

**Date:** 12/29/2025

**To:** FILE

**Through:** Brad Shultz, Cleanup Program Manager; Don Hanson, Lead Worker; Bryn Thoms, Hydrogeologist

**From:** Tina Elayer, Cleanup Project Manager  
Western Region

**Subject:** Goddard Energy Co. LUST # 06-12-1585, Goddard Energy Co. II LUST # 06-22-0317; Staff Memorandum in Support of a No Further Action Determination

This document presents the basis for the Oregon Department of Environmental Quality's (DEQ) recommended No Further Action (NFA) determination for the Goddard Energy Co. (Site), in Bandon, Coos County. As discussed in this report, contaminant concentrations in soil, soil gas, and groundwater are below applicable risk levels.

The proposed NFA determination meets the requirements of Oregon Administrative Rules Chapter 340, Division 122, Sections 0205 to 360; and Oregon Revised Statutes 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's location can be described as follows:

- 530 2<sup>nd</sup> St. SE, Bandon, Coos County, Oregon.
- Latitude 43.118579° North, longitude -124.409653° West
- Tax lot 28S14W30CA 01400, Township 28 South, Range 14 West, Section 30

### **Site setting.**

The Site is in downtown Bandon adjacent to Highway 101 and is approximately 0.5 acres (Figure 1). There is currently one building and an electrical shed on the Site. The Site was used for commercial fuel storage and dispensing since 1964 with a retail shop that housed a heating and cooling company with commercial/light industrial use and is currently unoccupied. The rest of the Site is covered with pavement and gravel. Land use zoning is C-2, industrial land with improvements.

Underground storage tanks (USTs) at the Site consisted of (Figure 2):

- Five 12,000-gallon fuel USTs (in tank nest area) removed May 13, 2022. No evidence of leaking. No soil removed.
- One 20,000-gallon fuel UST (in tank nest area) removed May 13, 2022. No evidence of leaking. No soil removed.
- One 675-gallon heating oil tank (located by building) removed May 13, 2022. Evidence of leaking. Soil removed.

Adjacent properties include Bandon Historical Society Museum to the east, residential to the southwest, Lighthouse Cove Inn and a Pastries & Pizza restaurant to the west, and Chevron gas station and Beach Loop Realty company to the north, across Highway 101. The Laurel, a vintage home and garden retail store is adjacent to the realty company. There is also a vacant lot zoned light industrial located on the south side of the Site.

### **Physical setting.**

The Site is in the U.S. Geological Survey Bandon, Oregon 7.5-minute quadrangle, and is at an approximate elevation of 40 feet above mean sea level (amsl). The Site is relatively level, with a very gentle topographic downward slope towards the north. Geology of the Site typically consists of fill material and native soils. Fill material consisting of sand was found at depths extending from the surface down to approximately 6 to 8 feet below ground surface (bgs) in the former tank pit area and then alluvium, with clayey sand from about 7 feet to 12 feet below ground surface (bgs).

The depth to groundwater fluctuates from about 6 to 10 feet based on season. Review of the Site elevation also indicates flow direction is likely to be tidally influenced and fluctuates from southeast to northwest. Borings had a static groundwater level at about 11 feet bgs in undisturbed areas of the Site during the September 2022 groundwater sampling event. The northern portion of the Site is mapped within the 100-year floodplain according to Federal Emergency Management Agency (Panel 41011C).

### **Site history.**

In the 1940's the 0.5-acre property was operated by Max Howell with Standard Oil. Above ground storage tanks (ASTs) were the only tanks used on the Site until it was sold to Goddard Energy Company (GEC) in 1964, who installed the USTs. GEC operated and maintained the bulk fuel facility until late 2022.

## **2. BENEFICIAL LAND AND WATER USE DETERMINATIONS**

### **Land use.**

The Site is currently vacant, and the owner has been discussing the possibility of changing the current land use zoning from commercial use to mixed use development, which includes the potential for residential with few limitations.

The current zone is C-2 (General Commercial, Section 17.44 of Bandon Zoning Code) which does not outright allow for residential use. Residential (single family and multifamily dwellings) is allowable with a conditional use permit which may or may not be approved by the Planning Commission. Due to uncertainties with the future land use, DEQ assumes that there could be possible future residential use.

#### **Groundwater use.**

A beneficial water use survey (BWUS) was conducted for the Site. According to Oregon Water Resources Department (WRD) online database, a total of fifty-two (52) water wells were identified in the same township, range, and section (T28S, R14W, S30). Six (6) wells were labeled as domestic wells with three (3) of those wells abandoned. The other three (3) wells appear to be located over a ¼ mile from the Site. Thirty-one (31) wells were labeled as industrial use, with all those wells being either abandoned or over a ¼ mile from the Site. The remaining seventeen (17) wells did not specify the use and were also abandoned and over a ¼ mile from the Site. Municipal water is provided to the Site and adjacent properties. Based on this information, there is no current beneficial uses of groundwater within the area of contamination at the Site, and groundwater use in the immediate vicinity of the Site appears unlikely.

#### **Surface water use.**

The nearest surface water body in the vicinity of the Site is the Coquille River about 350 feet north of the Site. Bandon Harbor lies within the Coquille River. Stormwater is managed on the Site by directing the runoff to the City of Bandon's municipal stormwater system. An oil/water separator was located on the Site but was removed in June 2025. Upon removal, holes formed by corrosion were observed in the separator walls. There was a pipe connected to the separator on each end that connected the separator to the stormwater system.

There were two storm drains with an oil/water separator downstream, and one storm drain with an oil/water separator upstream. This storm water system at the Site is connected to the City of Bandon storm drain system near the intersection of Elmira and 2nd Street. It is currently believed that the storm drain eventually discharges into the Coquille River located 350 feet north of the Site.

### **3. INVESTIGATION AND CLEANUP WORK**

There are two LUST projects associated with this Site. LUST # 06-12-1585 was created in 2012 after an underground storage tank (UST) assessment was performed in association with a permit issued by DEQ for the temporary closure of a premium-grade gasoline 12,000-gallon UST. LUST 06-22-0317 was opened when Alpha Environmental Services (Apha) oversaw decommissioning of the seven (7) USTs at the Site in 2022.

#### 2012 Investigation for temporary UST closure (LUST 06-12-1585)

The subject UST for the 2012 assessment was the southernmost tank located in a 6-tank nest at the southeastern portion of the Site (Figure 2). This tank initially stored gasoline but was later used to contain diesel and is labeled "12,000 Bio-Free Diesel UST" on the figure. Samples

collected from the west end of the subject UST detected relatively low levels of diesel and heavy oil range hydrocarbons in soil between 7.5 and 10 feet bgs. Based on the observed and detected contamination, LUST 06-12-1585 was opened. Since the tank contained gasoline prior to the 2012 assessment, the detections of diesel and heavy oil range hydrocarbons may have been from releases from adjacent USTs or from releases of petroleum products that were reportedly stored west of this area. This tank remained in place and was later removed with the others (see below).

In 2012 DEQ granted a no further action determination for the 12,000-gallon UST (LUST 06-12-1585), but additional investigation was later required to further understand the source and nature and extent of this release.

### **2022 and 2023 Investigations and UST Decommissioning (LUST 06-22-0317)**

Alpha Environmental Services (Alpha) oversaw the decommissioning of all seven USTs at the Site in the spring of 2022, which included one (1) 20,000-gal Kerosene UST, two (2) 12,000-gal Diesel USTs, two (2) 12,000-gal Gasoline USTs, one (1) 12,000-gal Bio-free Diesel UST, and one (1) 675-gal Diesel HOT. HCID testing indicated diesel-range hydrocarbons were present. Gasoline was not detected in the HCID tests. The contamination resulted in DEQ opening LUST 06-22-0317. The NWTPH-Dx testing identified diesel contamination at low concentrations in soil, all below 500 mg/kg diesel.

#### UST Decommissioning (April-May 2022)

Concurrent with the initial assessment, UST tank pumping also occurred in April 2022, with 2,300 total gallons of fuel removed from the seven (7) USTs. The liquids were disposed of by ORRCO of Portland, OR.

In May 2022, the six (6) USTs in the tank nest, and one (1) heating oil tank (HOT) were removed. The excavations were backfilled with the overburden material and  $\frac{3}{4}$  - inch minus gravel that was then compacted to match the existing surface grade. The USTs and HOT were recycled at Shinglehouse Auto & Salvage, 63568 Wrecking Rd., in Coos Bay, OR.

Soil sampling was not conducted in the tank nest area at the time of the UST decommissioning because samples had previously been collected during the 2022 initial assessment. Low detections of diesel range hydrocarbons had been detected in deep soil in the tank nest location prior to removal of the USTs.

#### Dispenser Area Investigation, Decommissioning and Cleanup (2021-2022)

In June and July 2021 Alpha collected soil samples from borings completed in the vicinity of the dispensers and product lines, immediately west of the tank nest. Gasoline and diesel range hydrocarbons were detected in the soil samples from the dispenser area.

In May 2022 decommissioning of the fuel dispensers and piping was completed. Alpha removed approximately 97.14 tons of gasoline and diesel-contaminated soil from the dispenser area

between May 13-14, 2022 . The excavation was about 8 feet deep, and attempts were made to remove all visibly contaminated soils, including the areas with the highest gasoline and diesel range contamination. Most of the contaminated soil was found to be below 3 feet bgs. Contaminated soil removed during the cleanup was disposed of at the Short Mountain Landfill. Contamination in soil remaining following the excavation contained low levels of gasoline and diesel, below construction worker and excavation worker risk-based concentrations (RBCs). VOCs were also tested for and only ethylbenzene was detected in one sample at 27.7 mg/kg, below applicable RBCs.

### September 2022 Soil and Groundwater Investigation

In September 2022, twenty-five (25) samples were collected from soil borings and analyzed initially for NWTPH-HCID, and then NWTPH-Dx for samples with detections. Some of the samples were analyzed for NWTPH-Gx even though gasoline hydrocarbons weren't detected by the HCID analysis. Soil samples from 11 feet bgs from four (4) borings (B3, B13, B15 and B23) had detections of diesel and/or heavy range hydrocarbons. Of these four samples, the highest detection was in B23 with a diesel concentration of 1,450 mg/kg near the HOT.

### 2022 and 2023 Soil and Groundwater Assessments

In September 2022, twenty (20) groundwater samples were also collected from soil borings around the Site. Very high levels of contamination in groundwater were detected in samples from the west end of HOT, with diesel concentrations ranging from 139,000 µg/L to 1,680,000 µg/L. These concentrations range from 20 to 240 times greater than the typical solubility of diesel in water (6,800 µg/L), indicating that free product could be present in this area. Groundwater samples from the south end of oil/water separator had detections of gasoline at 974 µg/L and diesel at 70,800 µg/L. The area west of the oil/water separator had detections of diesel at 9,470 µg/L. Some of these results are also high enough that free product (diesel) could be present in the vicinity of the oil/water separator.

Groundwater samples from around the excavation area of former dispensers detected gasoline at 9,640 µg/L, and diesel was detected as high as 106,000 µg/L. A groundwater sample collected from the southwest corner of tank nest had detections of diesel at 97.1 µg/L. The diesel concentrations indicate that free product could be present in the area. The rest of the September 2022 groundwater samples were non-detect.

Four (4) groundwater samples were collected in January 2023, from four borings (B22-B25). Groundwater samples were collected at 11 feet bgs. To evaluate the vapor intrusion pathway and the extent of groundwater contamination to the west, nine (9) groundwater samples and seven (7) soil gas samples were collected from nine borings (B-1 through B-9) completed in September 2023. Borings B-4, B-5 and B-6 were completed north of the Site building to assess conditions there. Borings B-1, B-2, and B-3 were completed to assess groundwater conditions west of the Site in the Elmira Street right-of-way. B-7 and B-8 were completed to evaluate groundwater concentrations near the former HOT.

Groundwater samples from borings B-1 through B-6 were non-detect for NWTPH-Gx, NWTPH-Dx, and NWTPH- Dx (heavy oil range). Groundwater samples with Gx and Dx detections were also analyzed for VOCs during the two sampling events.

### Soil Gas Sampling (September 2023)

On September 08, 2023, Alpha performed soil-gas testing that included sub-slab samples at SG-1, SG-2, and SG-3 (Figure 3). Soil gas samples were collected from locations SG-4, SG-5, SG-6, and SG-7.

There were deviations from the work plan including:

- EPA Method TO-17 was utilized instead of TO-15. This allowed for Gx to be added as TO-15 typically does not allow for Gx to be analyzed.
- The number of samples – this was later changed to be seven (7) total samples, three (3) in the building, and four (4) at various points throughout the property per DEQ discussion.
- Sub-slab soil gas sampling was conducted for samples in the building.
- Since TO-17 sample methodology was utilized, a deviation of collection was conducted to reflect TO-17.

All the soil gas samples collected by Alpha were non-detect for petroleum related contamination.

### Oil/Water Separator Removal May 2025 (Figures 4 & 5)

The oil/water separator (separator) was dug out with the excavation being approximately 25 feet long and 14 feet wide. The single-walled, metal separator was 8 feet in diameter and 17 feet in length with a calculated volume of 6,400 gallons. The top of the separator was one foot below ground surface. The excavation was 24 feet north of the historic excavation at the dispensers and 18 feet south of the HOT excavation. Lying along the western side of the separator excavation was a 4-inch conduit which was 2 feet bgs and contained the electrical lines for the onsite building. Electrical power was supplied to the Site via underground lines entering the property at the southwestern property corner (Figure 3). Four (4) soil samples (Soil-01 to -04) were collected from the separator excavation to characterize the soil conditions. All soil sampled was described as a silty sand. Soil samples were collected utilizing the track hoe, except for Soil-01 which was collected utilizing a hand auger.

Soil sample Soil-01 was collected from the western wall of separator excavation at 6 feet bgs. Soil-02 was collected from the southern end of excavation at 10 feet bgs. Both samples were discolored gray and had a distinct odor. Soil water interface was measured to be 10 feet bgs in Soil-02 boring. Soil -01 and -02 were interpreted to represent soil contamination in the separator area from approximately 6 to 10 feet bgs. No contaminated soil was removed from the excavation. Soil sample Soil-03 was collected from the southern end of the excavation at 11 feet bgs. Sample was brown with no petroleum odor, sample was saturated. Soil sample Soil-04 was collected 3 feet east of the eastern wall at 10 feet bgs. Sample was brown with no petroleum odor. Samples Soil -03 and -04 were collected to aid in the delineation of soil contamination in the separator excavation.

A groundwater sample (Water-01) was collected from the southern end of the separator excavation using a temporary well, water was turbid, had a sheen, and petroleum odor. No free product was observed on the groundwater in the separator excavation.

Gasoline range hydrocarbons were detected in the groundwater sample at 18,400 µg/L and diesel-range hydrocarbons were detected at 1,820 µg/L. Multiple petroleum VOCs were also detected in the groundwater sample.

#### Heating Oil Tank (HOT) Area Contaminated Soil Removal May 2025 (Figures 4 & 5)

Soil from the area around previously removed HOT was excavated to the following dimensions: 12 feet long, 8 feet wide, and 11 feet deep bgs. Non-contaminated soil was removed to a depth of 7 feet bgs and set aside for reuse as fill. The excavated material had a petroleum odor, was discolored gray, and mainly consisted of sand. At 11 feet bgs there was orange sand with no petroleum odor was encountered. Soil/water interface was measured to be 10 feet deep bgs.

Five (5) soil samples were collected from the HOT excavation. HOT-01 was collected from the bottom of the excavation at a depth of 11 feet. The sample was an orange color and did not have a petroleum odor. The sample was saturated. Samples HOT-02, HOT-03, HOT-04, and HOT-05 were collected from the north, east, south, and west walls of the excavation, respectively. Samples were collected at a depth of 10 feet bgs which was the depth of the soil/water interface. The samples were a gray color and had a petroleum odor.

A groundwater sample (HOT-W) was collected from the HOT excavation utilizing a temporary well. Groundwater sampled was slightly turbid, had a slight petroleum sheen (silver sheen), and no petroleum odor. No free product was observed on the groundwater in the HOT excavation.

Gasoline range hydrocarbons were detected in the groundwater sample at 420 µg/L and diesel-range hydrocarbons were detected at 1,820 µg/L. Ethylbenzene was also detected in the groundwater sample at 0.780µg/L. The other petroleum VOCs were all below method reporting limits (MRLs).

#### Apex Forensics Report -July 21, 2025

RYSE requested a forensics report from the Apex Forensics division of Apex Laboratories to evaluate whether gasoline has impacted the B8, B-9, B13, Water-01, and D1- 12"-30" locations at the Site. Apex has completed all sample analyses from the Site since 2022. The forensic report confirmed substantial degraded gasoline contamination in the areas of the dispenser and oil/water separator, while diesel contamination was relatively undegraded. A copy of the report can be found in the second Site Investigation Report by RYSE.

#### Removal of Contaminated Soils North of Dispenser Excavation (July 2025)

On July 15 and 16, 2025 contaminated soil north of the dispenser excavation extending to the northern end of the oil/water separator was removed. Six (6) loads of contaminated soil totaling 184.93 tons was removed and disposed at the Coffin Butte Landfill.

This total included the approximately 15 tons of contaminated soil excavated from the HOT area. The excavation was 14 feet wide and 44 feet long. The bottom of the northern end of the excavation was 11 feet bgs and the bottom of the southern end of the excavation was 10 feet bgs. Overlaying soil was removed and set aside for reuse as backfill. Approximately 5 feet of contaminated soil (6 to 11 feet deep or 5 to 10 feet deep) was excavated and hauled to Coffin Butte Landfill.

The western limit of the excavation extended west to Elmira Avenue. A buried electrical line supplying power to the onsite building was buried approximately three (3) feet deep bgs. Soil samples were collected above the electrical line. The excavation lithology was composed of crushed rock and dirt from 0 – 2 feet bgs, underlain by a brown sandy loam to nine (9) feet bgs, underlain by a black clayey loam to eleven (11) feet bgs with a tan silty sand at the base. Groundwater was encountered at eleven (11) feet bgs, no free product was observed in the groundwater entering the excavation.

Eleven (11) soil samples (Soil-05 – Soil-15) were collected from the excavation. All soil samples were analyzed by methods NWTPH-Gx and -Dx. Nine of the eleven soil samples were analyzed for RBDM VOCs. The highest concentration of gasoline range and diesel range hydrocarbons were detected in Soil-08 (7 feet bgs) at 6,250 mg/kg gasoline and 11,000 mg/kg diesel.

#### Soil Gas Sampling (October 2025)

Two soil gas wells were installed (SG-1 and SG-2) on October 9, 2025. SG-1 was completed six feet south of the loading dock on the southern side of the onsite building and approximately 48 feet east of the western property line. Crushed rock fill was encountered to a depth of 0.5 feet bgs. The fill was underlain by a light brown sand to a depth of 4.3 feet bgs. The light brown sand was underlain by a dark brown silty sand to a depth of 5 feet bgs. No petroleum odor was observed in the material removed from the borehole. A soil sample was collected (SG-1@5) at a depth of 5 feet bgs where the soil gas well was completed. Gasoline, diesel, and RBDM VOCs were not detected in the soil sample. A duplicate sample was collected from the SG-1 soil gas well, which was labeled SG-4. Low levels of toluene, xylenes and 1,2,4-trimethylbenzene were detected in the soil gas duplicate at SG-1.

SG-2 was completed 38 feet south of SG-1. Crushed rock fill was encountered to a depth of 2 feet bgs underlain by crushed rock mixed with brown sand fill to a depth of 2.7 feet bgs. The fill was underlain by a light brown sand to a depth of 5.0 feet bgs. No petroleum odor was observed in the material removed from the borehole. A soil sample was collected (SG-2@5) at a depth of 5 feet bgs where the soil gas well was completed. Gasoline, diesel, and RBDM VOCs were not detected in the soil sample. No other contaminants of interest were detected in SG-2 above method reporting limits.

Duplicate sample SG-4 was collected from SG-1 after sampling soil gas samples SG-1 and then SG-2 on October 25, 2025. The entire purge process was repeated before sample SG-4 was collected. Ethylbenzene, xylenes, and 1,2,4-trimethylbenzene were detected just above the method reporting limits. The detection of these compounds was over an order of magnitude less than the residential vapor intrusion into buildings RBCs. Additional soil gas sampling results were collected and analyzed for chloroform, helium, methane, oxygen, and carbon dioxide.

Methane was not detected in any sample above the method reporting limits of 0.0020% to 0.00024%. Oxygen was detected in samples SG-1 at 20%, at SG-4 at 19%, and at SG-2 at 13%. Carbon dioxide was detected in samples SG-1 at 1.1%, at SG-4 at 1.1%, and at SG-2 at 5.5%.

Chloroform was detected in all three soil gas samples as follows: SG-1 at 130  $\mu\text{g}/\text{m}^3$ , SG-4 at 120  $\mu\text{g}/\text{m}^3$ , and SG-2 at 7.0  $\mu\text{g}/\text{m}^3$ . The residential vapor intrusion into building RBC for chloroform is 4.1  $\mu\text{g}/\text{m}^3$  and the commercial vapor intrusion into building RBC for chloroform is 18  $\mu\text{g}/\text{m}^3$ . Methane is not a contaminant of concern for either of the LUST releases at the site.

#### **Nature and extent of contamination.**

Soil contamination consisting of gasoline and diesel range hydrocarbons, and low levels of VOCs remains beneath the Site, mainly at depth of four (4) feet and deeper. The soil contamination appears to be limited to on-site. Most of the soil contamination levels are below construction and excavation worker RBCs.

Groundwater beneath the Site is contaminated with gasoline and diesel range hydrocarbons. Higher levels of diesel contamination remain in the vicinity of the former HOT, near the building, and near the former dispenser area.

The groundwater contamination does extend north of the Site building, and beneath the Elmira Avenue right-of-way, and appears to attenuate as it moves northward, to concentrations well below applicable RBCs for water in excavations, before it reaches Highway 101.

No gasoline or diesel was detected in any of the soil gas samples collected from the Site above method reporting limits, even though there were elevated levels of gasoline and diesel in soil and groundwater at some locations. Low concentrations of petroleum VOCs were detected on soil gas sample (SG-1 duplicate), well below applicable RBCs.

One chemical (chloroform) exceeded both residential and commercial vapor intrusion into building risk-based concentrations (RBCs) in soil gas samples SG-1 and SG-4. Chloroform is not a contaminant of concern for the LUST project but may be related to chlorinated drinking water or wastewater from leaking plumbing.

## **4. RISK EVALUATION**

### **Conceptual site model.**

To evaluate human exposure to residual 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 below 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	Applicable RBC?	Basis for selection/exclusion
<b>SOIL</b>			
Ingestion, dermal contact, and inhalation	Residential	No	See Note 1.
	Urban residential	No	
	Occupational	No	
	Construction worker	Yes	
	Excavation worker	Yes	
Leaching to groundwater	Residential	No	See Note 2.
	Urban residential	No	
	Occupational	No	
<b>GROUNDWATER</b>			
Ingestion and inhalation from tap water	Residential	No	See Note 3.
	Urban residential	No	
	Occupational	No	
Volatilization to outdoor air	Residential	Yes	See Note 4.
	Urban residential	Yes	
	Occupational	Yes	
Vapor intrusion into buildings	Residential	Yes	See Note 4.
	Urban residential	Yes	
	Occupational	Yes	
Groundwater in excavation (GWE)	Construction and excavation worker	Yes	See Note 5.
<b>SOIL GAS to VI</b>			
Soil Gas to Vapor Intrusion	Residential	No	See Note 4.
	Urban Residential	No	
	Occupational	No	
<b>ECOLOGICAL</b>			
Ecological	Terrestrial & Surface Water	No	See Note 6.

1. Impacted soil has been detected at depths greater than 3 feet bgs. A contaminated media management plan (CMMP) has been created for the Site to guide workers when encountering potentially impacted soil.
2. Groundwater is not used for drinking. This pathway is therefore not considered, in accordance with Section B.3.2.4 of DEQ's risk-based decision making (RBDM) guidance.
3. City water is provided. Local groundwater is not currently used for drinking water and is not likely to be used for this purpose in the future.
4. Soil gas detections are below risk-based concentrations (RBCs).
5. There is no GWE RBC for diesel. Free product does not appear to be present.
6. Site has no significant habitat, nor is there a plan for the Site to have ecologically significant habitat. Groundwater is not expected to discharge to surface water. No impacts to Coquille River or Ferry Creek.

### **Contaminant concentrations.**

Please refer to the RYSE reports cited below for data tables for soil, groundwater and soil vapor results.

#### Soil

The soil impacts appear to be limited to eight (8) feet bgs approximately thirty (30) feet west of the property line, and approximately forty (40) feet south of Highway 101 (B2 - NWTPH-Dx [diesel range] – 1,450 mg/kg), twelve (12) feet bgs in the dispenser island area (B9 - NWTPH-Dx [diesel range] – 1,170 mg/kg), and the west end of the removed HOT at eleven (11) feet bgs (B23 - NWTPH-Dx [diesel range] – 1,450 mg/kg). There is some shallower (4 ft) gasoline contaminated soil remaining in the vicinity of the former dispenser excavation.

#### Groundwater (Figure 6)

Groundwater sampled in May 2025 had concentrations of gasoline ranging from 420 µg/L to 18,400 µg/L. Diesel concentrations ranged from 1,820µg/L to 8,660µg/L. Multiple RBDM VOCs were detected in the oil/water separator area, with ethylbenzene detected in the HOT area above method reporting limits (MRLs).

#### Soil Gas

Ethylbenzene, xylenes, and 1,2,4-trimethylbenzene were detected in the 2025 SG-1 duplicate sample at the following concentrations, respectively, 2.7 µg/m<sup>3</sup>, 15 µg/m<sup>3</sup>, and 8.4 µg/m<sup>3</sup>. Detections in the SG-1 sample were all below MRLs. None of these constituents exceed the residential or occupational inhalation pathways.

Chloroform was detected in the most recent round of soil gas samples collected from the Site in 2025. Chloroform was not included in the analysis in the previous round of soil gas samples. The concentrations ranged from 7.0 µg/m<sup>3</sup> (SG-2) to 130 µg/m<sup>3</sup> (SG-1). When compared to the updated commercial soil gas RBC, two of the samples (SG-1 and SG-4) exceeded soil gas RBCs for residential and commercial scenarios. The source of the chloroform is unknown, and it appears to be unrelated to the LUST project.

### **Human health risk.**

There have been four (4) soil excavations at the Site from May 2022 to July 2025. A total of 97.14 tons of contaminated soil was excavated from the dispenser area in May 2022, 15 tons of contaminated soil was excavated from the HOT area in May 2025, and 169.93 tons of contaminated soil was excavated from the oil/water separator area in July 2025. The source of contamination in the dispenser island area has been removed and natural attenuation should further reduce contamination in the soil and groundwater in that area.

There is not much soil contamination in the upper three (3) feet, so residential and occupational users of the Site should not come into direct contact with unacceptable levels of contamination. However, construction and excavation workers may contact deeper soils that are contaminated with diesel and gasoline. However, most of the deeper contamination is below construction and excavation worker RBCs.

Groundwater is not expected to be used on the Site or the immediately surrounding areas, so the tap water pathway is incomplete. Construction and excavation workers working at or beneath the water table will encounter diesel and gasoline and some related constituents. The gasoline and constituent concentrations in groundwater are well below the water in excavation RBC. There is no RBC for diesel in groundwater, but the contamination of diesel detected in groundwater in the vicinity of the former HOT were elevated and exceeded the solubility limit for diesel. However, because this is a localized area, and additional cleanup was done at the HOT area, the overall risks to construction workers encountering groundwater at the Site should be acceptable. Having a dedicated contaminated media management plan (CMMP) for this Site will further protect site workers and limit exposures to the residual contamination.

Concentrations of petroleum-related contaminants in the soil gas samples collected in 2023 and 2025 were either non-detect, or below vapor intrusion RBCs for residential and occupational exposure pathways.

Chloroform was detected in three soil gas samples collected at two soil gas wells in October 2025 as follows; SG-1 at 130  $\mu\text{g}/\text{m}^3$ , duplicate of SG-1 labeled as SG-4 at 120  $\mu\text{g}/\text{m}^3$ , and SG-2 at 7.0  $\mu\text{g}/\text{m}^3$ . The residential vapor intrusion into building RBC for chloroform is 4.1  $\mu\text{g}/\text{m}^3$  and the commercial vapor intrusion into building RBC for chloroform is 18  $\mu\text{g}/\text{m}^3$ .

The chloroform in the October 2025 soil gas samples is not related to the UST releases of petroleum hydrocarbons at the Site. However, if new buildings are planned for construction, the owner and developer should consider the detections of chloroform in soil gas sampling to ensure that measures are taken so that chloroform vapors do not migrate into the new structures and present possible health concerns to the occupants or residents. Chloroform is a probable carcinogen in humans. There is some evidence that it causes liver, kidney, and thyroid cancer in animals.

### **Ecological risk.**

The Site has no ecological significant habitat, nor is there a plan for the Site to have ecologically significant habitat. Groundwater is not expected to discharge to surface water at the Site and therefore will not reach the Coquille River or Ferry Creek via surface water.

## **5. RECOMMENDATION**

Following additional soil cleanup activities in 2025, soil, groundwater and soil gas contamination associated with the UST systems, the residual contamination should not result in unacceptable risks, and a No Further Action determination is recommended for this Site. The No Further Action determination should be recorded in DEQ's underground storage tank database, Facility No. 1045 and LUST No.'s 06-22-0317, 06-12-1585.

A CMMP was developed for the Site and will guide construction workers if contamination is encountered, and how to address it, especially in the vicinity of the former HOT. A health and safety plan (HASP) is also recommended for construction workers who may encounter impacted groundwater while conducting Site work.

If new buildings are planned for construction, the owner and developer should consider the detections of chloroform in soil gas sampling to ensure that measures are taken so that chloroform vapors do not migrate into the new structures and present possible health concerns to the occupants or residents.

A 30-day public comment period will be provided to the Oregon Department of Transportation (ODOT), City of Bandon Public Works Director, Tim Lakey, and the Bandon Historical Society Museum.

## **6. ADMINISTRATIVE RECORD**

Underground Storage Tank Assessment, Goddard Energy, 530 2<sup>nd</sup> Street SE, Bandon, Oregon. Universal Applicators, Inc. November 30, 2012.

UST Decommissioning Report and Initial Cleanup, Goddard Energy, 530 2<sup>nd</sup> Street SE, Bandon, Oregon. Alpha Environmental. June 7, 2022.

Site Characterization Work Plan, LUST # 06-22-0317, Goddard Energy, 530 2<sup>nd</sup> St., Bandon, OR. Alpha Environmental. September 7, 2022.

Site Assessment Report, LUST #06-12-1585 AND 06-22-0317, Goddard Energy, 530 2<sup>nd</sup> St., Bandon, OR. Alpha Environmental. September 7, 2022.

Site Assessment Report, LUST # 06-12-1585 and 06-22-0317, Goddard Energy, 530 2<sup>nd</sup> St., Bandon, OR. Alpha Environmental. February 6, 2023.

Site Assessment Report – October 2023, LUST # 06-12-1585 and 06-22-0317, Goddard Energy, 530 2<sup>nd</sup> St., Bandon, OR. Alpha Environmental. October 12, 2023.

Final Site Assessment Report, LUST #06-12-1585 AND 06-22-0317, Goddard Energy, 530 2<sup>nd</sup> St., Bandon, OR. Alpha Environmental. October 12, 2023.

RE: Additional Work Required Letter. DEQ. April 3, 2025.

Phase 1 Scope of Work for Additional Work Required at Goddard Energy Site, 530 2<sup>nd</sup> Street, SE, Bandon, Oregon, DEQ LUST #s 06-22-0317 and 06-12-1585. RYSE Environmental LLC. April 30, 2025.

Site Investigation Report for Goddard Energy Company, 530 2<sup>nd</sup> Street, SE, Bandon, Oregon, DEQ LUST #s 06-22-0317 and 06-12-1585. RYSE Environmental LLC. June 5, 2025.

Phase 2 Scope of Work for Additional Work Required at Goddard Energy Site, 530 2<sup>nd</sup> Street, SE, Bandon, Oregon, DEQ LUST #s 06-22-0317 and 06-12-1585. RYSE Environmental LLC. July 7, 2025.

Second Site Investigation Report for Goddard Energy Company, 530 2<sup>nd</sup> Street, SE, Bandon, Oregon, DEQ LUST #s 06-22-0317 and 06-12-1585. RYSE Environmental LLC. August 12, 2025.

Phase 3 Scope of Work for Soil Gas Sampling (Revision 1) at Goddard Energy Site, 530 2<sup>nd</sup> Street, SE, Bandon, Oregon, DEQ LUST #s 06-22-0317 and 06-12-1585. RYSE Environmental LLC. September 11, 2025.

Third Site Investigation Report for Goddard Energy Company, 530 2<sup>nd</sup> Street, SE, Bandon, Oregon, DEQ LUST #s 06-22-0317 and 06-12-1585. RYSE Environmental LLC. November 5, 2025.

Contaminated Media Management Plan for Construction & Excavation Activities, 530 2<sup>nd</sup> Street, SE, Bandon, Oregon, 97411. RYSE Environmental LLC. December 1, 2025.

## **7. ATTACHMENTS**

1. Figure 1. Site Vicinity map
2. Figure 2. Site map showing key features
3. Figure 3. Groundwater, soil, and soil gas sampling locations
4. Figure 4. Site diagram with Alpha and RYSE soil sample locations North
5. Figure 5. Site diagram with Alpha and RYSE soil sample locations South
6. Figure 6. Groundwater Sampling Locations Map



Figure 1. Site Vicinity Map (Provided by Alpha Environmental via email 12/30/2024).

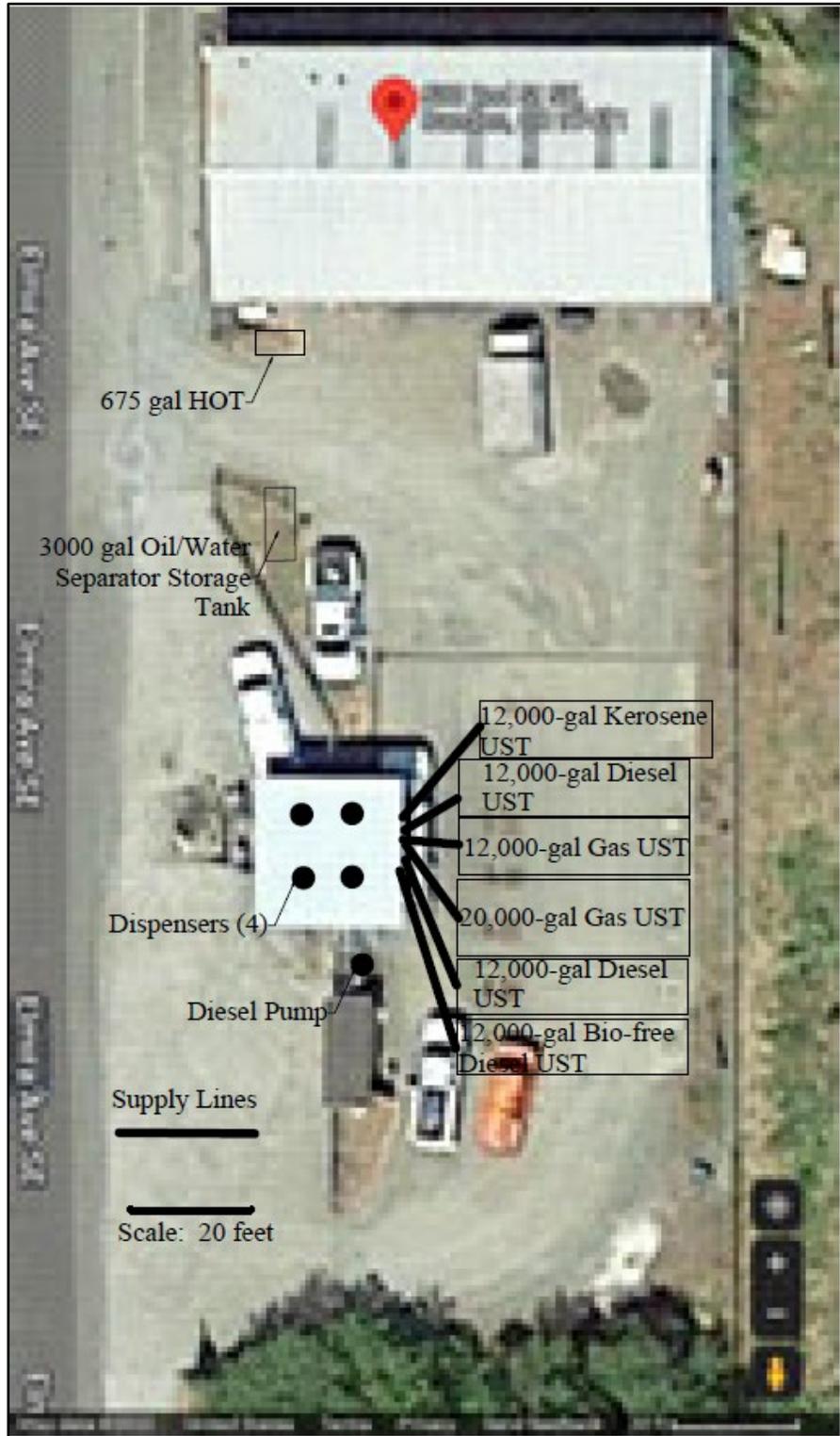


Figure 2. Site Map with Key Features (Provided by Alpha Environmental via email 12/30/2024).

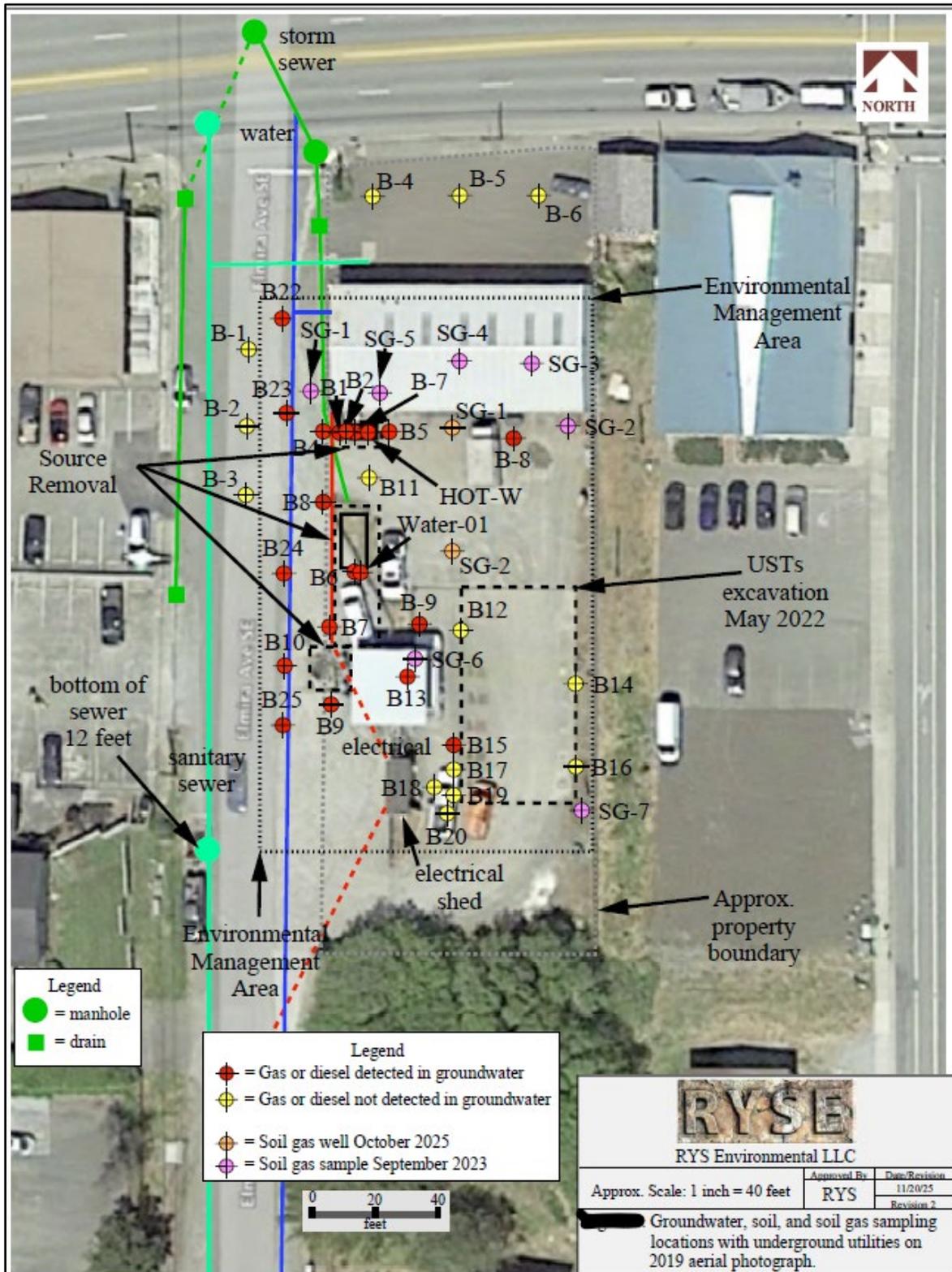


Figure 3. Groundwater, soil, and soil gas sampling locations (Alpha and RYSE) with underground utilities (Provided by RYSE December 1, 2025).

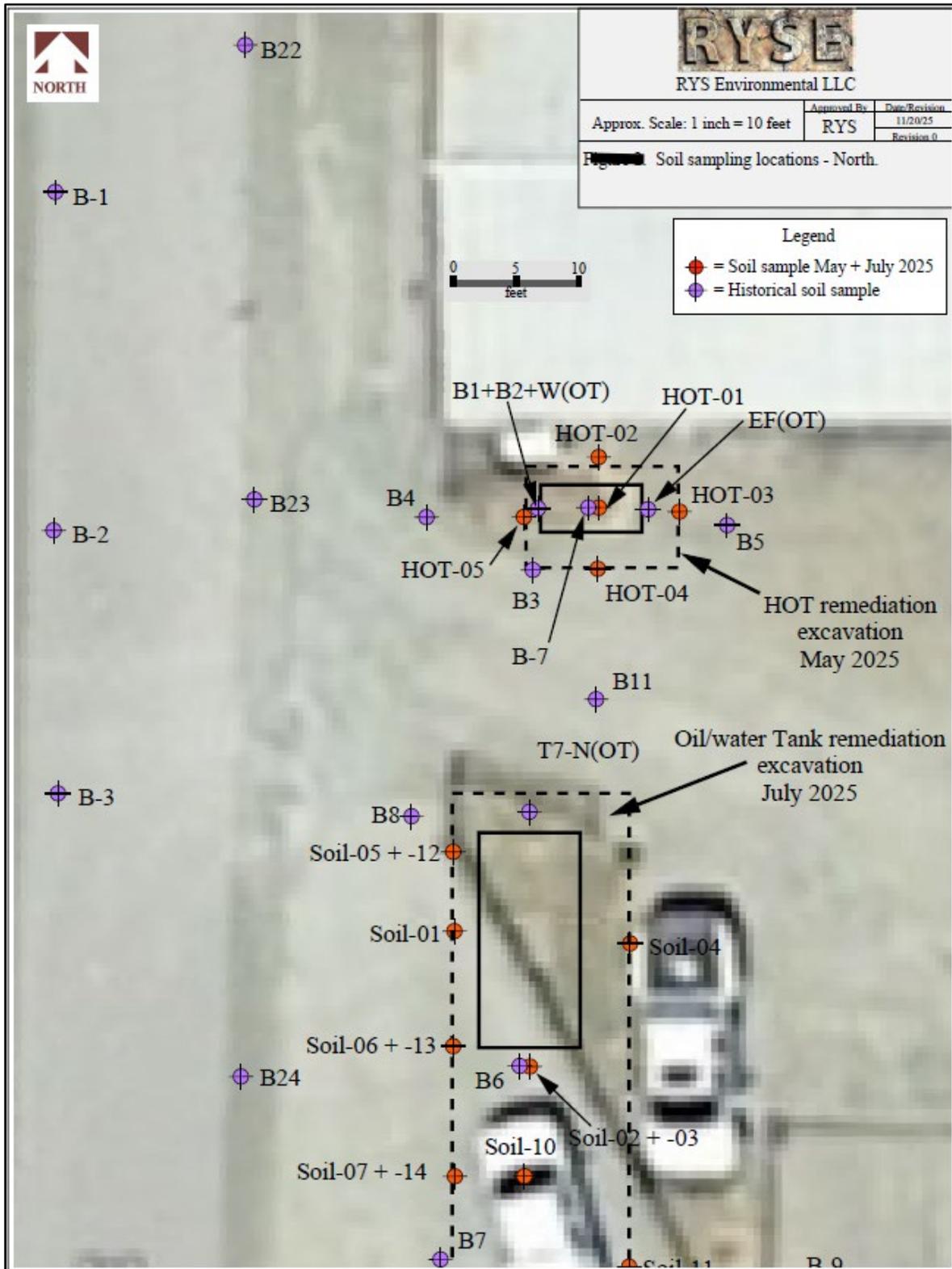


Figure 4. Site diagram with Alpha and RYSE soil sample locations North (Provided by RYSE December 1, 2025).

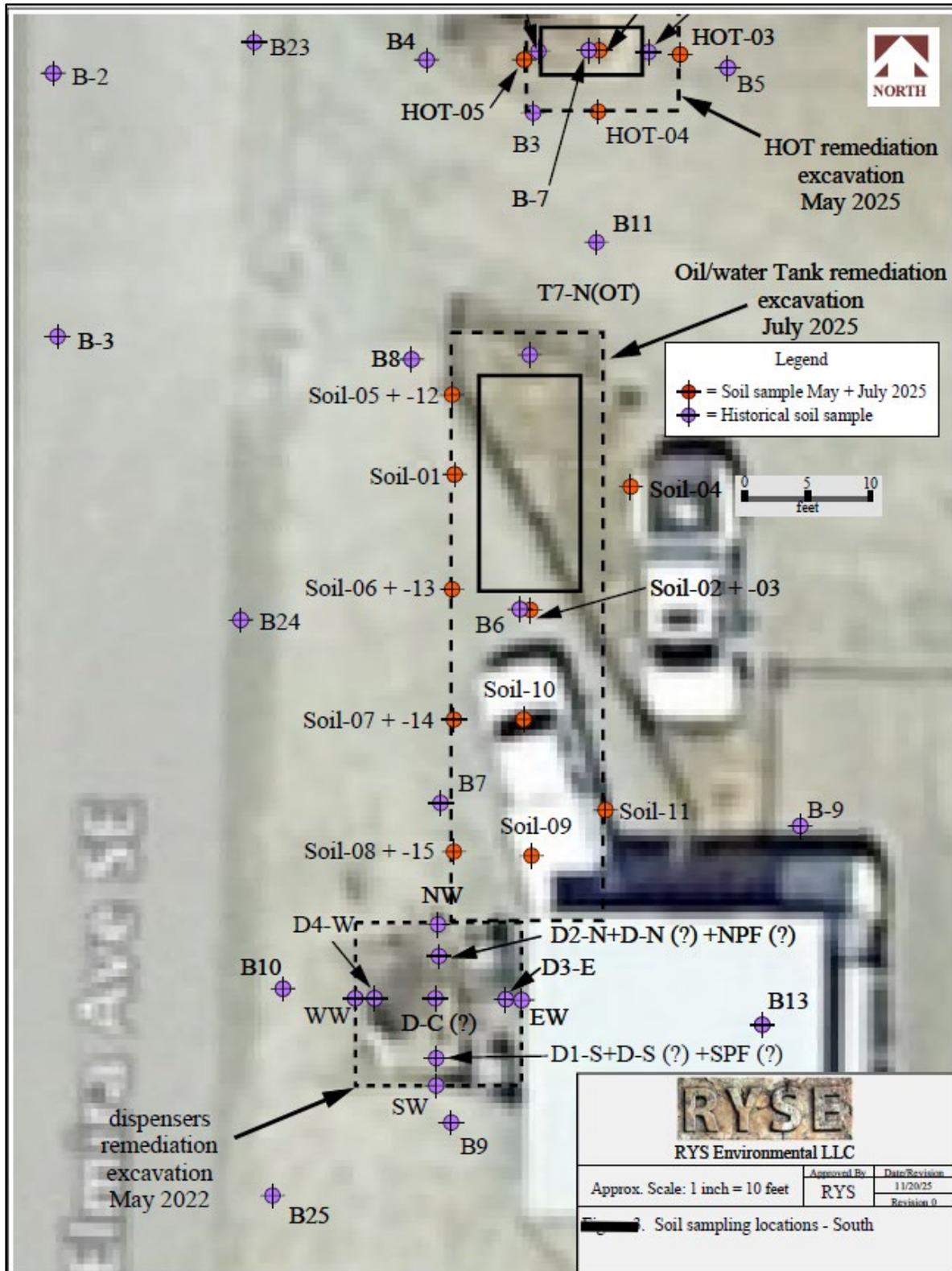


Figure 5. Site diagram with Alpha and RYSE soil sample locations South (Provided by RYSE December 1, 2025).

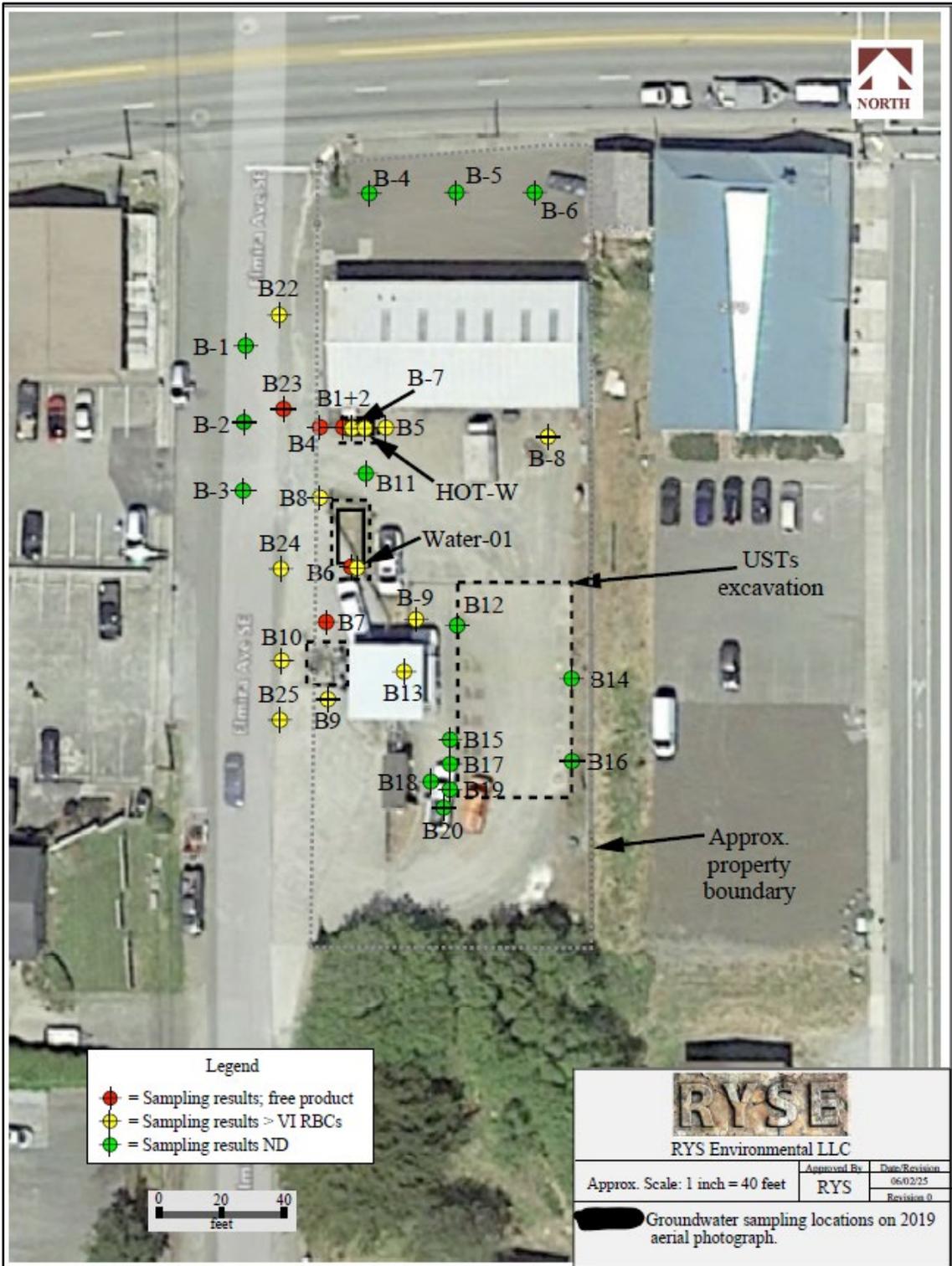


Figure 6. Groundwater Sampling Locations Map (Provided by RYSE June 5, 2025)