



T115s

December 18, 1996

Ms. Kathy Bahnick  
Port of Seattle, Environmental Engineering  
P.O. Box 1209  
Seattle, WA

Re: Letter Report Documenting Removal of 600-Gallon  
Fuel Oil Underground Storage Tank T115s  
Terminal 115, Seattle, Washington 006275 site number

Dear Ms Bahnick

This letter report documents removal of a single underground storage tank (UST) at the Port of Seattle's proposed Foley Cardlock Facility, Terminal 115 site. The site is located at 6730 West Marginal Way in Seattle, Washington (Figure 1). The work was performed under Professional Services Agreement Number P-950137 and subsequent Amendments.

The Port of Seattle (Port) has leased a portion of the Terminal 115 property to a tenant who is currently constructing a commercial retail fueling station. Diesel-range petroleum hydrocarbon impacts have previously been documented at the site, apparently related to a former heating oil UST, which was removed by the Port in 1995. During site construction work in July 1996, a previously unknown UST was encountered by the site contractor while installing subsurface drainage lines for the new fueling facility. The fill pipe for the tank was completely encased in concrete, with no indications at the surface that a UST was present. An approximately 1/2 inch diameter copper pipe was connected to the top of the tank, and was removed. No pump dispenser footing or mechanism was found associated with the UST. Based on the size and configuration of the UST, we assume that it was an old fuel oil tank used to store fuel oil for consumption by equipment or machinery on the property. On behalf of the Port, GeoScience Management (GSM) personnel observed excavation and removal of the UST, collected representative soil samples from the tank excavation and soil stockpile, submitted selected soil samples to an analytical laboratory and prepared this report.

### **Tank Removal**

Excavation and tank removal services were provided by Lee Morse Construction, Inc. of Fife, Washington. On September 4, 1996, Lee Morse personnel excavated and removed a single steel UST, and a limited amount of petroleum hydrocarbon-impacted soil from the central portion of the site (Figure 2). Prior to excavation and removal, the tank was pumped and rinsed, and all tank fluids recovered, by MarVac under contract to Lee Morse. A sample of the product (labeled T115-FP1) was collected from the bottom of the tank for fuel fingerprint analysis. Analysis of the sample indicated that the product was diesel fuel or similar product. The single wall steel tank measured six feet in length, by four feet, four inches in diameter, resulting in a calculated volume of approximately 600 gallons total capacity.

GSM personnel noted that at the time of removal, the tank appeared to be in poor condition with numerous holes in the ends and bottom. Soil in the excavation was noted to have a petroleum hydrocarbon-like odor, and

was slightly discolored near the west end of the tank and beneath the tank. Approximately 10-12 cubic yards of soil were removed from above and to the west of the UST in order to allow removal of the tank. Following tank removal, another 10-12 cubic yards of petroleum hydrocarbon-impacted soil was removed at the direction of GSM personnel. A total of approximately 25 cubic yards of soil were stockpiled temporarily on plastic, adjacent to the excavation pending arrangement of appropriate disposal. We understand that the Port will arrange for appropriate disposal of the excavated materials. The excavation was backfilled using clean imported fill material.

### Soil Sampling

Soil samples were collected using a stainless steel sampling spoon from the excavator bucket. Samples were obtained from the excavation sidewalls and floor (Figure 3). Soil samples from the east and west sidewalls (EWALL and WWALL, respectively) and from beneath the tank (FLOOR) were submitted to North Creek Analytical of Bothell, Washington for quantitative chemical analysis. Additionally, two soil stockpile samples (SS1 and SS2) were submitted for analysis.

Soils consisted of several feet of damp to wet, dark brown, slightly gravelly, silty sand fill, with scattered debris (metal, wood, bricks), underlain by moist to wet, gray to gray-brown silty clay to clayey silt. The excavation was extended to a depth of approximately 8 feet below existing ground surface. No groundwater seepage was observed in the excavation.

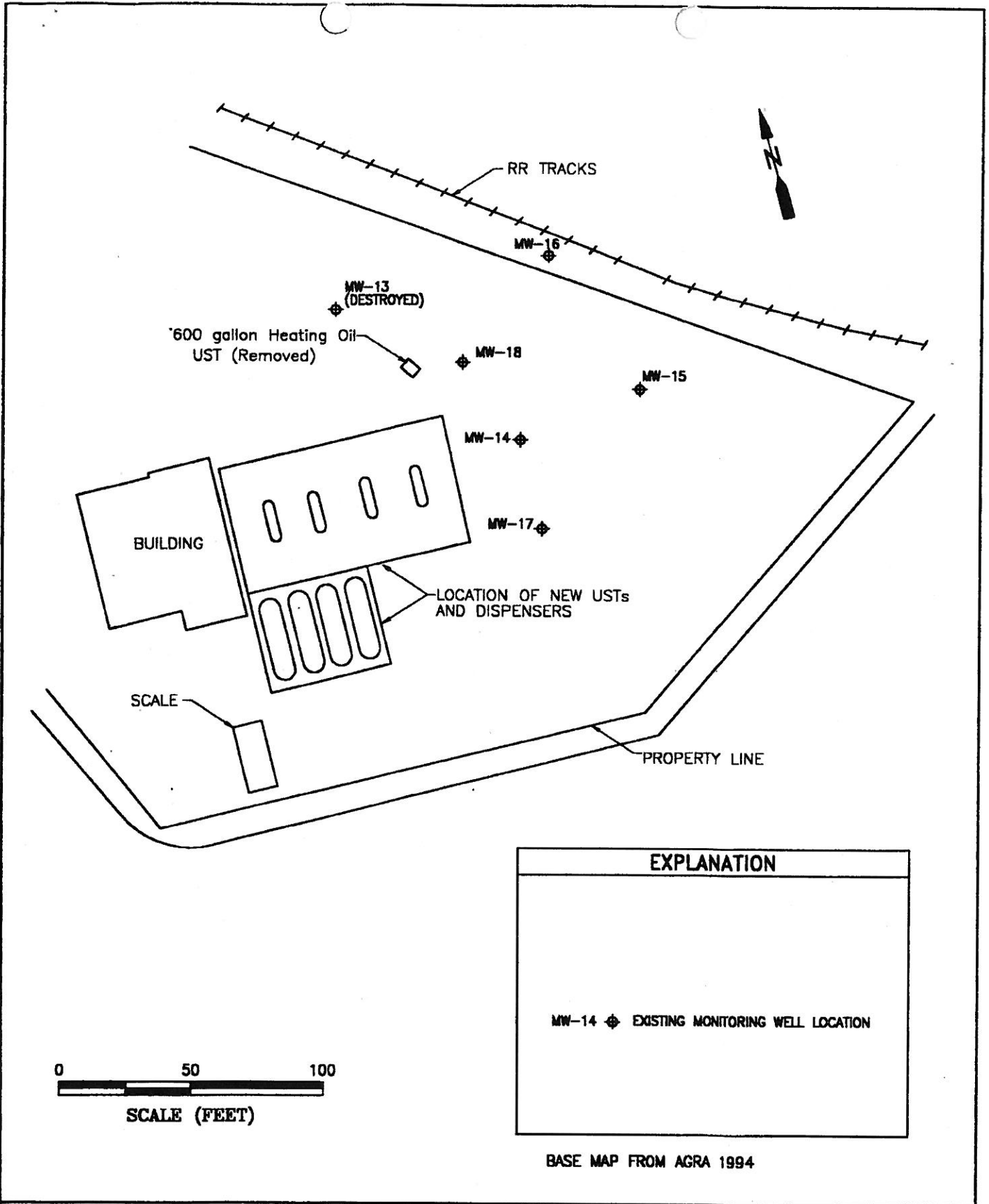
### Laboratory Analysis


Each of the five soil samples submitted for analysis was analyzed for petroleum hydrocarbons in the diesel and heavy oil ranges by Washington State Department of Ecology Method WTPH-D, Extended. A summary of the reported TPH concentrations is presented in Table 1. A copy of the analytical laboratory report is attached.

Table 1  
Summary of Analytical Data - Soil  
Port of Seattle, Terminal 115  
Seattle, Washington

Sample ID	Collection Depth (Feet)	TPH Diesel Range (mg/kg)	TPH Heavy Oil Range (mg/kg)
EWALL	8	263	45.7
WWALL	8	5,810	223
FLOOR	9	846	28.6
SS-1	NA	1,740	38.5
SS-2	NA	2,690	ND

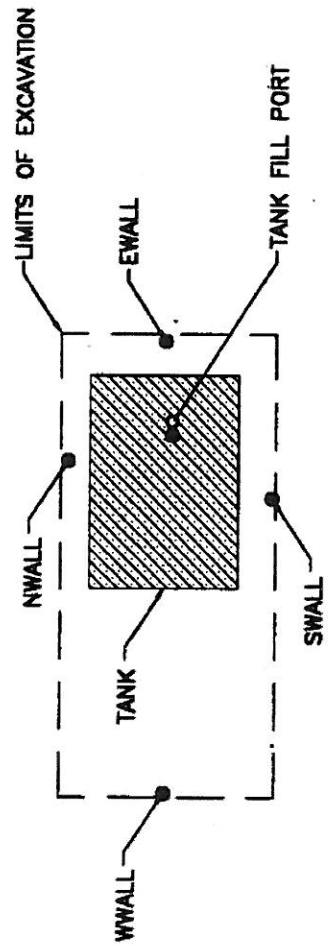
**Bold indicates reported concentration exceeds MTCA Method A Cleanup Level for Soil**





 **GeoScience Management, Inc.**  
*Environmental Consulting Services*  
 18008 89th Avenue NE  
 Bothell, Washington 98011

Job # 1002.01  
 DESIGN \_\_\_\_\_  
 DRAWN JB, HWS  
 DATE October 1996  
 SCALE 1" = 50'

**FIGURE 2**  
**PORT OF SEATTLE - TERMINAL 115**  
**PROPOSED FOLEY CARDLOCK FACILITY**  
**SEATTLE, WASHINGTON**  
**SITE PLAN**




**EXPLANATION**

-  MONITOR WELL LOCATION
-  SOIL SAMPLE LOCATION



**FIGURE 3**  
**PORT OF SEATTLE**  
**TERMINAL 115**  
**HEATING OIL UST**  
**SOIL SAMPLING LOCATIONS**

DESIGN HS  
 DRAWN HS/JB  
 DATE October, 1996  
 JOB No. 1002.01

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