

**PHASE II ENVIRONMENTAL SITE ASSESSMENT
REPORT**

**1.48-Acre Safeway/American Legion Property
1153 Duane Street and 1132 Exchange Street
Astoria, Oregon**

April 14, 2003

Prepared for:

**City of Astoria
Astoria, Oregon**

Prepared by:

**Hahn and Associates, Inc.
Portland, Oregon**

HAI Project No. 6081

TABLE OF CONTENTS

1. Introduction.....	1
2. Background.....	1
3. Field Activities	2
3.1 Geophysical Survey.....	2
3.2 Subsurface Investigation Activities.....	3
3.2.1 Shallow Soil Sampling	3
3.2.2 Drilling Procedures	4
3.2.3 Soil Sampling and Screening Procedures	4
3.2.4 Groundwater Sampling Procedures	5
3.2.5 Decontamination Procedures.....	5
3.2.6 Investigative Derived Waste	5
4. Analytical Tests.....	6
5. Results and Discussion.....	6
5.1 Subsurface Conditions.....	6
5.2 Soil Testing Results.....	6
5.3 Groundwater Testing Results	7
6. Conclusions and Recommendations.....	9
7. Limitations.....	10
8. Glossary of Abbreviations.....	11

TABLES

- 1 Summary of Boring Installations**
- 2 Summary of Analytical Results for Soil Samples**
- 3 Summary of Analytical Results for Groundwater Samples**

TABLE OF CONTENTS
(continued)

FIGURES

- 1 Location Map**
- 2 Site Map**
- 3 Petroleum Hydrocarbons in Soil**
- 4 Petroleum Hydrocarbons in Soil: Former Automotive Repair Area**
- 5 Volatile Organic Compounds in Groundwater**

APPENDICES

- A Geophysical Survey Report**
- B Laboratory Reports and Chain-of-Custody Documentation: Soil Samples**
- C Laboratory Reports and Chain-of-Custody Documentation: Groundwater Samples**

April 14, 2003

Mr. Mike Morgan
City of Astoria
1095 Duane Street
Astoria, OR 97103

HAI Project No. 6081

SUBJECT: Report on Phase II Environmental Site Assessment Activities; 1.48-Acre Safeway/American Legion Property, 1153 Duane Street and 1132 Exchange Street, Astoria, Oregon

Dear Mr. Morgan:

1. Introduction

At your request, Hahn and Associates, Inc. (HAI) has completed Phase II Environmental Site Assessment (ESA) activities at the above-referenced site (Figures 1 and 2).

The investigation activities were conducted to: 1) determine the presence of possible abandoned heating oil underground storage tanks (USTs) at the property; 2) evaluate the subsurface soils and groundwater in the vicinity of known and suspected USTs and above-ground storage tanks (ASTs); and 3) determine potential impacts to soil and groundwater from historic operations conducted at the subject property including an automobile repair garage and paint shop, a used car sales business, a dry cleaning establishment, and three printing operations.

We understand the City of Astoria is a potential purchaser of the property. It should be noted that a basement level exists beneath various areas of the site, including below the eastern parking lot, and most of the perimeter sidewalk.

2. Background

In January 2003, HAI conducted a Phase I ESA¹ of the subject property. The Phase I report identified the following Recognized Environmental Conditions (RECs), as defined by American Society for Testing and Materials (ASTM) Practice E1527-00, in which additional investigation would be necessary to document and further evaluate such conditions:

1. The subject property was historically occupied by several commercial tenants, including an automobile repair garage and paint shop, a used car sales business, a dry cleaning establishment, and a newspaper printing company, which may have used hazardous materials as part of business operations.

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

2. A manhole, piping, and fill port, associated with a reported heating oil tank, were observed at and below street level at the Exchange Street sidewalk to the south of the American Legion building.
3. A concrete box with extruding piping was also observed beneath the Exchange Street sidewalk adjacent to the property, in the area to the south of the Safeway store. An heating oil above-ground storage tank (AST), which may have historically been used to heat the Safeway store or a former property structure, is likely situated within the concrete box. An oil fill cap, possibly associated with this potential tank, was observed at street level in the Exchange Street sidewalk.
4. A concrete slab with one extruding pipe, indicating the possible presence of an UST, was observed below ground, to the south of the Safeway store near the Exchange Street sidewalk at the property's southern perimeter.
5. Research indicated that "gas and oils", which may have been contained in USTs, were stored at a commercial automobile garage formerly located on the property's northern portion. Building plans for the existing Safeway store indicate that existing tanks, which may have been associated with the commercial garage, were to be removed from beneath the Duane Street sidewalk during construction of the Safeway building. The removal of these tanks could not be confirmed.

Additionally, while not a REC as defined by ASTM Practice E1527-00, the following condition of potential environmental concern was identified in the Phase I ESA report:

6. Suspect asbestos-containing materials were noted in the American Legion building in the form of floor tiles, sheet vinyl flooring, and popcorn ceiling material. An asbestos survey of the Safeway store, completed in 1991, identified the presence of asbestos in mastic beneath various floor tiles in the store and in taping compound, apparently in reference to the drywall joint tape, in various areas of the store. The cove base and roofing material in/on the store were not sampled, but were presumed to contain asbestos. The asbestos survey did not include the exterior portions of the store, including the roof.

The scope of Phase II work activities was designed to address conditions 1 through 5. An asbestos survey (Item 6) was not part of this project.

3. Field Activities

3.1 Geophysical Survey

On February 19, 2003, GeoPotential Inc. (GeoPotential) of Gresham, Oregon, under contract to HAI, conducted a geophysical survey in an attempt to identify the presence of potential USTs associated with former operations at the property and to confirm the locations of potential USTs located in the American Legion basement and beneath the eastern parking lot. The area surveyed consisted of the basement areas located beneath the Safeway store eastern parking lot, the southeast corner of

the American Legion basement, and below the Duane Street sidewalk to assess for the presence of potential USTs. A combination of magnetic and ground penetrating radar geophysical equipment was used.

The results of the geophysical survey confirmed the presence of an heating oil UST in the basement area south of the American Legion Building. In addition, the presence of an UST beneath the concrete slab in the basement area south of the Safeway store was identified by the survey. Both USTs are estimated to be 675 gallons in capacity. Visual inspection of the above-grade concrete box located in the basement area south of the Safeway store also confirmed the presence of an AST at this location. The survey did not identify the presence of USTs below the basement level of Duane Street sidewalk. It appears likely that if tanks were associated with the former "gas and oils" area along Duane Street, they were removed and most likely were ASTs. GeoPotential's survey report is included in Appendix A.

3.2 Subsurface Investigation Activities

In February and March 2003, HAI conducted subsurface investigation activities at the property. In total, 18 borings (B-1 through B-18) were installed to depths up to 16 feet below ground surface (bgs) for the collection of soil and groundwater samples, and near-surface soil samples were collected from 9 additional locations. Three of the borings (B-1, B-2, and B-3) were installed in basement areas of the site where manual direct push equipment could access. Four of the borings (B-4 through B-7) and all the near surface soil samples were installed/collected within basement level areas of the site with a post-hole digger since access with direct push equipment was not possible. Based on the preliminary groundwater results from the February 2003 testing, follow-up groundwater investigation was conducted in March 2003 through installation of 11 additional borings (B-8 through B-18). All 11 follow-up borings were installed by direct push methods at street level.

The borings were installed to assess subsurface conditions at the identified areas of concern at the site:

- American Legion Heating Oil UST (B-1 and B-2)
- Former Printers and Cleaners Area (B-3, B-4, B-5)
- Safeway UST (B-4 and B-5)
- Safeway AST (samples -007 and -008)
- Former Printers (B-6)
- Former Auto Garage and "Gas and Oils" Area (B-7, B-14, and B-15)
- Former Auto Painting and Printers Area (samples -013 and SS-1 through SS-6)
- Baseline Groundwater Quality (B-2, B-3, B-4, B-6, B-7, B-8 through B-18).

3.2.1 Shallow Soil Sampling

On February 20 and March 18, 2003, nine soil samples (samples -007, -008, -013 and SS-1 through SS-6) were collected at the basement level portions of the subject site in areas where direct push equipment could not access. The samples were collected with a decontaminated

post-hole digger from depths of 1.0 to 1.5 feet below ground surface (bgs). The samples were collected from either side of the identified AST along the southern edge of the property and the area beneath a former automotive painting business and former printers. The soil sampling locations are shown on Figures 2 and 4.

3.2.2 Drilling Procedures

On February 19 and March 18, 2003, 14 push probe borings (B-1, B-2, B-3, and B-8 through B-18) were installed by direct push methods at the subject site to depths ranging from 5 to 16 feet below ground surface (bgs). Borings B-4 through B-7 were installed by HAI personnel with a decontaminated post-hole digger in the basement level areas that were not accessible by direct push equipment. Groundwater samples were collected from 15 of the push probe borings (B-2, B-3, B-4, B-6 through B-11, and B-13 through B-18). The locations of the push probe borings are shown on Figure 2.

Borings B-1, B-2, and B-3 were installed inside the American Legion and Safeway store accessible basement areas utilizing a roto-hammer equipped with 1-inch steel rod and large bore sampler. Soil borings B-8 through B-18 were installed by Geo-Tech Explorations, Inc. of Tualatin, Oregon with a truck-mounted Geo-Probe Systems hydraulic hammer unit using a 2-inch outside diameter (OD) Macrocore sampler and hydraulically-driven steel rods.

Following completion of the push probe boring activities, the borings were backfilled with 3/8-inch bentonite chips to within 6 inches of the ground surface. Concrete or top soil was placed in the upper 6 inches of the boring to match the surrounding land surface. Following completion of the post-hole digger borings, the borings were backfilled with soil cuttings to grade.

The boring installations, soil types encountered, and field screening results, are summarized on Table 1.

3.2.3 Soil Sampling and Screening Procedures

Continuous soil cores were collected from push probe borings using a 5-foot long, 2-inch OD Macro-Core Sampler. Discrete soil samples were selected from the cores and the post-hole digger borings for field screening and possible laboratory analyses based on field observation of soil type or contaminant occurrence. The properties of each boring were noted in the field by the HAI scientist. The push probe and post-hole digger boring characteristics and observed soil types are summarized on Table 1.

Upon collection, each soil sample was immediately placed in a 4-ounce sample jar and capped with a teflon-lined lid. The sample jars were labeled and transferred to a chilled container for shipment to the analytical laboratory. Standard sampling protocols, including the use of chain-of-custody documentation, were followed for all sampling procedures.

The soil samples were field-screened for the presence of potential contamination by the visual, olfactory, sheen test, and headspace vapor methods. The presence of sheen was assessed by placing clean tap water in a black pan and introducing approximately 5 grams

of disaggregated soil to the water. Screening for the presence of organic vapors was conducted by the headspace method using a photoionization detector (PID) equipped with a 10.6 ev lamp. The results of the headspace screening are recorded on the boring log (Table 1) in parts per million (ppm). The headspace method results should be considered a qualitative indicator of possible contamination and used for relative comparison purposes only.

3.2.4 Groundwater Sampling Procedures

Groundwater samples were collected at 12 of the push probe borings (B-2, B-3, B-8 through B-11, and B-13 through B-18) and three of the post-hole digger borings (B-4, B-6, and B-7) with a temporary well point. Although an attempt was made to collect a groundwater sample from boring B-12, no water entered the well point.

To collect the groundwater samples from push probe borings (except for boring B-2), a 4-foot section of 1-inch OD, 0.004-inch slotted stainless steel well screen was pushed to beneath the suspected groundwater level. To collect the groundwater samples from the post-hole digger borings and push probe boring B-2, a new 5-foot section of 1-inch OD, 0.010-inch slotted disposable polyvinyl chloride (PVC) well screen was pushed to beneath the suspected groundwater level. The well screen interval for the boring locations at street level was from 12 to 16 feet bgs. Screen intervals for borings installed at basement level (approximately 10 feet below street level) were at various depths: B-2 (4 to 9 feet bgs), B-3 (1 to 5 feet bgs), B-4 (0 to 5 feet bgs), B-6 (0 to 5 feet bgs), and B-7 (0 to 5 feet bgs). Water was detected at approximate depths of 12 to 13.5 feet below street level in the well points.

The groundwater samples were collected from the well points with new disposable bailer tubing following purging of approximately one liter of water or until dry. Water samples were also collected at selected locations using a peristaltic pump. Sampling containers were completely filled such that no headspace was present that would allow for the loss of volatiles. The sample containers were then labeled and transferred to a chilled container for shipment to the analytical laboratory.

3.2.5 Decontamination Procedures

All reusable drilling, soil sampling, and well point equipment was steam cleaned with potable water prior to use, and between boring locations, in order to prevent cross-contamination. All soil sampling equipment was decontaminated after each sample by using a detergent solution wash, and two potable water rinses. Decontamination was not necessary for water sampling equipment, as new disposable tubing was used during groundwater sampling activities.

3.2.6 Investigative Derived Waste

Soil wastes were not generated during the investigative activities. Since a sheen was not observed on the equipment decontamination water, it was placed on bare ground near the drilling locations for percolation.

4. Analytical Tests

The soil and groundwater samples were shipped with chain-of-custody documentation in sealed and chilled containers to Specialty Analytical, Inc. located in Portland, Oregon.

Based on field screening results and depth with respect to the water table, 10 soil samples were selected from the borings and shallow soil sampling locations for analysis of a hydrocarbon identification (HCID) of total petroleum hydrocarbons (TPH) by Northwest Method TPH-HCID. In addition, 9 soil samples were selected for analysis of diesel- and oil-range petroleum hydrocarbons by NW Method TPH-Dx.

Fourteen of the groundwater samples were analyzed for volatile organic compounds (VOCs), including solvents, by U. S. Environmental Protection Agency (EPA) Method 8260.

The results of the soil and groundwater analytical testing are summarized on Tables 2 and 3, respectively. The laboratory reports and chain-of-custody documentation for the soil and groundwater sampling activities are included in Appendices B and C, respectively.

5. Results and Discussion

5.1 Subsurface Conditions

The subsurface soils, as encountered during the drilling activities at the filled western portion of the site, are typically clayey silts to depths of approximately 14 feet below street level, underlain by medium-grain sand. Basement level borings installed beneath the eastern portion of the site parking lot typically encountered medium-grain sand (possibly fill) from the basement surface (approximately 10 feet below street level) to depths of 15 to 18.5 feet below street level, which was underlain by clayey sands and clayey silts. Historical Sanborn Fire Insurance Maps show the subject property was former tidal flats of the Columbia River (likely at the current basement level or lower), which has since been built up to current street level on pier and/or on fill.

Groundwater was encountered in borings at depths of 12 to 13.5 feet below street level. Groundwater was not observed in boring B-12 to a depth of 16 feet bgs. Based on topography and local hydrogeologic features, it is inferred that uppermost net groundwater flow direction is to the north towards the Columbia River. Groundwater flow direction was not confirmed by direct measurement from monitoring wells. Because of the filled nature of the site and area, and the close proximity to the Columbia River, a major hydrogeologic feature that displays seasonal and tidal variations, groundwater flow direction beneath the property may not be straightforward, possibly fluctuating seasonally and daily.

5.2 Soil Testing Results

Of the 15 soil samples selected for analysis of petroleum hydrocarbons, diesel-and/or oil-range petroleum hydrocarbons were detected above method detection limits in nine soil samples (Table 2, Figure 3). The detected concentrations of diesel-range petroleum

hydrocarbons ranged from 24.5 to 2,000 parts per million (ppm), and oil-range petroleum hydrocarbons ranged from 110 to 6,390 ppm. The petroleum hydrocarbons were detected in near-surface soils at three areas of the site: 1) the Safeway AST area (25 to 382 ppm diesel and oil); 2) beneath a former printer on the southeast corner of the site at B-6 (448 ppm oil); and 3) beneath a former auto painting and former printers in the northeast portion of the site (124 to 8,390 ppm diesel and oil) (Figure 4).

The detected total concentrations of petroleum hydrocarbons in soil exceed the Oregon Department of Environmental Quality (DEQ) Level 2 Soil Matrix Cleanup Standard of 500 ppm (OAR 340-122-0335) only in the former auto painting and former printers area beneath the northeast portion of the site. The lateral extent of TPH above the Soil Matrix Cleanup Standard is not determined, and the petroleum hydrocarbon levels do not appear to display a definable pattern. Although the vertical extent of petroleum contamination is not directly defined by samples in this area, it is not expected to extend very deep because of the presence of groundwater at 2 to 3 feet below the basement level.

If left in-place, undisturbed, it does not appear any actions would be necessary with respect to the identified petroleum contaminated soils, as long as access to the unfinished basement level continues to be restricted. However, if excess soils are generated during re-development of this area, then special management of these soils may be necessary. If cleanup of the impacted soils were deemed necessary, the most feasible remedial options would appear to be removal, capping, or some combination of the two. Capping would likely be the least cost remedial option, but would require additional investigation to verify the remedy would be appropriate and protective.

5.3 Groundwater Testing Results

Analytical testing of the 14 groundwater samples obtained by HAI indicates VOCs were detected above method detection limits at six locations (B-2, B-4, B-8, B-11, B-13, and B-14) (Table 3, Figure 5). The VOCs detected above method detection limits included benzene, chloromethane, cis-1,2-dichloroethene (cis-1,2,-DCE), trans-1,2,-dichloroethene (trans-1,2-DCE), tetrachloroethene (PCE), trichloroethene (TCE), and vinyl chloride.

VOCs detected at concentrations above EPA Region 9 Preliminary Remediation Goals (PRGs) for tap water, are benzene (3.75 ppb at B-13), chloromethane (17.6 ppb at B-2 and 3.96 ppb at B-4), cis-1,2-DCE (81.4 at B-2), PCE (7.42 ppb at B-4), TCE (3.29 ppb at B-4), and vinyl chloride (90 ppb at B-2, 3.1 ppb at B-8, 3.0 ppb at B-11, and 15.1 ppb at B-14).

The PCE/TCE/DCE/vinyl chloride suite of VOCs is a common suite of chemicals found where natural degradation of dry cleaning solvent (PCE) and/or de-greasing solvents (PCE or TCE) has occurred. Chloromethane is a degradation product of methylene chloride (a de-greasing solvent) or carbon tetrachloride (an historical dry cleaning solvent). Benzene is most often found to be related to a release of gasoline. The high percentage of degradation products (chloromethane, DCE, and vinyl chloride) to primary solvents in groundwater at the site appears to suggest a relatively high level of degradation of the original release has occurred. However, it should be emphasize that vinyl chloride is also used as a chemical in its own right, and may not necessarily be the product of the degradation of another solvent.

The distribution of VOCs, as well as the suite of VOCs detected in groundwater beneath the site, is erratic and does not follow any definable pattern. Likewise, the source or sources of the detected VOCs cannot be determined with the existing data. The task of assigning sources to the detected VOCs is further complicated by lack of reliable information on groundwater flow direction beneath the site. One possible explanation for the erratic occurrence of VOCs in uppermost groundwater is the presence of multiple sources on or near the site. Possible on-site sources include the former dry cleaners and auto repair facilities. An alternative explanation for the erratic occurrence of VOCs is that a larger single plume is present beneath the site, possibly originating off-site, but the plume is mostly below the level of the uppermost groundwater samples that were collected. Additional investigation would be necessary to fully define the magnitude, extent, and sources of VOCs in groundwater beneath the site.

Regardless of the source or sources of VOCs in groundwater, a preliminary risk screening can be conducted to determine potential exposure pathways and potential unacceptable risks that may be present under various land use scenarios at the property. Since the use of groundwater for drinking purposes in this area of Astoria does not appear reasonably likely, this exposure pathway can be preliminarily eliminated from consideration. Because the groundwater is located below the basement level of the site, direct contact with future residents or occupational workers also does not appear reasonably likely. However, because of the shallow nature of groundwater beneath the basement level, exposure to future construction workers or excavation workers should be considered. Likewise, vapor intrusion into buildings and volatilization to outdoor air are exposure pathways that need to be evaluated. A preliminary evaluation of risk for the VOCs in groundwater utilizing risk screening criteria indicates the VOCs in groundwater should not pose an unacceptable risk to construction or excavation workers, nor to outdoor air. The risk screening does indicate potential unacceptable risk to future potential residents due to vapor intrusion into buildings by vinyl chloride at one location (B-2). Unacceptable risks were not identified by this pathway for occupation workers. Thus, no unacceptable risks were preliminarily identified under current use conditions or future uses of the site for commercial or other non-residential activities. Additional investigation should be conducted to verify these preliminary conclusions.

If left in-place, undisturbed, it does not appear any actions would be necessary with respect to the identified VOCs in groundwater, as long as site use does not change. However, if excess groundwater is generated during re-development of this area, then special management of this water will be necessary.

Finally, even though it is preliminarily concluded the site does not pose unacceptable risk under current or future non-residential use, it would be prudent to conduct additional investigation at the site to better determine the full nature, extent, magnitude, and sources of contamination, as well as verify the preliminary risk screening results. Furthermore, if DEQ were to become involved in order to issue a letter of "no further action", the agency would most likely require a full Remedial Investigation (RI), Risk Assessment (RA), and Feasibility Study (FS) for the property, which is a potential financial liability to current and future owners of the property.

6. Conclusions and Recommendations

Two abandoned USTs and one AST were identified during the Phase II investigation activities conducted by HAI in February and March 2003. The tanks should be appropriately decommissioned by removal.

Analytical testing of soil samples collected at the site indicates diesel- and oil-type petroleum hydrocarbons are present in shallow soils beneath the basement level of the eastern portion of the property. The identified petroleum hydrocarbons in soil immediately below the northeastern corner of the Safeway store are present at concentrations exceeding the DEQ Level 2 Soil Matrix Cleanup Standard. This soil contamination has only been partially delineated and further investigation would be required to complete an assessment of these soils.

If left in-place, undisturbed, it does not appear any actions would be necessary with respect to the identified petroleum-contaminated soils, as long as access to the unfinished basement level continues to be restricted. However, if excess soils are generated during re-development of this area, then special management of these soils may be necessary. If cleanup of the impacted soils were deemed necessary, the most feasible remedial options would likely be removal, capping, or some combination of the two.

Analytical testing of groundwater samples collected from 14 borings at the site indicates several VOCs were detected above method detection limits. VOCs detected at concentrations above EPA PRGs for tap water include benzene, chloromethane, cis-1,2-DCE, PCE, TCE, and vinyl chloride. Other than benzene, which is most often associated with releases of gasoline, the detected VOCs are all chlorinated solvents that are typically related to dry cleaning or de-greasing.

The distribution and suites of VOCs detected in groundwater beneath the site are erratic and do not follow any definable pattern. This, in combination with the lack of reliable information on groundwater flow, makes the task of assigning sources to the detected VOCs complicated. Possible on-site sources include the former dry cleaners and auto repair facilities. Alternatively, a large plume originating off-site may be present that is mostly below the level of the uppermost groundwater samples that were collected during the investigation. Additional investigation would be necessary to fully define the magnitude, extent, and sources of VOCs in groundwater beneath the site.

A preliminary evaluation of risk for the VOCs in groundwater utilizing risk screening criteria indicates no unacceptable risks were identified under current use conditions or future uses of the site for commercial or other non-residential activities. However, the risk screening does suggest potential unacceptable risk due to vapor intrusion into buildings by vinyl chloride under a residential use scenario. Additional investigation should be conducted to verify these preliminary conclusions. Such investigation would most likely be required if DEQ were to become involved in order to issue a letter of "no further action".

If left in-place, undisturbed, it does not appear any actions would be necessary with respect to the identified VOCs in groundwater, as long as site use does not change to residential. However, if excess groundwater is generated during re-development of the site, then special management of this water will be necessary.

In summary, the identified impacts to soil and groundwater beneath the subject property do not appear to present any serious obstacle to re-development of the site for anything other than residential use. Likely, development of the site could occur without conducting any physical cleanup activities (other than tank decommissioning) through the use of capping and risk-based closure. However, additional investigation would be necessary to justify such a course of action, and even more investigation would likely be required to obtain a letter of "no further action" from DEQ. If excess soil or groundwater is generated during re-development of the property, then special management of these wastes will be necessary.

7. Limitations

The samples discussed in this report were 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 physical sampling and analytical activities that were conducted. The data presented in this report document only the concentrations of the target analytes in the particular sample and not the property as a whole.

If there are any comments or questions, please contact the undersigned. Thank you for the opportunity to be of service.

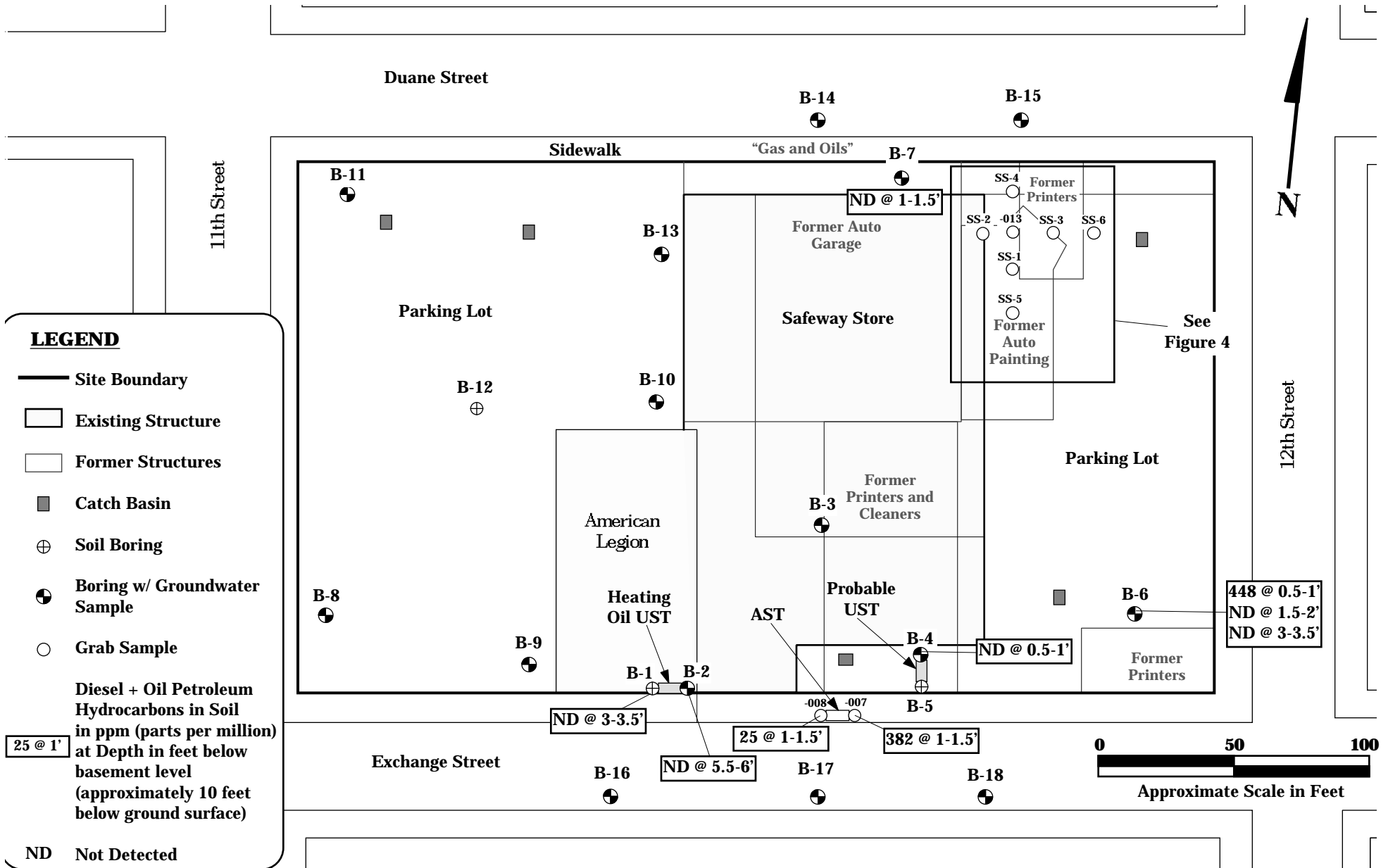
Respectfully,

Dennis M. Terzian
Sr. Environmental Scientist

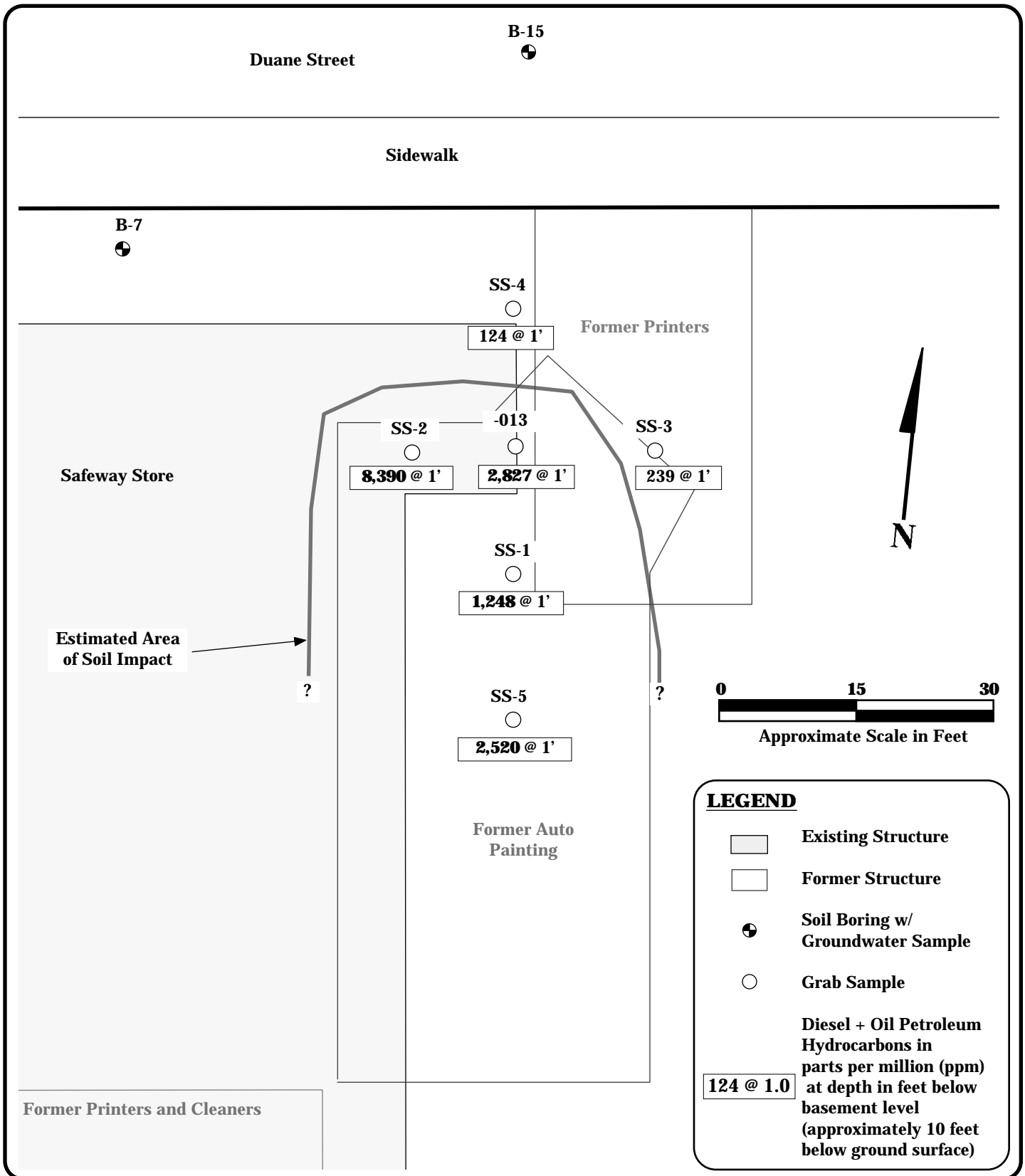
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8. Glossary of Abbreviations

ASTM	American Society for Testing and Materials
bgs	below ground surface
cis-1,2-DCE	cis-1,2-dichloroethene
trans-1,2-DCE	trans-1,2-dichloroethene
DEQ	Oregon Department of Environmental Quality
EPA	U. S. Environmental Protection Agency
ESA	Environmental Site Assessment
HAI	Hahn and Associates, Inc.
HCID	hydrocarbon identification
NWTPH-Dx	Northwest Method for total petroleum hydrocarbons as diesel
OAR	Oregon Administrative Rules
OD	outside diameter
PCE	tetrachloroethene
PID	photoionization detector
ppm	parts per million
PRGs	Preliminary Remediation Goals
PVC	polyvinyl chloride
RECs	Recognized Environmental Conditions
TCE	trichloroethene
TPH	total petroleum hydrocarbons
UST	underground storage tank
VOCs	volatile organic compounds



HAI Project No. 6081	HAHN AND ASSOCIATES, INCORPORATED	Petroleum Hydrocarbons in Soil	Figure
April 2003	ENVIRONMENTAL CONSULTANTS 434 NW 6TH AVE., SUITE 203 PORTLAND, OREGON 97209	Phase II Environmental Site Assessment 1.48-Acre Safeway/American Legion Property 1153 Duane Street and 1132 Exchange Street	3



HAI Project No. 6081	Hahn & Associates Incorporated	Petroleum Hydrocarbons in Soil: Former Automotive Repair Area	FIGURE
April 2003	ENVIRONMENTAL CONSULTANTS 434 NW SIXTH AVENUE, SUITE 203 PORTLAND, OREGON 97209 503/796-0717	Phase II Environmental Site Assessment 1.48-Acre Safeway/American Legion Property 1153 Duane Street and 1132 Exchange Street Astoria, Oregon	4