

2.4 Tank 5 (T5) 2,000-gallon Gasoline UST

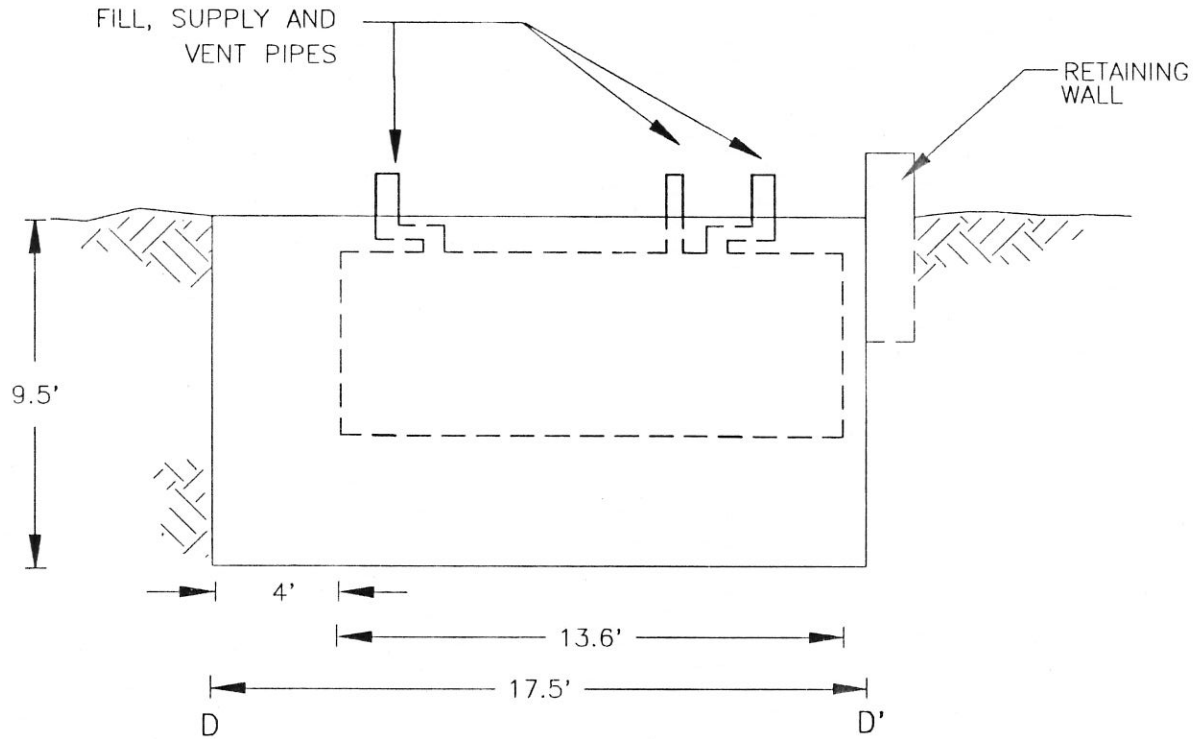
Tank 5 was removed from the fourth excavation dug. Therefore, Tank 5 was removed from excavation 4. All samples collected from the excavation and removed soils were labeled T4- or as SP4-.

2.4.1 Tank Removal

- Location: North end of the dock building (see Figure 2-2). Figure 2-8 presents a cross sectional view of the excavation.
- Factors Affecting Tank Removal or Sampling: The asphalt parking lot over the UST was cut out and removed to allow access to the UST.
- Dates Work was Performed: The UST was removed on August 11, 1992. The excavation was backfilled on the same day.

2.4.2 Description of the Tank Removal/Soil Sampling Activities

- Soil Types Encountered: The soils were a dark gray to black sandy gravel with cobbles. It could not be determined if the soil was native or fill.
- Groundwater Depth: This excavation was open during high tide. No groundwater was encountered during this excavation.
- Location and Extent of Petroleum-Impacted Soils: Impacted soils were not encountered around this UST. Observation, field analysis, and laboratory analysis indicate no release has occurred. The general location, depth, and results of the ATH field analysis is presented in Table 2-10.
- Visual Condition of the Tank: The tank was under asphalt paving and a small shed. The shed held the dispensing equipment. Both the shed and dispensing equipment were removed prior to cutting the asphalt paving. The tank had a fill pipe, vent pipe, and dispensing pipe, which were removed during tank removal. No staining was observed on the asphalt or concrete. After removal, the tank was inspected and was in good visual condition. Some surficial corrosion was present, but no holes were observed.
- Size of the Excavation: The excavation extended approximately 17.5 feet by 12.5 feet by 9 feet in depth.



TANK 5 (T5) 2,000 GALLON GASOLINE UST



NOT TO SCALE

NOTE: NO PVC GALLERY INSTALLED

ENSR
 ENSR CONSULTING & ENGINEERING

DRAWING: XTANK5
 C/SC: 1:1
 DATE: 01/26/93

DRAWN: ABB
 DISK: D/517
 CHECK: MM

FIGURE 2-8
 CROSS SECTION
 OF TANK 5 AT
 SEWARD

ALASKA RAILROAD
 ANCHORAGE, ALASKA
 PROJECT 0092-009-700

Table 2-10

**Ambient Temperature Headspace (ATH) Results
Field Analysis
Tank 5, Seward**

| Sample Number | Approximate Location | Depth (ft) | Reading ¹ |
|---------------|----------------------|------------|----------------------|
| T4-1 | Middle of excavation | 8 | 0 |
| T4-2 | S Side | 8 | 0 |

¹ ATH readings were obtained as detailed in Section 1.3.1.

- Estimated Volume of Soils Removed During Excavation: The volume is approximately 45 cubic yards.
- PVC Gallery: No gallery was installed at this time because field conditions did not indicate a release from this UST.
- Backfill: The excavation was backfilled with clean gravel from Metco Sand and Gravel. The gravel was placed using a backhoe.

2.4.3 Laboratory Results

Figure 2-2 presents the location of the soil samples, which were collected for laboratory analysis. Tables 2-11 and 2-12 present the laboratory results for the UST excavation and excavated soils.

The laboratory results for the excavation are below detection limits for GRO, ethylbenzene, and xylenes. Benzene ranged from 0.12 ppm to 0.17 ppm. Toluene ranged from not detected to 0.1 ppm.

The laboratory results for the excavated soil pile are below detection limits for ethylbenzene, PCBs, halogenated organics, and lead. Benzene ranged from not detected to 0.18 ppm. Toluene ranged from 0.2 ppm to 0.5 ppm. Xylenes ranged from 0.1 ppm to 0.3 ppm. TPH ranged from 31 ppm to 44 ppm. Arsenic was 6 ppm in both SP4-1 and SP4-2. Chromium ranged from 38 ppm to 44 ppm.

Table 2-11

Analytical Results for Tank 5, Seward

| Sample Number | Depth (ft) | Gasoline Range Organics (GRO) (mg/kg) | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylenes (mg/kg) |
|---------------|------------|---------------------------------------|-----------------|-----------------|----------------------|-----------------|
| T4-1 | 8 | < 5 ¹ | 0.17 | 0.1 | < 0.1 | < 0.1 |
| T4-2 | 8 | < 5 | 0.12 | < 0.1 | < 0.1 | < 0.1 |

¹ Sample results reported with < indicate that the sample was below laboratory detection limits. The method detection limit is the number right of the < symbol.

Table 2-12

Analytical Results for Tank 5 Excavated Soils, Seward

| Sample Number | Benzene (mg/kg) | Toluene (mg/kg) | Ethylbenzene (mg/kg) | Xylenes (mg/kg) | TPH (mg/kg) | PCB (mg/kg) | Halogenated Organics (mg/kg) | Arsenic (mg/kg) | Chromium (mg/kg) | Lead (mg/kg) |
|---------------|---------------------|-----------------|----------------------|-----------------|-------------|-------------|------------------------------|-----------------|------------------|--------------|
| SP4-1 | 0.18 | 0.5 | < 0.1 | 0.3 | 44 | < 1 | < 0.05 to < 0.5 ¹ | 6 | 38 | < 20 |
| SP4-2 | < 0.05 ² | 0.2 | < 0.1 | 0.1 | 31 | < 1 | < 0.05 to < 0.5 ¹ | 6 | 44 | < 20 |

¹ Halogenated organics consist of different compounds that have detection limits ranging from 0.05 mg/kg to 0.5 mg/kg.
² Sample results reported with < indicate that the sample was below laboratory detection limits. The method detection limit is the number right of the < symbol.