

SEP 07 1994

11

ENGINEERING DATA TRANSMITTAL

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Station # 12

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| (A) Item No.         | (B) Document/Drawing No. | (C) Sheet No. | (D) Rev. No. | (E) Title or Description of Data Transmitted   | Approval Designator | Reason for Transmittal | Originator Disposition | Receiver Disposition |
| 1                    | WHC-SD-EN-AP-179         |               | 0            | Underground Storage Tanks 200W-FS-34 and 200W-FS-35 Excavated Soil Filed Sampling Plan | E                   | 1/2                    | 1                      |                      |
|                      |                          |               |              |  |                     |                        |                        |                      |
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| (G)    | (H)   | 17. SIGNATURE/DISTRIBUTION<br>(See Approval Designator for required signatures) |                     |          |          |                       |                   |          |          | (G)    | (H)   |
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| 1/2    | 1     | Cog. Eng. J. S. Hill  | <i>J.S. Hill</i>    | 8/30/94  | H6-25    | J.G. Lucas            | <i>J.G. Lucas</i> | 8-27-94  | H6-01    | 1/2    | 1     |
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**RELEASE AUTHORIZATION**

**Document Number:** WHC-SD-EN-AP-179, REV. 0

**Document Title:** Underground Storage Tanks 200W-FS-34 and 200W-FS-35  
Excavated Soil Field Sample Plan

**Release Date:** 8/31/94

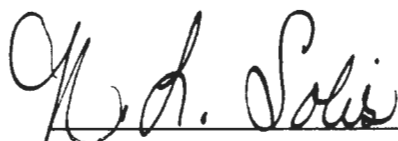
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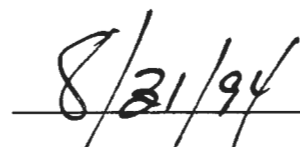
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SUPPORTING DOCUMENT

1. Total Pages 6

2. Title

Underground Storage Tanks 200W-FS-34 and 200W-FS-35 Excavated Soil Field Sample Plan

3. Number

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7. Abstract

This document outlines that procedure that will be used to sample the soil excavated during the removal of underground storage tanks 200W-FS-34 and 200W-FS-35.

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10. RELEASE STAMP

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9. Impact Level E

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**Underground Storage Tanks  
200W-FS-34 and 200W-FS-35  
Excavated Soil  
Field Sampling Plan**

**1.0 PURPOSE**

This plan outlines the process that will be used to collect samples from soil excavated during removal of underground storage tanks 200W-FS-34 and 200W-FS-35. The samples will be analyzed to determine if gasoline and diesel fuel are present in the soil at levels above action levels (see Section 3.0) specified by the Washington State Department of Ecology in Washington Administrative Code (WAC)-90-52, "Guidance for Site Checks and Site Assessments for Underground Storage Tanks", revised in October of 1992.

**2.0 BACKGROUND**

On April 15, 1992, underground storage tanks 200W-FS-34 (unleaded gasoline) and 200W-FS-35 (diesel) were removed and soil samples were collected at each former tank location and from around the associated piping. Soil was excavated from the site until field instrumentation indicated that the former tank sites were clean in the judgment of the field team leader. Field monitoring consisted of using an organic vapor monitor to survey soil shaken in a plastic bag. Monitoring indicated that petroleum contamination ranged from 40 to 800 ppm. See Logbook EFL-1009 for specifics of soil sampling.

The excavated soil was spread out in a 56-ft-by-88-ft rectangle 6 to 8 in. deep, then surrounded by a rope-and-post fence and posted "Controlled Area Authorized Personnel Only." The excavated soil is located just southwest of the 200 Area fire station. (See Figure 1.)

**3.0 SOIL SAMPLING ACTIVITIES**

Based on information from Logbook EFL-1009 and from observing the excavated-soil laydown site, stratified random sampling will be used. The 88-ft-by-56-ft soil site was divided into 6 equal quadrants of 28 ft by 29.3 ft. Each quadrant was subdivided into 56 subquadrants and assigned a number from 1 through 56. A random number generator was to pick one subquadrant for sampling from each of the six quadrants. See Figure 2 for locations of sample sites.

The six soil samples plus two field QC samples will be collected in accordance with the following EIIs:

- 1.1 Hazardous Waste Site Entry Requirements
- 1.5 Field Logbooks

- 1.13 Environmental Readiness Review
- 5.1 Chain of Custody
- 5.2 Soil and Sediment Sampling
- 5.5 1706 KE Laboratory Decontamination of RCRA/CERCLA Sampling Equipment
- 5.10 Obtaining Sample Identification Numbers and Accessing HEIS Data
- 5.11 Sample Packaging and Shipping
- 14.1 Analytical Laboratory Data Management.

Soil samples will be collected by hand from the middle of the soil layer as much as practical. One duplicate sample will be collected from one of the six soil sample locations and one trip blank will be collected using clean silica sand. The soil samples will be analyzed for and compared with the following soil action levels:

- Benzene (0.5 mg/kg)
- Ethylbenzene (20 mg/kg)
- Toluene (40 mg/kg)
- Xylene (20 mg/kg)
- Total petroleum hydrocarbons (TPH) gasoline (100 mg/kg)
- TPH diesel (200 mg/kg).

#### 4.0 REFERENCES

- WAC-90-52, "Guidance for Site Checks and Site Assessments for Underground Storage Tanks," *Washington Administrative Code*, as amended.
- WHC-CM-7-7, *Environmental Investigation and Site Characterization Manual*, Westinghouse Hanford Company, Richland, Washington.

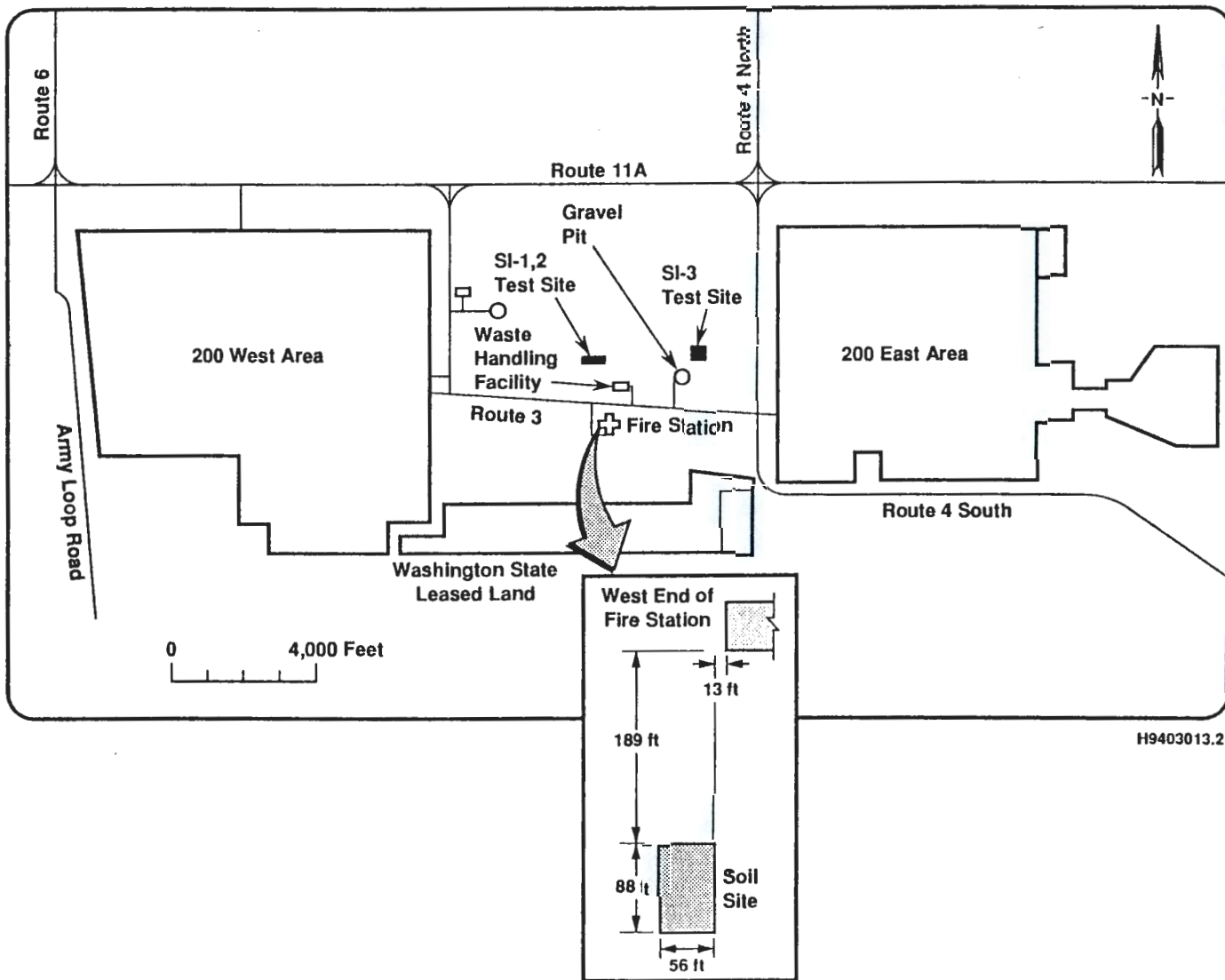
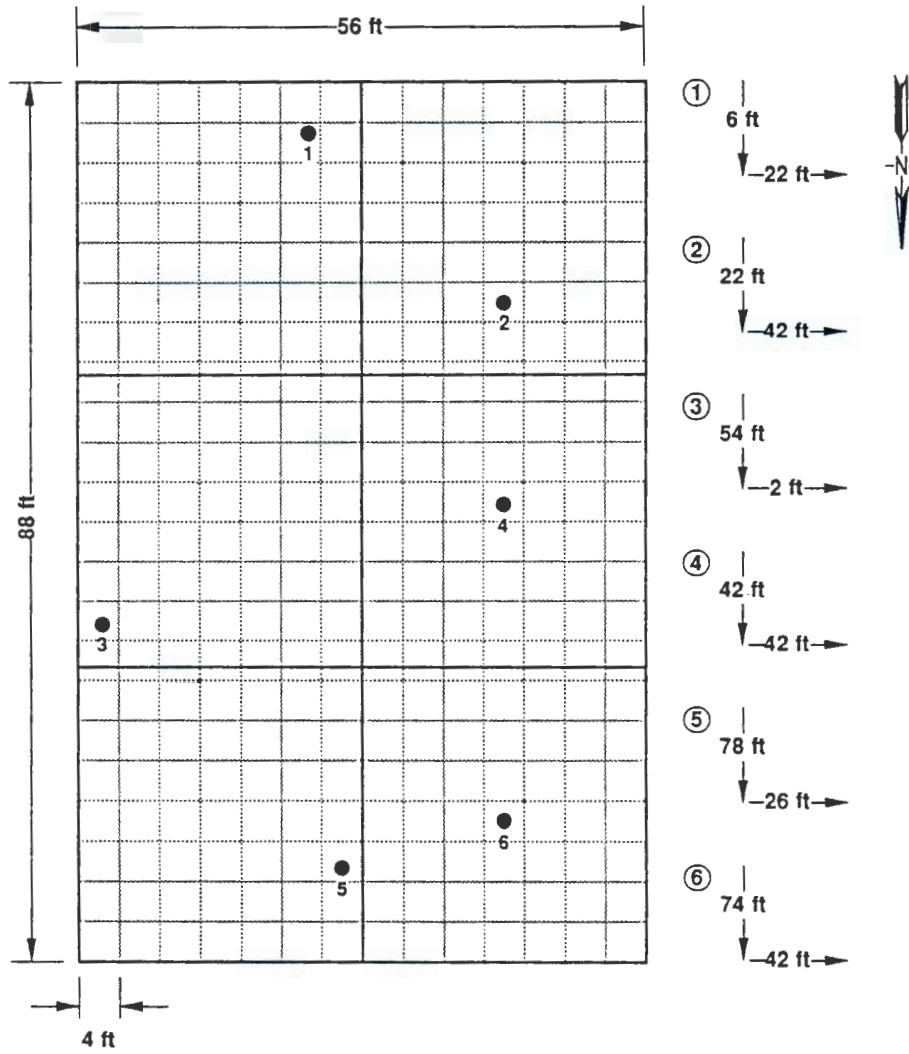


Figure 1. Soil Sites.

Figure 2. Soil Sample Locations.



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