

# Site Assessment Workplan

East Gresham Elementary School  
900 SE 5th Street  
Gresham, Oregon 97080  
UST Facility ID 3677  
LUST# 26-95-0187

Prepared for:  
Gresham-Barlow School District No. 10Jt  
2020 SE Fleming Avenue  
Gresham, Oregon 97080

October 2025  
Apex Project 25010756



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## 1 INTRODUCTION

This site assessment workplan has been prepared for Gresham-Barlow School District No. 10Jt (Client) and documents the planning, implementation, and procedures for the continued assessment of the former regulated gasoline underground storage tank (UST) at East Gresham Elementary School located at 900 SE 5th Street in Gresham, Oregon (site). This assessment has been designed to address the area of concern around the former UST, which had a release in the 1990s that was assigned leaking underground storage tank (LUST) file #26-95-0187. It includes review of historical documentation by previous consultants and Apex Companies, LLC, by and through its wholly owned subsidiary PBS Engineering and Environmental LLC (Apex), as well as regulatory correspondence from the Oregon Department of Environmental Quality (DEQ). The assessment is designed to address the request for additional assessment Apex received from DEQ in 2019, and if applicable, request regulatory closure.

## 2 SITE LOCATION AND DESCRIPTION

### 2.1 Site Ownership and Regulatory History

The site is located at 900 SE 5th Street, Gresham, Oregon. It is in the southwest one-quarter of the southeast one-quarter of Section 10, Township 1 South, Range 3 East of the Willamette Meridian (Figure 1). According to the Multnomah County Assessor, it is located on Tax Lot 1S3E10DC-00100. It encompasses approximately 11.5 acres and is generally flat, at an approximate elevation of 375 feet above mean sea level. The southern portion of the site slopes down toward an unnamed tributary that drains to Johnson Creek along the property's southern boundary. To the west is a steep slope toward off-site residences.

The site has been operated as a public-school facility since at least the 1950s. A previous school building was located on the western portion of the site, with athletic fields to the east and south. An automotive shop was located southwest of the former school building near the western property boundary (Figure 2).

## 3 PREVIOUS ENVIRONMENTAL ASSESSMENTS

A 2,000-gallon gasoline UST was discovered to have had a release near the shop building in 1995. The tank and the associated fuel pump were decommissioned by removal. Petroleum-contaminated soil (PCS) and petroleum-contaminated groundwater were observed during decommissioning and assessment activities. A total of 518 tons of PCS was excavated and disposed for off-site treatment.<sup>1</sup> H.G. Schlicker and Associates, Inc. (HGSA) expressed concern there was contamination migrating along the backfill of a nearby drain, referred to in some instances as a storm drain and others as a French drain, at the base of the west-facing slope on the western property margin, and that this drain discharged to the unnamed tributary to the south. A geophysical survey was completed to identify the drain. A signal from a potential drain was returned at a depth of 3 feet; however, the survey was not conclusive because of the variable terrain and vegetation, and no associated outfall could be located.

Eight monitoring wells (MW-1 through MW-8) were installed in 1996, and the wells were monitored until February 1997 (Figure 3). The site was determined to be a low priority for DEQ, and no sampling occurred until 2007.

In August 2007, Grant and Associates (G&A) completed one round of groundwater monitoring at the property. Monitoring wells MW1, MW2, MW4, MW5, MW6, and MW7 were sampled. MW3 and MW8 were excluded as previous sampling events indicated these wells were clean. G&A found the following:

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<sup>1</sup> HGSA (H.G. Schlicker & Associates, Inc.). (1995, October 12). Summary of Actions, East Gresham Elementary School, Gresham, Oregon, UST Decommissioning and Cleanup, LUST #26-95-187.

- The groundwater flow direction was determined to be toward the southwest at a gradient of 0.0735 feet per foot.
- Petroleum compounds were identified in groundwater samples from all the monitoring wells sampled. Benzene concentrations exceeded DEQ risk-based concentrations (RBCs) at the time.
- Contaminants of potential concern (COPCs) were identified as benzene, 1,2-dichloroethene (DCE), and naphthalene.
- Groundwater vapor intrusion and the ingestion and inhalation pathways were identified as potential risk scenarios.

G&A recommended additional characterization and continued groundwater monitoring activities, and that a corrective action plan be developed to meet applicable cleanup requirements under Oregon Administrative Rules (OARs).

In 2019, DEQ prepared a file review summary that recommended the following actions for the Client:

- Complete an assessment of groundwater contamination in the southwest direction.
- Develop a corrective action plan to reduce or eliminate residual contamination to meet current DEQ standards.
- Continue groundwater monitoring.

A new school building was constructed between 2018 and 2019 east of the old school building, and the old school building and former automotive shop were demolished. As part of the redevelopment, the site was regraded to make way for new athletic fields. Monitoring wells previously indicated to be within a contaminated groundwater plume were sampled by Apex in May 2019. Following sampling, the wells were decommissioned by removal by Cascade Drilling in August 2019.

In a December 5, 2019, letter from DEQ to Terry Taylor with the Client, DEQ recommended installing three to four groundwater monitoring wells and soil gas sampling points near the former UST for the purpose of determining if the site is eligible for regulatory closure. Apex developed a workplan to address DEQ's request for additional assessment.

Three groundwater monitoring wells, MW-2R, MW-5R, and MW-7R, and four soil gas monitoring locations, SG1 through SG4, were installed in October 2023. Subsequent to their installation, Apex conducted four quarters of groundwater monitoring events and two semi-annual soil gas monitoring events.

Results of the monitoring performed by Apex indicated the presence of residual groundwater and soil gas contamination (Tables 1 and 2). Elevated soil gas concentrations are present at depth around SG-1D. This extends west to at least SG-2 near the western property boundary (Figure 3). The area of contamination is located near the former auto shop on the west side of the Site. Based on soil gas concentrations, residual contaminated soil and groundwater may be present below the former automotive shop near SG-1 at depths of approximately 10 feet below ground surface (bgs) (Table 2). This may be contributing to the concentrations observed near the property boundary.<sup>2</sup>

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<sup>2</sup> PBS an Apex Company (Apex). (April 2025). *Well Installation and Annual Monitoring Report*.

Apex recommended additional site characterization and monitoring to extend off site toward the west due to the lack of lateral delineation to below applicable RBCs for both contaminated groundwater and the soil gas plume.

This workplan intends to address the known groundwater contamination above volatilization to indoor air RBCs and elevated soil gas concentrations near the western site boundary.

#### **4 GEOLOGY AND HYDROGEOLOGY**

Surficial deposits in the vicinity of the site are wind-blown loess deposited during Quaternary glacial episodes. The unit consists of massive, micaceous, quartzfeldspathic silt, and very fine sand. It is pale gray to tan in color near the surface and overlies a firm, red-brown silt below.<sup>3</sup> Underlying these unconsolidated materials is the Troutdale Formation,<sup>4</sup> which is referred to as the Troutdale Gravel Aquifer in this area. The Troutdale Gravel Aquifer is typically well-indurated and consists of pebbly to cobbly clast-supported conglomerate with a silty to sandy matrix. Most of the clasts are derived from basalt with the remainder composed of quartzite and other rock types.<sup>5</sup> Underlying the Troutdale Gravel Aquifer is typically a fine-grained confining unit that may interbed with the Troutdale Sand Aquifer. A deep sand and gravel aquifer underlies these units, with older deposits, including Columbia River Basalt, at depth.

Boring logs for the monitoring wells installed by Apex indicate mixtures of gray clay and red and brown silt to the total depth explored of 30 feet bgs. Monitoring wells on the property indicated depths to groundwater ranging from 5 to 17 feet bgs with groundwater elevations varying seasonally and a flow direction predominantly toward the west or southwest.<sup>6</sup>

#### **5 PURPOSE AND OBJECTIVES**

This workplan documents the proposed activities intended to satisfy DEQ's requirements for additional assessment for the open LUST file. Apex anticipates that the Client will request regulatory closure following the assessment, provided monitoring results indicate concentrations of residual contaminants do not exceed the applicable DEQ RBCs.

#### **6 HEALTH AND SAFETY AND WORK COORDINATION**

A site-specific health and safety plan (HASP) was previously prepared; it will be updated to include the new scope of work before commencing fieldwork. Information to ensure safe working practices will be included in the HASP. In all cases, pertinent safety information will be relayed to field personnel, including subcontractors, to communicate mandatory elements from the federal code for hazardous waste operations and emergency response (29 CFR 1910.120(b)(4)).

Installation of new groundwater monitoring and soil gas wells will be coordinated in advance with offsite property owners. Property owners will be given at least two weeks' notice prior to field activities occurring, and work plans and well locations will be communicated to and agreed to by all project stakeholders prior to mobilization.

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<sup>3</sup> Wells, Ray E., Haugerud, Ralph A., Niemi, Alan R., Niemi, Wendy A., Ma, Lina, Evarts, ... Sawlan, Michael G. (2020). Geologic Map of the Greater Portland Metropolitan Area and Surrounding Region, Oregon and Washington, USGS Scientific Investigation Map 3443.

<sup>4</sup> Snyder, Daniel T. (2008). *Estimated Depth to Ground Water and Configuration of the Water Table in the Portland, Oregon Area*. USGS Scientific Investigations Report 2008-5059.

<sup>5</sup> Hartford, Susan V., and William D. McFarland. (1989). *Lithology, Thickness, and Extent of Hydrogeologic Units Underlying the East Portland Area, Oregon*. USGS Water-Resources Investigations Report 88-4110.

<sup>6</sup> G&A (Grant and Associates). (2007, October 3). Status Report No. 1 August 2007.

Apex will contact the Oregon Utility Notification Center to file a public utility locate request. Apex will also subcontract with a private utility locating company to survey private utilities and detectable subsurface obstructions. Soil boring locations are subject to utility constraints and may need to be moved according to the utility survey and/or other site constraints such as trees or other landscaping.

## **7 MONITORING WELL INSTALLATION, AND SOIL GAS WELL INSTALLATION ACTIVITIES**

### **7.1 Groundwater Monitoring Well Installation**

Apex plans to install five groundwater monitoring wells (MW-9 through MW-13). MW-9 will be installed at a location near the north end of the former automotive shop, where residual PCS may be located. MW-10 through MW-13 will be installed at adjacent residential properties west of the site (see Figure 3). The proposed off site groundwater monitoring wells are contingent on access agreements with various property owners. Borings will be advanced using a direct-push drilling rig. Monitoring wells will be installed into the groundwater table to a depth of 25 feet bgs, or deeper, so that they are at least 5 feet below the groundwater table. The wells will be constructed with 2-inch Schedule 40 polyvinyl chloride (PVC) pipe with a 10-foot well screen that straddles the water table. Wells will be completed with a flush-mount monument at grade.

During drilling, soil from each boring will be continuously logged and field screened for the presence of petroleum hydrocarbons by visual/olfactory observation and for the presence of volatile organic compounds (VOCs) using a photoionization detector (PID). Apex personnel will wear new disposal nitrile gloves when collecting samples, and the sampling and drill rig equipment will be decontaminated between locations with a detergent wash and a tap water rinse.

After the wells are constructed, Apex will perform well development as established in Apex's standard operating procedure for monitoring well development (available upon request) no earlier than 24 hours after the well sealant material has been placed. The wells will be surveyed by an Apex survey crew, and the top-of-casing elevation will be surveyed to an accuracy of 0.01 feet for determining groundwater gradient and flow direction.

### **7.2 Soil Gas Monitoring Well Installation**

Permanent soil gas monitoring well locations (SG5 through SG9) will be located on adjacent properties to the west. However, these proposed permanent soil gas well locations are contingent on access agreements with various property owners. Soil gas wells are necessary to determine the potential for volatilization to outdoor air and vapor intrusion into buildings.

Four permanent soil gas monitoring wells (SG5 through SG8) will be installed at the adjacent residential properties to the west. One additional soil gas point, SG9, may be installed depending on the use of the outbuilding at 660 SE Juniper Court E if the outbuilding is used as an occupiable space other than storage, (e.g., accessory dwelling unit or office).

Installation of the soil gas wells will be completed by a licensed driller, concurrent with the groundwater well installations. The borings will be advanced using a direct-push drill rig to a depth of at least 5.5 feet bgs, where a stainless-steel soil gas implant (or equivalent) will be installed and then attached to Teflon tubing that will be placed from the implant to the surface. The implant will be backfilled with approximately 6 inches of sand above the sample screen, then with hydrated bentonite to the surface to form a seal from ambient air. A flush-mount concrete well monument with a steel lid will be installed to protect the vapor monitoring well. The monitoring points will be allowed to rest and equilibrate for a period of at least 48 hours prior to sample

collection, in accordance with DEQ's *Guidance for Assessing and Remediating Vapor Intrusion in Buildings* (VI Guidance).<sup>7</sup>

## **8 SAMPLING AND ANALYSIS PLAN**

### **8.1 Soil Sampling**

Soil samples will be collected and analyzed from each boring location if evidence of soil contamination is observed based on field screening above the soil-water interface. Apex anticipates that soil samples at MW-9 will be collected at depths where field indications of residual contamination are at the highest, (as indicated by PID or visual indicators), and at the soil-water interface. Apex anticipates soil samples at the other monitoring well locations will be collected at the soil-water interface.

Soil samples will be analyzed for the following:

- Gasoline-range total petroleum hydrocarbons (TPH) by Northwest Method TPH, gasoline extended (NWTPH-Gx)

Follow-up analysis may include the following:

- Risk-based decision-making (RBDM) VOCs by Environmental Protection Agency (EPA) Method 8260B

Following the sampling, the samples will be labeled, stored on ice, and shipped to an Oregon-accredited laboratory under chain-of-custody documentation. Samples will be analyzed under a standard turnaround time (typically 10 business days).

### **8.2 Quarterly Groundwater Monitoring**

Apex will collect groundwater samples from the new monitoring wells no sooner than 48 hours following groundwater well development. DEQ typically requires four quarters of monitoring to demonstrate compliance with DEQ RBCs. Apex proposes collecting four additional quarters of groundwater sampling from the new and existing monitoring wells.

Apex will collect groundwater samples using low-flow sampling protocols at the new monitoring wells, if feasible. Previous sampling attempts on the existing well network required a modified approach because of poor well recharge. For MW-2A, MW-5A, and MW-7A, Apex previously had to purge the well dry and return the next day for water to collect in laboratory containers. Apex anticipates this approach will continue at the existing well network. Depending on the hydraulic properties of the shallow aquifer, this approach may also be warranted at the new monitoring wells. Apex personnel will communicate with DEQ if the modified approach becomes necessary. A peristaltic pump and new tubing will be used to collect the samples into laboratory-provided containers that will be labeled, placed on ice for the duration of sampling, and transportation to an Oregon-accredited laboratory under chain-of-custody documentation.

Groundwater samples will be analyzed for the following:

- Gasoline-range hydrocarbons by NWTPH-Gx
- RBDM VOCs by EPA Method 8260

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<sup>7</sup> DEQ (Oregon Department of Environmental Quality). (2025, March). *Guidance for Assessing and Remediating Vapor Intrusion into Buildings*.

### 8.3 Semiannual and Quarterly Soil Gas Monitoring

Apex will complete semiannual soil gas sampling at the existing soil gas monitoring wells and quarterly monitoring at the new soil gas wells at the private residences. Apex will collect the soil gas samples according to the VI Guidance with modifications for leak detection measures. Adjustments to the following protocol may be warranted based on field conditions and will be documented in field notes. Summa canisters will be ordered from the laboratory with flow regulators assuming a flow rate of no more than 200 milliliters per minute (mL/minute). The Summa canisters will be individually certified for petroleum-related VOCs and fixed gases.

Soil gas samples will be analyzed for the following:

- Gasoline-range TPH and RBDM VOCs by EPA Method TO-15
- Fixed gases including oxygen, carbon dioxide, methane, and helium by ASTM Method 1946

Laboratory analysis will be conducted under standard turnaround time (7 to 10 business days).

## 9 QUALITY CONTROL

DEQ has a guidance document specifying quality control (QC) samples to be collected during sampling events.<sup>8</sup> The document specifies that a field duplicate and trip blank should be collected and analyzed during each sampling event. Groundwater will be the only medium to have field duplicates collected; a soil gas field duplicate will not be collected. The samples will be analyzed for the same analytes as the parent sample. The QC trip blank will be analyzed for RBDM VOCs by EPA Method 8260.

## 10 INVESTIGATION-DERIVED WASTES

Investigation-derived waste (IDW) consisting of soil cuttings, purge water, and decontamination wash water will be placed into 55-gallon drums that will be sealed, labeled, and stored on site in a client-approved location. It is anticipated that soil and water can be disposed of as nonhazardous waste. Disposable sampling equipment and supplies will be bagged and disposed of as solid waste.

Waste drums will be stored on site at a secure location coordinated with the client following the well installation and quarterly groundwater monitoring events. Drums will be picked up to be disposed of once they are full or no longer needed.

Apex anticipates that a sample of the soil containerized in drums will be required for disposal purposes. A composite sample of soil containerized in drums will be analyzed for:

- Gasoline-range hydrocarbons by NWTPH-Gx
- RBDM VOCs by EPA Method 8260
- Resource Conservation and Recovery Act (RCRA) 8 metals by EPA Method 6010 or equivalent

Apex will coordinate disposal with a licensed waste hauler for transport to a licensed disposal or treatment facility.

## 11 DELIVERABLES

Preliminary results from the drilling and quarterly sampling events will be provided to the Client via email. Results will also be shared with DEQ and the adjacent property owners in a memorandum documenting the findings after each event. Upon receiving final laboratory analytical testing reports following the fourth

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<sup>8</sup> DEQ. (2015, July 31). *Quality Assurance for the Environmental Cleanup Programs*.

consecutive quarter of sampling, Apex will prepare an electronic remedial investigation report that will include a description of field activities, tables of analytical results, a comparison of detections to applicable DEQ RBCs, boring logs, figures, laboratory reports, and recommendations.

In the absence of any residual separated phase petroleum liquid (fuel product) identified on site, and provided there is no contamination in groundwater or soil gas above applicable RBCs observed off site following four quarters of sampling events, Apex will issue a final report with a request that DEQ issue a No Further Action (NFA) determination and close the regulatory file. If separated phase liquid is identified, it would be an indication that a residual source of contamination is present, and removal of source material may be required by DEQ to reduce levels of potential unacceptable risk to human health. If unacceptable risk of vapor intrusion into the adjacent residences is identified during the course of the investigation, indoor air monitoring may be warranted.

## 12 LIMITATIONS

Apex has prepared this workplan for use by Gresham-Barlow School District No. 10Jt. This report is for the exclusive use of the client and is not to be relied upon by other parties. It is not to be photographed, photocopied, or similarly reproduced in total or in part without the express written consent of the client and Apex.

This study is limited to the tests, locations, and depths as indicated to determine the absence or presence of certain contaminants. The site as a whole may have other contamination that may not be characterized by this study. The findings and conclusions of this work are not scientific certainties but probabilities based on professional judgment concerning the significance of the data gathered during the course of this investigation. Apex is not able to represent that the Site or adjoining land contain no hazardous waste, oil, or other latent conditions beyond that detected or observed by Apex.

Prepared by Apex Companies, LLC.

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Samantha Strain  
Project Geologist

Date

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Bret Waldron, RG  
Senior Geologist

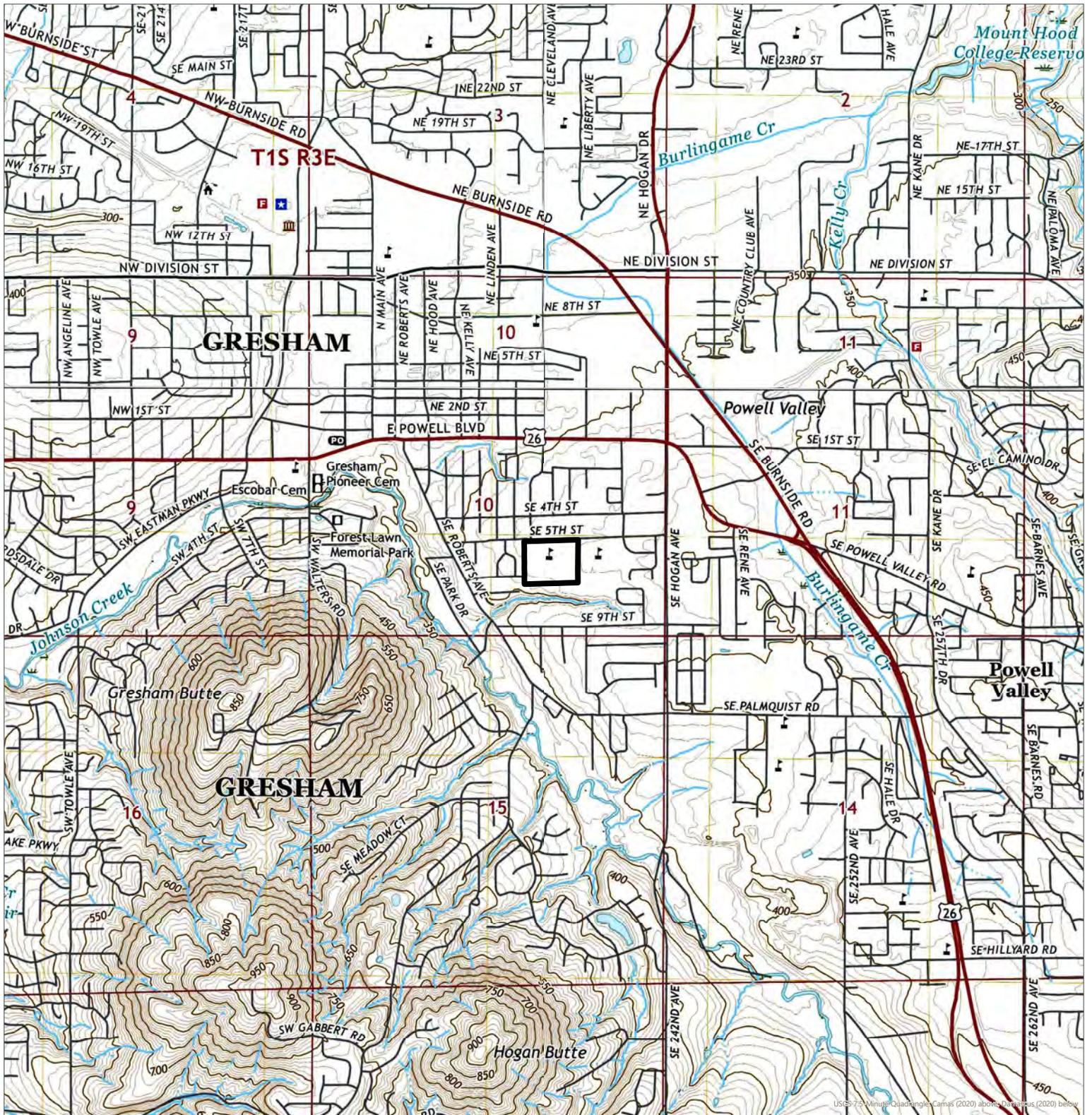
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# Figures

Figure 1. Vicinity Map

Figure 2. Site Plan

Figure 3. Study Area



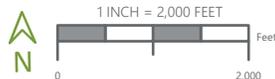
## Site Vicinity

900 SE 5th Street, Gresham, Oregon

Date: October 2025 | Project: 25010756

Figure: 1

 Site Boundary



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.



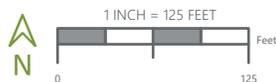
## Site Plan

900 SE 5th Street, Gresham, Oregon

Date: October 2025 | Project: 25010756

**Figure: 2**

- Former Underground Storage Tank
- Former Shop Building
- Study Area
- Site Boundary



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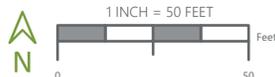
## Study Area

900 SE 5th Street, Gresham, Oregon

Date: October 2025 | Project: 25010756

**Figure: 3**

- |  |                                      |  |                                 |
|--|--------------------------------------|--|---------------------------------|
|  | Groundwater Monitoring Well          |  | Decommissioned Monitoring Well  |
|  | Soil Gas Monitoring Well             |  | Former Underground Storage Tank |
|  | Proposed Groundwater Monitoring Well |  | Former Shop Building            |
|  | Proposed Soil Gas Monitoring Well    |  | Site Boundary                   |



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# Tables

Table 1. Summary of Groundwater Monitoring Analytical Results– TPH, VOCs, and Lead

Table 2. Summary of Soil Gas Analytical Results -TPH and VOCs



**Table 1. Summary of Groundwater Analytical Results—TPH, VOCs, and Lead**

East Gresham Elementary School  
 900 SE 5th Street, Gresham, Oregon  
 DEQ File #26-95-0187 & #26-19-0304

Well ID/ Top of Casing Elevation (feet amsl)	Screen Interval	Depth to Groundwater (feet btoc)	Groundwater Elevation (amsl)	Sample ID	Sample Date	Total Petroleum Hydrocarbons (TPH)			Volatile Organic Compounds (VOCs)													Metals	
						Gasoline	Diesel	Oil	Benzene	Toluene	Ethylbenzene	Total Xylenes	1,2-Dibromoethane (EDB)	1,2-Dichloroethane (EDC)	Methyl tert-butyl ether (MTBE)	Naphthalene	Isopropylbenzene	n-Propylbenzene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	n-Butylbenzene	sec-Butylbenzene	Dissolved Lead
µg/L																							
MW-7R (374.01)	10-25	10.59	363.42	23Q4-MW-7R	11/22/2023	<b>1,310</b>	-	-	< 0.200	< 1.00	<b>4.21</b>	< 1.50	< 0.500	< 0.400	< 1.00	< 5.00	1.73	-	< 1.00	9.42	-	-	-
		7.29	366.72	24Q1-MW-7R	3/13/2024	<b>1,880</b>	-	-	<b>0.530</b>	< 1.00	<b>4.49</b>	< 1.50	< 0.500	<b>0.730</b>	< 1.00	< 5.00	1.18	-	< 1.00	10.2	-	-	-
		12.58	361.43	24Q2-MW-7R	7/19/2024	<b>967</b>	-	-	<b>0.470</b>	< 1.00	<b>1.58</b>	< 1.50	< 0.500	<b>0.670</b>	< 1.00	< 5.00	< 1.00	-	< 1.00	4.44	-	-	-
		12.58	361.43	24Q2-DUP		<b>1,010</b>	-	-	<b>0.530</b>	< 1.00	<b>1.60</b>	< 1.50	< 0.500	<b>0.790</b>	< 1.00	< 5.00	< 1.00	-	< 1.00	4.72	-	-	-
		12.48	361.53	24Q3-MW-7R		9/26/2024	<b>1,510</b>	-	-	<b>3.39</b>	< 1.00	<b>6.92</b>	< 1.50	< 0.500	<b>1.67</b>	< 1.00	< 5.00	4.15	-	< 1.00	3.96	-	-
MW-8 (370.80)	5-20	6.13	364.67	-	10/30/1996	-	-	-	< 0.5	< 0.5	< 0.5	< 0.5	-	-	-	-	-	-	-	-	-	-	
		6.93	363.87	-	2/11/1997	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
		13.05	357.75	-	8/30/2007	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Groundwater in Excavation <sup>1</sup>					Construction & Excavation Worker	14,000	>S		1,800	220,000	4,500	23,000	27	630	63,000	500	51,000	NS	6,300	7,500	NS	NS	> S
Ingestion from Tapwater <sup>1</sup>					Occupational	<b>450</b>	430		<b>2.1</b>	6,300	<b>6.4</b>	830	0.034	<b>0.78</b>	68	<b>0.72</b>	2,000	NS	250	280	NS	NS	15
					Residential	<b>110</b>	100		<b>0.46</b>	1,100	<b>1.5</b>	190	0.0075	<b>0.17</b>	<b>14</b>	<b>0.17</b>	440	NS	54	59	NS	NS	NS
Volatilization to Indoor Air Chronic					Commercial	<b>520</b>	1,700		<b>12</b>	150,000	<b>31</b>	3,300	1.5	18	3,200	<b>50</b>	9,100	22,000	24,000	1,700	NITI	NITI	NS
					Residential	<b>120</b>	400		<b>2.8</b>	36,000	<b>7.1</b>	780	0.34	4.0	740	<b>11</b>	2,200	5,300	560	400	NITI	NITI	NITI
Volatilization to Outdoor Air <sup>1</sup>					Occupational	>S	>S		14,000	>S	43,000	>S	790	9,000	1,500,000	16,000	>S	NS	>S	>S	NS	NS	NV
					Residential	>S	>S		3,100	>S	9,900	>S	180	2,100	350,000	3,600	>S	NS	>S	>S	NS	NS	NS

Notes:

See laboratory report for full list of analytes and quality-control data.

**Bold** text indicates an exceedance of one or more of the cleanup levels.

<sup>1</sup>Oregon Risk-Based Decision-Making for the Remediation of Petroleum-Contaminated Sites, Oregon DEQ Sept. 2003. Revised RBCs March 2024.

<sup>2</sup>Chronic and Acute Vapor Intrusion Risk-Based Concentrations, Oregon DEQ Sept. 2023.

<: not detected above the laboratory reporting limit

-: analyte not tested

>S: The groundwater RBC exceeds the solubility limit.

amsl: above mean sea level

btoc: below top of casing

µg/L: micrograms per liter

NITI: no inhalation toxicity information

NS: no set value for this analyte

NV: this analyte is considered nonvolatile

**Table 2. Summary of Soil Gas Analytical Results—TPH and VOCs**

East Gresham Elementary School  
 900 SE 5th Street, Gresham, Oregon  
 DEQ File #26-95-0187 & #26-19-0304

Well ID	Screening Interval	Sample ID	Sample Date	TPH	Detected VOCs										
				Gasoline Range Organics	Benzene	Ethylbenzene	Isopropylbenzene	Naphthalene	n-Propylbenzene	Toluene	1,2,4-Trimethylbenzene	1,3,5-Trimethylbenzene	m & p-Xylene	o-Xylene	All Other VOCs
SG-1S	4.5-5.0	SG-1S	3/13/2024	2,000 J	< 1.8 J	< 2.5 J	< 56 J	< 1.5 J	< 28 J	< 43 J	< 28 J	< 28 J	< 5 J	< 2.5 J	ND
			9/24/2024	< 826	1.67	4.77	< 0.983	< 3.30	< 0.982	4.18	1.50	< 0.982	14.4	5.29	ND
SG-1D	9.5-10.0	SG-1D	9/24/2024	<b>8,550,000</b>	<b>16,300</b>	<b>36,900</b>	7,620	< 330	15,100	7,190	<b>9,030</b>	<b>9,870</b>	<b>38,600</b>	<b>646</b>	ND
SG-2	4.5-5.0	SG-2	3/13/2024	5,100	< 1.9	< 2.6	< 58	< 1.5	< 29	< 44	36	< 29	< 5.1	< 2.6	ND
			9/24/2024	<b>199,000</b>	<b>1,210</b>	<b>43.4</b>	180	<b>42.7</b>	775	32.5	721	726	53.3	3.69	ND
SG-3	4.5-5.0	SG-3	3/13/2024	< 1,900	< 1.8	< 2.5	< 56	< 1.5	< 28	< 43	< 28	< 28	< 5	< 2.5	ND
			9/26/2024	< 826	1.33	2.81	1.02	< 3.30	1.07	< 1.88	0.991	< 0.982	4.25	< 0.867	ND
SG-4	4.5-5.0	SG-4	3/13/2024	< 1,700	< 1.7	< 2.3	< 52	< 1.4	< 26	< 40	< 26	< 26	< 4.6	< 2.3	ND
			9/26/2024	< 826	0.993	1.72	< 0.983	< 3.30	< 0.982	7.84	0.996	< 0.982	3.82	1.63	ND
Chronic Vapor Intrusion <sup>1</sup>			Residential	<b>10,000</b>	<b>12</b>	<b>37</b>	14,000	<b>2.8</b>	35,000	170,000	<b>2,100</b>	<b>2,100</b>	<b>3,500</b>		Varies
			Commercial	<b>40,000</b>	<b>52</b>	<b>160</b>	58,000	<b>12</b>	150,000	730,000	<b>8,800</b>	<b>8,800</b>	<b>15,000</b>		Varies
Acute Vapor Intrusion <sup>1</sup>			Residential	NS	<b>970</b>	730,000	NS	6,700	NS	250,000	NS	NS	290,000		Varies
			Commercial	NS	<b>2,900</b>	2,200,000	NS	20,000	NS	770,000	NS	NS	870,000		Varies

Notes:

See laboratory report for full list of analytes and quality-control data.

**Bold** text indicates an exceedance of one or more of the cleanup levels.

<sup>1</sup>Oregon Risk-Based Decision-Making for the Remediation of Petroleum-Contaminated Sites, Oregon DEQ Sept. 2003. Revised RBCs March 2024.

<sup>2</sup>Chronic and Acute Vapor Intrusion Risk-Based Concentrations, Oregon DEQ March. 2024.

<: not detected above the laboratory reporting limit