

**TANK DECOMMISSIONING
REPORT**

Safeway Property
1153 Duane Street
Astoria, Oregon

December 17, 2003

Prepared for:

Safeway Inc.
Clackamas, Oregon

Prepared by:

Hahn and Associates, Inc.
Portland, Oregon

HAI Project No. 6167
DEQ Tank Log No. 04-03-2314

TABLE OF CONTENTS

| | | |
|-------|--|----|
| 1.0 | SUMMARY OF FINDINGS..... | 1 |
| 2.0 | RECOMMENDATIONS..... | 2 |
| 3.0 | INTRODUCTION..... | 2 |
| 4.0 | BACKGROUND..... | 3 |
| 5.0 | FIELD ACTIVITIES..... | 4 |
| 5.1.1 | AST Decommissioning | 4 |
| 5.1.2 | Heating Oil Tank Decommissioning | 5 |
| 6.0 | RESULTS AND DISCUSSION..... | 6 |
| 6.1 | Above-Ground Storage Tank..... | 6 |
| 6.2 | Heating Oil Tank | 6 |
| 7.0 | LIMITATIONS AND SIGNATURES..... | 10 |
| 8.0 | GLOSSARY OF ABBREVIATIONS..... | 11 |

TABLES

- 1 Summary of Soil Testing Results

FIGURES

- 1 Location Map
- 2 Site Map
- 3 Sample Location Map

APPENDICES

- A Photographs
- B Tank Liquids Disposal Documentation
- C Laboratory Reports and Chain-of-Custody Documentation
- D DEQ Forms

1.0 SUMMARY OF FINDINGS

In October 2003, tank decommissioning activities were conducted at the Safeway Store property, 1153 Duane Street, Astoria, Oregon, as required by a *Purchase and Sale Agreement*. A summary of the work activities and findings is presented below.

- 1) An approximate 500-gallon above-ground storage tank (AST) of unknown use was decommissioned in-place by cutting the ends out and cleaning the tank.
 - a) No petroleum residue or odors were noted inside the tank or piping when decommissioning this AST, indicating the tank was apparently not used for petroleum storage.
 - b) Previous sampling of exposed soils immediately adjacent to the ends of the AST detected petroleum hydrocarbons at concentrations below the Oregon Department of Environmental Quality (DEQ) Level 2 Soil Matrix Cleanup Standard. Further evaluation of the soils in this area in relation to the AST does not appear warranted.
- 2) A 675-gallon heating oil underground storage tank (UST) was decommissioned in-place by pumping and cleaning the tank, and backfilling with an inert material.
 - a) Testing of a soil sample collected through the bottom of the south end of the UST detected petroleum hydrocarbons, indicating a release of heating oil has occurred.
 - b) The lateral and vertical extent of the petroleum-contaminated soil is adequately defined, with an estimated volume of less than 25 cubic yards.
 - c) Groundwater is present at the elevation of soil impact and the tank. Previous testing of groundwater at the tank location did not reveal the presence of BTEX (benzene, toluene, ethylbenzene, and xylene) compounds.

- d) Although the heating oil tank is appropriately decommissioned in-place at the site, certification and risk-based closure of the cleanup for this tank is not possible until additional soil and groundwater testing can be conducted.

2.0 RECOMMENDATIONS

Based on the results of the tank decommissioning activities, the following recommendations are presented:

- 1) At such time that the overhead structures are demolished and access to the subgrade area is possible, physical removal of the decommissioned AST and heating oil UST should be considered.
- 2) At such time that the overhead structures are demolished and access to the heating oil UST area is possible with push probe or excavating equipment, additional soil and groundwater samples should be collected to pursue risk-based closure for this tank release.
- 3) Following risk-based evaluation for the heating oil tank release, the cleanup should be certified by a DEQ-licensed Heating Oil Tank Service Provider.

3.0 INTRODUCTION

Safeway Inc. (Safeway) retained Hahn and Associates, Inc. (HAI) to conduct tank decommissioning activities at the Safeway Store property located at 1153 Duane Street, Astoria, Oregon (Figures 1 and 2).

In October 2003, two tanks were decommissioned in-place that were located in the subgrade (basement level) area of the Safeway property, including a 675-gallon heating oil tank underground storage tank (UST), and an approximate 500-gallon above-ground storage tank (AST) of unknown use.

The tank decommissioning activities were required to be completed by Safeway as part of a *First Amendment to Purchase and Sale Agreement* between Safeway and the City of Astoria.

4.0 BACKGROUND

In January 2003, HAI conducted a Phase I ESA¹ for the City of Astoria of the entire block bounded by 11th, 12th, Duane, and Exchange Streets, which includes the Safeway property and the American Legion property. The Phase I report identified a number of potential environmental conditions at the property that warranted further assessment, including the two tanks referenced above. In February and March 2003, HAI conducted a Phase II ESA² for the City of Astoria to further evaluate the identified environmental conditions, including a soil assessment at the two referenced tanks. The tank locations are shown on Figure 2. A brief summary of the tanks and the Phase II ESA testing results are summarized below.

- 1) Above-Ground Storage Tank The AST, which was enclosed in a concrete box, was located beneath the sidewalk of Exchange Street south of the Safeway store within the open subgrade area (Appendix A, Photograph 1). At the time of the Phase II ESA, the referenced AST was thought to be a heating oil tank. Subsequent evidence gathered during decommissioning of this 500-gallon tank indicates this tank did not likely store petroleum product, but more likely stored water. Thus, the actual use of this tank is not known.

Phase II testing of the exposed soils adjacent to the AST identified petroleum hydrocarbons at concentrations up to 382 parts per million (ppm). Further evaluation of the tank was not deemed necessary since the detected petroleum hydrocarbon concentrations are below the DEQ Level 2 Soil Matrix Cleanup Standard of 500 ppm (OAR 340-122-0335).

- 2) Underground Storage Tank An UST was suspected to be present beneath a concrete slab within the subgrade area to the south of the Safeway store near the Exchange Street sidewalk (Appendix A, Photograph 2). A geophysical survey conducted as part of the Phase II ESA confirmed the presence of an UST beneath the concrete slab. At the time of the Phase II ESA, the use of the UST was unknown.

¹ Hahn and Associates, Inc. (2003a). *A Phase I Environmental Site Assessment, Approximate 1.48-Acre Safeway/America Legion Property, 1153 Duane Street/1132 Exchange Street, Astoria, Oregon* (HAI Project No. 6039). January 17, 2003.

² Hahn and Associates, Inc. (2003b). *Phase II Environmental Site Assessment Report, 1.48-Acre Safeway/America Legion Property, 1153 Duane Street and 1132 Exchange Street, Astoria, Oregon* (HAI Project No. 6081). April 14, 2003.

Subsequent evidence gathered during decommissioning of this 675-gallon tank indicates the tank was used to store heating oil.

Phase II soil testing adjacent and below the north end of the heating oil UST did not identify petroleum impacts beneath the tank. However, sampling beneath the south end of the tank was not possible due to refusal in hard material.

5.0 FIELD ACTIVITIES

The tank decommissioning activities were completed in October 2003 by Stayton Environmental Inc. (Stayton) of Portland, Oregon, with oversight and documentation by HAI. Due difficult access to the subgrade area of the site, it was decided to decommission both tanks in-place. Since both tanks are located within the subgrade area, which has difficult access and is considered a potential confined space, all work was conducted by manual methods.

HAI acted as the DEQ licensed Heating Oil Tank Service Provider (No. 16487) for the decommissioning of the heating oil UST.

5.1.1 AST Decommissioning

On October 30, 2003, Stayton began decommissioning of the 500-gallon AST by demolishing a portion of the concrete box that encased the tank. Two pipes exiting the top of the tank were removed. No obvious vent pipe was observed. Once access to the tank was gained, it was determined that it contained a few inches of rusty water. This water was pumped into a 55-gallon drum for later transport to a disposal facility. The entire ends of the tank were removed to render the tank unusable (Appendix A, Photograph 3).

An inspection of the inside of the tank did not reveal any evidence of a petroleum residue or odor. Thus, it was not clear the tank had been used for storage of heating oil or other petroleum product. It was speculated by Stayton that the tank may have been used to store water for a water-based hydraulic lift system. Since soil samples had been previously collected at the tank location, no additional sampling was conducted at this time.

The tank was left in-place, and can be physically removed at the time the overhead structures are demolished and access to the tank is possible.

5.1.2 Heating Oil Tank Decommissioning

Decommissioning On October 30, 2003, Stayton began decommissioning of the 675-gallon heating oil UST by demolishing a portion of the concrete hold-down pad over the tank. The top of the tank was present immediately below the concrete pad. Once access to the tank was gained, it was found the tank contained approximately 75 gallons of heating oil. The product was pumped into 55-gallon drums for later transport to a disposal facility. A hole was cut into the top of the tank to access the tank. The tank was scraped and wiped clean with sorbent pads and triple-rinsed with water. The rinse water was collected into a 55-gallon drum for later transport to a disposal facility.

Liquid Disposal The AST water, heating oil product, and rinse water (120 gallons total) was delivered to Thermo Fluids Inc., Portland, Oregon, for treatment and disposal (Appendix B).

Soil Sampling After cleaning of the tank, a hole was cut through the bottom of each end of the tank for the collection of soil samples. The base of the tank was at a depth of 4 feet below basement level (bbl), or 13.5 feet below street level. Soil samples were collected from approximately 0 to 1.0 feet below each end of the tank (4 to 5 feet bbl) within wet medium sandy soil. The sample collected from the south end of the tank exhibited a sheen and had an odor. Because of the potential for a release at the south end of the tank, it was decided to attempt collection of a deeper sample from this end of the tank. Thus, on October 31, 2003, a second sample was collected using a hand auger from the south end of the tank at a depth of 1 to 2 feet below the base of the tank (5 to 6 feet bbl).

The soil samples were shipped with chain-of-custody documentation in sealed and chilled containers to Specialty Analytical, Inc. located in Portland, Oregon. The samples were analyzed for diesel- and oil-range total petroleum hydrocarbons (TPH) by Northwest Method TPH-Dx. The results of the soil analytical testing are summarized on Table 1, and discussed in Section 6.2. The laboratory reports and chain-of-custody documentation are included in Appendix C.

Release Report Based on receipt of the analytical testing results, which confirmed a release had occurred from the heating oil tank, a release was reported to the DEQ on November 11, 2003, via the On-Line Tank Data Submittal System (Appendix D). The tank was assigned Leaking UST

Incident Log No. 04-03-2314 by the DEQ. On November 18, 2003, the *Initial Heating Oil Cleanup Report Form* was submitted to DEQ (Appendix D).

Backfilling The tank was backfilled with the concrete rubble generated from demolition of the AST concrete box and the UST concrete hold-down pad. The tank can be physically removed at the time the overhead structures are demolished and access to the tank is possible.

6.0 RESULTS AND DISCUSSION

6.1 Above-Ground Storage Tank

The subgrade AST has been rendered unusable as a tank, and can be physically removed at the time the overhead structures are demolished and access to the tank is possible.

No petroleum residue or odors were noted inside the tank or piping when decommissioning this AST. Thus, it does not appear the tank was used for petroleum storage. It is speculated the tank may have been used to store water for a water-based hydraulic lift system.

Sampling of the exposed soils immediately adjacent to the ends of the AST was conducted previously as part of a Phase II ESA in February 2003. Petroleum hydrocarbons were detected in the samples from the east and west ends (1.0 to 1.5 feet bbl) at total concentrations of 382 and 25 ppm, respectively (Table 1), which are below the DEQ Level 2 Soil Matrix Cleanup Standard of 500 ppm. Excerpts from laboratory reports for the February 2003 investigation showing the results of this testing are included in Appendix C. Phase II ESA testing of the shallow soils within other areas of the Safeway open subgrade detected widespread petroleum contamination. It is suspected the petroleum hydrocarbons detected at the AST location are related to the general contamination of the subgrade soils and not to the AST itself. Further evaluation of the soils in this area in relation to the AST does not appear warranted.

6.2 Heating Oil Tank

The subgrade heating oil UST has been decommissioned in-place, and can be physically removed at the time the overhead structures are demolished and access to the tank is possible.

Soil Testing Results Testing of soil samples collected from the north end of the UST did not detect petroleum hydrocarbons, including sample 6167-031030-072 collected through the bottom of the tank at a depth of 4 to 5 feet bbl, and a sample collected from boring B-4 (February 2003) just off the north end of the tank from a depth of 0.5 to 1.0 feet bbl (Table 1, Figure 3).

Testing of soil samples (-073 and -074) collected through the bottom of the south end of the UST detected diesel- and oil-range petroleum hydrocarbons at total concentrations of 647 ppm (4.0 to 5.0 feet bbl) and 181 ppm (5.0 to 6.0 feet bbl), indicating a release has occurred from the tank.

Groundwater Occurrence Previous Phase II investigation at the property indicates uppermost groundwater typically occurs at depths of 12 to 14 feet below street level, or 2.5 to 4.5 feet bbl. Thus, the base of the heating oil UST and the detected petroleum contamination are present within the range of typical water table fluctuation beneath the site. Based on topography and local hydrogeologic features, it is inferred that uppermost net groundwater flow direction is generally to the north towards the Columbia River.

Estimated Extent and Volume of Soil Contamination Given the inferred groundwater flow direction to the north, the lateral extent of soil contamination can be conservatively estimated to extend no more than 6 feet from the south end of the tank based on the lack of detectable petroleum hydrocarbons at the north end of the tank. Further, the decline in petroleum hydrocarbons with depth at the south end of the tank indicates the vertical extent of soil contamination is adequately defined. Based on the preceding, the maximum estimated volume of soil containing petroleum hydrocarbons greater than 500 ppm is 5 cubic yards, and greater than 100 ppm is 25 cubic yards.

Groundwater Testing During the Phase II ESA in February 2003, a groundwater sample was collected from boring B-4. This boring was installed with a post-hole digger. Because of difficult access to the subgrade area, as well as its potential confined space conditions, use of a shovel or post-hole digger were the only means available to collect subsurface samples from the open subgrade areas. Groundwater was encountered at a depth of 2.5 feet bbl at boring B-4.

The groundwater sample from B-4 was analyzed for volatile organic compounds (VOCs) by EPA Method 8260. Excerpts from laboratory reports for the February 2003 investigation showing the results of this testing are

included in Appendix C. Halogenated VOCs (chlorinated solvents) were detected in the sample, which are unrelated to the heating oil tank, and are discussed in detail in a separate report³. Contaminants of concern with respect to heating oil are benzene, toluene, ethylbenzene, and xylene (BTEX) compounds, and polynuclear aromatic hydrocarbons (PAHs). BTEX compounds were not detected in the groundwater sample from boring B-4.

Although collection of groundwater samples for PAH testing was contemplated during the tank decommissioning, it was ruled out because of concern regarding collection of representative samples. Unlike VOCs, testing for PAHs in groundwater is sensitive to the amount of turbidity or suspended solids in the sample, often giving false positive results for turbid samples. Since collection of representative, low-turbidity, samples is not possible through the bottom of a tank or from a hole installed by a post-hole digger, it was decided to delay the collection of groundwater samples for PAH analysis until the time overhead structures are demolished and access to the tank area is possible with push probe or excavating equipment.

Closure Approach and Data Gaps Since groundwater is present at the depth of soil impact and the decommissioned heating oil UST, regulatory closure of this tank using DEQ Soil Matrix rules or the *Generic Remedy for Cleanup of Petroleum Contaminated Soil from Releases from Residential Underground Heating Oil Tanks* would not appear applicable. Accordingly, regulatory closure is most likely appropriate through the *Generic Remedy for Simple Risk-Based Cleanups*, which is outlined in the DEQ guidance document *Risk-Based Decision Making (RBDM) for the Remediation of Petroleum-Contaminated Sites* dated September 22, 2003.

The *Generic Remedy for Simple Risk-Based Cleanups* requires that soil and groundwater samples from heating oil release sites be tested for TPH-Dx, BTEX compounds, and PAHs. In order to apply this generic remedy to the site, additional sampling would be necessary, including testing of a worst-case soil sample for BTEX and PAH compounds, and testing of a representative groundwater sample for TPH-Dx and PAHs. These data gaps can be addressed at the time access to the tank area is possible with push probe or excavating equipment.

³ Hahn and Associates, Inc. (2003c). *Subsurface Investigation Report, Safeway Property, 1153 Duane Street, Astoria, Oregon* (HAI Project No. 6167). December 16, 2003.

Future Actions Although the heating oil tank has been appropriately decommissioned in-place at the site, certification and regulatory closure of the cleanup for this tank is not possible at this time. Additional testing of soil and groundwater is needed to complete a risk-based cleanup for the site. Because of access and confined space issues, it is recommended this testing be conducted at the time the overhead structures are demolished and access to the tank is possible with push probe or excavating equipment. Given our experience at other heating oil tank release sites with similar levels of soil contamination at the water table, there is no significant risk in delaying the closure of this site until a time when access is available. Finally, it is recommended that the decommissioned UST be removed at the time the overhead structures are demolished.

7.0 LIMITATIONS AND SIGNATURES

The information presented in this report was collected, analyzed, and interpreted following the standards of care, skill, and diligence ordinarily provided by a professional in the performance of similar services as of the time the services were performed. This report and the conclusions and/or recommendations contained in it are based solely upon research and/or observations, and physical sampling and analytical activities that were conducted.

The information presented in this report is based only upon activities witnessed by HAI or its contractors, and/or upon information provided to HAI by the Client and/or its contractors. The analytical data presented in this report document only the concentrations of the target analytes in the particular sample, and not the property as a whole.

Unless otherwise specified in writing, this report has been prepared solely for the use by the Client and for use only in connection with the evaluation of the subject property. Any other use by the Client or any use by any other person shall be at the user's sole risk, and HAI shall have neither liability nor responsibility with respect to such use.

Hahn and Associates, Inc.

Prepared by:



Roger E. Brown, R.G.

Principal

Date

12/17/03

8.0 GLOSSARY OF ABBREVIATIONS

| | |
|------|--|
| AST | above-ground storage tank |
| bbl | below basement level |
| BTEX | benzene, toluene, ethylbenzene, and xylene |
| EPA | U.S. Environmental Protection Agency |
| ESA | Environmental Site Assessment |
| HAI | Hahn and Associates, Inc. |
| NW | Northwest |
| OAR | Oregon Administrative Rules |
| DEQ | Oregon Department of Environmental Quality |
| PAHs | polynuclear aromatic hydrocarbons |
| ppm | parts per million |
| TPH | total petroleum hydrocarbons |
| UST | underground storage tank |
| VOCs | volatile organic compounds |

TABLE 1 – Summary of Soil Testing Results

| Tank | Sample Location | Sample Number | Sample Date | Sample Depth (feet bbl) | Laboratory Analytical Testing Results in mg/kg (ppm) |
|-----------------------------------|-----------------|-----------------|-------------|-------------------------|--|
| | | | | | |
| Reference Levels ¹ ==> | | | | | |
| 500-Gallon AST | E End | 6081-030220-007 | 20-Feb-03 | 1.0 - 1.5 | Diesel, Oil 81.9 300. 382. |
| | W End | 6081-030220-008 | 20-Feb-03 | 1.0 - 1.5 | Diesel, Oil 24.5 59.6 U 25. |
| 675-Gallon Heating Oil UST | B-4 | 6081-030220-009 | 20-Feb-03 | 0.5 - 1.0 | ND |
| | N End | 6167-031030-072 | 30-Oct-03 | 4.0 - 5.0 | 20.2 U 67.2 U ND |
| | S End | 6167-031030-073 | 30-Oct-03 | 4.0 - 5.0 | 350. 297. 647. |
| | | 6167-031031-074 | 31-Oct-03 | 5.0 - 6.0 | 96.3 84.6 181. |

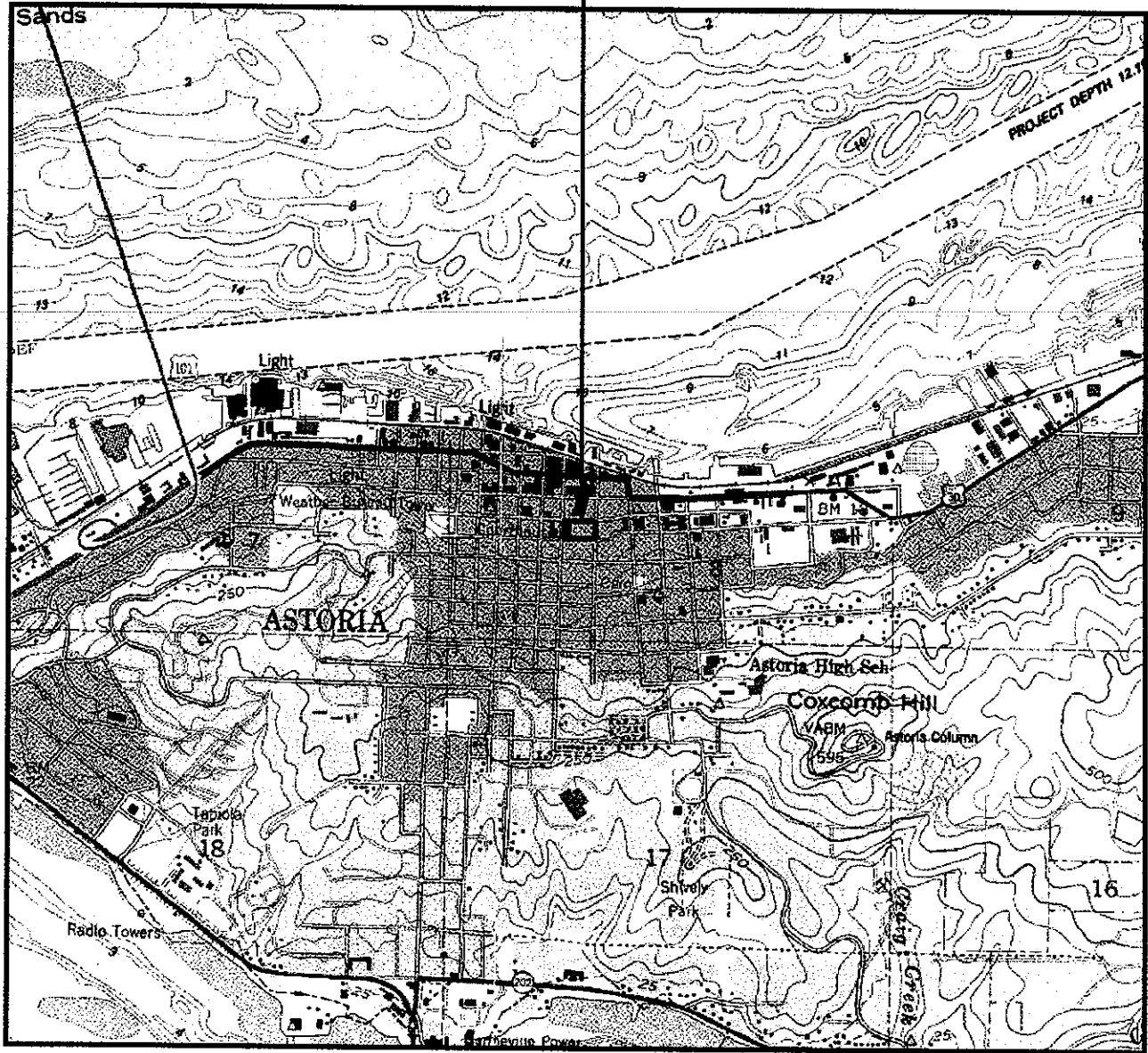
Notes:

bbl = below basement level (9.5 feet below street level)
 DEQ = Oregon Department of Environmental Quality
 HCID = hydrocarbon identification
 mg/kg = milligrams/kilogram
 ND = not detected

NW = Northwest Method
 ppm = parts per million
 TPH = total petroleum hydrocarbons
 U = not detected above concentration indicated

1 = DEQ Level 2 Soil Matrix Cleanup Standard (OAR 340-122-0335)

**Subject
Property**



Note: Base Map from the Astoria (1984), Oregon/Washington
USGS 7.5-Minute Quadrangle
Contour Interval: 50 Feet



FIGURE 1 Location Map

Tank Decommissioning Report
1153 Duane Street
Astoria, Oregon

Duane Street

11th Street

12th Street

Sidewalk

Exchange Street



Access to Subgrade

Safeway Store

American Legion




American Legion Heating Oil UST

675-Gallon Decommissioned Heating Oil UST

500-Gallon Decommissioned AST

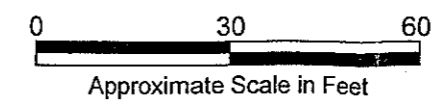
Basement

Basement

- LEGEND**
-  Site Boundary
 -  Existing Structure
 -  Area with Basement Level (approximately 9.5 feet below street level)

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717



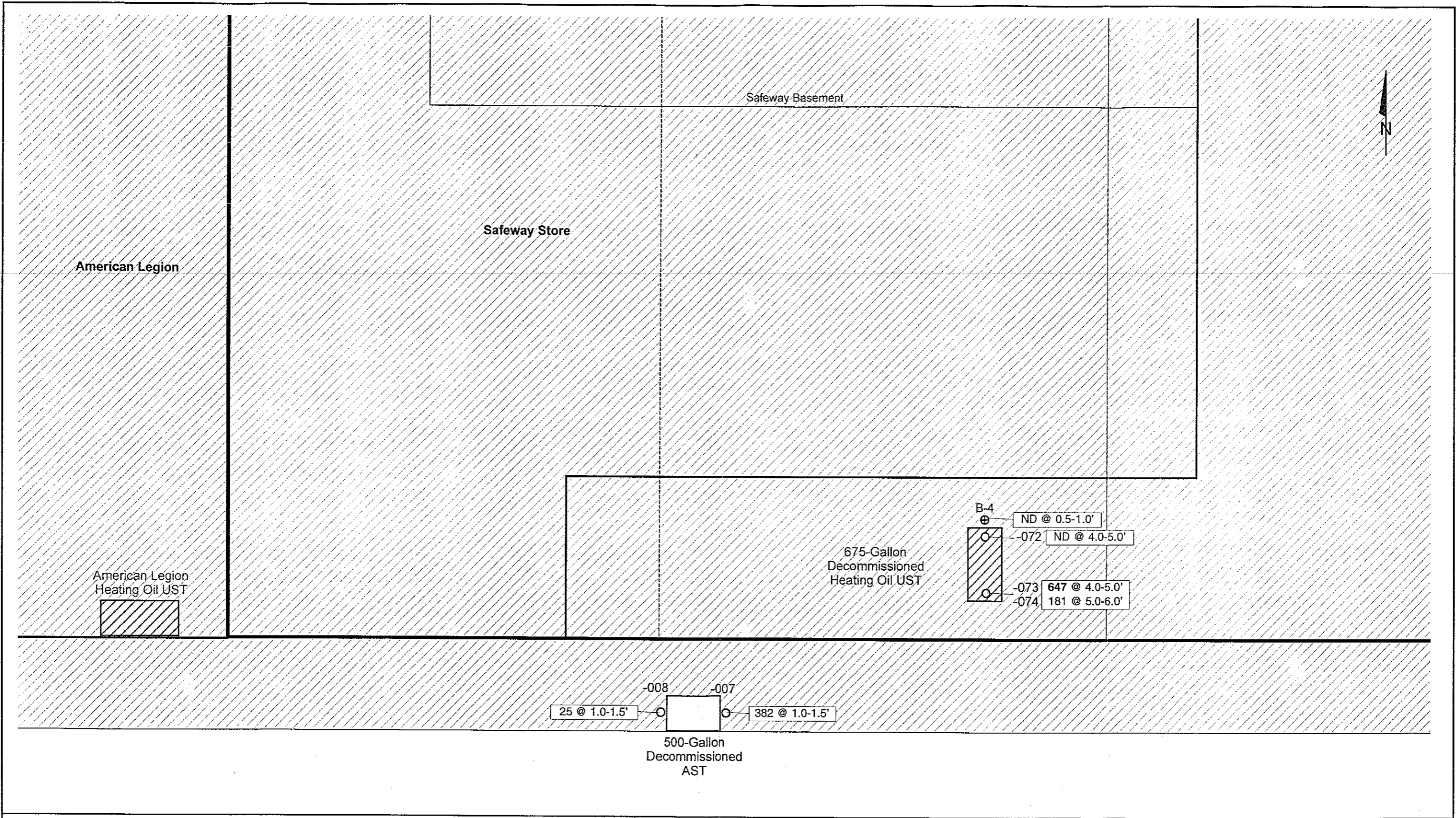
1 inch = 30 feet

**FIGURE 2
Site Map**

Tank Decommissioning Report
1153 Duane Street
Astoria, Oregon

Project No. 6167 December 2003

File: 6167-02 Site Map HOT



File: 6167-03 Sample Loc Map HOT

LEGEND

- Site Boundary
- Existing Structure
- ▨ Area with Basement Level

- ⊕ Hand Boring
- Soil Sample Location
- 52@2 Diesel+Oil Petroleum Hydrocarbons (NW TPH-Dx) in parts per million (ppm) at Depth in feet below basement level (9.5 feet below street level)
- ND Not Detected

Hahn AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
 434 NW 6th AVENUE, SUITE 203
 PORTLAND, OREGON 97209
 503-796-0717

0 10 20
 Approximate Scale in Feet

1 inch = 10 feet

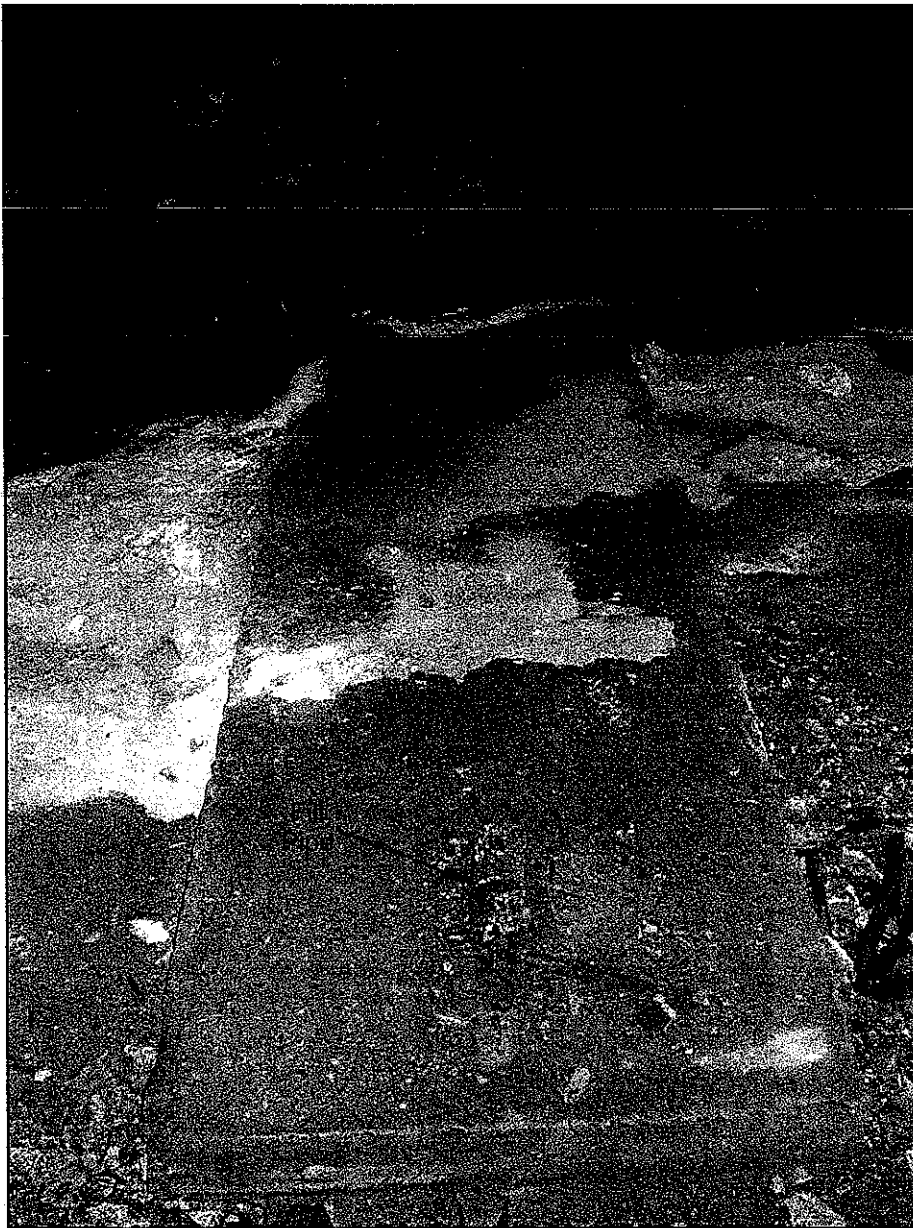
Project No. 6167 December 2003

FIGURE 3
Sample Location Map

Tank Decommissioning Report
 1153 Duane Street
 Astoria, Oregon

APPENDIX A

Photographs



Photograph No. 1

Date Taken: January 3, 2003

Direction Facing: North

Comments: 675-gallon heating oil tank area prior to decommissioning, showing the concrete hold-down pad over the top of the tank.

HAHN AND ASSOCIATES, INC.

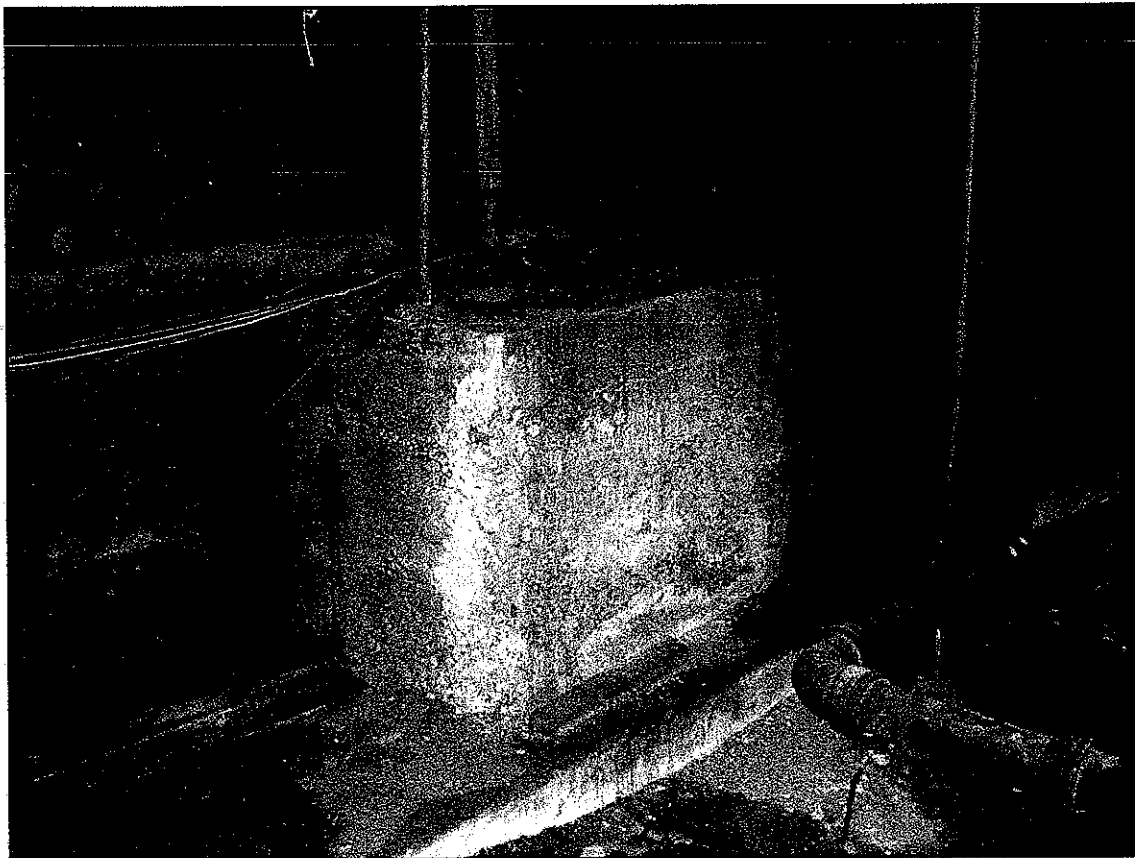
ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Site Photographs

Tank Decommissioning Report
1153 Duane Street
Astoria, Oregon

Project No. 6167

December 2003



Photograph No. 2

Date Taken: January 3, 2003

Direction Facing: Southwest

Comments: Approximate 500-gallon above-ground storage tank (AST) enclosed in concrete box prior to decommissioning.

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Site Photographs

Tank Decommissioning Report
1153 Duane Street
Astoria, Oregon

Project No. 6167

December 2003



Photograph No. 3

Date Taken: October 31, 2003

Direction Facing: Southwest

Comments: Approximate 500-gallon above-ground storage tank (AST) after decommissioning. Each end of the AST was entirely cut out and removed.

HAHN AND ASSOCIATES, INC.

ENVIRONMENTAL CONSULTANTS
434 NW 6th AVENUE, SUITE 203
PORTLAND, OREGON 97209
503-796-0717

Site Photographs

Tank Decommissioning Report
1153 Duane Street
Astoria, Oregon

Project No. 6167

December 2003

APPENDIX B

Tank Liquids Disposal Documentation



INVOICE
CUSTOMER PICKUP TICKET
ACKNOWLEDGEMENT/RECEIPT

517933

REMIT TO:
 THERMO FLUIDS INC.
 PNC BANK
 P.O. BOX 31001-0723
 PASADENA, CALIFORNIA 91110-0723
 TERMS: NET 10 DAYS

Fed. I.D. 59-3210374

CUST# 632703 MANIFEST# _____ EPA# (if Applicable) _____
 GENERATOR/CUSTOMER NAME Safeway P.O.# _____
 ADDRESS 1132 Exchange St TELEPHONE# _____
 CITY Astoria STATE OR ZIP _____ METHOD OF PAYMENT _____
 BILLING ADDRESS (IF DIFFERENT) Station Env, 4614 NE Royal Court, Portland, OR 97213

| MATERIALS | INVENTORY/ TANK SIZE | QUANTITY P/U DEL | UNIT | @ | TOTAL |
|---|-------------------------|---------------------|--------|---------------|-------|
| USED OIL | | | | | |
| OFF SPECIFICATION USED OIL | | | | | |
| GAS / DIESEL (Circle one) UNUSED FUEL | | | | | |
| OIL WATER MIXTURE | | | Coallo | 0.25 | |
| FIELD SCREEN HALOGEN TEST (Type) | | | | | |
| NON RCRA WASTE ANTIFREEZE *(See Below) | | | | | |
| ANTIFREEZE PREMIX (Circle one) CONCENTRATED/DEX COOL | | | | | |
| FILTER DRUMS | | | | | |
| SPECIALTY FILTERS | | | | | |
| SPIN ONS | | | | | |
| SLUDGE/ABSORB/DIRT (Circle one) | | | | | |
| OIL WATER SEPARATOR/ SUMP (Circle one) | | | | | |
| CATCH BASIN | | | | | |
| SERVICE FEE | | | | | |
| OTHER | | | | | |
| OTHER | | | | | |
| NEXT PICKUP DATE | | | | TOTALS | |

*SHIPPING NAME: RQ, ENVIRONMENTALLY HAZARDOUS SUBSTANCES, LIQUID, N.O.S. (Ethylene Glycol), 9,UN3082, PGIII
 (If vehicle meets RQ 5000 LBS or greater for Ethylene Glycol)

HALOGEN TESTED: _____ YES _____ NO _____ HALOGEN TEST RESULTS _____ PPM _____

Generator's description of waste and source: (attach analytical data, MSDS, etc. to back) _____

Signed Below, subject to terms and conditions as specified on reverse side of terms form.

AUTHORIZED CUSTOMER'S SIGNATURE _____ CUSTOMER'S NAME PRINTED _____

DRIVER'S SIGNATURE _____ TRUCK# _____ DATE _____

RECEIVING FACILITY SIGNATURE _____ RECEIVING FACILITY NAME PRINTED _____

RECEIVING FACILITY CODE: 630 (SEE REVERSE)

LEGEND OF MEASURE: DRM (DRUMS), GAL (GALLONS), LBS (POUNDS), OP (OVERPACS), TN (TONS), YD (YARDS)

Shipper's No. 03028

Carrier's No. _____

STAYTON ENVIRONMENTAL INC.
 (NAME OF CARRIER)

SCAC _____

Date 10-30-03

TO: Consignee THEAMO FLUIDS
 Street 6400 SE 101ST AVE
 Destination PORTLAND, OR Zip _____
 Route: _____

FROM: Shipper SAFEWAY
 Street 1132 EXCHANGE ST.
 Origin ASTORIA, OR Zip _____
 Vehicle Number _____ U.S. DOT Hazmat Reg. No. _____

| No. Shipping Units | HM | Kind of Packages, Description of Articles (IF HAZARDOUS MATERIALS - PROPER SHIPPING NAME) | HAZARD CLASS | I.D. Number | PACKING GROUP | WEIGHT (subject to correction) | RATE | LABELS REQUIRED (for exemption) |
|--------------------|----|---|--------------|-------------|---------------|--------------------------------|------|---------------------------------|
| 3 | | 55gal Drums HEATING OIL / WATER | MNL. | | | 1200 lbs | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |
| | | | | | | | | |

Remit C.O.D. to:
 Address: _____
 City: _____ State: _____ Zip: _____

C. O. D. FEE:
 Prepaid Collect \$ _____
COD Amt: \$

NOTE: Where the rate is dependent on value, shippers are required to state specifically in writing the agreed or declared value of the property. The agreed or declared value of the property is hereby specifically stated by the shipper to be not exceeding \$ _____ Per _____

Freight Charges
 PREPAID COLLECT

RECEIVED, subject to the classifications and lawfully filed tariffs in effect on the date of issue of this Bill of Lading, the property described above in apparent good order, except as noted (contents and condition of contents of packages unknown), marked, consigned, and destined as indicated above which said carrier (the word carrier being understood throughout this contract as meaning any person or corporation in possession of the property under the contract) agrees to carry to its usual place of delivery at said destination, if on its route, otherwise to deliver to another carrier on the route to said destination. It is mutually agreed as to each carrier at all or any of, said property over all or any portion of said route to destination and as to each party at any time interested in all or any said property, that every service to be performed hereunder shall be subject to all the bill of lading terms and conditions in the governing classification on the date of shipment. Shipper hereby certifies that he is familiar with all the bill of lading terms and conditions in the governing classification and the said terms and conditions are hereby agreed to by the shipper and accepted for himself and his assigns.

This is to certify that the aforementioned materials are properly classified, described, packaged, marked and labeled and are in proper condition for transportation according to the applicable regulations of the Department of Transportation. **PLACARDS REQUIRED** **PLACARDS SUPPLIED** YES NO - FURNISHED BY CARRIER DRIVER'S SIGNATURE: _____

SPECIAL INSTRUCTIONS: _____
 SHIPPER: SAFEWAY
 PER: MAT CONSULTING / GILL BETTS
 DATE: 10-30-03

CARRIER: STAYTON ENVIRONMENTAL, INC
 PER: WES BEVANS
 DATE: 10-30-03

EMERGENCY RESPONSE
 TELEPHONE NUMBER: () _____

Monitored at all times the Hazardous Material is in transportation including storage incidental to transportation (172.604).

APPENDIX C

Laboratory Analytical Reports and Chain-of-Custody Documentation

HAHN AND ASSOCIATES, INC.
Environmental Management

434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory Specialty Analytical

503-612-9007

Lab Project No. _____

CHAIN OF CUSTODY

Chain of Custody No. 1 of 1

Project Manager Dennis Terzian
Project No. 6167
Project Name Astoria - UST
Collected by Jill Betts

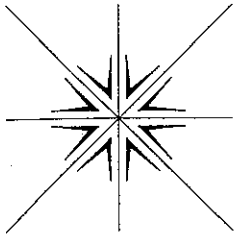
Liquid with Sediment Sample
Test Filtrate _____ Test Sediment _____ Test Both _____
Multi-Phase Sample
Test One (which) _____ Test Separately _____ Shake _____

Samples Received at 4C (Y or N) _____
Appropriate Containers Used (Y or N) _____
Provide Verbal Results (Y or N) _____
Provide Preliminary Fax Results _____

Sample Number Prefix: 6167-031030 -

| Lab ID | Sample # | Date | Time | Sample Description | Matrix | | | Number of Containers | Analyses to be Performed | | | | | | | | | | RUSH | Remarks | | | | |
|--------|------------|-----------------|-------------|--------------------|----------|-------|-------|----------------------|--------------------------|---|---|---|---|---|---|---|---|----|------|---------|----|----|--|-----------------------------|
| | | | | | Soil | Water | Other | | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 | 10 | | | 11 | 12 | | |
| | <u>012</u> | <u>10/30/03</u> | <u>4:05</u> | <u>UST N</u> | <u>X</u> | | | <u>2</u> | | | | | | | | | | | | | | | | |
| | <u>013</u> | <u>↓</u> | <u>4:30</u> | <u>UST S</u> | <u>X</u> | | | <u>2</u> | | | | | | | | | | | | | | | | <u>Hold.</u> <u>2003</u> |

| | | | | | |
|------------------------------------|---------------------------------|----------------------|---------------------|--------------------------------|-------------------------|
| Relinquished by <u>[Signature]</u> | Company <u>HAHN & ASSOC</u> | Date <u>11/05/03</u> | Time <u>12:15pm</u> | Received by <u>[Signature]</u> | Company <u>Security</u> |
| Relinquished by _____ | Company _____ | Date _____ | Time _____ | Received by _____ | Company _____ |
| Relinquished by _____ | Company _____ | Date _____ | Time _____ | Received by _____ | Company _____ |



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572
1 (877) 612-9007

November 07, 2003

Dennis Terzian
Hahn and Associates, Inc.
434 NW Sixth Avenue
Suite 203
Portland, OR 97209
TEL: (503) 796-0717
FAX (503) 227-2209

RE: Astoria - UST / 6167

Dear Dennis Terzian:

Order No.: 0311014

Specialty Analytical received 2 samples on 11/4/2003 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Ned Engleson
Project Manager

Technical Review

Specialty Analytical

Date: 07-Nov-03

CLIENT: Hahn and Associates, Inc.
Project: Astoria - UST / 6167

Lab Order: 0311014

Lab ID: 0311014-01
Client Sample ID: 6167-031030-072

Collection Date: 10/30/2003 4:05:00 PM
Matrix: SOIL

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|-------------------|--------|--------|------|-----------|----|---------------|
| NWTPH-DX | | | | | | Analyst: btf |
| Diesel | ND | 20.2 | | mg/Kg-dry | 1 | 11/5/2003 |
| Lube Oil | ND | 67.2 | | mg/Kg-dry | 1 | 11/5/2003 |
| Surr: o-Terphenyl | 67.2 | 50-150 | | %REC | 1 | 11/5/2003 |

Lab ID: 0311014-02
Client Sample ID: 6167-031030-073

Collection Date: 10/30/2003 4:30:00 PM
Matrix: SOIL

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|-------------------|--------|--------|------|-----------|----|---------------|
| NWTPH-DX | | | | | | Analyst: btf |
| Diesel | 350 | 21.6 | | mg/Kg-dry | 1 | 11/5/2003 |
| Lube Oil | 297 | 72.2 | | mg/Kg-dry | 1 | 11/5/2003 |
| Surr: o-Terphenyl | 98.1 | 50-150 | | %REC | 1 | 11/5/2003 |

Specialty Analytical

CLIENT: Hahn and Associates, Inc.
 Work Order: 0311014
 Project: Astoria - UST / 6167

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

| | | | | | | | | | | | |
|-------------------|--------|-----------|-----------|-------------|-----------|----------|-----------|----------------|-----------|----------|--------------|
| Sample ID | MBLK | SampType: | MBLK | TestCode: | NWTPHDX_S | Units: | mg/Kg | Prep Date: | 11/4/2003 | Run ID: | GC-M_031105B |
| Client ID: | ZZZZZ | Batch ID: | 9908 | TestNo: | NWTPH-Dx | | | Analysis Date: | 11/5/2003 | SeqNo: | 223233 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Diesel | ND | 15.0 | | | | | | | | | |
| Lube Oil | ND | 50.0 | | | | | | | | | |
| Surf: o-Terphenyl | 25.33 | 1.00 | 33.33 | 0 | 76 | 50 | 150 | 0 | 0 | | |

| | | | | | | | | | | | |
|------------|--------|-----------|-----------|-------------|-----------|----------|-----------|----------------|-----------|----------|--------------|
| Sample ID | LCS | SampType: | LCS | TestCode: | NWTPHDX_S | Units: | mg/Kg | Prep Date: | 11/4/2003 | Run ID: | GC-M_031105B |
| Client ID: | ZZZZZ | Batch ID: | 9908 | TestNo: | NWTPH-Dx | | | Analysis Date: | 11/5/2003 | SeqNo: | 223234 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Diesel | 158.3 | 15.0 | 167.6 | 0 | 94.4 | 76.3 | 122 | 0 | 0 | | |
| Lube Oil | 155.3 | 50.0 | 167.6 | 0 | 92.6 | 69.9 | 127 | 0 | 0 | | |

| | | | | | | | | | | | |
|------------|----------------|-----------|-----------|-------------|-----------|----------|-----------|----------------|-----------|----------|--------------|
| Sample ID | 0311016-01ADUP | SampType: | DUP | TestCode: | NWTPHDX_S | Units: | mg/Kg-dry | Prep Date: | 11/4/2003 | Run ID: | GC-M_031105B |
| Client ID: | ZZZZZ | Batch ID: | 9908 | TestNo: | NWTPH-Dx | | | Analysis Date: | 11/5/2003 | SeqNo: | 223244 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Diesel | 458.2 | 153 | 0 | 0 | 0 | 0 | 0 | 367.2 | 22.0 | 20 | R |
| Lube Oil | 2517 | 509 | 0 | 0 | 0 | 0 | 0 | 1975 | 24.1 | 20 | R |

| | | | | | | | | | | | |
|------------|----------------|-----------|-----------|-------------|-----------|----------|-----------|----------------|-----------|----------|--------------|
| Sample ID | 0311013-01ADUP | SampType: | DUP | TestCode: | NWTPHDX_S | Units: | mg/Kg-dry | Prep Date: | 11/4/2003 | Run ID: | GC-M_031105B |
| Client ID: | ZZZZZ | Batch ID: | 9908 | TestNo: | NWTPH-Dx | | | Analysis Date: | 11/5/2003 | SeqNo: | 223245 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Diesel | ND | 18.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | |
| Lube Oil | ND | 61.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 | |

| | | | | | | | | | | | |
|------------|--------|-----------|-----------|-------------|-----------|----------|-----------|----------------|-----------|----------|--------------|
| Sample ID | CCV | SampType: | CCV | TestCode: | NWTPHDX_S | Units: | mg/Kg | Prep Date: | 11/4/2003 | Run ID: | GC-M_031105B |
| Client ID: | ZZZZZ | Batch ID: | 9908 | TestNo: | NWTPH-Dx | | | Analysis Date: | 11/5/2003 | SeqNo: | 223235 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits
 S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits
 B - Analyte detected in the associated Method Blank
 Page 1 of 2

CLIENT: Hahn and Associates, Inc.
Work Order: 0311014
Project: Astoria - UST / 6167

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

| | | | | | | | | | | | |
|------------|-------|-----------|------|-----------|-----------|--------|-------|----------------|-----------|---------|--------------|
| Sample ID | CCV | SampType: | CCV | TestCode: | NWTPHDX_S | Units: | mg/Kg | Prep Date: | 11/4/2003 | Run ID: | GC-M_031105B |
| Client ID: | ZZZZZ | Batch ID: | 9908 | TestNo: | NWTPH-Dx | | | Analysis Date: | 11/5/2003 | SeqNo: | 223235 |

| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
|----------|--------|------|-----------|-------------|------|----------|-----------|-------------|------|----------|------|
| Diesel | 150.5 | 15.0 | 166.8 | 0 | 90.2 | 85 | 115 | 0 | 0 | 0 | |
| Lube Oil | 162.4 | 50.0 | 169.5 | 0 | 95.8 | 85 | 115 | 0 | 0 | 0 | |

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits Page 2 of 2

KEY TO FLAGS

- A. This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1. This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2. This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against lube oil calibration standards.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- C. The result confirmed by secondary column or GC/MS analysis.
- CN. See case narrative.
- CR. Result for this analyte maybe biased due to interferences. Confirmation by GC/MS or other technique is recommended.
- D. Surrogate was diluted outside reporting range.
- E. Result exceeds the calibration range for the compound. The result should be considered an estimate.
- F. The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- G. Result may be biased high due to biogenic interferences. Silica gel clean-up recommended.
- H. Sample was analyzed outside recommended holding times.
- HT. At clients request, sample was analyzed outside method recommended holding time.
- J. The result for this analyte is between the MDL and the PQL, and should be considered an estimated concentration.
- K. Diesel result is biased high due to amount of oil contained in the sample.
- L. Diesel result is biased high due to amount of gasoline contained in the sample.
- M. Oil result is biased high due to amount of diesel contained in the sample.
- MC. Sample concentration is greater than 4x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MSA. Value determined by Method of Standard Addition.
- N. Sample appears to contain biogenic material biasing quantification.
- O. Laboratory Control Standard (LCS) exceeded laboratory control limits, meets CCV criteria. Data meets EPA requirements.
- P. Detected levels of Methylene Chloride may be due to laboratory contamination, due to previous analysis or background levels.
- Q. Detection limits elevated due to sample matrix.
- R. RPD control limits were exceeded.
- RF. Duplicate failed, due to result being at or near method reporting limit.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- S. Recovery outside control limits.
- *. The result for this parameter was greater than the maximum contaminant level or the TCLP regulatory limit.

HAHN AND ASSOCIATES, INC.
Environmental Management

434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory Specialty Analytical

503-612-9007

Lab Project No.

CHAIN OF CUSTODY

Chain of Custody No. 1591

Project Manager Dennis Terzian
Project No. 6157
Project Name Astoria - UST
Collected by Jill Belts

Liquid with Sediment Sample
Test Filtrate _____ Test Sediment _____ Test Both _____
Multi-Phase Sample
Test One (which) _____ Test Separately _____ Shake _____

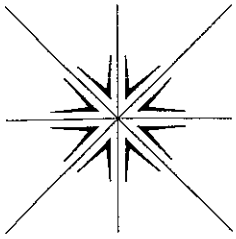
Samples Received at 4C (Y or N) _____
Appropriate Containers Used (Y or N) _____
Provide Verbal Results (Y or N) _____
Provide Preliminary Fax Results _____

Sample Number Prefix: 6157-400031031

| Matrix | | | Number of Containers | Analyses to be Performed | | | | | | | | | | RUSH | Remarks | |
|--------|-------|-------|----------------------|--------------------------|--|--|--|--|--|--|--|--|--|------|---------|--|
| Soil | Water | Other | | | | | | | | | | | | | | |
| | | | 2 | X | | | | | | | | | | | | |

| Lab ID | Sample # | Date | Time | Sample Description | Soil | Water | Other | Number of Containers | | | | | | | | | Remarks |
|--------|---------------------------|-----------------|-------------|--------------------|-------------------------------------|-------|-------|----------------------|----------|--|--|--|--|--|--|--|---------|
| | <u>075</u> <u>0710</u> | <u>10/31/03</u> | <u>7:50</u> | <u>UST 8'-2'</u> | <input checked="" type="checkbox"/> | | | <u>2</u> | <u>X</u> | | | | | | | | |

| | | | | | |
|------------------------------------|---------------------------------|----------------------|---------------------|--------------------------------|--------------------------|
| Relinquished by <u>[Signature]</u> | Company <u>HAHN & ASSOC</u> | Date <u>11/03/03</u> | Time <u>12:15pm</u> | Received by <u>[Signature]</u> | Company <u>Specialty</u> |
| Relinquished by | Company | Date | Time | Received by | Company |
| Relinquished by | Company | Date | Time | Received by | Company |



Specialty Analytical

19761 S.W. 95th Place
Tualatin, OR 97062
(503) 612-9007
Fax (503) 612-8572
1 (877) 612-9007

November 07, 2003

Dennis Terzian
Hahn and Associates, Inc.
434 NW Sixth Avenue
Suite 203
Portland, OR 97209
TEL: (503) 796-0717
FAX (503) 227-2209

RE: Astoria - UST / 6167

Dear Dennis Terzian:

Order No.: 0311015

Specialty Analytical received 1 sample on 11/4/2003 for the analyses presented in the following report.

There were no problems with the analysis and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative, or as qualified with flags. Results apply only to the samples analyzed. Without approval of the laboratory, the reproduction of this report is only permitted in its entirety.

If you have any questions regarding these tests, please feel free to call.

Sincerely,

Ned Engleson
Project Manager

Technical Review

Specialty Analytical

Date: 07-Nov-03

CLIENT: Hahn and Associates, Inc.
Project: Astoria - UST / 6167

Lab Order: 0311015

Lab ID: 0311015-01
Client Sample ID: 6167-031031-074

Collection Date: 10/31/2003 7:55:00 AM
Matrix: SOIL

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|-------------------|--------|--------|------|-----------|----|---------------|
| NWTPH-DX | | | | | | Analyst: btf |
| Diesel | 96.3 | 19.8 | | mg/Kg-dry | 1 | 11/5/2003 |
| Lube Oil | 84.6 | 66.1 | | mg/Kg-dry | 1 | 11/5/2003 |
| Surr: o-Terphenyl | 85.1 | 50-150 | | %REC | 1 | 11/5/2003 |

Specialty Analytical

Date: 07-Nov-03

CLIENT: Hahn and Associates, Inc.
 Work Order: 0311015
 Project: Astoria - UST / 6167

ANALYTICAL QC SUMMARY REPORT

TestCode: NWTPHDX_S

| Sample ID | MBLK | SampType | MBLK | TestCode | NWTPHDX_S | Units | mg/Kg | Prep Date | 11/4/2003 | Run ID | GC-M_031105B |
|-------------------|--------|----------|-----------|-------------|-----------|----------|-----------|---------------|-----------|----------|--------------|
| Client ID | ZZZZZ | Batch ID | 9908 | TestNo | NWTPH-Dx | | | Analysis Date | 11/5/2003 | SeqNo | 223233 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Diesel | ND | 15.0 | | | | | | | | | |
| Lube Oil | ND | 50.0 | | | | | | | | | |
| Surr: o-Terphenyl | 25.33 | 1.00 | 33.33 | 0 | 76 | 50 | 150 | 0 | 0 | 0 | 0 |

| Sample ID | LCS | SampType | LCS | TestCode | NWTPHDX_S | Units | mg/Kg | Prep Date | 11/4/2003 | Run ID | GC-M_031105B |
|-----------|--------|----------|-----------|-------------|-----------|----------|-----------|---------------|-----------|----------|--------------|
| Client ID | ZZZZZ | Batch ID | 9908 | TestNo | NWTPH-Dx | | | Analysis Date | 11/5/2003 | SeqNo | 223234 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Diesel | 158.3 | 15.0 | 167.6 | 0 | 94.4 | 76.3 | 122 | 0 | 0 | 0 | 0 |
| Lube Oil | 155.3 | 50.0 | 167.6 | 0 | 92.6 | 69.9 | 127 | 0 | 0 | 0 | 0 |

| Sample ID | 0311016-01ADUP | SampType | DUP | TestCode | NWTPHDX_S | Units | mg/Kg-dry | Prep Date | 11/4/2003 | Run ID | GC-M_031105B |
|-----------|----------------|----------|-----------|-------------|-----------|----------|-----------|---------------|-----------|----------|--------------|
| Client ID | ZZZZZ | Batch ID | 9908 | TestNo | NWTPH-Dx | | | Analysis Date | 11/5/2003 | SeqNo | 223244 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Diesel | 458.2 | 153 | 0 | 0 | 0 | 0 | 0 | 367.2 | 22.0 | 20 | R |
| Lube Oil | 2517 | 509 | 0 | 0 | 0 | 0 | 0 | 1975 | 24.1 | 20 | R |

| Sample ID | 0311013-01ADUP | SampType | DUP | TestCode | NWTPHDX_S | Units | mg/Kg-dry | Prep Date | 11/4/2003 | Run ID | GC-M_031105B |
|-----------|----------------|----------|-----------|-------------|-----------|----------|-----------|---------------|-----------|----------|--------------|
| Client ID | ZZZZZ | Batch ID | 9908 | TestNo | NWTPH-Dx | | | Analysis Date | 11/5/2003 | SeqNo | 223245 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Diesel | ND | 18.4 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |
| Lube Oil | ND | 61.2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 20 |

| Sample ID | CCV | SampType | CCV | TestCode | NWTPHDX_S | Units | mg/Kg | Prep Date | 11/4/2003 | Run ID | GC-M_031105B |
|-----------|--------|----------|-----------|-------------|-----------|----------|-----------|---------------|-----------|----------|--------------|
| Client ID | ZZZZZ | Batch ID | 9908 | TestNo | NWTPH-Dx | | | Analysis Date | 11/5/2003 | SeqNo | 223235 |
| Analyte | Result | PQL | SPK value | SPK Ref Val | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |
| Diesel | ND | 15.0 | | | | | | | | | |
| Lube Oil | ND | 50.0 | | | | | | | | | |

Qualifiers: ND - Not Detected at the Reporting Limit
 J - Analyte detected below quantitation limits

S - Spike Recovery outside accepted recovery limits
 R - RPD outside accepted recovery limits

B - Analyte detected in the associated Method Blank
 Page 1 of 2

ANALYTICAL QC SUMMARY REPORT

CLIENT: Hahn and Associates, Inc.

Work Order: 0311015

Project: Astoria - UST / 6167

TestCode: NWTPHDX_S

| | | | | | | | | | | | |
|------------|--------|----------------|---------------------|--------------|--------------------------|----------------------|-----------|-------------|------|----------|------|
| Sample ID | CCV | SampType: CCV | TestCode: NWTPHDX_S | Units: mg/Kg | Prep Date: 11/4/2003 | Run ID: GC-M_031105B | | | | | |
| Client ID: | ZZZZZ | Batch ID: 9908 | TestNo: NWTPH-Dx | | Analysis Date: 11/5/2003 | SeqNo: 223235 | | | | | |
| Analyte | Result | PQL | SPK value | SPK RefVal | %REC | LowLimit | HighLimit | RPD Ref Val | %RPD | RPDLimit | Qual |

Diesel
Lube Oil

| | | | | | | |
|-------|-------|---|------|----|-----|---|
| 150.5 | 166.8 | 0 | 90.2 | 85 | 115 | 0 |
| 162.4 | 169.5 | 0 | 95.8 | 85 | 115 | 0 |

Qualifiers: ND - Not Detected at the Reporting Limit S - Spike Recovery outside accepted recovery limits B - Analyte detected in the associated Method Blank
 J - Analyte detected below quantitation limits R - RPD outside accepted recovery limits Page 2 of 2

KEY TO FLAGS

- A. This sample contains a Gasoline Range Organic not identified as a specific hydrocarbon product. The result was quantified against gasoline calibration standards.
- A1. This sample contains a Diesel Range Organic not identified as a specific hydrocarbon product. The result was quantified against diesel calibration standards.
- A2. This sample contains a Lube Oil Range Organic not identified as a specific hydrocarbon product. The result was quantified against lube oil calibration standards.
- A3. Results determined to be non detect based on hydrocarbon pattern recognition. The product was carry-over from another hydrocarbon type.
- B. The blank exhibited a positive result greater than the reporting limit for this compound.
- C. The result confirmed by secondary column or GC/MS analysis.
- CN. See case narrative.
- CR. Result for this analyte maybe biased due to interferences. Confirmation by GC/MS or other technique is recommended.
- D. Surrogate was diluted outside reporting range.
- E. Result exceeds the calibration range for the compound. The result should be considered an estimate.
- F. The positive result for this hydrocarbon is due to single component contamination. The product does not match any hydrocarbon in the fuels library.
- G. Result may be biased high due to biogenic interferences. Silica gel clean-up recommended.
- H. Sample was analyzed outside recommended holding times.
- HT. At clients request, sample was analyzed outside method recommended holding time.
- J. The result for this analyte is between the MDL and the PQL, and should be considered an estimated concentration.
- K. Diesel result is biased high due to amount of oil contained in the sample.
- L. Diesel result is biased high due to amount of gasoline contained in the sample.
- M. Oil result is biased high due to amount of diesel contained in the sample.
- MC. Sample concentration is greater than 4x the spiked value; the spiked value is considered insignificant.
- MI. Outside control limits due to Matrix Interference.
- MSA. Value determined by Method of Standard Addition.
- N. Sample appears to contain biogenic material biasing quantification.
- O. Laboratory Control Standard (LCS) exceeded laboratory control limits, meets CCV criteria. Data meets EPA requirements.
- P. Detected levels of Methylene Chloride may be due to laboratory contamination, due to previous analysis or background levels.
- Q. Detection limits elevated due to sample matrix.
- R. RPD control limits were exceeded.
- RF. Duplicate failed, due to result being at or near method reporting limit.
- RP. Matrix spike values exceed established QC limits, post digestion spike is in control.
- S. Recovery outside control limits.
- *. The result for this parameter was greater than the maximum contaminant level or the TCLP regulatory limit.

HAHN AND ASSOCIATES, INC.

Environmental Management

434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory SPECIALTY ANALYTICAL

CHAIN OF CUSTODY

Lab Project No. 0302101

Chain of Custody No. 1

Project Manager DENNIS TEZZIAJ
Project No. 6081
Project Name ASTORIA SAFETY
Collected by Dennis M. Terzian

Liquid with Sediment Sample
Test Filtrate _____ Test Sediment _____ Test Both _____
Multi-Phase Sample
Test One (which) _____ Test Separately _____ Shake _____

Samples Received at 4C (Y or N) _____
Appropriate Containers Used (Y or N) _____
Provide Verbal Results (Y or N) _____
Provide Preliminary Fax Results _____

Sample Number Prefix:
6081 - 030214 - (001 thru 006)
6081 - 030220 - (007 thru 015)

| Matrix | Analyses to be Performed | | | | | | | | | | RUSH | Remarks | |
|--------|--------------------------|-------|-------|----------------------|--|--|--|--|--|--|------|---------|--|
| | Soil | Water | Other | Number of Containers | | | | | | | | | |
| | | | | | | | | | | | | | |
| | | | | | | | | | | | | | |

| Lab ID | Sample # | Date | Time | Sample Description | Soil | Water | Other | Number of Containers | | | | | | | | | | Remarks |
|--------|----------|---------|------|--------------------|------|-------|-------|----------------------|---|--|--|--|--|--|--|--|--|---------|
| | 001 | 2/19/03 | 1245 | B-1 (3') | X | | | 2 | X | | | | | | | | | |
| | 002 | | 1535 | B-2 (5.5') | X | | | 2 | X | | | | | | | | | |
| | 003 | | 1340 | " (7.5') | X | | | 2 | | | | | | | | | | |
| | 004 | | 1508 | E-3 (0.5') | X | | | 2 | | | | | | | | | | |
| | 005 | | 1510 | " (2.5') | X | | | 2 | | | | | | | | | | |
| | 006 | | 1520 | " (8.5') | X | | | 2 | | | | | | | | | | |
| | 007 | 2/20/03 | 950 | E side AST (1') | X | | | 1 | X | | | | | | | | | |
| | 008 | | 955 | W side AST (1') | X | | | 1 | X | | | | | | | | | |
| | 009 | | 1000 | B-4 (0.5') | X | | | 1 | X | | | | | | | | | |
| | 010 | | 1035 | B-5 (0.5') | X | | | 1 | X | | | | | | | | | |
| | 011 | | 1040 | B-6 (1.5') | X | | | 1 | X | | | | | | | | | |
| | 012 | | 1045 | B-6 (3') | X | | | 1 | X | | | | | | | | | |
| | 013 | | 1130 | NE corner (1') | X | | | 1 | X | | | | | | | | | |
| | 014 | | 1150 | B-7 (1') | X | | | 1 | X | | | | | | | | | |
| | 015 | | 1155 | " (2.5') | X | | | 1 | | | | | | | | | | |

| | | | | | |
|------------------------------------|-------------------------------------|---------------------|------------------|--------------------------------|--------------------------------|
| Relinquished by <u>[Signature]</u> | Company <u>HAHN & ASSOC</u> | Date <u>2/21/03</u> | Time <u>1:30</u> | Received by <u>[Signature]</u> | Company <u>Spec Analytical</u> |
| Relinquished by <u>[Signature]</u> | Company <u>Specialty Analytical</u> | Date <u>2/21/03</u> | Time <u>8:30</u> | Received by <u>[Signature]</u> | Company <u>SA</u> |

Specialty Analytical

Date: 05-Mar-03

CLIENT: Hahn and Associates, Inc.
Project: Astoria Safeway

Lab Order: 0302101

Lab ID: 0302101-05 **Collection Date:** 2/19/2003 3:10:00 PM
Client Sample ID: 6081-030219-005 **Matrix:** SOIL

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|----------|--------|-------|------|-------|----|---------------|
|----------|--------|-------|------|-------|----|---------------|

| | | | | | | |
|-------------------------|------|------------|--|--|---|--------------|
| HOLD PER CLIENT REQUEST | | PER CLIENT | | | | Analyst: cld |
| Hold | HOLD | | | | 1 | 2/27/2003 |

Lab ID: 0302101-06 **Collection Date:** 2/19/2003 3:20:00 PM
Client Sample ID: 6081-030219-006 **Matrix:** SOIL

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|----------|--------|-------|------|-------|----|---------------|
|----------|--------|-------|------|-------|----|---------------|

| | | | | | | |
|-------------------------|------|------------|--|--|---|--------------|
| HOLD PER CLIENT REQUEST | | PER CLIENT | | | | Analyst: cld |
| Hold | HOLD | | | | 1 | 2/27/2003 |

Lab ID: 0302101-07 **Collection Date:** 2/20/2003 9:50:00 AM
Client Sample ID: 6081-030220-007 **Matrix:** SOIL

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|----------|--------|-------|------|-------|----|---------------|
|----------|--------|-------|------|-------|----|---------------|

| | | | | | | |
|-------------------|----------|---------------|--|-----------|---|--------------|
| NWTPH-HCID | | NWHCID | | | | Analyst: btf |
| Gasoline | ND | 23.4 | | mg/Kg-dry | 1 | 2/21/2003 |
| Mineral Spirits | ND | 23.4 | | mg/Kg-dry | 1 | 2/21/2003 |
| Kerosene | ND | 58.5 | | mg/Kg-dry | 1 | 2/21/2003 |
| Diesel | Diesel | 58.5 | | mg/Kg-dry | 1 | 2/21/2003 |
| Lube Oil | Lube Oil | 117 | | mg/Kg-dry | 1 | 2/21/2003 |
| Surr: BFB | 65.5 | 50-150 | | %REC | 1 | 2/21/2003 |
| Surr: o-Terphenyl | 97.1 | 50-150 | | %REC | 1 | 2/21/2003 |

| | | | | | | |
|-------------------|------|-----------------|---|-----------|---|--------------|
| NWTPH-DX | | NWTPH-DX | | | | Analyst: btf |
| Diesel | 81.9 | 17.5 | K | mg/Kg-dry | 1 | 3/3/2003 |
| Lube Oil | 300 | 58.5 | | mg/Kg-dry | 1 | 3/3/2003 |
| Surr: o-Terphenyl | 79.8 | 50-150 | | %REC | 1 | 3/3/2003 |

Specialty Analytical

Date: 05-Mar-03

CLIENT: Hahn and Associates, Inc.
Project: Astoria Safeway

Lab Order: 0302101

Lab ID: 0302101-08
Client Sample ID: 6081-030220-008

Collection Date: 2/20/2003 9:55:00 AM
Matrix: SOIL

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|-------------------|----------|-----------------|------|---------------------|----|---------------|
| NWTPH-HCID | | NWHCID | | Analyst: btf | | |
| Gasoline | ND | 23.8 | | mg/Kg-dry | 1 | 2/21/2003 |
| Mineral Spirits | ND | 23.8 | | mg/Kg-dry | 1 | 2/21/2003 |
| Kerosene | ND | 59.6 | | mg/Kg-dry | 1 | 2/21/2003 |
| Diesel | Diesel | 59.6 | | mg/Kg-dry | 1 | 2/21/2003 |
| Lube Oil | Lube Oil | 119 | | mg/Kg-dry | 1 | 2/21/2003 |
| Surr: BFB | 78.8 | 50-150 | | %REC | 1 | 2/21/2003 |
| Surr: o-Terphenyl | 92.7 | 50-150 | | %REC | 1 | 2/21/2003 |
| NWTPH-DX | | NWTPH-DX | | Analyst: btf | | |
| Diesel | 24.5 | 17.9 | | mg/Kg-dry | 1 | 3/3/2003 |
| Lube Oil | ND | 59.6 | | mg/Kg-dry | 1 | 3/3/2003 |
| Surr: o-Terphenyl | 86.7 | 50-150 | | %REC | 1 | 3/3/2003 |

Lab ID: 0302101-09
Client Sample ID: 6081-030220-009

Collection Date: 2/20/2003 10:00:00 AM
Matrix: SOIL

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|-------------------|--------|---------------|------|---------------------|----|---------------|
| NWTPH-HCID | | NWHCID | | Analyst: btf | | |
| Gasoline | ND | 22.5 | | mg/Kg-dry | 1 | 2/21/2003 |
| Mineral Spirits | ND | 22.5 | | mg/Kg-dry | 1 | 2/21/2003 |
| Kerosene | ND | 56.2 | | mg/Kg-dry | 1 | 2/21/2003 |
| Diesel | ND | 56.2 | | mg/Kg-dry | 1 | 2/21/2003 |
| Lube Oil | ND | 112 | | mg/Kg-dry | 1 | 2/21/2003 |
| Surr: BFB | 87.8 | 50-150 | | %REC | 1 | 2/21/2003 |
| Surr: o-Terphenyl | 98.3 | 50-150 | | %REC | 1 | 2/21/2003 |

HAHN AND ASSOCIATES, INC.

Environmental Management
434 NW Sixth Avenue, Suite 203 • Portland OR 97209
(503) 796-0717 • Fax (503) 227-2209

Laboratory SPECIMTS

Lab Project No. 0302100

CHAIN OF CUSTODY

Chain of Custody No. 1

Project Manager DENNIS TERZIAN
Project No. 6081
Project Name ASTORIA SAFEWAYS
Collected by Dennis M. Terzian

Liquid with Sediment Sample
Test Filtrate _____ Test Sediment _____ Test Both _____
Multi-Phase Sample
Test One (which) _____ Test Separately _____ Shake _____

Samples Received at 4C (Y or N) _____
Appropriate Containers Used (Y or N) _____
Provide Verbal Results (Y or N) _____
Provide Preliminary Fax Results _____

Sample Number Prefix:
6081-030210-(100-101)
6081-030220-(102-104)

| Matrix | | | Number of Containers | Analyses to be Performed | | | | | | | | | | RUSH | Remarks |
|--------|-------|-------|----------------------|--------------------------|--|--|--|--|--|--|--|--|--|------|---------|
| Soil | Water | Other | | | | | | | | | | | | | |
| | | | 4 | X | | | | | | | | | | | |
| | | | 4 | X | | | | | | | | | | | |
| | | | 2 | X | | | | | | | | | | | |
| | | | 3 | X | | | | | | | | | | | |
| | | | 1 | X | | | | | | | | | | | |

| Lab ID | Sample # | Date | Time | Sample Description |
|--------|----------|---------|------|--------------------|
| 100 | | 2/19/03 | 1410 | B-2 |
| 101 | | ↓ | 1530 | B-3 |
| 102 | | 2/20/03 | 1050 | B-4 |
| 103 | | ↓ | 1220 | B-5 |
| 104 | | ↓ | 1240 | B-6 |

| | | | | | |
|------------------------------------|---------------------------------|---------------------|------------------|--------------------------------|------------------------------|
| Relinquished by <u>[Signature]</u> | Company <u>HAHN & ASSOC</u> | Date <u>2/21/03</u> | Time <u>1:30</u> | Received by <u>[Signature]</u> | Company <u>Spec Analytic</u> |
| Relinquished by <u>[Signature]</u> | Company <u>Spec Analytic</u> | Date <u>2/21/03</u> | Time <u>2:30</u> | Received by <u>[Signature]</u> | Company <u>SA</u> |

Date: 26-Feb-03

Specialty Analytical

CLIENT: Hahn and Associates, Inc.
 Lab Order: 0302100
 Project: Astoria Safeway
 Lab ID: 0302100-03

Client Sample ID: 6081-030220-102
 Collection Date: 2/20/2003 10:50:00 AM

Matrix: GROUNDWATER

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|---------|------|-------|----|----------------------|
| | | SW8260B | | | | Analyst: skc |
| VOLATILES BY GC/MS | | | | | | |
| 1,1,1,2-Tetrachloroethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,1,1-Trichloroethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,1,2,2-Tetrachloroethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,1,2-Trichloroethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,1-Dichloroethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,1-Dichloroethene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,1-Dichloropropene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,2,3-Trichlorobenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,2,3-Trichloropropane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,2,4-Trichlorobenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,2,4-Trimethylbenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,2-Dibromo-3-chloropropane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,2-Dibromoethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,2-Dichlorobenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,2-Dichloroethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,2-Dichloropropane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,3,5-Trimethylbenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,3-Dichlorobenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,3-Dichloropropane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 1,4-Dichlorobenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 2,2-Dichloropropane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 2-Butanone | ND | 10.0 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 2-Chlorotoluene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 2-Hexanone | ND | 10.0 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 4-Chlorotoluene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 4-Isopropyltoluene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| 4-Methyl-2-pentanone | ND | 20.0 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Acetone | ND | 50.0 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Acrylonitrile | ND | 5.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Benzene | ND | 0.400 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Bromobenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Bromochloromethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Bromodichloromethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Bromoform | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Bromomethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Carbon disulfide | ND | 2.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Carbon tetrachloride | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Chlorobenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Chloroethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Chloroform | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Chloromethane | 3.96 | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |

Specialty Analytical

Date: 26-Feb-03

CLIENT: Hahn and Associates, Inc.
 Lab Order: 0302100
 Project: Astoria Safeway
 Lab ID: 0302100-03

Client Sample ID: 6081-030220-102
 Collection Date: 2/20/2003 10:50:00 AM

Matrix: GROUNDWATER

| Analyses | Result | Limit | Qual | Units | DF | Date Analyzed |
|-----------------------------|--------|----------|------|-------|----|----------------------|
| | | SW8260B | | | | Analyst: skc |
| VOLATILES BY GC/MS | | | | | | |
| cis-1,2-Dichloroethene | 3.10 | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| cis-1,3-Dichloropropene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Dibromochloromethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Dibromomethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Dichlorodifluoromethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Ethylbenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Hexachlorobutadiene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Isopropylbenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| m,p-Xylene | ND | 2.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Methyl tert-butyl ether | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Methylene chloride | ND | 20.0 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| n-Butylbenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| n-Propylbenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Naphthalene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| o-Xylene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| sec-Butylbenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Styrene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| tert-Butylbenzene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Tetrachloroethene | 7.42 | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Toluene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| trans-1,2-Dichloroethene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| trans-1,3-Dichloropropene | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Trichloroethene | 3.29 | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Trichlorofluoromethane | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Vinyl chloride | ND | 1.00 | | µg/L | 1 | 2/24/2003 2:39:00 PM |
| Surr: 1,2-Dichloroethane-d4 | 90.8 | 72.8-113 | | %REC | 1 | 2/24/2003 2:39:00 PM |
| Surr: 4-Bromofluorobenzene | 111 | 83.4-125 | | %REC | 1 | 2/24/2003 2:39:00 PM |
| Surr: Dibromofluoromethane | 107 | 79.4-124 | | %REC | 1 | 2/24/2003 2:39:00 PM |
| Surr: Toluene-d8 | 107 | 88.6-129 | | %REC | 1 | 2/24/2003 2:39:00 PM |

APPENDIX D

DEQ Forms

Subject: OLPRR Incident Report in Accepted Status. Log Number: 04-03-2314
Date: Mon, 3 Nov 2003 13:31:22 -0800
Thread-Topic: OLPRR Incident Report in Accepted Status. Log Number: 04-03-2314
Thread-Index: AcOiUdQEmG0cSf+rQliogGuVHDy0lw==
From: "State of Oregon DEQ" <SQLAdmin@deq.state.or.us>
To: <JBETTS@HAHNASOC.COM>

YOUR ON-LINE TANK DATA SUBMITTAL HAS BEEN REVIEWED AND ACCEPTED BY THE
STATE OF OREGON DEQ.
NEW LUST INCIDENT LOG NUMBER: 04-03-2314

REPORTED BY: COMPANY NAME: HAHN AND ASSOCIATES INC.
PHONE NUMBER:
SITE NAME: SAFEWAY
SITE ADDRESS: 1153 DUANE STREET
SITE COUNTY: CLATSOP
SITE CITY: ASTORIA
SITE ZIP CODE: 97103

DATE RECEIVED: 11/3/2003
RELEASE TYPE: HEATING OIL

| RESPONSIBLE PARTY INFORMATION | INVOICE CONTACT INFORMATION |
|-------------------------------|-----------------------------|
| FIRST NAME: JEFF | FIRST NAME: |
| LAST NAME: PARKER | LAST NAME: |
| ORGANIZATION: CLACKAMAS | ORGANIZATION: SAFEWAY, INC. |
| CITY: CLACKAMAS | CITY: |
| PHONE: 503-657-6367 | PHONE: |
| ADDRESS: PO BOX 523 | ADDRESS: |
| STATE: | STATE: |

OR
ZIP:
97015

ZIP:

DISCOVERY DATE: 10/31/2003 CONFIRMATION: CONTRACTOR
DISCOVERY: DECOMMISSIONING CAUSE: TANKLEAK

MEDIA TYPE CONTAMINANT TYPE
SOIL HEATING OIL

--

This e-mail is for the sole use of the intended recipient(s) and contains information belonging to Hahn and Associates, Inc., which is confidential and/or legally privileged. If you are not the intended recipient, you are hereby notified that any disclosure, copying, distribution or taking of any action in reliance on the contents of this e-mail information is strictly prohibited. If you have received this e-mail in error, please immediately notify the sender by reply e-mail and destroy all copies of the original message. This document (email, text, table, and/or figure) and any attachments are only a copy of a master document. The master hard copy is stored by Hahn and Associates, Inc. and will serve as the official document of record.

Jill S. Betts
Hahn and Associates, Inc. * 434 NW 6th Avenue, Suite 203
Portland, Oregon 97209-3651
Telephone: 503/796-0717 *Facsimile: 503/227-2209
E-mail: jbetts@hahnasoc.com



OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY
Underground Storage Tank Program

HEATING OIL TANK SERVICES
SERVICE PROVIDER REPORT CERTIFICATION
INITIAL HEATING OIL CLEANUP REPORT FORM

July 3, 2001
Form No. HOT-InitCuRep.2.070301

If required by OAR 340-177-0055(5), complete this INITIAL report and submit it to the DEQ NWR office as soon as possible, but at least within 45 days from the date the release from a heating oil tank is confirmed.

Property Owner Name: SAFEWAY, INC. DEQ Cleanup File No.: 04-03-2314

Property Address: 1153 DUANE STREET

City/State/Zip Code: ASTORIA, OREGON 97103

County: CLATSOP

Owner Phone Number: 503-657-6367

Owner Mailing Address (if different): ATTN: JEFF PARKER, SAFEWAY, INC., P.O. BOX 523
CLATSOP, OREGON 97015

10/31/03 Date the release was originally suspected (e.g. water in tank) or confirmed (sight, smell, test).

11/03/03 Date the release was reported to DEQ. Name of DEQ person contacted: REPORTED ONLINE
Note: Releases must be reported within 72-hours by owner or service provider.

Circle One
Yes No

A visual inspection of the release has been made and immediate actions taken to prevent any further release or migration of heating oil into surrounding soils or groundwater.

Yes No

Any fire, explosion, and/or vapor hazards in soil or groundwater have been identified and mitigated.
Yes No NA Monitoring for hazards has continued beyond initial identification.

Yes No NA

As much heating oil/sludge as possible has been removed from the tank. Gallons removed: 90
Name of oil recycling or disposal company (circle one): SPENCER ENVIRONMENTAL

Yes No

Hazards posed by contaminated soil that has been excavated or exposed have been remedied.
Note: Contaminated soil cannot be stored on-site for more than 30 days without a permit from DEQ.

Yes No

Free product has been observed in the tank pit and/or groundwater (circle any that apply).
Note: Any free product observed must be removed and properly treated/disposed.

Yes No

Groundwater has been encountered during tank decommissioning or cleanup actions taken to-date.
Note: DEQ must be notified immediately when groundwater is encountered at any time.

Yes No

Measurements for the presence of a release where contamination is most likely to be encountered have been made at the time of this report. If yes, note highest TPH sample result: mg/kg TPH-Dx.

Yes No

Cleanup actions have been initiated at the time of this report. If no, include proposed schedule for cleanup and state reason for delayed cleanup on back of this form: Proposed cleanup date (mo/yr) FUTURE RISK-BASED CLEANUP

"By my signature below, I state that the information contained in this report is true and complete to the best of my knowledge."

Name of person preparing report (please print): DENNIS M. TERZIAN

Signature: [Signature] Date: 11/18/03

Supervisor License No.: 20230 Expiration Date: 6/14/2005

Licensed Heating Oil Tank Service Provider Company: HANN & ASSOCIATES, INC.

Company License Number: 16487 Expiration Date: 3/15/2004