysis of Polycyclic Aromatic Hydrocarbons (PAHs) was not conducted on these samples. Additional soil samples were not analyzed for TPH-D and TPH-G except for soil samples obtained from the used oil UST excavation. These samples were analyzed for TPH-G, TPH-D, TPH-O and PAHs by USEPA Method 8270E SIM.

Groundwater samples were analyzed for diesel and gasoline-range hydrocarbons by DEQ Method NWTPH-Dx and Gx; total lead by USEPA Method 6010; and Volatile Organic Compounds by USEPA method 8260

Soil vapor samples were analyzed for total petroleum hydrocarbons as gasoline (TPH-G) by USEPA Method TO-3M and VOCs by modified USEPA Method TO-15 GC/MS Full Scan.

Nature and extent of contamination.
The contaminants of interest are gasoline, diesel and oil-range hydrocarbons and their constituents and metals. Soil, groundwater, and soil vapor at the site were found to be impacted. Specific contaminants are detailed below.

Soil
TPH-G was detected in soil at a depth of 8 feet bgs in the vicinity of the eastern dispenser island and the parking lot east of the gasoline USTs. TPH-G was also detected in soil at a depth of 3 feet beneath the fuel lines. Diesel and Oil-range hydrocarbons were detected in soil samples obtained from beneath the former used oil UST at a depth of 7 feet. These samples also contained concentrations of Chromium and lead and estimated concentrations of Acenaphthalene, Benzo(g,h,i)perylene, Fluoranthene, and Pyrene. Lead was detected in soil samples obtained from SB-1 to SB-7.

Groundwater
Gasoline-range hydrocarbons were detected in groundwater in two locations: SB-3 next to the east dispenser island, and SB-4 located at the south end of the building near the anomaly. Gasoline concentrations detected were greater than the groundwater vapor intrusion RBCs for commercial receptors. Naphthalene was also detected at a concentration greater than the RBC for ingestion and inhalation from tapwater for occupational receptors. Some other VOCs were also detected in groundwater samples from these borings at concentrations below applicable RBCs. Total lead and the solvent tetrachloroethene (PCE) were detected in SB-1 located on the north side of the building. Concentrations were below applicable RBCs. Chloroform was detected in SB-2 located east of the former gasoline USTs at a concentration greater than the RBC for

ingestion and inhalation from tapwater for occupational receptors. Based on where the PCE was found, DEQ feels that the source of the PCE is probably the adjacent dry cleaning shop.

Soil Vapor
Gasoline concentrations detected in groundwater from SB-4 were above the groundwater vapor intrusion risk-based concentrations. Therefore, additional sub slab soil vapor sampling was conducted to determine the potential risk to commercial receptors inside the building. Two soil vapor samples were collected downgradient of SB-4. Gasoline and various associated VOCs were detected in SGP-1 located closest to the boring. Concentrations detected were below the RBCs for vapor intrusion. Sample SGP-2 was located further north and next to the wall shared by the adjacent dry cleaners. This sample contained concentrations of trichloroethene (TCE) and PCE; chemicals typically associated with dry cleaners. All chemicals detected were at concentrations below the chronic vapor intrusion risk-based concentrations.

4. RISK EVALUATION

Conceptual site model.
Petroleum-related contamination at the site is the result of releases from the former fuel dispensers and a suspected former UST. It appears that the PCE and TCE contamination detected may be from the adjacent dry cleaner. The site is zoned commercial. Use is not likely to change therefore, residential and urban residential receptors are unlikely, and were not considered.

The exposure pathways groundwater ingestion & inhalation from Tapwater and leaching to Groundwater are considered incomplete because municipal water is supplied, and shallow groundwater at the site is unlikely to have a future beneficial use.

To evaluate human exposure to residual chemical contamination requires an assessment of the type and extent of that exposure. This is based on current and reasonably likely future site use. DEQ publishes risk-based concentrations (RBCs) for contaminants commonly encountered, for different types of exposure scenarios. These RBCs are conservative estimates of protective levels of contaminants in soil, groundwater and air. Table 1 shows potential exposure pathways and receptors for this site. Based on this, applicable RBCs are identified and used for risk screening.

Table 1. Identification of applicable RBCs, based on pertinent pathways and receptors

	Pathway	Receptor	Is pathway complete?	Is RBC Exceeded?	Comments
Soil	Ingestion, Dermal Contact, and Inhalation	Residential and/or Urban Residential	No	No	
		Occupational	No	No	
		Construction Worker	Yes	No	
		Excavation Worker	Yes	No	
	Volatilization to Outdoor Air	Residential and/or Urban residential	No		
		Occupational	Yes		
	Volatilization to Indoor Air	Residential	No	n/a	See Note 1
		Commercial	Yes	n/a	
	Leaching to Groundwater	Residential and/or Urban residential	No	Yes	Notes 2 and 3.
		Occupational	No	Yes	
Groundwater	Ingestion & Inhalation from Tap Water	Residential and/or Urban residential			Notes 2 and 3.
		Occupational			
	Vapor Intrusion into Buildings	Residential	No		
		Commercial	Yes	Yes	Note 4.
	Groundwater in Excavation	Occupational	Yes	No	
Soil Vapor		Residential	No	n/a	
		Commercial	Yes	No	
Ecological		Terrestrial & Surface Water	No	No	

Notes:

1. DEQ does not have RBCs for volatilization to indoor air from soil. However, soil contaminated with greater than 500 ppm for diesel and 80 ppm for gasoline is considered a potential VI source.
2. Groundwater is not used for drinking. This pathway is therefore not considered, in accordance with Section B.3.2.4 of DEQ's RBDM guidance.
3. Water is provided by the Eugene Water and Electric Board. Local groundwater is not currently used for drinking water and is not likely to be used for this purpose in the future.
4. Concentrations detected in sub-slab soil vapor samples (under building) were below all applicable RBCs.

Contaminant concentrations.
In general, soil, groundwater and soil vapor contamination at the site was found to be limited and at relatively low levels, below applicable RBCs. Specific concentrations can be found in A&E tables 1, 2, and 3 attached to this document.

Soil.
TPH-g was detected in soil at a maximum concentration of 390 mg/kg**.** This concentration exceeds the soil screening levels for vapor intrusion.

Groundwater
TPH-G and naphthalene were reported above the Occupational - Ingestion & Inhalation from Tapwater RBC in groundwater samples collected from borings SB-3 and SB-4. Maximum concentrations detected for TPH-G and naphthalene were 947 µg/l and 3.1 µg/l, respectively.

Soil Vapor
Concentrations detected in sub-slab soil vapor sample (under building) were below all applicable RBCs.

Human health risk.
Residual concentrations of gasoline in soil at SB-3 are greater than the soil vapor intrusion screening levels. However, Human health risks related to TPH-g concentrations in the vicinity of SB-3 are considered acceptable for the following reasons:

- Contamination is at a depth of 8 feet which allows for natural attenuation of potential contaminants in soil vapor to occur.
- Construction of future buildings on the property line is unlikely.
- Concentrations of TPH-G are expected to decline over time through natural attenuation.

Shallow groundwater at the site was shown to have no beneficial use and the site and surrounding properties obtain drinking water for EWEB. The ingestion & inhalation from tap water pathway is considered incomplete and makes groundwater conditions at the site below acceptable human risks.

Groundwater from SB-4 has concentrations of TPH-g above the groundwater vapor intrusion RBC. This sample location is located within 5 feet of the southern property line, and it is possible that contaminated groundwater may extend offsite. Human health risks related to TPH-g concentrations in the vicinity of SB-4 are considered acceptable for the following reasons:

- The depth of groundwater is greater than 5 feet bgs providing a zone for biodegradation of TPH-g in soil vapor.
- Construction of future buildings on the property line is unlikely.
- The adjacent property is a self-storage facility with minimal occupational use and no residential use.
- Sub slab vapor samples from inside the building onsite indicate that soil vapor concentrations do not exceed occupational RBCs.

Ecological risk.
The site is a fully paved commercial site. The soil contamination remaining at the site is at 8 feet bgs. Groundwater contamination is restricted to the site therefore discharge to surface water should not be a concern. There are, therefore, no unacceptable ecological risks identified for the site.

5. RECOMMENDATION

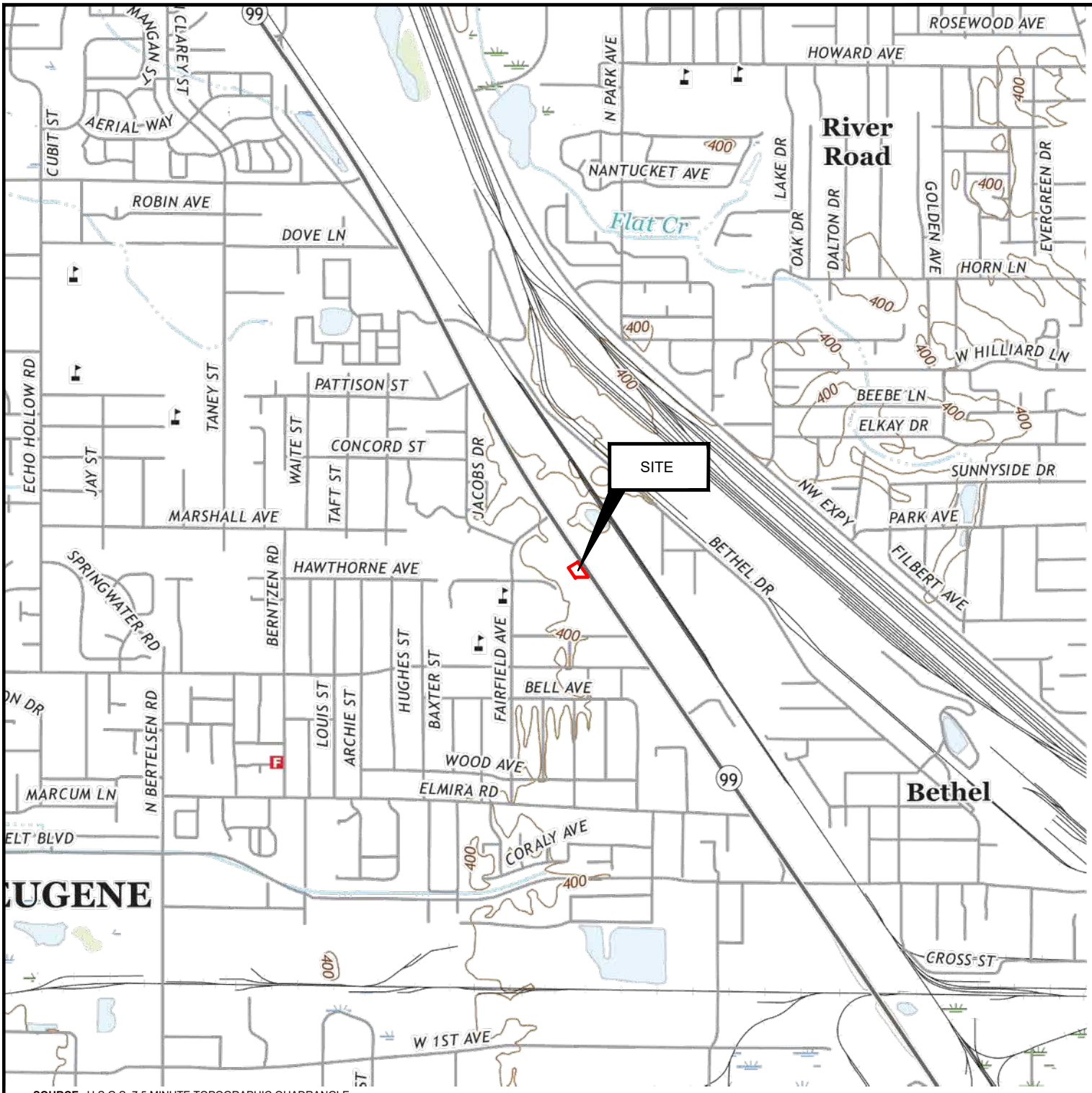
Based on sample results for soil, groundwater and soil vapor, acceptable risk levels are not exceeded, and a No Further Action determination is recommended for this site. The No Further Action determination should be recorded in DEQ's environmental data management system also known as Your DEQ Online (YDO) to reflect this decision.

6. ADMINISTRATIVE RECORD

2023-12-28_20-23-0389_20-day Report, 20-23-0839, final.pdf
2024-02-08_20-23-0389_InitalSiteReport.pdf
2024-03-21_20-23-0839_Soil Gas Assessment Report - Final.pdf
2024-04-17_20-23-0839_UST Decommissioning Assessment Work Plan - Final.pdf
2024-08-28_20-23-0839_Site Characterization and Request for Closure Report

7. ATTACHMENTS

1. Site Location Map (Figure 1, A&M Engineering and Environmental Services, Inc)
2. Boring/Sampling Location Map (Figure 3, A&M Engineering and Environmental Services, Inc)
3. Table 1-Summary of Soil Analytical Results(A&M)
4. Table 2-Soil Gas Sample Analytical Results (A&M)
5. Table 3-Summary of Groundwater Analytical Results (A&M)



SOURCE: U.S.G.S. 7.5 MINUTE TOPOGRAPHIC QUADRANGLE
EUGENE WEST, OR (2020)

Scale: 1"=1,500'

N

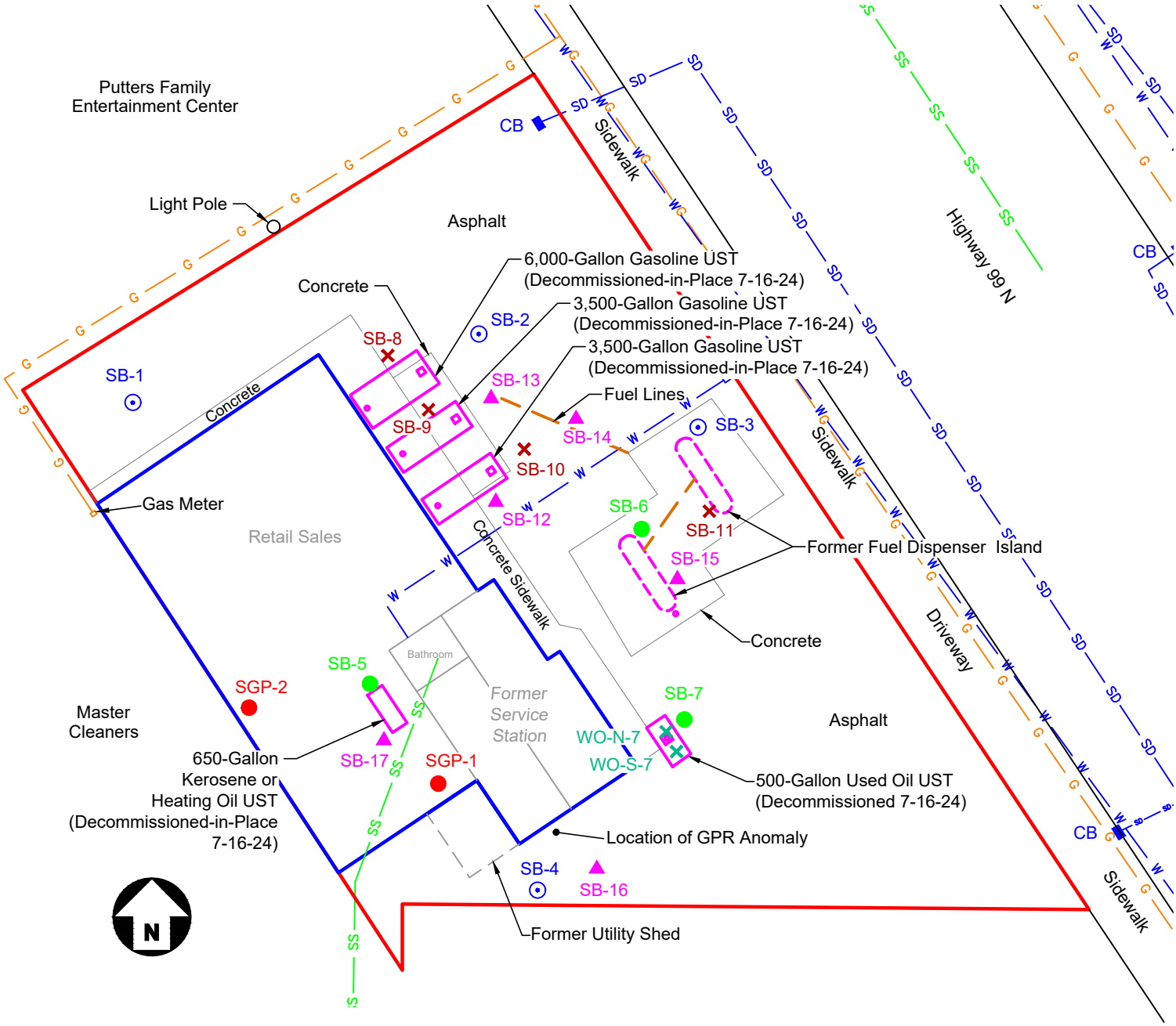
0 750 1,500 3,000

A & M Engineering and Environmental Services, Inc.
Consulting - Design - Construction - Remediation

SITE LOCATION MAP
SITE CHARACTERIZATION REPORT

1082 HIGHWAY 99 N
EUGENE, OREGON

SCALE:	DATE:	FIGURE NO.
AS SHOWN	7/11/24	1
APPROVED BY:	DRAWN BY:	PROJECT NO.
DJL	SRM	2628-0003



All Utility Locations are Approximate

LEGEND

Approximate Site Boundary		CB	Catch Basin
UST	Underground Storage Tank	SB-6	Soil Boring (11-2023)
W	Water Line	SB-4	Soil and Groundwater Boring (11-2023)
SS	Sanitary Sewer Line	SGP-1	Soil Gas Sample (2-2024)
G	Natural Gas Line	SB-7	Soil Boring (11-2023 and 7-2024)
SD	Storm Water Line	SB-10	Soil and Groundwater Boring (7-2024)
		WO-N-7	UST Decommissioning Soil Sample (7-2024)

Scale: 1"=30'

0 15 30 60

A & M Engineering and Environmental Services, Inc.
Consulting - Design - Construction - Remediation

BORING/SAMPLING LOCATION MAP
SITE CHARACTERIZATION REPORT

1082 HIGHWAY 99 N
EUGENE, OREGON

SCALE:	DATE:	FIGURE NO.
AS SHOWN	8/19/24	3
APPROVED BY:	DRAWN BY:	PROJECT NO.
DJL	SRM	2628-0003

Table 1
Summary of Soil Analytical Results

Sample Location	Sample ID	Date Sampled	Depth (feet)	DEQ Method NWTPH-Dx (mg/kg)		DEQ Method NWTPH-Gx (mg/kg)	Metals USEPA Method 6010 D (mg/kg)			USEPA 1311 (µg/L)	Volatile Organic Compounds USEPA Method 8260B (mg/kg)								Polynuclear Aromatic Hydrocarbons USEPA Method 8270E SIM (mg/kg)				
				Diesel	Motor Oil	Gasoline	Cadmium	Chromium	Lead	Chromium (leachable)	Isopropylbenzene (Cumene)	Naphthalene	Toluene	n-Butylbenzene	*n*-Propylbenzene	*p*-Isopropyltoluene	*sec*- Butylbenzene	All Other VOCs	Acenaphthylene	Benzo(g,h,i)perylene	Fluoranthene	Pyrene	All Other PAHs
SB-1	SB-1-8	11/9/2023	9	<19.6	<13.1	<10.3	--	--	4.2	--	<0.0782	<0.313	<0.313	<0.0782	<0.0782	<0.0782	<0.0782	ND	--	--	--	--	--
SB-2	SB-2-8	11/9/2023	8	<19.1	<12.7	11.6	--	--	4.3	--	<0.0737	<0.295	<0.295	<0.0737	<0.0737	<0.0737	<0.0737	ND	--	--	--	--	--
SB-3	SB-3-9	11/9/2023	8	<19.0	<12.7	390	--	--	5.4	--	<0.0905	<0.362	<0.362	0.222	0.163	<0.0905	<0.0905	ND	--	--	--	--	--
SB-4	SB-4-12	11/9/2023	8	<20.1	<13.4	<7.9	--	--	4.3	--	1.160	0.953	0.953	7.420	6.720	1.260	2.110	ND	--	--	--	--	--
SB-5	SB-5-8	11/9/2023	9	<19.5	<13.0	<8.1	--	--	20.0	--	<0.0844	<0.338	<0.338	<0.0844	<0.0844	<0.0844	<0.0844	ND	--	--	--	--	--
SB-6	SB-6-9	11/10/2023	9	<19.6	<13.1	<11.2	--	--	4.7	--	<0.101	<0.405	<0.405	<0.101	<0.101	<0.101	<0.101	ND	--	--	--	--	--
SB-7	SB-7-9	11/10/2023	9	<19.5	<13.0	<8.3	--	--	5.4	--	<0.0793	<0.317	<0.317	<0.0793	<0.0793	<0.0793	<0.0793	ND	--	--	--	--	--
SB-8	SB-8-12	7/24/2024	12	--	--	<14.2	--	--	--	--	<0.129	<0.516	<0.129	--	<0.129	--	--	ND	--	--	--	--	--
SB-9	SB-9-12	7/24/2024	12	--	--	<15.1	--	--	--	--	<0.154	<0.616	<0.154	--	<0.154	--	--	ND	--	--	--	--	--
SB-10	SB-10-12	7/24/2024	12	--	--	<13.4	--	--	--	--	<0.125	<0.501	<0.125	--	<0.125	--	--	ND	--	--	--	--	--
SB-11	SB-11-2.5	7/24/2024	2.5	--	--	<13.8	--	--	--	--	<0.137	<0.550	<0.137	--	<0.137	--	--	ND	--	--	--	--	--
SB-12	SB-12-12	7/24/2024	12	--	--	<13.3	--	--	--	--	<0.132	<0.527	<0.132	--	<0.132	--	--	ND	--	--	--	--	--
SB-13	SB-13-12	7/24/2024	12	--	--	<7.4	--	--	--	--	<0.0838	<0.335	<0.0838	--	<0.0838	--	--	ND	--	--	--	--	--
SB-14	SB-14-3	7/24/2024	3	--	--	16.4	--	--	--	--	<0.120	<0.481	0.357	--	<0.120	--	--	ND	--	--	--	--	--
	SB-14-9	7/24/2024	9	--	--	<13.4	--	--	--	--	<0.135	<0.540	<0.135	--	<0.135	--	--	ND	--	--	--	--	--
SB-15	SB-15-2.5	7/24/2024	2.5	--	--	<13.2	--	--	--	--	<0.145	<0.582	<0.145	--	<0.145	--	--	ND	--	--	--	--	--
SB-16	SB-16-12	7/24/2024	12	<20.0	<13.3	<14.5	--	--	--	--	<.0145	<0.581	<.0145	--	<.0145	--	--	ND	--	--	--	--	--
SB-17	SB-17-3	7/24/2024	3	<15.8	<10.5	<13.1	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Used Oil UST	WO-N-7	7/16/2024	7	53.3	364	<2.7	<0.061	26.9	11.1	<6.3	<0.0211	<0.0240	<0.0196	<0.0214	<0.0211	<0.0221	<0.0218	ND	0.0050 J	0.0145	0.0034 J	0.0066 J	ND
	WO-S-7	7/16/2024	7	19.1 J	138	<2.8	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
Volatilization to Outdoor Air - Occupational[a]				>Max	NE	69,000	NV	NV	NV	NA	>Csat	83	>Csat	NE	NE	NE	NE	Various	NE	NE	NV	>Max	Various
Soil Ingestion, Dermal Contact, and Inhalation - Occupational[a]				14,000	NE	20,000	1,100	<Max	800	NA	57,000 (>Csat)	23	88,000 (>Csat)	NE	NE	NE	NE	Various	NE	NE	30,000 (>Csat)	23,000 (>Csat)	Various
Soil Ingestion, Dermal Contact, and Inhalation - Construction Worker[a]				4,600	NE	9,700	350	530,000	800	NA	27,000 (>Csat)	580	28,000 (>Csat)	NE	NE	NE	NE	Various	NE	NE	10,000 (>Csat)	7,500 (>Csat)	Various
Soil Ingestion, Dermal Contact, and Inhalation - Excavation Worker[a]				>Max	NE	>Max	9,700	<Max	800	NA	750,000 (>Csat)	16,000 (>Csat)	770,000 (>Csat)	NE	NE	NE	NE	Various	NE	NE	280,000 (>Csat)	210,000 (>Csat)	Various

Notes:

USEPA - United States Environmental Protection Agency
DEQ - Oregon Department of Environmental Quality
mg/kg - Milligrams per kilogram
< - Not reported at, or above, the indicated laboratory method reporting limit
NE - Not established
J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.
Shaded value was reported above the laboratory reporting limit.

ND - Not detected
NV - Non-volatile
-- - Not analyzed
NA - Not applicable

µg/L - micrograms per liter

[a] Risk-based concentrations are referenced from the September 2003 DEQ *Risk-Based Decision Making For the Remediation of Petroleum-Contaminated Sites* , June 2023 update
>Max - The constituent RBC for this pathway is greater than 100,000 mg/kg
>Csat - The soil RBC exceeds the limit of 3-phase equilibrium partitioning. Soil concentrations in excess of this value indicate free product might be present.

Table 2
Soil Gas Sample Analytical Results

Sample Location/Description	Sample ID	Sample Date	Volatile Organic Compounds Modified USEPA Method TO-15 GC/MS Full Scan (µg/m³)													USEPA Method TO-3M (µg/m³)	ASTM Method D1946 (ppmv)
			2-Butanone (MEK)	Acetone	Benzene	Dichlorodifluoromethane (CFC 12)	Ethylbenzene	Isopropanol	o-Xylene	m,p-Xylene	*trans*-1,2-Dichloroethene	Tetrachloroethene (PCE)	Toluene	Trichloroethene (TCE)	All Remaining Analyzed VOCs	Total Petroleum Hydrocarbon as Gasoline	Helium
Interior Subslab Sample Northwest of Boring SB-4	SGP-1	02/23/24	12	240	<2.0	3.4	3.7	23	3.2	<11	<2.5	5.5	4.3	<3.4	ND	11,000	<41
Interior Subslab Sample Along Western Wall	SGP-2	02/23/24	14	160	18	3.9	7.7	<12	3.7	18	2.3	22	4.0	8.6	ND	<8,200	<41
DEQ Commercial Chronic Soil Gas Screening Values [a]			730,000	NE	52	15,000	160	29,000	15,000	15,000	5,800	1,600	730,000	100	Various	40,000	NE

Notes:

USEPA - United States Environmental Protection Agency

ASTM - ASTM International

[a] Oregon Department of Environmental Quality (DEQ) Chronic Vapor Intrusion Risk-Based Concentrations (RBCs), June 2023

µg/m³ - Micrograms per cubic meter

Shaded value indicates analyte reported above the laboratory method reporting limit (MRL)

Bold value indicates the analyte exceeds DEQ Chronic Screening Value

< - Not detected at, or above, the indicated laboratory MRL

ND - Not detected at, or above, the laboratory MRL

NE - Not established

Former Knechts Auto Parts
1082 N. Highway 99
Eugene, Oregon

Table 3
Summary of Groundwater Analytical Results

Sample Location	Sample ID	Date Sampled	DEQ Method NWTPH-Dx (µg/L)		DEQ Method NWTPH-Gx (µg/L)	Total Lead USEPA Method 6010 (µg/L)	Volatile Organic Compounds USEPA Method 8260B (µg/L)								
			Diesel	Motor Oil	Gasoline	Total Lead	Chloroform	Isopropylbenzene (Cumene)	Naphthalene	Tetrachloroethene	n-Butylbenzene	*n* -Propylbenzene	*sec* -butylbenzene	*tert* -butylbenzene	All Other VOCs
SB-1	SB-1	11/9/2023	<410	<410	<100	13.1	<1.0	<1.0	<1.0	1.4	<1.0	<1.0	<1.0	<1.0	ND
SB-2	SB-2	11/9/2023	<400	<400	<100	<10.0	**1.8**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	ND
SB-3	SB-3	11/9/2023	<400	<400	**504**	<10.0	<1.0	2.7	**3.1**	<1.0	3.0	11.9	1.7	<1.0	ND
SB-4	SB-4	11/9/2023	<400	<400	**947**	<10.0	<1.0	1.7	<1.0	<1.0	3.4	2.2	10.2	<1.0	ND
SB-8	SB-8-GW	7/24/2024	--	--	<100	--	--	<1.0	<1.0	--	--	<1.0	--	--	ND
SB-9	SB-9-GW	7/24/2024	--	--	<100	--	--	<1.0	<1.0	--	--	<1.0	--	--	ND
SB-10	SB-10-GW	7/24/2024	--	--	<100	--	--	<1.0	<1.0	--	--	<1.0	--	--	ND
SB-11	SB-11-GW	7/24/2024	--	--	<100	--	--	<1.0	<1.0	--	--	<1.0	--	--	ND
Volatilization to Outdoor Air - Occupational[a]			>S	NE	>S	>S	6,300	>S	16,000	>S	NE	NE	NE	NE	Various
Vapor Intrusion into Buildings - Occupational[a]			1,700	NE	520	NV	5.9	9,100	50	130	NITI	22,000	NITI	NITI	Various
Groundwater in Excavation[a]			>S	NE	14,000	>S	720	>S	500	5,600	NE	NE	NE	NE	Various
Ingestion and Inhalation from Tapwater - Occupational[a]			430	NE	450	15	0.98	2,000	0.72	48	NE	NE	NE	NE	Various

Notes:

USEPA - United States Environmental Protection Agency
DEQ - Oregon Department of Environmental Quality
µg/L- Micrograms per Liter
< - Not reported at, or above, the indicated laboratory method reporting limit.
ND - Not detected at, or above the laboratory method reporting limit
Shaded value was reported above the laboratory reporting limit.
Bold value was reported above a Risk-based Concentration (RBC).
NITI - No inhalation toxicity
NE - Not established
-- - Not analyzed

[a] Risk-based concentrations are referenced from the September 2003 DEQ *Risk-Based Decision Making For the Remediation of Petroleum-Contaminated Sites* , June 2023 update
>S - The groundwater RBC exceeds the solubility limit. Groundwater concentrations in excess of this value indicate free product might be present.