PACTRUST
Pacific Realty Associates, L.P.

15350 S.W. Sequoia Pkwy., Suite 300
Portland, Oregon 97224
503/624-6300 • Facsimile: 503/624-7755

October 2, 2000

BY FEDEX

Ms. Gale Colburn
Unit Supervisor
Washington Department of Ecology – NWRO
3190 160th Avenue, S.E.
Bellevue, WA 98006-5452

Dear Ms. Colburn:

Re: Facility No. 1ptr5481 / T&E
4208 Rainier Avenue South, Seattle Washington (the "Property")
Phase II Assessment Results

Enclosed is a Phase II Environmental Site Assessment on the Property, which is owned by Pacific Realty Associates, L.P. The assessment was performed as a result of our discovery that a dry cleaning establishment had operated on the site prior to redevelopment of the Property.

On June 28 and 29, 2000 eight soil borings were installed on the Property in locations selected by our environmental consultant, Hahn and Associates, Inc ("Hahn"). PCE and other volatile organic compounds were detected in both soil and groundwater samples taken using those borings. The enclosed report provides a detailed description of the investigation process and the findings.

We are submitting this report in accordance with the requirements of WAC 173-340-300 (2). We are working with Hahn to determine the appropriate methods to further characterize the extent of the contamination and to develop a proposed plan for remediation. We will provide further information as it is developed.

Sincerely,

PACIFIC REALTY ASSOCIATES, L.P.

Richard P. Buono
Vice President

Encl.
cc: Jeffrey L. Brown (w/Encl.)
Thomas L. Hanavan (w/Encl.)
Mark W. Olson (w/o Encl.)
Guy H. Tanz (w/o Encl.) - by facsimile 227-2209

PHASE II
ENVIRONMENTAL SITE ASSESSMENT

Rainier Mall
4208 Rainier Avenue South
Seattle, Washington

August 1, 2000

Prepared for:

PacTrust
Portland, Oregon

Prepared by:

Hahn and Associates, Inc.
Portland, Oregon

HAI Project No. 5015

TABLE OF CONTENTS

TABLES

FIGURES

TABLE OF CONTENTS
(continued)

APPENDICES

August 1, 2000

Mr. Richard Buono
PacTrust
15350 SW Sequoia Parkway, Suite 300
Portland, Oregon 97224

HAI Project No. 5015

SUBJECT: Report on Phase II Environmental Site Assessment Activities; Rainier Mall, 4208 Rainier Avenue South, Seattle, Washington

Dear Mr. Buono:

1.0 Introduction

At your request, Hahn and Associates, Inc. (HAI) has completed Phase II Environmental Site Assessment (ESA) activities at the above-referenced site (Figure 1). The investigation activities were conducted to assess the quality of subsurface soils and groundwater relating to two former dry cleaning operations at the subject property.

2.0 Background

In August 1998, HAI conducted a Phase I ESA at the site that is documented in HAI's May 23, 2000 report[1]. The Phase I ESA concluded that a geophysical survey for abandoned underground storage tanks (USTs) should be conducted at the property, and that the locations of two former dry cleaners should be investigated.

In June 2000, HAI coordinated a geophysical survey of the site, and conducted a Phase II ESA investigation to determine the quality of subsurface soils and groundwater relating to the former dry cleaner properties at the site, the results of which are presented in this report.

The locations of former dry cleaners were estimated based on a combination of historical research including aerial photographs, Sanbourn Fire Insurance Maps, and historical maps made available through PacTrust. Since Rainier Avenue South and Genesee Street have been redeveloped at least once, and possibly several times, without further research, the exact locations of the former dry cleaners depicted on figures in this report should be considered approximate.

---

[1] Hahn and Associates, Inc. (2000) *A Phase I Environmental Site Assessment, Rainier Mall (Former Safeway Store No. 441), 4208 Rainier Avenue South, Seattle, Washington*, (HAI Project No. 4936), May 23, 2000

3.0 Geophysical Survey Activities

On June 27, 2000, Apollo Geophysics Corporation (Apollo Geophysics) conducted a geophysical survey of the property to assess for the presence of buried objects that could indicate the potential presence of USTs. The geophysical survey consisted of traversing areas of the property not covered with existing structures using a combination of electromagnetic (EM) and ground penetrating radar (GPR) equipment. The geophysical survey did not identify any buried objects characteristic of USTs. Although, Apollo Geophysics did identify a potential former excavation in the sidewalk adjacent to the current structure, it was not investigated based on its relatively remote location in relationship to former residential structures at the site. The Apollo Geophysics report[1] is included in Appendix A.

4.0 Field Activities

4.1 Soil Boring Installation Procedures

On June 27, 2000, HAI installed two push probes, (B-1A and B-2A) to determine if this method of drilling was suitable for the site. The push probes were installed with a GeoProbe unit that uses a 2-inch outside diameter (OD) hydraulically-driven steel rod. Push probes B-1A and B-2A met refusal at depths of approximately 10.5 feet below ground surface (bgs) and 2.5 feet bgs respectively. Due to the shallow depths of refusal, push probes were deemed not suitable for investigation activities at the site. Therefore, a hollow stem auger drilling rig was utilized to complete the site investigation.

On June 28 and 29, 2000, HAI installed 8 soil borings (B-1 through B-8) for the collection of soil and groundwater quality samples. Four soil borings were installed in the vicinity of each identified dry cleaner location. B-1 through B-4 were installed in the vicinity of the southern former dry cleaning facility, and B-5 through B-8 were installed in the vicinity of the more northern former dry cleaning facility (Figure 2).

Soil borings were installed with a Mobil B-59 drilling rig equipped with 4 1/4-inch inside diameter (ID) hollow stem auger to a maximum depth of investigation at 41 feet bgs. Groundwater was encountered and sampled in borings B-1, B-3, B-4, B-5, and B-7 at depths between 24.5 to 29.5 feet bgs.

The soil borings were installed by Geo-Tech Explorations, Inc. of Portland, Oregon a Washington licensed drilling contractor. The soil boring installations were completed in accordance with Washington Administrative Codes (WAC) 173-160.

---

[1] Apollo Geophysics Corporation (2000) *UST Locate, Rainier Mall, Seattle Washington*, June 29, 2000

4.2 Soil Sampling Procedures

Soil sampling was performed at 2.5 to 5-foot intervals in the soil borings. Soil boring samples were collected with a 2-inch outside diameter (OD) split-barrel sampling device that was driven into the undisturbed soils 1.5 feet ahead of the augering bit using the Standard Penetration Test (SPT).

The soil samples were immediately placed in 4-ounce sample jars and capped with teflon-lined lids. The sample jars were then 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 properties of each soil sample were noted by an HAI scientist in the field including an estimate of the Unified Soil Classification System (USCS) soil type designation. The soil boring details are summarized on Table 1.

4.3 Soil Field Screening Procedures

The soil samples were field-screened for the presence of contamination utilizing visual, sheen, olfactory, and headspace vapor methods. The presence of organic vapors was field screened utilizing a photoionization detector (PID) equipped with a 10.6 ev lamp. Immediately following the collection of the sample, approximately 4 ounces of soil were placed in a quart size plastic bag and sealed. The sample was then set aside for a 20-minute stabilization period, whereupon the detector probe was inserted through the seal into the bag. The results of the headspace screening are recorded on Table 1 in parts per million (ppm). The headspace vapor method results should be considered qualitative and should be used for comparison purposes only.

The presence of sheen was assessed by placing clean tap water in a black pan and introducing approximately 5 grams of soil to the water. The observations for the presence or lack of sheen is a relative indicator of contamination.

4.4 Temporary Well Point Sampling Procedures

A temporary well point was installed in each soil boring where groundwater was encountered (B-1, B-3, B-4, B-5, and B-7) at depths of 26 to 32 feet bgs. Each temporary well point was constructed of a three-foot section of 0.010-inch slotted, stainless steel well screen and riser pipe that were installed through the hollow stem auger. Once the desired sampling depth was reached, the well point was installed and a temporary sand pack was placed in the annulus as the augers were pulled back approximately 3 feet.

Each temporary well point was purged dry prior to sampling utilizing an Accuwell peristaltic pump equipped with new polyethylene tubing. Upon recharge, a representative sample was collected from each location using a new disposable polyethylene bailer. The sampling containers were completely filled such that no headspace was present that would allow the loss of volatiles. The sample bottles were then transferred to a chilled container for shipment to the analytical laboratory.

4.5 Push Probe and Soil Boring Abandonment Procedures

Following installation, the sand pack at each temporary well point was drilled out with the hollow stem auger. Each push probe and/or soil boring was backfilled with granular bentonite to within 1 foot of land surface and capped with cement.

4.6 Decontamination Procedures

All push probe, soil boring, and well point equipment was steam cleaned with potable water prior to use, and between each boring location 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, since new disposable tubing was used during groundwater sampling activities.

4.7 Investigative Derived Waste

In total, 16 55-gallon drums of investigative derived waste (IDW) soil were generated during the work activities. The drums are currently stored behind the Rainier Mall pending characterization and future disposal. Due to the presence of dry cleaning solvent [tetrachloroethene (perc or PCE)] in soil samples, the IDW soil is being characterized to determine appropriate disposal options. IDW soil disposal documentation will be submitted to PacTrust in a forthcoming correspondence.

In total, approximately 50 gallons of equipment decontamination water and purge water were generated during the work activities. Since a sheen was not observed on any of the water, it was placed on the vegetated ground surface near each respective dry cleaner location for percolation.

5.0 Analytical Tests

The soil and groundwater samples were shipped with chain-of-custody documentation in sealed and chilled containers to Environmental Services Laboratory, Inc., in Portland, Oregon, for analysis.

Four soil samples, two in the vicinity of each former dry cleaner property, were selected for analysis based on their locations, depths, and field screening observations relative to the location to each former facility. The selected soil samples were analyzed for volatile organic compounds (VOCs), including PCE, by U. S. Environmental Protection Agency (EPA) Method 8260B. The results of the soil analysis are summarized on Table 2, and the laboratory reports and chain-of-custody documentation are included in Appendix B.

Five groundwater samples were analyzed for VOCs, including PCE, by EPA Method 8260B. The results of the groundwater analysis are summarized on Table 3, and the laboratory reports and chain-of-custody documentation are included in Appendix C.

6.0 Results and Discussion

6.1 Subsurface Conditions

The subsurface soils encountered during the investigative activities were generally mixtures of gravel, sand, silt, and clay, to the maximum depth of investigation at 41 feet bgs. Near surface soils were generally coarser in nature consisting of gravel, sand, and to a lesser degree silt, to a depth of approximately 14 feet bgs, with deeper soils generally finer in nature consisting of sands, silts, and clays to the maximum depth of investigation at 41 feet bgs.

Groundwater was encountered at depths of approximately 24.5 to 29.5 feet bgs in borings B-1, B-3, B-4, B-5, and B-7. Groundwater was not observed in borings B-2, B-6, or B-8. Flow direction in the uppermost groundwater beneath the site is difficult to infer due to the discontinuity of subsurface geology, the lack of groundwater in three of the borings, and the variable local topography. Groundwater flow direction may be in an easterly direction toward Lake Washington, located approximately 3,500 feet from the site, or in a southeasterly direction toward nearby topographically low areas.

6.2 Soil Testing Results

Analytical testing of two soil samples selected from borings B-6 (7.0 feet bgs) and B-8 (4.5 feet bgs) in the vicinity of the northern former dry cleaner did not detect VOCs above analytical method detection limits. Although VOCs were not detected in a soil sample selected from boring B-3 (4.5 feet bgs), they were detected in boring B-1 (19.5 feet bgs) in the vicinity of the southern former dry cleaner. PCE was detected in boring B-1 at a concentration of 83,000 parts per billion (ppb) which exceeds the Washington Department of Ecology (WDOE) Method A soil cleanup level of 500 ppb. The presence of soil impacts at a depth of 19.5 feet in boring B-1 indicates the likely presence of a release from the former southern dry cleaner at the site.

6.3 Groundwater Testing Results

Analytical testing of groundwater samples in the vicinity of the northern former dry cleaner did not detect VOCs above method detection limits with the exception of 1.25 ppb PCE at boring B-7. The 1.25 ppb PCE is below the WDOE Method A groundwater cleanup level of 5 ppb.

Analytical testing of two of three groundwater samples collected from the vicinity of the southern dry cleaner detected VOCs with PCE at concentrations ranging from 1,980 ppb to 3,800 ppb. Other VOCs detected in this area that exceed WDOE reference levels include 1,1-dichloroethene (1,1-DCE), trichloroethene (TCE), and vinyl chloride.

The highest concentration of PCE detected in groundwater (3,800 ppb) was detected at boring B-4 located east of the former southern dry cleaner property. The increase in the concentration of PCE from boring B-1 to B-4 suggests that shallow groundwater flow may be in an easterly direction at the site. However, further investigation would need to be conducted to confirm the direction of groundwater flow at the site.

7.0 Conclusions and Recommendations

The results of the Phase II investigation activities indicate that USTs were not identified at the site. However, it appears that releases of dry cleaning solvent (PCE) have impacted soil and groundwater beneath the subject site at concentrations that exceed WDOE reference levels.

HAI understands that PacTrust is considering purchasing this property. In such a circumstance, we would recommend additional investigation to determine the extent of soil and groundwater impacts at the site. In addition, the identified soil and groundwater impacts could have an adverse impact on the property as follows:

- The property value may be affected
- The property may be difficult to transfer/sell
- The property may be difficult to finance, refinance, or be utilized as collateral
- Future re-development may be affected
- The property could be a financial liability

8.0 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.

Sincerely,

Guy H. Tanz
Associate

attachments

TABLE 1 - Soil Boring Summary

Phase II Environmental Site Assessment
Rainier Mall
4208 Rainier Avenue South
Seattle, Washington

Project No. 5015

Soil Boring Number	Installation Date	Total Depth (feet bgs)	Installation Method	Groundwater Data Summary[1]		Soil Data Summary[2]							
				Depth Encountered (feet bgs)	Sample Screen Interval (feet bgs)	Sample Depth (feet bgs)	Sample No. (Prefix: 5015-00062-)	Soil Strata [3] (feet bgs) Top	Soil Strata [3] (feet bgs) Bottom	Soil Type	Field Screening Results: Odor	Visual	Sheen Test	Headspace Vapor (ppm)
B-1A	27-Jun-00	15.0	Push Probe			3.5	7-001	0.5		Silt with some Sand and Gravel	no	no	no	5.8
						7.5	7-002				no	no	no	4.5
						10.0	7-003		14.5		no	no	no	4.1
B-1	28-Jun-00	41.0	HSA	28.5	29 - 32	14.5	8-004	14.5		Silt	no	no	no	2.3
					Sample No.	19.5	8-005		24.5		yes	no	no	182.
					5015-000628-101	24.5	8-006	24.5		Silty Sand	no	no	no	18.3
						29.5	8-007		30.0		no	no	no	3.9
						34.5	8-008	30.0		Silty Clay	no	no	no	5.1
						39.5	8-009		41.0		no	no	no	4.6
B-2	28-Jun-00	31.0	HSA	Dry	-	4.5	8-010	0.5	7.0	Silt with some Sand and Gravel	no	no	no	3.1
						7.0	8-011	7.0		Sandy Silt	no	no	no	5.8
						9.5	8-012		14.5		no	no	no	3.6
						14.5	8-013	14.5		Silty Clay	no	no	no	5.1
						19.5	8-014				no	no	no	6.1
						24.5	8-015				no	no	no	6.8
						29.5	8-016		31.0		no	no	no	8.1
B-3	28-Jun-00	30.0	HSA	29.5	27 - 30	2.0	8-017	0.5	4.5	Silty Sand	no	no	no	3.2
					Sample No.	4.5	8-018	4.5		Silt with some Sand and Gravel	no	no	no	3.3
					5015-000628-102	7.0	8-019				no	no	no	3.3
						9.5	8-020		15.0		no	no	no	3.2
						15.0	8-021	15.0		Silty Clay	no	no	no	5.2
						19.5	8-022		25.0		no	no	no	3.2
						24.5	8-023	25.0	30.0	Silty Clay with trace Sand	no	no	no	2.7
B-4	28-Jun-00	30.0	HSA	29.0	27 - 30	2.0	8-024	0.5		Silty Sand	no	no	no	2.5
					Sample No.	4.5	8-025				no	no	no	2.6
					5015-000628-103	7.0	8-026				no	no	no	1.7
						9.5	8-027				no	no	no	1.5
						14.5	8-028		15.0		no	no	no	2.
						19.5	8-029	15.0		Silty Clay	no	no	no	1.8
						24.5	8-030		30.0		no	no	no	2.5
B-5	29-Jun-00	26.0	HSA	25.5	23 - 26	2.0	9-031	0.5		Silty Sand	no	no	no	1.5
					Sample No.	4.5	9-032				no	no	no	1.1
					5015-000629-104	7.0	9-033		9.5		no	no	no	0.9
						9.5	9-034	9.5		Silty Clay	no	no	no	0.9
						14.5	9-035				no	no	no	0.7
						19.5	9-036		24.5		no	no	no	0.7
						24.5	9-037	24.5	26.0	Silty Clay with trace Sand	no	no	no	0.8

TABLE 1 - Soil Boring Summary

Phase II Environmental Site Assessment
Rainier Mall
4208 Rainier Avenue South
Seattle, Washington

Project No. 5015

Soil Boring Number	Installation Date	Total Depth (feet bgs)	Installation Method	Groundwater Data Summary[1]		Soil Data Summary[2]							
				Depth Encountered (feet bgs)	Sample Screen Interval (feet bgs)	Sample Depth (feet bgs)	Sample No. (Prefix: 5015-00062-)	Soil Strata [3] (feet bgs) Top	Soil Strata [3] (feet bgs) Bottom	Soil Type	Field Screening Results: Odor	Visual	Sheen Test	Headspace Vapor (ppm)
B-6	29-Jun-00	41.0	HSA	Dry	-	2.0	9-038	0.5		Silty Sand	no	no	no	0.6
						7.0	9-039		9.5		no	no	no	1.5
						9.5	9-040	9.5		Silty Clay	no	no	no	1.5
						14.5	9-041				no	no	no	1.7
						19.5	9-042				no	no	no	2.
						24.5	9-043				no	no	no	2.4
						29.5	9-044				no	no	no	2.8
						34.5	9-045				no	no	no	2.3
						39.5	9-046		41.0		no	no	no	2.3
B-7	29-Jun-00	26.0	HSA	24.5	23 - 26 Sample No. 5015-000629-105	2.0	9-047	0.5		Sandy Gravel	no	no	no	0.5
						4.5	9-048		7.0		no	no	no	1.3
						7.0	9-049	7.0		Silty Sand	no	no	no	1.5
						9.5	9-050		10.0		no	no	no	1.2
						14.5	9-051	10.0		Silty Clay	no	no	no	1.4
						19.5	9-052		21.0		no	no	no	1.6
						-	-	21.0	24.0	Clayey Sand	no	no	no	-
						24.5	9-053	24.0	26.0	Silty Clay	no	no	no	1.8
B-8	29-Jun-00	41.0	HSA	Dry	-	2.0	9-054	0.5	4.5	Sandy Gravel	no	no	no	1.4
						4.5	9-055	4.5		Silty Sand	no	no	no	4.
						7.0	9-056		9.5		no	no	no	3.7
						9.5	9-057	9.5		Silty Clay	no	no	no	4.6
						14.5	9-058		19.5		no	no	no	5.
						19.5	9-059	19.5	24.5	Clayey Sand	no	no	no	5.7
						24.5	9-060	24.5		Silty Clay	no	no	no	6.3
						29.5	9-061				no	no	no	6.7
						34.5	9-062				no	no	no	5.6
						39.5	9-063		41.0		no	no	no	5.4

Note: 1 = See Table 3 for groundwater analytical results
2 = See Table 2 for soil analytical results
3 = all areas investigated were covered by approximately 6 inches of asphalt surface cover

bgs = below ground surface
HSA = hollow stem auger
ppm = parts per million

TABLE 2 – Summary of Analytical Results for Soil Samples
Volatile Organic Compounds (VOCs) by EPA Method 8260

Phase II Environmental Site Assessment
Rainier Mall
4208 Rainier Avenue South
Seattle, Washington

Project No. 5015

Boring Number	Sample Number	Sample Date	Top of Sample Depth (feet bgs)	Analytical Results ug/kg (ppb)						
				1,1-DCE	cis-1,2-DCE	PCE	TCE	Vinyl Chloride	Other VOCs	Total HVOCs
B-1	5015-000628-005	28-Jun-00	19.5	ND>5.0	ND>5.0	**83,300.**	272.	ND>10.0	1,2,4-TMB = 123 1,3,5-TMB = 32.2 n-Propylbenzene = 16.8	83,572.
B-3	5015-000628-018	28-Jun-00	4.5	ND>5.0	ND>5.0	ND>5.0	ND>5.0	ND>10.0	ND	ND
B-6	5015-000629-039	29-Jun-00	7.0	ND>5.0	ND>5.0	ND>5.0	ND>5.0	ND>10.0	ND	ND
B-8	5015-000629-055	29-Jun-00	4.5	ND>5.0	ND>5.0	ND>5.0	ND>5.0	ND>10.0	ND	ND
Reference Level[1] ==>				1,670.[2]	800,000.[2]	500.	500.	526.[2]	#	#

Note:
# = not established
bgs = below ground surface
DCE = dichloroethene
EPA = U.S. Environmental Protection Agency
HVOCs = halogenated volatile organic compounds
kg = kilograms
MTCA = Model Toxics Control Act, Chapter 173-340 WAC
ND = not detected above detection limit indicated
PCE = tetrachloroethene
ppb = parts per billion
TCE = trichloroethene
TMB = rimethylbenzene
ug/l = micrograms/liter
VOCs = volatile organic compounds
WAC = Washington Administrative Code

1 = Reference Level based on MTCA Method A Level for Residential Soil (WAC 173-340-740) unless otherwise indicated
2 = Reference Level based on MTCA Method B Level for Residential Soil (CLARC II Table, February 1996)

Bold numbers indicate concentration in excess of Reference Level

TABLE 3 – Summary of Analytical Results for Groundwater Samples
Volatile Organic Compounds (VOCs) by EPA Method 8260

Phase II Environmental Site Assessment
Rainier Mall
4208 Rainier Avenue South
Seattle, Washington

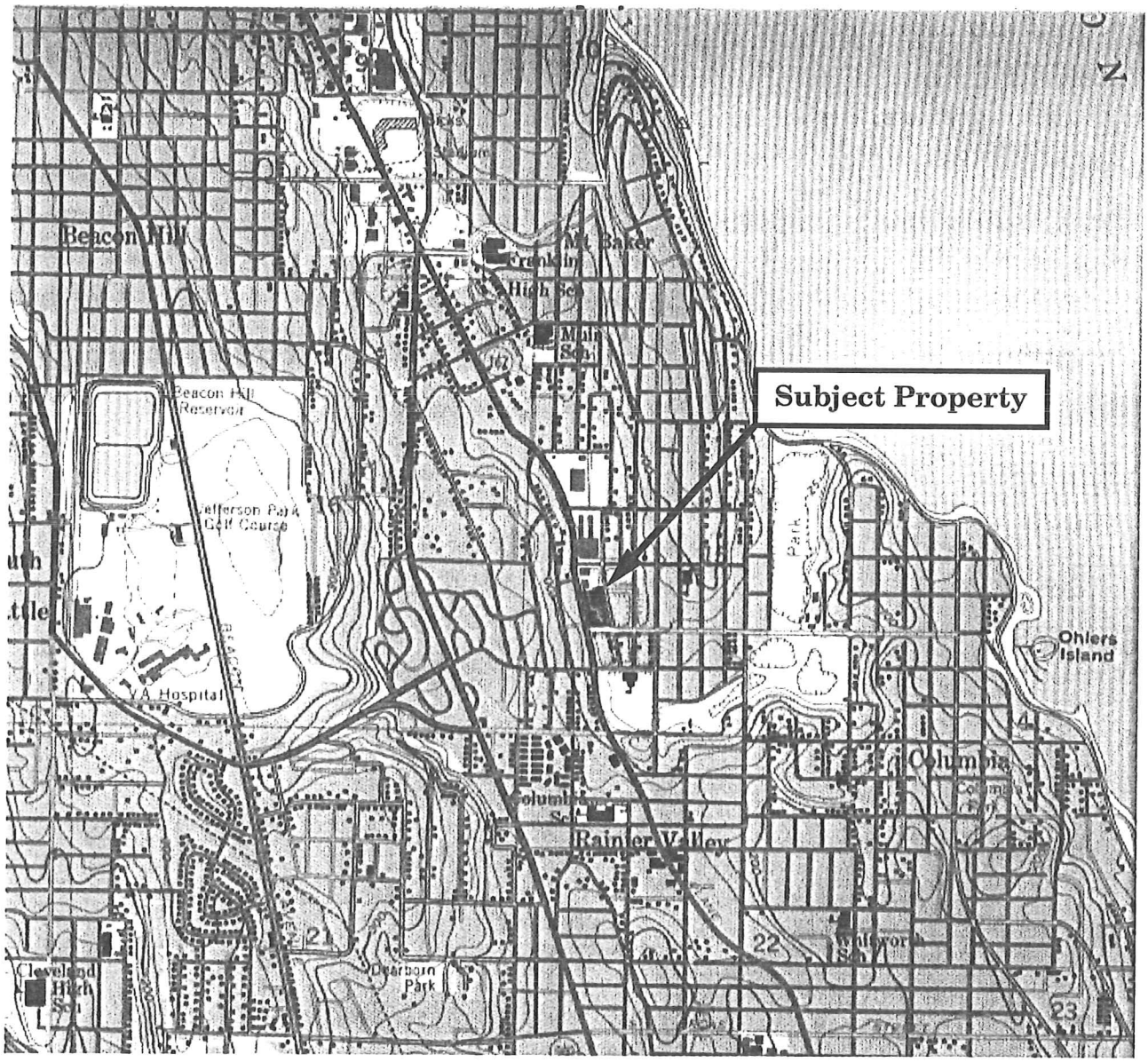
Project No. 5015

Boring Number	Sample Number	Sample Date	Screen Interval (feet bgs)	Analytical Results ug/l (ppb)						
				1,1-DCE	cis-1,2-DCE	PCE	TCE	Vinyl Chloride	Other VOCs	Total HVOCs
B-1	5015-000628-101	28-Jun-00	29 - 32	ND>1.0	25.7	**1,980.**	**288.**	ND>1.2	ND	2,294
B-3	5015-000628-102	28-Jun-00	27 - 30	ND>1.0	1.8	ND>1.0	ND>1.0	ND>1.2	ND	ND
B-4	5015-000628-103	28-Jun-00	27 - 30	**2.94**	40.8	**3,800.**	**1,100.**	**4.37**	ND	4,945
B-5	5015-000629-104	29-Jun-00	23 - 26	ND>1.0	ND>1.0	ND>1.0	ND>1.0	ND>1.2	ND	ND
B-7	5015-000629-105	29-Jun-00	23 - 26	ND>1.0	ND>1.0	1.25	ND>1.0	ND>1.2	ND	1.25
			Reference Level[1] ==>	0.0729[2]	80.[2]	5.0	5.0	0.2	#	#

Note:
# = not established
bgs = below ground surface
DCE = dichloroethene
EPA = U.S. Environmental Protection Agency
HVOCs = halogenated volatile organic compounds
MTCA = Model Toxics Control Act, Chapter 173-340 WAC
ND = not detected above detection limit indicated
PCE = tetrachloroethene
ppb = parts per billion
TCE = trichloroethene
ug/l = micrograms/liter
VOCs = volatile organic compounds
WAC = Washington Administrative Code

1 = Reference Level based on MTCA Method A Level (WAC 173-340-740) unless otherwise indicated
2 = Reference Level based on MTCA Method B Level for Groundwater (CLARC II Table, February 1996)

Bold numbers indicate concentration in excess of Reference Level



Note: Base Map from the Seattle South, Washington (1973) USGS 7.5 Minute Quadrangle
Contour Interval: 25 Feet

HAI Project No. 5015	**HAHN AND ASSOCIATES** INCORPORATED	**Location Map**	**FIGURE**
August 2000	ENVIRONMENTAL MANAGEMENT 434 NW SIXTH AVENUE, SUITE 203 PORTLAND, OREGON 97209 503/796-0717	Phase II Environmental Site Assessment Rainier Mall 4208 Rainier Avenue South Seattle, Washington	**1**

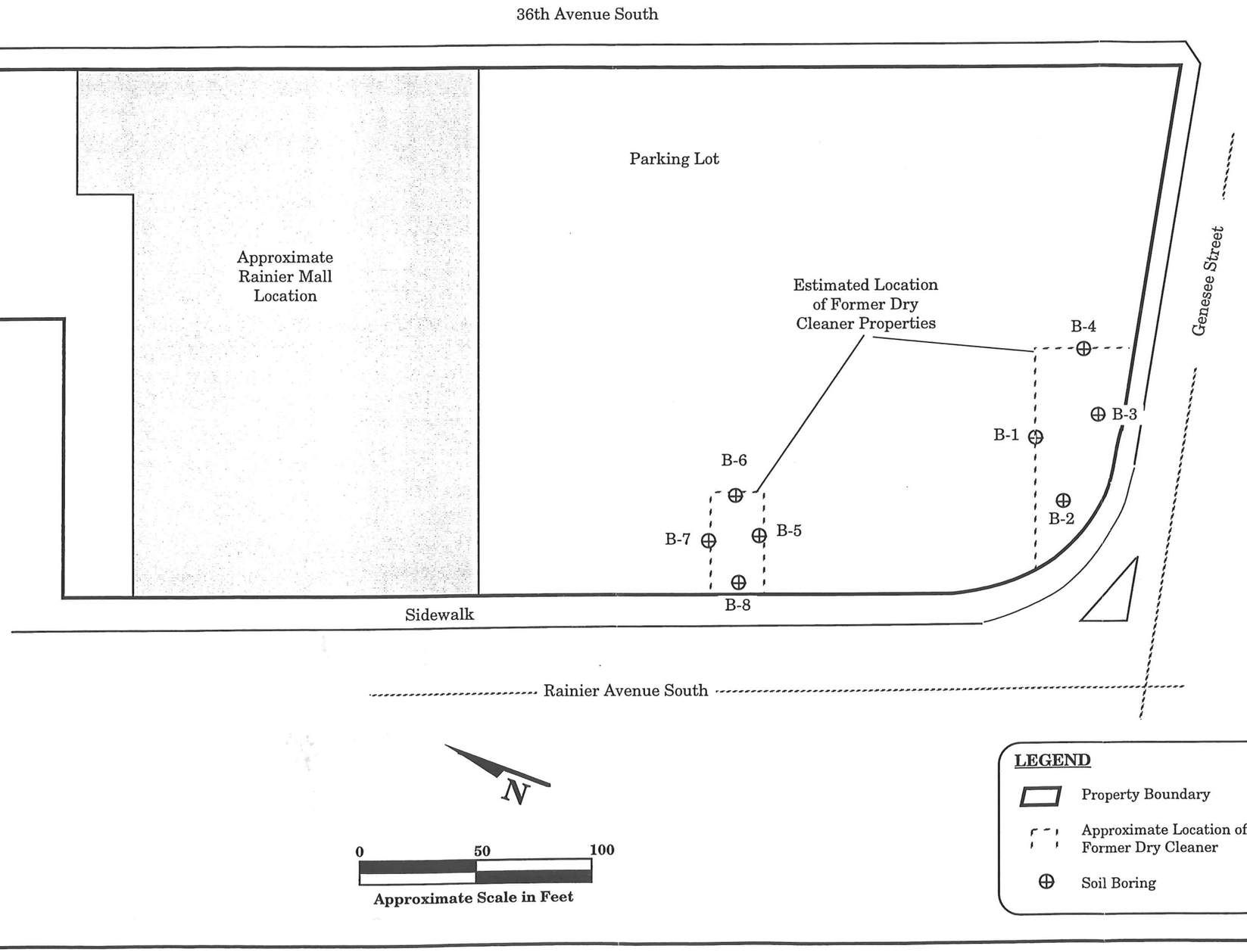


Figure 2

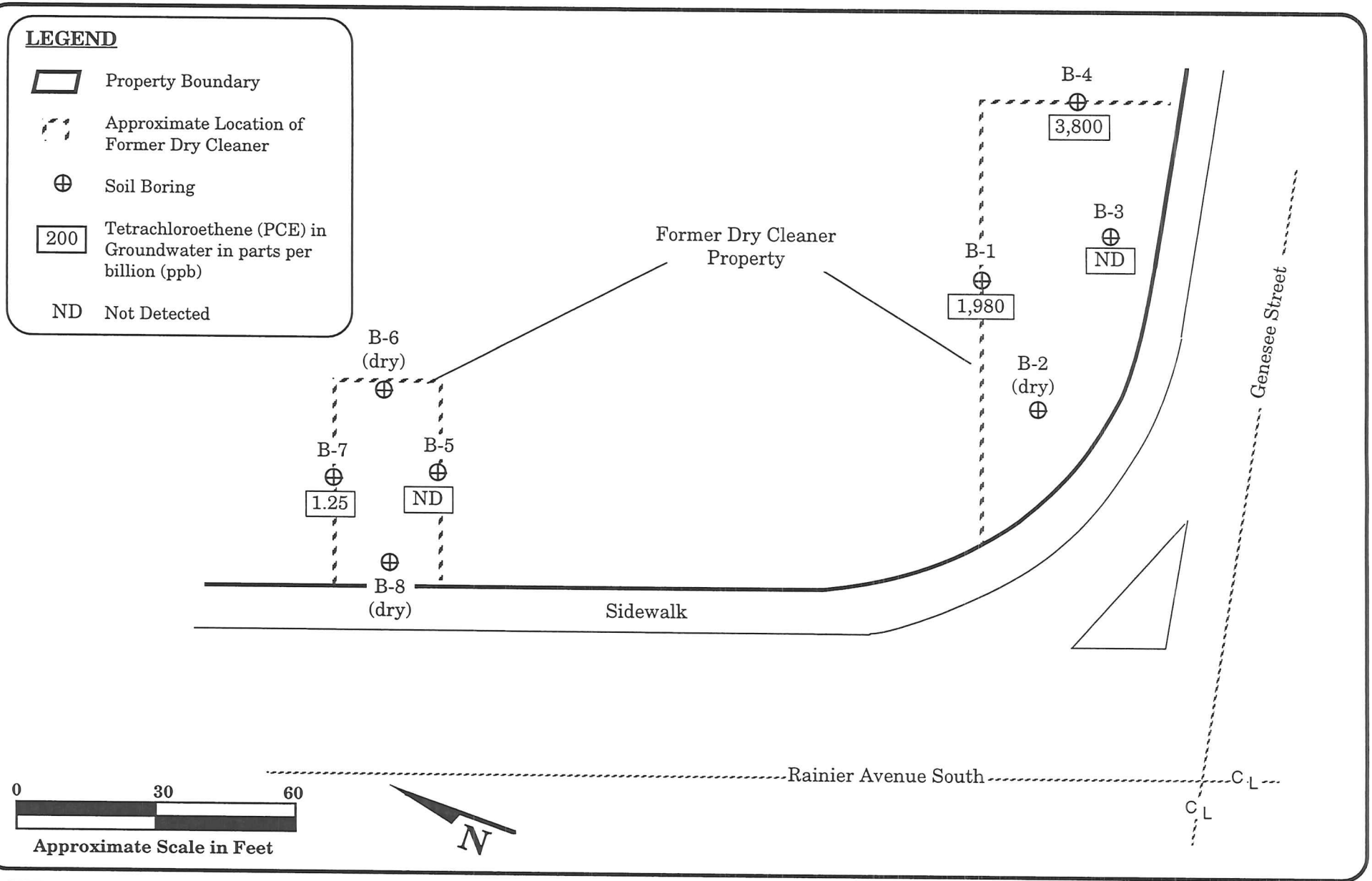
Site Map

Phase II Environmental Site Assessment
Rainier Mall
4208 Rainier Avenue South
Seattle, Washington

HAHN AND ASSOCIATES, INC.
ENVIRONMENTAL MANAGEMENT
434 NW SIXTH AVENUE, SUITE 203
PORTLAND, OREGON 97209
(503) 796-0717

August 2000

Project No. 5015



HAI Project No. 5015	**HAHN and ASSOCIATES** INCORPORATED	**PCE In Groundwater**	**FIGURE**
July 2000	ENVIRONMENTAL MANAGEMENT 434 NW SIXTH AVENUE, SUITE 203 PORTLAND, OREGON 97209 503/796-0717	Phase II Environmental Site Assessment Rainier Mall 4208 Rainier Avenue South Seattle, Washington	3

APPENDIX A

Apollo Geophysics Corporation Geophysical Survey

APOLLO GEOPHYSICS CORPORATION

Engineering, Geology, Environmental, Construction & Mining

Thursday, June 29, 2000

Guy H. Tanz
Hahn and Associates, Inc
434 NW 6th Avenue, Suite 203
Portland, Oregon 97209-3600

AGC File No.: **00.236**

Re: **UST Locate**
Rainier Mall
Seattle, Washington

Dear Mr. Tanz,

This letter reports the results of geophysical exploration for potential Underground Storage Tanks (USTs) at the above referenced site. The site is located at 4208 Rainier Avenue South in Seattle, Washington. A two-person field crew from **APOLLO GEOPHYSICS** completed the geophysical field program on Tuesday, June 27, 2000.

We investigated the site with an Electromagnetic (EM) instrument, which locates buried metal objects. We traversed the site with the EM instrument on approximate 5-foot line spacings, which produced target areas for the Ground Penetrating Radar (GPR). We further investigated the target areas using GPR, which enabled us to identify the targets as potential USTs, underground utilities, or demolition debris. Ground Penetrating Radar established a relative depth, size and ground projection of the object (i.e. to determine if the object was indicative or was not indicative of a UST). Small objects in the near surface, 1 to 2 feet, will respond the same as a larger object (UST) at depth.

RESULTS OF THE GEOPHYSICAL SURVEY

We traversed the parking lot area with an EM instrument, which found several target areas for further investigation with the GPR instrument. The EM target areas were traversed with a GPR instrument to evaluate their potential as USTs.

Two of the EM target areas, EM Targets #1 and #2, did not show potential as USTs after being traversed with the GPR Instrument. Target #2 may actually be an old building pad. We recommend these areas to be further evaluated with direct exploration to verify that the anomalies are not USTs.

Target area #3 was not traversed with the EM instrument. Reinforcing steel or some other material present in the concrete sidewalk interfered with the EM instrument. Therefore, the northeastern sidewalk was traversed with the GPR instrument. Target area #3 showed potential as an old excavation that was backfilled, after being traversed with the GPR instrument. We recommend this area to be further evaluated with direct exploration to rule out the possibility that the excavation was a former location of a UST.

An EM anomaly is located in the southeastern portion of the site in the area of a former dry cleaner property, which may be associated with the former dry cleaner building foundation.

The approximate locations of target areas #1 through #3 and the EM anomaly are shown on the Site Plan in Figure 1. The GPR images for target areas #1 through #3 are presented in Figures 2 through 6. All EM target areas and recommended direct exploration locations were marked in the field with environmentally degradable paint. Suspected pipes, demolition debris, etc., were not marked in the field.

The 'GPR Imagery' presented in Figures 2 through 6 have a horizontal and vertical scale of approximately 1 inch equals 4 feet. With regard to the estimated vertical scale, the normal relationship between radar time and actual depth for the Northwest Region is approximately 4 to 4.5 nanoseconds per foot. It should be noted that this relationship holds true in a general sense. Variations of water content, silt content and other factors, such as the presence of concrete flooring, may also change this relationship. Therefore it should be expected that the vertical scale is an estimate only and may vary from the shown scale.

ELECTROMAGNETIC

The electromagnetic, or EM device, transmits and receives an electromagnetic signal. The EM signal is transmitted through the ground, which in turn radiates a signal that is dependent on the

ground conductivity and which is also received at the receiver. The two signals, the transmitted and ground response EM waves, are balanced for a zero response in the instrument. When the ground conditions change, for example, when the transmitted signal encounters buried metal, the balance or null point changes, and the instrument responds with an audible signal. Depending on the size of the metal object, the penetration is up to 10 feet in depth. The EM survey was limited in areas, where reinforcing steel was present in the concrete or immediately adjacent to any above ground metal objects on the site.

GROUND PENETRATING RADAR

APOLLO GEOPHYSICS uses a PE1000 with either a 450 or 110 MHz antenna for shallow UST Locates. The radar antenna transmits an electromagnetic step-pulse at a frequency of 450/110 MHz at a selected stack rate of 32/64. When the signal encounters a change in electrical properties/permittivity, a portion of the signal energy is reflected back to the surface. The character of the reflection is used to define the source of the reflection. The reflected signal is received by the antenna, processed by a DSP radar processor with signal gain control and the raw data is recorded by the outboard 80486 computer with 16 MB RAM & 300 MB Hard Drive. The radar data is displayed by the computer on a 16.5 cm Color Active Matrix LCD VGA screen in real-time. The radar displays the data in real-time, which enables us to review the data in the field for on the spot evaluation. The recorded raw data, as recorded by the computer, is then later processed to remove unwanted peripheral effects by proprietary GPR software.

A typical circular UST will produce, in cross-section, a hyperbolic reflection. A traverse parallel to the centerline of the UST will show a horizontal (if there is no velocity or elevation change along the traverse) reflection, with a partial hyperbolic signature at both ends of the UST. The hyperbolic signature is the result of "seeing" the tank before the center of the antenna is over the tank.

WARRANTY OF SERVICES

Electromagnetic methods may define UST's constructed of non-ferrous metals, but not fiberglass or plastic materials. Ground Penetrating Radar may define fiberglass or plastic UST's or drums provided they fall within the exploration grid of the GPR.

All geophysical information presented is based upon geophysical measurements made by generally accepted methods and field procedures and **APOLLO GEOPHYSICS'** interpretation of these data. The geophysical results are, therefore, interpretative in nature and are considered to be a reasonably accurate presentation of existing conditions within the limitations of the methods employed. Services performed by **APOLLO GEOPHYSICS** under this agreement are conducted in a manner consistent with, but no less than, that level of care skill ordinarily exercised by members of the profession currently practicing under similar conditions. We cannot guarantee the accuracy or correctness of any interpretation, and we shall not be liable or responsible for any loss, cost, damages or expenses incurred or sustained by the Client resulting from any interpretation made by any of our officers, agents or employees. No other warranty, expressed or implied, is made. **APOLLO GEOPHYSICS** recognizes that subsurface conditions may vary from those encountered at the location where geophysical or other explorations are made. The data interpretations and recommendations made by **APOLLO GEOPHYSICS** are based solely on the information available to them at the time of performance; and **APOLLO GEOPHYSICS** shall not be responsible for the interpretation, by others, of the information developed.

We trust this will complete your requirements for this project and look forward to working with you on future projects. If you have any further questions or need further assistance, please don't hesitate to call.

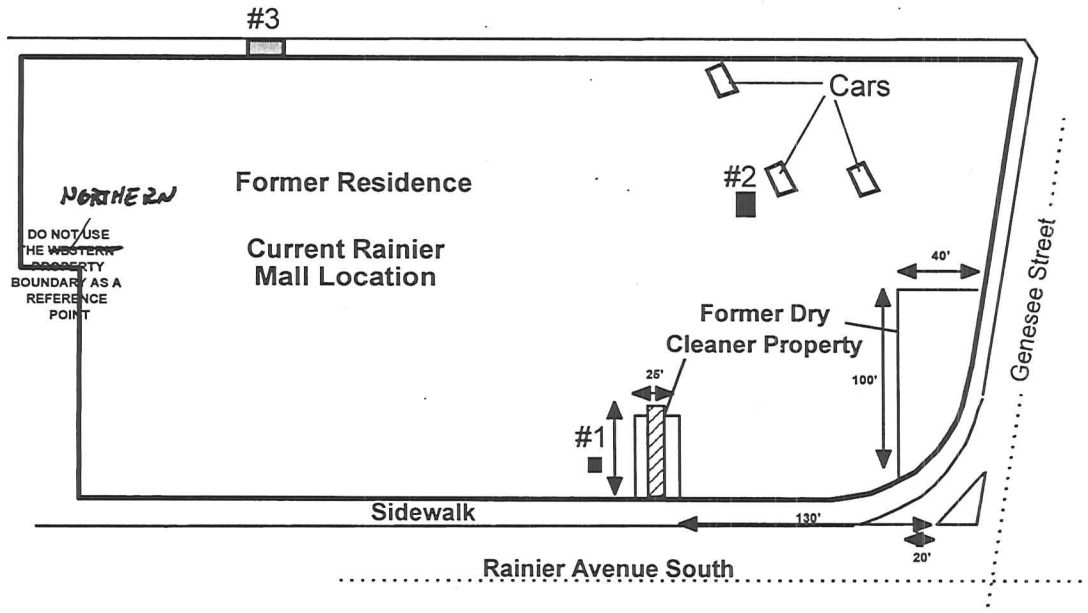
Sincerely,

APOLLO GEOPHYSICS CORPORATION

Lynn M. Ringstad
Project Geologist/Geophysicist

Matthew C. Ringstad
Project Geophysicist

Site Plan



LEGEND

#1 DESIGNATION AND APPROXIMATE LOCATION OF ANOMALY

#1 DESIGNATION AND APPROXIMATE LOCATION OF SUSPECTED OLD EXCAVATION

APPROXIMATE LOCATION OF EM ANOMALY

Note: Site Plan created from an electronic copy of a Site Map by Hahn and Associates, Inc., titled "Phase II Environmental Site Assessment, Rainier Mall," dated June 2000. The locations of all features shown are approximate.

0 100 200

Approximate Scale 1" = 100'

APOLLO GEOPHYSICS CORPORATION

ENGINEERING, GEOLOGY, ENVIRONMENTAL CONSTRUCTION & MINING

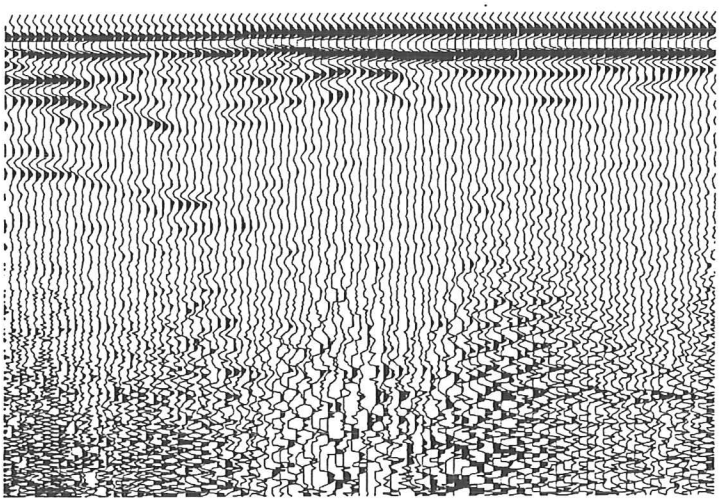
UST Locate - Rainier Mall
Seattle, Washington

FIGURE 1

FILE NO. 00.236

DATE June 2000

UST Locate - GPR Imagery - Target #1



top of anomaly

limits of anomaly

0 4 8

Approximate Scale 1" = 4'

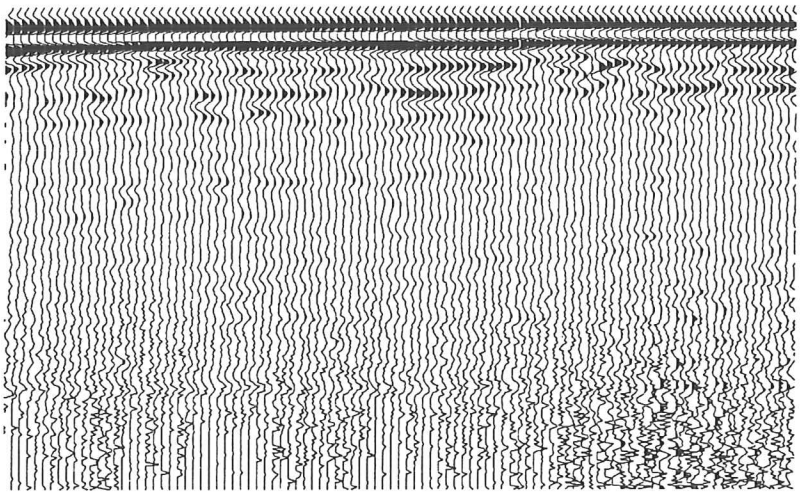
NOTE: The normal relationship between radar time and actual depth for the Northwest Region is approximately 4 to 4.5 nanoseconds per foot. It should be noted, that this relationship holds true in a general sense. Variations of water content, silt content and other factors, such as the presence of concrete flooring, may also change this relationship.

APOLLO GEOPHYSICS CORPORATION

ENGINEERING, GEOLOGY, ENVIRONMENTAL
CONSTRUCTION & MINING

UST Locate - Rainier Mall Seattle, Washington	FIGURE 2
FILE NO. 00.236	DATE June 2000

UST Locate - GPR Imagery - Target #1



top of anomaly

limits of anomaly

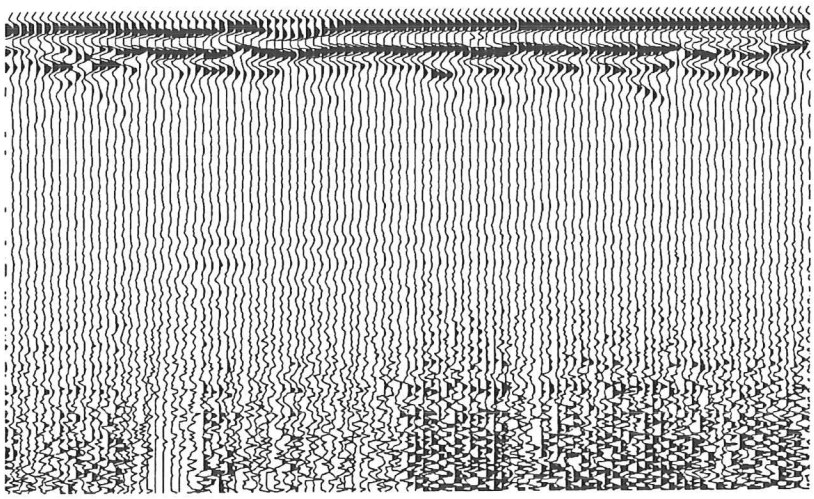
0 4 8

Approximate Scale 1" = 4'

NOTE: The normal relationship between radar time and actual depth for the Northwest Region is approximately 4 to 4.5 nanoseconds per foot. It should be noted, that this relationship holds true in a general sense. Variations of water content, silt content and other factors, such as the presence of concrete flooring, may also change this relationship.

APOLLO GEOPHYSICS CORPORATION ENGINEERING, GEOLOGY, ENVIRONMENTAL CONSTRUCTION & MINING	UST Locate - Rainier Mall Seattle, Washington	FIGURE 3
	FILE NO. 00.236	DATE June 2000

UST Locate - GPR Imagery - Target #2



top of suspected building pad

limits of suspected building pad

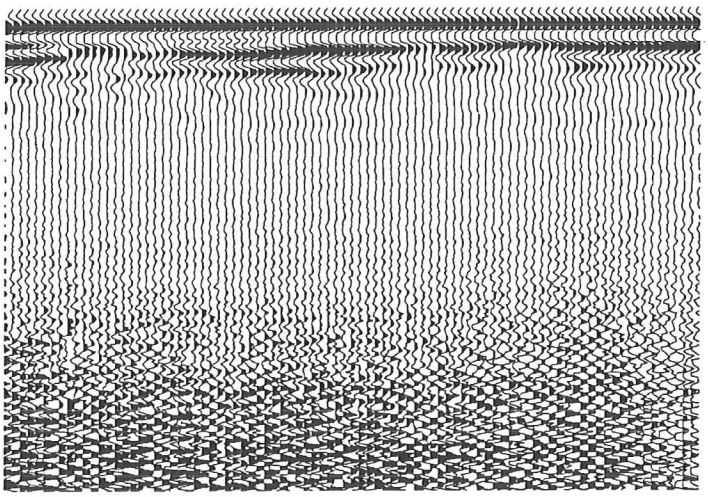
0 4 8

Approximate Scale 1" = 4'

NOTE: The normal relationship between radar time and actual depth for the Northwest Region is approximately 4 to 4.5 nanoseconds per foot. It should be noted, that this relationship holds true in a general sense. Variations of water content, silt content and other factors, such as the presence of concrete flooring, may also change this relationship.

APOLLO GEOPHYSICS CORPORATION ENGINEERING, GEOLOGY, ENVIRONMENTAL CONSTRUCTION & MINING	UST Locate - Rainier Mall Seattle, Washington	FIGURE 4
	FILE NO. 00.236	DATE June 2000

UST Locate - GPR Imagery - Target #2



top of
suspected
building pad

limits of
suspected building pad

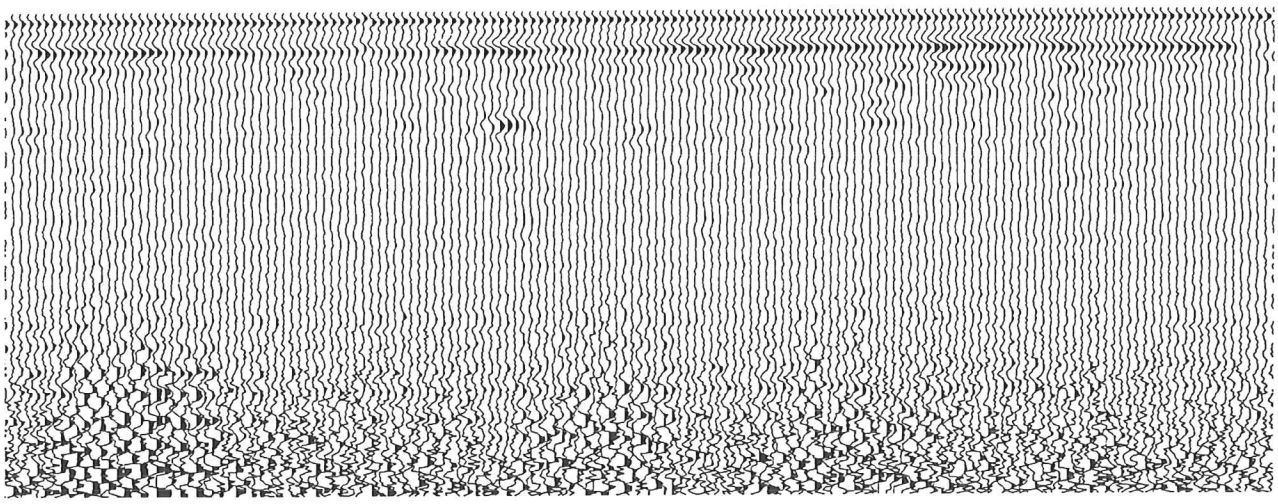
0 4 8

Approximate Scale 1" = 4'

NOTE: The normal relationship between radar time and actual depth for the Northwest Region is approximately 4 to 4.5 nanoseconds per foot. It should be noted, that this relationship holds true in a general sense. Variations of water content, silt content and other factors, such as the presence of concrete flooring, may also change this relationship.

APOLLO GEOPHYSICS CORPORATION ENGINEERING, GEOLOGY, ENVIRONMENTAL CONSTRUCTION & MINING	UST Locate - Rainier Mall Seattle, Washington	FIGURE 5
	FILE NO. 00.236	DATE June 2000

UST Locate - GPR Imagery - Target #3



limits of
suspected old excavation

0 4 8

Approximate Scale 1" = 4'

NOTE: The normal relationship between radar time and actual depth for the Northwest Region is approximately 4 to 4.5 nanoseconds per foot. It should be noted, that this relationship holds true in a general sense. Variations of water content, silt content and other factors, such as the presence of concrete flooring, may also change this relationship.

APOLLO GEOPHYSICS CORPORATION
ENGINEERING, GEOLOGY, ENVIRONMENTAL
CONSTRUCTION & MINING

UST Locate - Rainier Mall Seattle, Washington	FIGURE 6
FILE NO. 00.236	DATE June 2000

APPENDIX B

Laboratory Analytical Reports and Chain-of-Custody Documentation - Soil Samples

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

Laboratory: EAL
Lab Project No.: 0007003

CHAIN OF CUSTODY

Chain of Custody No.: 3

Project Manager: AL TATE
Project No.: 5015
Project Name: PacTrust Seattle
Collected by: Jay Greifer

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 ____

Comments
Sample Number Prefix: 5015-000628-

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers	Analyses to be Performed: EPA 8260	RUSH	Remarks
04	004	6/28/00	830	B1 @ 15	X			1			
05	005		Stop	@ 20	X			1	X		
06	006		853	@ 25	X			1			
07	007		909	@ 30	X			1			
08	008		939	@ 35	X			1			
09	009		955	@ 40	X			1			
10	010		1116	B2 @ 5	X			1			
11	011		1126	7 1/2	X			1			
12	012		1133	10	X			1			
13	013		1148	15	X			1			
14	014		1159	20	X			1			
15	015		1215	25	X			1			
16	016		1234	30	X			1			
17	017		1327	B3 @ 2 1/2	X			1			
18	018		1337	5	X			1	X		
19	019		1341	7 1/2	X			✓			
20	020		1347	10	X			1			
21	021		1400	15	X			1			
22	022		1411	20	X			1			
23	023		1424	25	X			1			
24	024		1555	B4 @ 2 1/2	X			1			
25	025		1604	5	X			1			
26	026		1616	7 1/2	X			1			
27	027		1628	10	X			1			
28	028		1627	15	X			1			
29	029		1632	20	X			1			

Relinquished by	Company	Date	Time	Received by	Company
	HAHN & ASSOC	6/30/00	1430		EAL
Relinquished by	Company	Date	Time	Received by	Company

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

Laboratory EJL

Lab Project No. C007003

CHAIN OF CUSTODY

Chain of Custody No. 4

Project Manager Jay Greifer
Project No. 5015
Project Name Pac Trust Seattle
Collected by Jay Greifer

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 ____

Comments
Sample Number Prefix: 5015-000626-

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers	Analyses to be Performed: EPA 8260	RUSH	Remarks
30	030	6/26	1644	B4825	X			1			

Relinquished by	Company	Date	Time	Received by	Company
	HAHN & ASSOC	6/26/00	1430	Dawn Klein	EJL
Relinquished by	Company	Date	Time	Received by	Company

5

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

Laboratory: EAL
Lab Project No.: CC07003

CHAIN OF CUSTODY
Chain of Custody No.: 5

Project Manager: Guy Hahn
Project No.: 5015
Project Name: PacTrust Seattle
Collected by: Jay Greifer

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

Comments
Sample Number Prefix: 5015-111039

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers	Analyses to be Performed: EPA 8260	RUSH	Remarks
31	031	6/29/11	701	B5 @ 2 1/2	X			1			
32	032		711	5	X			1			
33	033		718	7 1/2	X			1			
34	034		727	10	X			1			
35	035		735	15	X			1			
36	036		745	20	X			1			
37	037		758	25	X			1			
38	038		918	B6 2 1/2	X			1			
39	039		934	7 1/2	X			1	*		
40	040		948	10	X			1			
41	041		947	15	X			1			
42	042		953	20	X			1			
43	043		1015	25	X			1			
44	044		1023	30	X			1			
45	045		1033	35	X			1			
46	046		1055	40	X			1			
47	047		1216	B7 @ 2 1/2	X			1			
48	048		1231	5	X			1			
49	049		1247	7 1/2	X			1			
50	050		1255	10	X			1			
51	051		1304	15	X			1			
52	052		1314	20	X			1			
53	053		1320	25	X			1			
54	054		1433	B8 @ 2 1/2	X			1			
55	055		1445	5	X			1	*		
56	056		1451	7 1/2	X			1			

Relinquished by	Company	Date	Time	Received by	Company
	HAHN & ASSOC	6/30/11	1430		EAL
Relinquished by	Company	Date	Time	Received by	Company

1 of 1

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

Laboratory: ESL
Lab Project No.: 000703

CHAIN OF CUSTODY
Chain of Custody No.: 17

Project Manager: GUTHRIE
Project No.: # 505
Project Name: Pac Trust Seattle
Collected by: Jay Greifer

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

Comments
Sample Number Prefix: 505-000629-

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers	Analyses to be Performed: EPA 8260	RUSH	Remarks
57	057	6-29-00	1459	DB @ 10	X			1			
58	058	"	1511	15	X			1			
59	059	"	1517	20	X			1			
60	060	"	1538	25	X			1			
61	061	"	1544	30	X			1			
62	062	"	1600	35	X			1			
63	063	"	1615	40	X			1			

Relinquished by	Company	Date	Time	Received by	Company
	HAHN & ASSOC	6/30/00	1470		ESL
Relinquished by	Company	Date	Time	Received by	Company

Environmental Services Laboratory, Inc. E S L

17400 SW Upper Boones Ferry Road • Suite 270 • Portland, OR 97224 • (503) 670-8520

July 13, 2000

Mr. Guy Tanz
Hahn & Associates
434 N.W. 6th Avenue
Suite 203
Portland, OR 97209
TEL: (503)796-0717
FAX (503) 227-2209

RE: 5015/PacTrust Seattle Order No.: 0007003

Dear Mr. Guy Tanz,

Environmental Services Laboratory received 63 samples on 6/30/00 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Volatiles by GC/MS (EPA 8260B)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval from the Laboratory.

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

Sincerely,

Nichole Karl

Nichole Karl
Project Manager

Keith Hunter

Technical Review

Environmental Services Laboratory

Date: *17-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-005
Lab Order:	0007003	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007003-05A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: **tmh**
1,1,1,2-Tetrachloroethane	ND	5.00		µg/Kg	1	7/11/00
1,1,1-Trichloroethane	ND	5.00		µg/Kg	1	7/11/00
1,1,2,2-Tetrachloroethane	ND	5.00		µg/Kg	1	7/11/00
1,1,2-Trichloroethane	ND	5.00		µg/Kg	1	7/11/00
1,1-Dichloroethane	ND	5.00		µg/Kg	1	7/11/00
1,1-Dichloroethene	ND	5.00		µg/Kg	1	7/11/00
1,1-Dichloropropene	ND	5.00		µg/Kg	1	7/11/00
1,2,3-Trichlorobenzene	ND	5.00		µg/Kg	1	7/11/00
1,2,3-Trichloropropane	ND	5.00		µg/Kg	1	7/11/00
1,2,4-Trichlorobenzene	ND	5.00		µg/Kg	1	7/11/00
1,2,4-Trimethylbenzene	123	5.00		µg/Kg	1	7/11/00
1,2-Dibromo-3-chloropropane	ND	10.0		µg/Kg	1	7/11/00
1,2-Dibromoethane	ND	5.00		µg/Kg	1	7/11/00
1,2-Dichlorobenzene	ND	5.00		µg/Kg	1	7/11/00
1,2-Dichloroethane	ND	5.00		µg/Kg	1	7/11/00
1,2-Dichloropropane	ND	5.00		µg/Kg	1	7/11/00
1,3,5-Trimethylbenzene	32.2	5.00		µg/Kg	1	7/11/00
1,3-Dichlorobenzene	ND	5.00		µg/Kg	1	7/11/00
1,3-Dichloropropane	ND	5.00		µg/Kg	1	7/11/00
1,4-Dichlorobenzene	ND	5.00		µg/Kg	1	7/11/00
2,2-Dichloropropane	ND	5.00		µg/Kg	1	7/11/00
2-Butanone	ND	100		µg/Kg	1	7/11/00
2-Chloroethyl vinyl ether	ND	50.0		µg/Kg	1	7/11/00
2-Chlorotoluene	ND	5.00		µg/Kg	1	7/11/00
2-Hexanone	ND	100		µg/Kg	1	7/11/00
4-Chlorotoluene	ND	5.00		µg/Kg	1	7/11/00
4-Isopropyltoluene	ND	5.00		µg/Kg	1	7/11/00
4-Methyl-2-pentanone	ND	5.00		µg/Kg	1	7/11/00
Acetone	ND	100		µg/Kg	1	7/11/00
Benzene	ND	5.00		µg/Kg	1	7/11/00
Bromobenzene	ND	5.00		µg/Kg	1	7/11/00
Bromochloromethane	ND	5.00		µg/Kg	1	7/11/00
Bromodichloromethane	ND	5.00		µg/Kg	1	7/11/00
Bromoform	ND	5.00		µg/Kg	1	7/11/00
Bromomethane	ND	10.0		µg/Kg	1	7/11/00
Carbon disulfide	ND	5.00		µg/Kg	1	7/11/00
Carbon tetrachloride	ND	5.00		µg/Kg	1	7/11/00
Chlorobenzene	ND	5.00		µg/Kg	1	7/11/00
Chloroethane	ND	10.0		µg/Kg	1	7/11/00
Chloroform	ND	5.00		µg/Kg	1	7/11/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-005
Lab Order:	0007003	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007003-05A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Chloromethane	ND	10.0		µg/Kg	1	7/11/00
cis-1,2-Dichloroethene	ND	5.00		µg/Kg	1	7/11/00
cis-1,3-Dichloropropene	ND	5.00		µg/Kg	1	7/11/00
Dibromochloromethane	ND	5.00		µg/Kg	1	7/11/00
Dibromomethane	ND	5.00		µg/Kg	1	7/11/00
Dichlorodifluoromethane	ND	10.0		µg/Kg	1	7/11/00
Ethylbenzene	ND	5.00		µg/Kg	1	7/11/00
Hexachlorobutadiene	ND	5.00		µg/Kg	1	7/11/00
Iodomethane	ND	5.00		µg/Kg	1	7/11/00
Isopropylbenzene	ND	5.00		µg/Kg	1	7/11/00
m,p-Xylene	ND	10.0		µg/Kg	1	7/11/00
Methyl tert-butyl ether	ND	10.0		µg/Kg	1	7/11/00
Methylene chloride	ND	100		µg/Kg	1	7/11/00
n-Butylbenzene	ND	5.00		µg/Kg	1	7/11/00
n-Propylbenzene	16.8	5.00		µg/Kg	1	7/11/00
Naphthalene	ND	25.0		µg/Kg	1	7/11/00
o-Xylene	ND	5.00		µg/Kg	1	7/11/00
sec-Butylbenzene	ND	5.00		µg/Kg	1	7/11/00
Styrene	ND	5.00		µg/Kg	1	7/11/00
tert-Butylbenzene	ND	5.00		µg/Kg	1	7/11/00
Tetrachloroethene	83,300	500		µg/Kg	1	7/11/00
Toluene	ND	5.00		µg/Kg	1	7/11/00
trans-1,2-Dichloroethene	ND	5.00		µg/Kg	1	7/11/00
trans-1,3-Dichloropropene	ND	5.00		µg/Kg	1	7/11/00
Trichloroethene	272	5.00		µg/Kg	1	7/11/00
Trichlorofluoromethane	ND	10.0		µg/Kg	1	7/11/00
Vinyl acetate	ND	5.00		µg/Kg	1	7/11/00
Vinyl chloride	ND	10.0		µg/Kg	1	7/11/00
Surr: 4-Bromofluorobenzene	98.4	74-121		%REC	1	7/11/00
Surr: Dibromofluoromethane	97.4	80-120		%REC	1	7/11/00
Surr: Toluene-d8	101.0	81-117		%REC	1	7/11/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-018
Lab Order:	0007003	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007003-18A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: **tmh**
1,1,1,2-Tetrachloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1,1-Trichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1,2,2-Tetrachloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1,2-Trichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1-Dichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1-Dichloroethene	ND	5.00		µg/Kg	1	7/10/00
1,1-Dichloropropene	ND	5.00		µg/Kg	1	7/10/00
1,2,3-Trichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,2,3-Trichloropropane	ND	5.00		µg/Kg	1	7/10/00
1,2,4-Trichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,2,4-Trimethylbenzene	ND	5.00		µg/Kg	1	7/10/00
1,2-Dibromo-3-chloropropane	ND	10.0		µg/Kg	1	7/10/00
1,2-Dibromoethane	ND	5.00		µg/Kg	1	7/10/00
1,2-Dichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,2-Dichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,2-Dichloropropane	ND	5.00		µg/Kg	1	7/10/00
1,3,5-Trimethylbenzene	ND	5.00		µg/Kg	1	7/10/00
1,3-Dichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,3-Dichloropropane	ND	5.00		µg/Kg	1	7/10/00
1,4-Dichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
2,2-Dichloropropane	ND	5.00		µg/Kg	1	7/10/00
2-Butanone	ND	100		µg/Kg	1	7/10/00
2-Chloroethyl vinyl ether	ND	50.0		µg/Kg	1	7/10/00
2-Chlorotoluene	ND	5.00		µg/Kg	1	7/10/00
2-Hexanone	ND	100		µg/Kg	1	7/10/00
4-Chlorotoluene	ND	5.00		µg/Kg	1	7/10/00
4-Isopropyltoluene	ND	5.00		µg/Kg	1	7/10/00
4-Methyl-2-pentanone	ND	5.00		µg/Kg	1	7/10/00
Acetone	ND	100		µg/Kg	1	7/10/00
Acrylonitrile	ND	250		µg/Kg	1	7/10/00
Benzene	ND	5.00		µg/Kg	1	7/10/00
Bromobenzene	ND	5.00		µg/Kg	1	7/10/00
Bromochloromethane	ND	5.00		µg/Kg	1	7/10/00
Bromodichloromethane	ND	5.00		µg/Kg	1	7/10/00
Bromoform	ND	5.00		µg/Kg	1	7/10/00
Bromomethane	ND	10.0		µg/Kg	1	7/10/00
Carbon disulfide	ND	5.00		µg/Kg	1	7/10/00
Carbon tetrachloride	ND	5.00		µg/Kg	1	7/10/00
Chlorobenzene	ND	5.00		µg/Kg	1	7/10/00
Chloroethane	ND	10.0		µg/Kg	1	7/10/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-018
Lab Order:	0007003	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007003-18A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Chloroform	ND	5.00		µg/Kg	1	7/10/00
Chloromethane	ND	10.0		µg/Kg	1	7/10/00
cis-1,2-Dichloroethene	ND	5.00		µg/Kg	1	7/10/00
cis-1,3-Dichloropropene	ND	5.00		µg/Kg	1	7/10/00
Dibromochloromethane	ND	5.00		µg/Kg	1	7/10/00
Dibromomethane	ND	5.00		µg/Kg	1	7/10/00
Dichlorodifluoromethane	ND	10.0		µg/Kg	1	7/10/00
Ethylbenzene	ND	5.00		µg/Kg	1	7/10/00
Hexachlorobutadiene	ND	5.00		µg/Kg	1	7/10/00
Iodomethane	ND	5.00		µg/Kg	1	7/10/00
Isopropylbenzene	ND	5.00		µg/Kg	1	7/10/00
m,p-Xylene	ND	10.0		µg/Kg	1	7/10/00
Methyl tert-butyl ether	ND	10.0		µg/Kg	1	7/10/00
Methylene chloride	ND	100		µg/Kg	1	7/10/00
n-Butylbenzene	ND	5.00		µg/Kg	1	7/10/00
n-Propylbenzene	ND	5.00		µg/Kg	1	7/10/00
Naphthalene	ND	25.0		µg/Kg	1	7/10/00
o-Xylene	ND	5.00		µg/Kg	1	7/10/00
sec-Butylbenzene	ND	5.00		µg/Kg	1	7/10/00
Styrene	ND	5.00		µg/Kg	1	7/10/00
tert-Butylbenzene	ND	5.00		µg/Kg	1	7/10/00
Tetrachloroethene	ND	5.00		µg/Kg	1	7/10/00
Toluene	ND	5.00		µg/Kg	1	7/10/00
trans-1,2-Dichloroethene	ND	5.00		µg/Kg	1	7/10/00
trans-1,3-Dichloropropene	ND	5.00		µg/Kg	1	7/10/00
Trichloroethene	ND	5.00		µg/Kg	1	7/10/00
Trichlorofluoromethane	ND	10.0		µg/Kg	1	7/10/00
Vinyl acetate	ND	5.00		µg/Kg	1	7/10/00
Vinyl chloride	ND	10.0		µg/Kg	1	7/10/00
Surr: 4-Bromofluorobenzene	99.6	74-121		%REC	1	7/10/00
Surr: Dibromofluoromethane	100.6	80-120		%REC	1	7/10/00
Surr: Toluene-d8	101.2	81-117		%REC	1	7/10/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000629-039
Lab Order:	0007003	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/29/00
Lab ID:	0007003-39A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: **tmh**
1,1,1,2-Tetrachloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1,1-Trichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1,2,2-Tetrachloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1,2-Trichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1-Dichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1-Dichloroethene	ND	5.00		µg/Kg	1	7/10/00
1,1-Dichloropropene	ND	5.00		µg/Kg	1	7/10/00
1,2,3-Trichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,2,3-Trichloropropane	ND	5.00		µg/Kg	1	7/10/00
1,2,4-Trichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,2,4-Trimethylbenzene	ND	5.00		µg/Kg	1	7/10/00
1,2-Dibromo-3-chloropropane	ND	10.0		µg/Kg	1	7/10/00
1,2-Dibromoethane	ND	5.00		µg/Kg	1	7/10/00
1,2-Dichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,2-Dichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,2-Dichloropropane	ND	5.00		µg/Kg	1	7/10/00
1,3,5-Trimethylbenzene	ND	5.00		µg/Kg	1	7/10/00
1,3-Dichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,3-Dichloropropane	ND	5.00		µg/Kg	1	7/10/00
1,4-Dichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
2,2-Dichloropropane	ND	5.00		µg/Kg	1	7/10/00
2-Butanone	ND	100		µg/Kg	1	7/10/00
2-Chloroethyl vinyl ether	ND	50.0		µg/Kg	1	7/10/00
2-Chlorotoluene	ND	5.00		µg/Kg	1	7/10/00
2-Hexanone	ND	100		µg/Kg	1	7/10/00
4-Chlorotoluene	ND	5.00		µg/Kg	1	7/10/00
4-Isopropyltoluene	ND	5.00		µg/Kg	1	7/10/00
4-Methyl-2-pentanone	ND	5.00		µg/Kg	1	7/10/00
Acetone	ND	100		µg/Kg	1	7/10/00
Benzene	ND	5.00		µg/Kg	1	7/10/00
Bromobenzene	ND	5.00		µg/Kg	1	7/10/00
Bromochloromethane	ND	5.00		µg/Kg	1	7/10/00
Bromodichloromethane	ND	5.00		µg/Kg	1	7/10/00
Bromoform	ND	5.00		µg/Kg	1	7/10/00
Bromomethane	ND	10.0		µg/Kg	1	7/10/00
Carbon disulfide	ND	5.00		µg/Kg	1	7/10/00
Carbon tetrachloride	ND	5.00		µg/Kg	1	7/10/00
Chlorobenzene	ND	5.00		µg/Kg	1	7/10/00
Chloroethane	ND	10.0		µg/Kg	1	7/10/00
Chloroform	ND	5.00		µg/Kg	1	7/10/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000629-039
Lab Order:	0007003	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/29/00
Lab ID:	0007003-39A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Chloromethane	ND	10.0		µg/Kg	1	7/10/00
cis-1,2-Dichloroethene	ND	5.00		µg/Kg	1	7/10/00
cis-1,3-Dichloropropene	ND	5.00		µg/Kg	1	7/10/00
Dibromochloromethane	ND	5.00		µg/Kg	1	7/10/00
Dibromomethane	ND	5.00		µg/Kg	1	7/10/00
Dichlorodifluoromethane	ND	10.0		µg/Kg	1	7/10/00
Ethylbenzene	ND	5.00		µg/Kg	1	7/10/00
Hexachlorobutadiene	ND	5.00		µg/Kg	1	7/10/00
Iodomethane	ND	5.00		µg/Kg	1	7/10/00
Isopropylbenzene	ND	5.00		µg/Kg	1	7/10/00
m,p-Xylene	ND	10.0		µg/Kg	1	7/10/00
Methyl tert-butyl ether	ND	10.0		µg/Kg	1	7/10/00
Methylene chloride	ND	100		µg/Kg	1	7/10/00
n-Butylbenzene	ND	5.00		µg/Kg	1	7/10/00
n-Propylbenzene	ND	5.00		µg/Kg	1	7/10/00
Naphthalene	ND	25.0		µg/Kg	1	7/10/00
o-Xylene	ND	5.00		µg/Kg	1	7/10/00
sec-Butylbenzene	ND	5.00		µg/Kg	1	7/10/00
Styrene	ND	5.00		µg/Kg	1	7/10/00
tert-Butylbenzene	ND	5.00		µg/Kg	1	7/10/00
Tetrachloroethene	ND	5.00		µg/Kg	1	7/10/00
Toluene	ND	5.00		µg/Kg	1	7/10/00
trans-1,2-Dichloroethene	ND	5.00		µg/Kg	1	7/10/00
trans-1,3-Dichloropropene	ND	5.00		µg/Kg	1	7/10/00
Trichloroethene	ND	5.00		µg/Kg	1	7/10/00
Trichlorofluoromethane	ND	10.0		µg/Kg	1	7/10/00
Vinyl acetate	ND	5.00		µg/Kg	1	7/10/00
Vinyl chloride	ND	10.0		µg/Kg	1	7/10/00
Surr: 4-Bromofluorobenzene	101.4	74-121		%REC	1	7/10/00
Surr: Dibromofluoromethane	103.4	80-120		%REC	1	7/10/00
Surr: Toluene-d8	104.6	81-117		%REC	1	7/10/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000629-055
Lab Order:	0007003	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/29/00
Lab ID:	0007003-55A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: **tmh**
1,1,1,2-Tetrachloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1,1-Trichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1,2,2-Tetrachloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1,2-Trichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1-Dichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,1-Dichloroethene	ND	5.00		µg/Kg	1	7/10/00
1,1-Dichloropropene	ND	5.00		µg/Kg	1	7/10/00
1,2,3-Trichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,2,3-Trichloropropane	ND	5.00		µg/Kg	1	7/10/00
1,2,4-Trichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,2,4-Trimethylbenzene	ND	5.00		µg/Kg	1	7/10/00
1,2-Dibromo-3-chloropropane	ND	10.0		µg/Kg	1	7/10/00
1,2-Dibromoethane	ND	5.00		µg/Kg	1	7/10/00
1,2-Dichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,2-Dichloroethane	ND	5.00		µg/Kg	1	7/10/00
1,2-Dichloropropane	ND	5.00		µg/Kg	1	7/10/00
1,3,5-Trimethylbenzene	ND	5.00		µg/Kg	1	7/10/00
1,3-Dichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
1,3-Dichloropropane	ND	5.00		µg/Kg	1	7/10/00
1,4-Dichlorobenzene	ND	5.00		µg/Kg	1	7/10/00
2,2-Dichloropropane	ND	5.00		µg/Kg	1	7/10/00
2-Butanone	ND	100		µg/Kg	1	7/10/00
2-Chloroethyl vinyl ether	ND	50.0		µg/Kg	1	7/10/00
2-Chlorotoluene	ND	5.00		µg/Kg	1	7/10/00
2-Hexanone	ND	100		µg/Kg	1	7/10/00
4-Chlorotoluene	ND	5.00		µg/Kg	1	7/10/00
4-Isopropyltoluene	ND	5.00		µg/Kg	1	7/10/00
4-Methyl-2-pentanone	ND	5.00		µg/Kg	1	7/10/00
Acetone	ND	100		µg/Kg	1	7/10/00
Benzene	ND	5.00		µg/Kg	1	7/10/00
Bromobenzene	ND	5.00		µg/Kg	1	7/10/00
Bromochloromethane	ND	5.00		µg/Kg	1	7/10/00
Bromodichloromethane	ND	5.00		µg/Kg	1	7/10/00
Bromoform	ND	5.00		µg/Kg	1	7/10/00
Bromomethane	ND	10.0		µg/Kg	1	7/10/00
Carbon disulfide	ND	5.00		µg/Kg	1	7/10/00
Carbon tetrachloride	ND	5.00		µg/Kg	1	7/10/00
Chlorobenzene	ND	5.00		µg/Kg	1	7/10/00
Chloroethane	ND	10.0		µg/Kg	1	7/10/00
Chloroform	ND	5.00		µg/Kg	1	7/10/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *17-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000629-055
Lab Order:	0007003	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/29/00
Lab ID:	0007003-55A	**Matrix:**	SOIL

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Chloromethane	ND	10.0		µg/Kg	1	7/10/00
cis-1,2-Dichloroethene	ND	5.00		µg/Kg	1	7/10/00
cis-1,3-Dichloropropene	ND	5.00		µg/Kg	1	7/10/00
Dibromochloromethane	ND	5.00		µg/Kg	1	7/10/00
Dibromomethane	ND	5.00		µg/Kg	1	7/10/00
Dichlorodifluoromethane	ND	10.0		µg/Kg	1	7/10/00
Ethylbenzene	ND	5.00		µg/Kg	1	7/10/00
Hexachlorobutadiene	ND	5.00		µg/Kg	1	7/10/00
Iodomethane	ND	5.00		µg/Kg	1	7/10/00
Isopropylbenzene	ND	5.00		µg/Kg	1	7/10/00
m,p-Xylene	ND	10.0		µg/Kg	1	7/10/00
Methyl tert-butyl ether	ND	10.0		µg/Kg	1	7/10/00
Methylene chloride	ND	100		µg/Kg	1	7/10/00
n-Butylbenzene	ND	5.00		µg/Kg	1	7/10/00
n-Propylbenzene	ND	5.00		µg/Kg	1	7/10/00
Naphthalene	ND	25.0		µg/Kg	1	7/10/00
o-Xylene	ND	5.00		µg/Kg	1	7/10/00
sec-Butylbenzene	ND	5.00		µg/Kg	1	7/10/00
Styrene	ND	5.00		µg/Kg	1	7/10/00
tert-Butylbenzene	ND	5.00		µg/Kg	1	7/10/00
Tetrachloroethene	ND	5.00		µg/Kg	1	7/10/00
Toluene	ND	5.00		µg/Kg	1	7/10/00
trans-1,2-Dichloroethene	ND	5.00		µg/Kg	1	7/10/00
trans-1,3-Dichloropropene	ND	5.00		µg/Kg	1	7/10/00
Trichloroethene	ND	5.00		µg/Kg	1	7/10/00
Trichlorofluoromethane	ND	10.0		µg/Kg	1	7/10/00
Vinyl acetate	ND	5.00		µg/Kg	1	7/10/00
Vinyl chloride	ND	10.0		µg/Kg	1	7/10/00
Surr: 4-Bromofluorobenzene	102.6	74-121		%REC	1	7/10/00
Surr: Dibromofluoromethane	102.6	80-120		%REC	1	7/10/00
Surr: Toluene-d8	106.2	81-117		%REC	1	7/10/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

CLIENT: Hahn & Associates
Work Order: 0007003
Project: 5015/PacTrust Seattle

QC SUMMARY REPORT
Method Blank

Sample ID: **MBLANK** Batch ID: **05 8260 S-7/1** Test Code: **EPA 8260B** Units: **µg/Kg** Analysis Date **7/10/00** Prep Date:

Client ID: **0007003** Run ID: **ANGSTROM_000710A** SeqNo: **46169**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	5									
1,1,1-Trichloroethane	ND	5									
1,1,2,2-Tetrachloroethane	ND	5									
1,1,2-Trichloroethane	ND	5									
1,1-Dichloroethane	ND	5									
1,1-Dichloroethene	ND	5									
1,1-Dichloropropene	ND	5									
1,2,3-Trichlorobenzene	ND	5									
1,2,3-Trichloropropane	ND	5									
1,2,4-Trichlorobenzene	ND	5									
1,2,4-Trimethylbenzene	ND	5									
1,2-Dibromo-3-chloropropane	ND	10									
1,2-Dibromoethane	ND	5									
1,2-Dichlorobenzene	ND	5									
1,2-Dichloroethane	ND	5									
1,2-Dichloropropane	ND	5									
1,3,5-Trimethylbenzene	ND	5									
1,3-Dichlorobenzene	ND	5									
1,3-Dichloropropane	ND	5									
1,4-Dichlorobenzene	ND	5									
2,2-Dichloropropane	ND	5									
2-Butanone	ND	100									
2-Chloroethyl vinyl ether	ND	50									
2-Chlorotoluene	ND	5									
2-Hexanone	ND	100									
4-Chlorotoluene	ND	5									
4-Isopropyltoluene	ND	5									

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

CLIENT: Hahn & Associates
Work Order: 0007003
Project: 5015/PacTrust Seattle

QC SUMMARY REPORT
Method Blank

4-Methyl-2-pentanone	ND	5
Acetone	ND	100
Benzene	ND	5
Bromobenzene	ND	5
Bromochloromethane	ND	5
Bromodichloromethane	ND	5
Bromoform	ND	5
Bromomethane	ND	10
Carbon disulfide	ND	5
Carbon tetrachloride	ND	5
Chlorobenzene	ND	5
Chloroethane	ND	10
Chloroform	ND	5
Chloromethane	ND	10
cis-1,2-Dichloroethene	ND	5
cis-1,3-Dichloropropene	ND	5
Dibromochloromethane	ND	5
Dibromomethane	ND	5
Dichlorodifluoromethane	ND	10
Ethylbenzene	ND	5
Hexachlorobutadiene	ND	5
Iodomethane	ND	5
Isopropylbenzene	ND	5
m,p-Xylene	ND	10
Methyl tert-butyl ether	ND	10
Methylene chloride	ND	100
n-Butylbenzene	ND	5
n-Propylbenzene	ND	5
Naphthalene	ND	25
o-Xylene	ND	5
sec-Butylbenzene	ND	5
Styrene	ND	5
tert-Butylbenzene	ND	5

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

CLIENT: Hahn & Associates
Work Order: 0007003
Project: 5015/PacTrust Seattle

QC SUMMARY REPORT
Method Blank

Tetrachloroethene	ND	5
Toluene	ND	5
trans-1,2-Dichloroethene	ND	5
trans-1,3-Dichloropropene	ND	5
Trichloroethene	ND	5
Trichlorofluoromethane	ND	10
Vinyl acetate	ND	5
Vinyl chloride	ND	10

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

Environmental Services Laboratory

Date: *13-Jul-00*

CLIENT: Hahn & Associates
Work Order: 0007003
Project: 5015/PacTrust Seattle

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV** Batch ID: **05 8260 S-7/1** Test Code: **EPA 8260B** Units: **µg/Kg** Analysis Date **7/10/00** Prep Date:

Client ID: **0007003** Run ID: **ANGSTROM_000710A** SeqNo: **46168**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	54.5	5	50	0	109.0%	80	120	0			
1,2-Dichloropropane	50.4	5	50	0	100.8%	80	120	0			
Chloroform	51	5	50	0	102.0%	80	120	0			
Ethylbenzene	49.5	5	50	0	99.0%	80	120	0			
Toluene	51.4	5	50	0	102.8%	80	120	0			
Vinyl chloride	51.3	10	50	0	102.6%	80	120	0			
4-Bromofluorobenzene	47.2	0	50	0	94.4%	86	115	0			
Dibromofluoromethane	49.6	0	50	0	99.2%	86	118	0			
Toluene-d8	49.8	0	50	0	99.6%	88	110	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

APPENDIX C

Laboratory Analytical Reports and Chain-of-Custody Documentation - Groundwater Samples

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

Laboratory: Ctf
Lab Project No.:

CHAIN OF CUSTODY

Chain of Custody No. 3

Project Manager: Guy Hunz
Project No.: 5015
Project Name: Pac Trust Seattle
Collected by: Jay Greifer

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

Comments
Sample Number Prefix: 505-000628-
000628

Lab ID	Sample #	Date	Time	Sample Description	Matrix: Soil	Matrix: Water	Matrix: Other	Number of Containers	Analyses to be Performed: EPA 8260	RUSH	Remarks
01	101	6/25/00	1016	B1		X		4	X		3 VOA/1L
02	102	"	1444	B3		X		4	X		3 VOA/1L
03	103	"	1704	B4		X		4	X		3 VOA/1L

Relinquished by	Company	Date	Time	Received by	Company
	HAHN & ASSOC				
Relinquished by	Company	Date	Time	Received by	Company

w

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

Laboratory: ESL
Lab Project No.:

CHAIN OF CUSTODY
Chain of Custody No. 6

Project Manager	GUY TANZ
Project No.	5015
Project Name	PAC TRUST
Collected by	Jay Greifer

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 ___

Comments
Sample Number Prefix: 5015-000829-

Lab ID	Sample #	Date	Time	Sample Description	Soil	Water	Other	Number of Containers	EPA 8260									RUSH	Remarks
04	104	6/29/00	830	B 5		X		4	X										3VOA/1L
05	105	↓	1342	B 7		X		4	X										3VOA/1L

Relinquished by	Company	Date	Time	Received by	Company
[signature]	HAHN & ASSOC	6/30/00	1430	[signature]	ESL
Relinquished by	Company	Date	Time	Received by	Company

Environmental Services Laboratory, Inc. E S L

17400 SW Upper Boones Ferry Road • Suite 270 • Portland, OR 97224 • (503) 670-8520

July 10, 2000

Mr. Guy Tanz
Hahn & Associates
434 N.W. 6th Avenue
Suite 203
Portland, OR 97209
TEL: (503)796-0717
FAX (503) 227-2209

RE: 5015/PacTrust Seattle Order No.: 0007004

Dear Mr. Guy Tanz,

Environmental Services Laboratory received 5 samples on 6/30/00 for the analyses presented in the following report.

The Samples were analyzed for the following tests:
Volatiles by GC/MS (EPA 8260B)

There were no problems with the analyses and all data for associated QC met EPA or laboratory specifications except where noted in the Case Narrative. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety, without the written approval from the Laboratory.

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

Sincerely,

Nichole Karl

Nichole Karl
Project Manager

Keith Hunter

Technical Review

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-101
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: **tmh**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/7/00
1,1,1-Trichloroethane	ND	1.00		µg/L	1	7/7/00
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/7/00
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/7/00
1,1-Dichloroethane	ND	1.00		µg/L	1	7/7/00
1,1-Dichloroethene	ND	1.00		µg/L	1	7/7/00
1,1-Dichloropropene	ND	1.00		µg/L	1	7/7/00
1,2,3-Trichlorobenzene	ND	1.80		µg/L	1	7/7/00
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/7/00
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/7/00
1,2-Dibromo-3-chloropropane	ND	1.80		µg/L	1	7/7/00
1,2-Dibromoethane	ND	1.00		µg/L	1	7/7/00
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,2-Dichloroethane	ND	1.00		µg/L	1	7/7/00
1,2-Dichloropropane	ND	1.00		µg/L	1	7/7/00
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/7/00
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,3-Dichloropropane	ND	1.00		µg/L	1	7/7/00
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
2,2-Dichloropropane	ND	1.00		µg/L	1	7/7/00
2-Butanone	ND	20.0		µg/L	1	7/7/00
2-Chloroethyl vinyl ether	ND	5.00		µg/L	1	7/7/00
2-Chlorotoluene	ND	1.00		µg/L	1	7/7/00
2-Hexanone	ND	20.0		µg/L	1	7/7/00
4-Chlorotoluene	ND	1.00		µg/L	1	7/7/00
4-Isopropyltoluene	ND	1.00		µg/L	1	7/7/00
4-Methyl-2-pentanone	ND	1.00		µg/L	1	7/7/00
Acetone	ND	20.0		µg/L	1	7/7/00
Benzene	ND	1.00		µg/L	1	7/7/00
Bromobenzene	ND	1.00		µg/L	1	7/7/00
Bromochloromethane	ND	1.00		µg/L	1	7/7/00
Bromodichloromethane	ND	1.00		µg/L	1	7/7/00
Bromoform	ND	1.00		µg/L	1	7/7/00
Bromomethane	ND	5.00		µg/L	1	7/7/00
Carbon disulfide	ND	1.00		µg/L	1	7/7/00
Carbon tetrachloride	ND	1.00		µg/L	1	7/7/00
Chlorobenzene	ND	1.00		µg/L	1	7/7/00
Chloroethane	ND	1.80		µg/L	1	7/7/00
Chloroform	ND	1.00		µg/L	1	7/7/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-101
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-01A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Chloromethane	ND	2.00		µg/L	1	7/7/00
cis-1,2-Dichloroethene	25.7	1.80		µg/L	1	7/7/00
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/7/00
Dibromochloromethane	ND	1.00		µg/L	1	7/7/00
Dibromomethane	ND	1.00		µg/L	1	7/7/00
Dichlorodifluoromethane	ND	2.00		µg/L	1	7/7/00
Ethylbenzene	ND	1.00		µg/L	1	7/7/00
Hexachlorobutadiene	ND	2.00		µg/L	1	7/7/00
Iodomethane	ND	1.00		µg/L	1	7/7/00
Isopropylbenzene	ND	1.00		µg/L	1	7/7/00
m,p-Xylene	ND	2.00		µg/L	1	7/7/00
Methyl tert-butyl ether	ND	2.00		µg/L	1	7/7/00
Methylene chloride	ND	10.0		µg/L	1	7/7/00
n-Butylbenzene	ND	1.00		µg/L	1	7/7/00
n-Propylbenzene	ND	1.00		µg/L	1	7/7/00
Naphthalene	ND	2.00		µg/L	1	7/7/00
o-Xylene	ND	1.00		µg/L	1	7/7/00
sec-Butylbenzene	ND	1.00		µg/L	1	7/7/00
Styrene	ND	1.00		µg/L	1	7/7/00
tert-Butylbenzene	ND	1.00		µg/L	1	7/7/00
Tetrachloroethene	1,980	20.0		µg/L	1	7/7/00
Toluene	ND	1.00		µg/L	1	7/7/00
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/7/00
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/7/00
Trichloroethene	288	20.0		µg/L	1	7/7/00
Trichlorofluoromethane	ND	2.00		µg/L	1	7/7/00
Vinyl acetate	ND	1.00		µg/L	1	7/7/00
Vinyl chloride	ND	1.20		µg/L	1	7/7/00
Surr: 4-Bromofluorobenzene	98.8	86-115		%REC	1	7/7/00
Surr: Dibromofluoromethane	100.6	86-118		%REC	1	7/7/00
Surr: Toluene-d8	102.2	88-110		%REC	1	7/7/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-102
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: **tmh**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/7/00
1,1,1-Trichloroethane	ND	1.00		µg/L	1	7/7/00
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/7/00
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/7/00
1,1-Dichloroethane	ND	1.00		µg/L	1	7/7/00
1,1-Dichloroethene	ND	1.00		µg/L	1	7/7/00
1,1-Dichloropropene	ND	1.00		µg/L	1	7/7/00
1,2,3-Trichlorobenzene	ND	1.80		µg/L	1	7/7/00
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/7/00
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/7/00
1,2-Dibromo-3-chloropropane	ND	1.80		µg/L	1	7/7/00
1,2-Dibromoethane	ND	1.00		µg/L	1	7/7/00
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,2-Dichloroethane	ND	1.00		µg/L	1	7/7/00
1,2-Dichloropropane	ND	1.00		µg/L	1	7/7/00
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/7/00
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,3-Dichloropropane	ND	1.00		µg/L	1	7/7/00
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
2,2-Dichloropropane	ND	1.00		µg/L	1	7/7/00
2-Butanone	ND	20.0		µg/L	1	7/7/00
2-Chloroethyl vinyl ether	ND	5.00		µg/L	1	7/7/00
2-Chlorotoluene	ND	1.00		µg/L	1	7/7/00
2-Hexanone	ND	20.0		µg/L	1	7/7/00
4-Chlorotoluene	ND	1.00		µg/L	1	7/7/00
4-Isopropyltoluene	ND	1.00		µg/L	1	7/7/00
4-Methyl-2-pentanone	ND	1.00		µg/L	1	7/7/00
Acetone	ND	20.0		µg/L	1	7/7/00
Benzene	ND	1.00		µg/L	1	7/7/00
Bromobenzene	ND	1.00		µg/L	1	7/7/00
Bromochloromethane	ND	1.00		µg/L	1	7/7/00
Bromodichloromethane	ND	1.00		µg/L	1	7/7/00
Bromoform	ND	1.00		µg/L	1	7/7/00
Bromomethane	ND	5.00		µg/L	1	7/7/00
Carbon disulfide	ND	1.00		µg/L	1	7/7/00
Carbon tetrachloride	ND	1.00		µg/L	1	7/7/00
Chlorobenzene	ND	1.00		µg/L	1	7/7/00
Chloroethane	ND	1.80		µg/L	1	7/7/00
Chloroform	ND	1.00		µg/L	1	7/7/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-102
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-02A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Chloromethane	ND	2.00		µg/L	1	7/7/00
cis-1,2-Dichloroethene	ND	1.80		µg/L	1	7/7/00
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/7/00
Dibromochloromethane	ND	1.00		µg/L	1	7/7/00
Dibromomethane	ND	1.00		µg/L	1	7/7/00
Dichlorodifluoromethane	ND	2.00		µg/L	1	7/7/00
Ethylbenzene	ND	1.00		µg/L	1	7/7/00
Hexachlorobutadiene	ND	2.00		µg/L	1	7/7/00
Iodomethane	ND	1.00		µg/L	1	7/7/00
Isopropylbenzene	ND	1.00		µg/L	1	7/7/00
m,p-Xylene	ND	2.00		µg/L	1	7/7/00
Methyl tert-butyl ether	ND	2.00		µg/L	1	7/7/00
Methylene chloride	ND	10.0		µg/L	1	7/7/00
n-Butylbenzene	ND	1.00		µg/L	1	7/7/00
n-Propylbenzene	ND	1.00		µg/L	1	7/7/00
Naphthalene	ND	2.00		µg/L	1	7/7/00
o-Xylene	ND	1.00		µg/L	1	7/7/00
sec-Butylbenzene	ND	1.00		µg/L	1	7/7/00
Styrene	ND	1.00		µg/L	1	7/7/00
tert-Butylbenzene	ND	1.00		µg/L	1	7/7/00
Tetrachloroethene	ND	1.00		µg/L	1	7/7/00
Toluene	ND	1.00		µg/L	1	7/7/00
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/7/00
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/7/00
Trichloroethene	ND	1.00		µg/L	1	7/7/00
Trichlorofluoromethane	ND	2.00		µg/L	1	7/7/00
Vinyl acetate	ND	1.00		µg/L	1	7/7/00
Vinyl chloride	ND	1.20		µg/L	1	7/7/00
Surr: 4-Bromofluorobenzene	99.6	86-115		%REC	1	7/7/00
Surr: Dibromofluoromethane	102.6	86-118		%REC	1	7/7/00
Surr: Toluene-d8	102.4	88-110		%REC	1	7/7/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-103
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-03A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: **tmh**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/7/00
1,1,1-Trichloroethane	ND	1.00		µg/L	1	7/7/00
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/7/00
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/7/00
1,1-Dichloroethane	ND	1.00		µg/L	1	7/7/00
1,1-Dichloroethene	2.94	1.00		µg/L	1	7/7/00
1,1-Dichloropropene	ND	1.00		µg/L	1	7/7/00
1,2,3-Trichlorobenzene	ND	1.80		µg/L	1	7/7/00
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/7/00
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/7/00
1,2-Dibromo-3-chloropropane	ND	1.80		µg/L	1	7/7/00
1,2-Dibromoethane	ND	1.00		µg/L	1	7/7/00
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,2-Dichloroethane	ND	1.00		µg/L	1	7/7/00
1,2-Dichloropropane	ND	1.00		µg/L	1	7/7/00
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/7/00
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,3-Dichloropropane	ND	1.00		µg/L	1	7/7/00
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
2,2-Dichloropropane	ND	1.00		µg/L	1	7/7/00
2-Butanone	ND	20.0		µg/L	1	7/7/00
2-Chloroethyl vinyl ether	ND	5.00		µg/L	1	7/7/00
2-Chlorotoluene	ND	1.00		µg/L	1	7/7/00
2-Hexanone	ND	20.0		µg/L	1	7/7/00
4-Chlorotoluene	ND	1.00		µg/L	1	7/7/00
4-Isopropyltoluene	ND	1.00		µg/L	1	7/7/00
4-Methyl-2-pentanone	ND	1.00		µg/L	1	7/7/00
Acetone	ND	20.0		µg/L	1	7/7/00
Benzene	ND	1.00		µg/L	1	7/7/00
Bromobenzene	ND	1.00		µg/L	1	7/7/00
Bromochloromethane	ND	1.00		µg/L	1	7/7/00
Bromodichloromethane	ND	1.00		µg/L	1	7/7/00
Bromoform	ND	1.00		µg/L	1	7/7/00
Bromomethane	ND	5.00		µg/L	1	7/7/00
Carbon disulfide	ND	1.00		µg/L	1	7/7/00
Carbon tetrachloride	ND	1.00		µg/L	1	7/7/00
Chlorobenzene	ND	1.00		µg/L	1	7/7/00
Chloroethane	ND	1.80		µg/L	1	7/7/00
Chloroform	ND	1.00		µg/L	1	7/7/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-103
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-03A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Chloromethane	ND	2.00		µg/L	1	7/7/00
cis-1,2-Dichloroethene	40.8	1.80		µg/L	1	7/7/00
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/7/00
Dibromochloromethane	ND	1.00		µg/L	1	7/7/00
Dibromomethane	ND	1.00		µg/L	1	7/7/00
Dichlorodifluoromethane	ND	2.00		µg/L	1	7/7/00
Ethylbenzene	ND	1.00		µg/L	1	7/7/00
Hexachlorobutadiene	ND	2.00		µg/L	1	7/7/00
Iodomethane	ND	1.00		µg/L	1	7/7/00
Isopropylbenzene	ND	1.00		µg/L	1	7/7/00
m,p-Xylene	ND	2.00		µg/L	1	7/7/00
Methyl tert-butyl ether	ND	2.00		µg/L	1	7/7/00
Methylene chloride	ND	10.0		µg/L	1	7/7/00
n-Butylbenzene	ND	1.00		µg/L	1	7/7/00
n-Propylbenzene	ND	1.00		µg/L	1	7/7/00
Naphthalene	ND	2.00		µg/L	1	7/7/00
o-Xylene	ND	1.00		µg/L	1	7/7/00
sec-Butylbenzene	ND	1.00		µg/L	1	7/7/00
Styrene	ND	1.00		µg/L	1	7/7/00
tert-Butylbenzene	ND	1.00		µg/L	1	7/7/00
Tetrachloroethene	3,800	50.0		µg/L	1	7/7/00
Toluene	ND	1.00		µg/L	1	7/7/00
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/7/00
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/7/00
Trichloroethene	1,100	20.0		µg/L	1	7/7/00
Trichlorofluoromethane	ND	2.00		µg/L	1	7/7/00
Vinyl acetate	ND	1.00		µg/L	1	7/7/00
Vinyl chloride	4.37	1.20		µg/L	1	7/7/00
Surr: 4-Bromofluorobenzene	100.2	86-115		%REC	1	7/7/00
Surr: Dibromofluoromethane	99.2	86-118		%REC	1	7/7/00
Surr: Toluene-d8	101.2	88-110		%REC	1	7/7/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-104
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-04A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: **tmh**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/7/00
1,1,1-Trichloroethane	ND	1.00		µg/L	1	7/7/00
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/7/00
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/7/00
1,1-Dichloroethane	ND	1.00		µg/L	1	7/7/00
1,1-Dichloroethene	ND	1.00		µg/L	1	7/7/00
1,1-Dichloropropene	ND	1.00		µg/L	1	7/7/00
1,2,3-Trichlorobenzene	ND	1.80		µg/L	1	7/7/00
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/7/00
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/7/00
1,2-Dibromo-3-chloropropane	ND	1.80		µg/L	1	7/7/00
1,2-Dibromoethane	ND	1.00		µg/L	1	7/7/00
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,2-Dichloroethane	ND	1.00		µg/L	1	7/7/00
1,2-Dichloropropane	ND	1.00		µg/L	1	7/7/00
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/7/00
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
1,3-Dichloropropane	ND	1.00		µg/L	1	7/7/00
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/7/00
2,2-Dichloropropane	ND	1.00		µg/L	1	7/7/00
2-Butanone	ND	20.0		µg/L	1	7/7/00
2-Chloroethyl vinyl ether	ND	5.00		µg/L	1	7/7/00
2-Chlorotoluene	ND	1.00		µg/L	1	7/7/00
2-Hexanone	ND	20.0		µg/L	1	7/7/00
4-Chlorotoluene	ND	1.00		µg/L	1	7/7/00
4-Isopropyltoluene	ND	1.00		µg/L	1	7/7/00
4-Methyl-2-pentanone	ND	1.00		µg/L	1	7/7/00
Acetone	ND	20.0		µg/L	1	7/7/00
Benzene	ND	1.00		µg/L	1	7/7/00
Bromobenzene	ND	1.00		µg/L	1	7/7/00
Bromochloromethane	ND	1.00		µg/L	1	7/7/00
Bromodichloromethane	ND	1.00		µg/L	1	7/7/00
Bromoform	ND	1.00		µg/L	1	7/7/00
Bromomethane	ND	5.00		µg/L	1	7/7/00
Carbon disulfide	ND	1.00		µg/L	1	7/7/00
Carbon tetrachloride	ND	1.00		µg/L	1	7/7/00
Chlorobenzene	ND	1.00		µg/L	1	7/7/00
Chloroethane	ND	1.80		µg/L	1	7/7/00
Chloroform	ND	1.00		µg/L	1	7/7/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-104
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-04A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Chloromethane	ND	2.00		µg/L	1	7/7/00
cis-1,2-Dichloroethene	ND	1.80		µg/L	1	7/7/00
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/7/00
Dibromochloromethane	ND	1.00		µg/L	1	7/7/00
Dibromomethane	ND	1.00		µg/L	1	7/7/00
Dichlorodifluoromethane	ND	2.00		µg/L	1	7/7/00
Ethylbenzene	ND	1.00		µg/L	1	7/7/00
Hexachlorobutadiene	ND	2.00		µg/L	1	7/7/00
Iodomethane	ND	1.00		µg/L	1	7/7/00
Isopropylbenzene	ND	1.00		µg/L	1	7/7/00
m,p-Xylene	ND	2.00		µg/L	1	7/7/00
Methyl tert-butyl ether	ND	2.00		µg/L	1	7/7/00
Methylene chloride	ND	10.0		µg/L	1	7/7/00
n-Butylbenzene	ND	1.00		µg/L	1	7/7/00
n-Propylbenzene	ND	1.00		µg/L	1	7/7/00
Naphthalene	ND	2.00		µg/L	1	7/7/00
o-Xylene	ND	1.00		µg/L	1	7/7/00
sec-Butylbenzene	ND	1.00		µg/L	1	7/7/00
Styrene	ND	1.00		µg/L	1	7/7/00
tert-Butylbenzene	ND	1.00		µg/L	1	7/7/00
Tetrachloroethene	ND	1.00		µg/L	1	7/7/00
Toluene	ND	1.00		µg/L	1	7/7/00
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/7/00
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/7/00
Trichloroethene	ND	1.00		µg/L	1	7/7/00
Trichlorofluoromethane	ND	2.00		µg/L	1	7/7/00
Vinyl acetate	ND	1.00		µg/L	1	7/7/00
Vinyl chloride	ND	1.20		µg/L	1	7/7/00
Surr: 4-Bromofluorobenzene	101.0	86-115		%REC	1	7/7/00
Surr: Dibromofluoromethane	102.8	86-118		%REC	1	7/7/00
Surr: Toluene-d8	100.8	88-110		%REC	1	7/7/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-105
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-05A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
VOLATILES BY GC/MS		**EPA 8260B**				Analyst: **tmh**
1,1,1,2-Tetrachloroethane	ND	1.00		µg/L	1	7/6/00
1,1,1-Trichloroethane	ND	1.00		µg/L	1	7/6/00
1,1,2,2-Tetrachloroethane	ND	1.00		µg/L	1	7/6/00
1,1,2-Trichloroethane	ND	1.00		µg/L	1	7/6/00
1,1-Dichloroethane	ND	1.00		µg/L	1	7/6/00
1,1-Dichloroethene	ND	1.00		µg/L	1	7/6/00
1,1-Dichloropropene	ND	1.00		µg/L	1	7/6/00
1,2,3-Trichlorobenzene	ND	1.80		µg/L	1	7/6/00
1,2,3-Trichloropropane	ND	1.00		µg/L	1	7/6/00
1,2,4-Trichlorobenzene	ND	1.00		µg/L	1	7/6/00
1,2,4-Trimethylbenzene	ND	1.00		µg/L	1	7/6/00
1,2-Dibromo-3-chloropropane	ND	1.80		µg/L	1	7/6/00
1,2-Dibromoethane	ND	1.00		µg/L	1	7/6/00
1,2-Dichlorobenzene	ND	1.00		µg/L	1	7/6/00
1,2-Dichloroethane	ND	1.00		µg/L	1	7/6/00
1,2-Dichloropropane	ND	1.00		µg/L	1	7/6/00
1,3,5-Trimethylbenzene	ND	1.00		µg/L	1	7/6/00
1,3-Dichlorobenzene	ND	1.00		µg/L	1	7/6/00
1,3-Dichloropropane	ND	1.00		µg/L	1	7/6/00
1,4-Dichlorobenzene	ND	1.00		µg/L	1	7/6/00
2,2-Dichloropropane	ND	1.00		µg/L	1	7/6/00
2-Butanone	ND	20.0		µg/L	1	7/6/00
2-Chloroethyl vinyl ether	ND	5.00		µg/L	1	7/6/00
2-Chlorotoluene	ND	1.00		µg/L	1	7/6/00
2-Hexanone	ND	20.0		µg/L	1	7/6/00
4-Chlorotoluene	ND	1.00		µg/L	1	7/6/00
4-Isopropyltoluene	ND	1.00		µg/L	1	7/6/00
4-Methyl-2-pentanone	ND	1.00		µg/L	1	7/6/00
Acetone	ND	20.0		µg/L	1	7/6/00
Benzene	ND	1.00		µg/L	1	7/6/00
Bromobenzene	ND	1.00		µg/L	1	7/6/00
Bromochloromethane	ND	1.00		µg/L	1	7/6/00
Bromodichloromethane	ND	1.00		µg/L	1	7/6/00
Bromoform	ND	1.00		µg/L	1	7/6/00
Bromomethane	ND	5.00		µg/L	1	7/6/00
Carbon disulfide	ND	1.00		µg/L	1	7/6/00
Carbon tetrachloride	ND	1.00		µg/L	1	7/6/00
Chlorobenzene	ND	1.00		µg/L	1	7/6/00
Chloroethane	ND	1.80		µg/L	1	7/6/00
Chloroform	ND	1.00		µg/L	1	7/6/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT:	Hahn & Associates	**Client Sample ID:**	5015-000628-105
Lab Order:	0007004	**Tag Number:**	
Project:	5015/PacTrust Seattle	**Collection Date:**	6/28/00
Lab ID:	0007004-05A	**Matrix:**	AQUEOUS

Analyses	Result	Limit	Qual	Units	DF	Date Analyzed
Chloromethane	ND	2.00		µg/L	1	7/6/00
cis-1,2-Dichloroethene	ND	1.80		µg/L	1	7/6/00
cis-1,3-Dichloropropene	ND	1.00		µg/L	1	7/6/00
Dibromochloromethane	ND	1.00		µg/L	1	7/6/00
Dibromomethane	ND	1.00		µg/L	1	7/6/00
Dichlorodifluoromethane	ND	2.00		µg/L	1	7/6/00
Ethylbenzene	ND	1.00		µg/L	1	7/6/00
Hexachlorobutadiene	ND	2.00		µg/L	1	7/6/00
Iodomethane	ND	1.00		µg/L	1	7/6/00
Isopropylbenzene	ND	1.00		µg/L	1	7/6/00
m,p-Xylene	ND	2.00		µg/L	1	7/6/00
Methyl tert-butyl ether	ND	2.00		µg/L	1	7/6/00
Methylene chloride	ND	10.0		µg/L	1	7/6/00
n-Butylbenzene	ND	1.00		µg/L	1	7/6/00
n-Propylbenzene	ND	1.00		µg/L	1	7/6/00
Naphthalene	ND	2.00		µg/L	1	7/6/00
o-Xylene	ND	1.00		µg/L	1	7/6/00
sec-Butylbenzene	ND	1.00		µg/L	1	7/6/00
Styrene	ND	1.00		µg/L	1	7/6/00
tert-Butylbenzene	ND	1.00		µg/L	1	7/6/00
Tetrachloroethene	1.25	1.00		µg/L	1	7/6/00
Toluene	ND	1.00		µg/L	1	7/6/00
trans-1,2-Dichloroethene	ND	1.00		µg/L	1	7/6/00
trans-1,3-Dichloropropene	ND	1.00		µg/L	1	7/6/00
Trichloroethene	ND	1.00		µg/L	1	7/6/00
Trichlorofluoromethane	ND	2.00		µg/L	1	7/6/00
Vinyl acetate	ND	1.00		µg/L	1	7/6/00
Vinyl chloride	ND	1.20		µg/L	1	7/6/00
Surr: 4-Bromofluorobenzene	101.8	86-115		%REC	1	7/6/00
Surr: Dibromofluoromethane	104.4	86-118		%REC	1	7/6/00
Surr: Toluene-d8	102.4	88-110		%REC	1	7/6/00

Qualifiers:

ND - Not Detected at the Reporting Limit

J - Analyte detected below quantitation limits

B - Analyte detected in the associated Method Blank

* - Value exceeds Maximum Contaminant Level

S - Spike Recovery outside accepted recovery limits

R - RPD outside accepted recovery limits

E - Value above quantitation range

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT: Hahn & Associates
Work Order: 0007004
Project: 5015/PacTrust Seattle

QC SUMMARY REPORT
Method Blank

Sample ID: **MBLANK** Batch ID: **05 8260 A-7/7** Test Code: **EPA 8260B** Units: **µg/L** Analysis Date **7/6/00** Prep Date:
Client ID: **0007004** Run ID: **ANGSTROM_000706A** SeqNo: **45882**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1,1,2-Tetrachloroethane	ND	1									
1,1,1-Trichloroethane	ND	1									
1,1,2,2-Tetrachloroethane	ND	1									
1,1,2-Trichloroethane	ND	1									
1,1-Dichloroethane	ND	1									
1,1-Dichloroethene	ND	1									
1,1-Dichloropropene	ND	1									
1,2,3-Trichlorobenzene	ND	1.8									
1,2,3-Trichloropropane	ND	1									
1,2,4-Trichlorobenzene	ND	1									
1,2,4-Trimethylbenzene	ND	1									
1,2-Dibromo-3-chloropropane	ND	1.8									
1,2-Dibromoethane	ND	1									
1,2-Dichlorobenzene	ND	1									
1,2-Dichloroethane	ND	1									
1,2-Dichloropropane	ND	1									
1,3,5-Trimethylbenzene	ND	1									
1,3-Dichlorobenzene	ND	1									
1,3-Dichloropropane	ND	1									
1,4-Dichlorobenzene	ND	1									
2,2-Dichloropropane	ND	1									
2-Butanone	ND	20									
2-Chloroethyl vinyl ether	ND	5									
2-Chlorotoluene	ND	1									
2-Hexanone	ND	20									
4-Chlorotoluene	ND	1									
4-Isopropyltoluene	ND	1									

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

CLIENT: Hahn & Associates
Work Order: 0007004
Project: 5015/PacTrust Seattle

QC SUMMARY REPORT
Method Blank

4-Methyl-2-pentanone	ND	1
Acetone	ND	20
Benzene	ND	1
Bromobenzene	ND	1
Bromochloromethane	ND	1
Bromodichloromethane	ND	1
Bromoform	ND	1
Bromomethane	ND	5
Carbon disulfide	ND	1
Carbon tetrachloride	ND	1
Chlorobenzene	ND	1
Chloroethane	ND	1.8
Chloroform	ND	1
Chloromethane	ND	2
cis-1,2-Dichloroethene	ND	1.8
cis-1,3-Dichloropropene	ND	1
Dibromochloromethane	ND	1
Dibromomethane	ND	1
Dichlorodifluoromethane	ND	2
Ethylbenzene	ND	1
Hexachlorobutadiene	ND	2
Iodomethane	ND	1
Isopropylbenzene	ND	1
m,p-Xylene	ND	2
Methyl tert-butyl ether	ND	2
Methylene chloride	ND	10
n-Butylbenzene	ND	1
n-Propylbenzene	ND	1
Naphthalene	ND	2
o-Xylene	ND	1
sec-Butylbenzene	ND	1
Styrene	ND	1
tert-Butylbenzene	ND	1

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

CLIENT: Hahn & Associates
Work Order: 0007004
Project: 5015/PacTrust Seattle

QC SUMMARY REPORT
Method Blank

Tetrachloroethene	ND	1
Toluene	ND	1
trans-1,2-Dichloroethene	ND	1
trans-1,3-Dichloropropene	ND	1
Trichloroethene	ND	1
Trichlorofluoromethane	ND	2
Vinyl acetate	ND	1
Vinyl chloride	ND	1.2

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

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT: Hahn & Associates
Work Order: 0007004
Project: 5015/PacTrust Seattle

QC SUMMARY REPORT

Sample Matrix Spike

Sample ID: **0007001-01A MS** Batch ID: **05 8260 A-7/7** Test Code: **EPA 8260B** Units: **µg/L** Analysis Date **7/6/00** Prep Date:
Client ID: **0007004** Run ID: **ANGSTROM_000706A** SeqNo: **45884**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	52.8	1	50	0	105.6%	0	234	0			
Benzene	51.8	1	50	0	103.6%	37	151	0			
Chlorobenzene	47.8	1	50	0	95.6%	37	160	0			
Toluene	52.9	1	50	0	105.8%	47	150	0			
Trichloroethene	52.9	1	50	0	105.8%	71	157	0			

Sample ID: **0007001-01A MSD** Batch ID: **05 8260 A-7/7** Test Code: **EPA 8260B** Units: **µg/L** Analysis Date **7/6/00** Prep Date:
Client ID: **0007004** Run ID: **ANGSTROM_000706A** SeqNo: **45885**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	53.7	1	50	0	107.4%	0	234	52.8	1.7%	20	
Benzene	47.4	1	50	0	94.8%	37	151	51.8	8.9%	20	
Chlorobenzene	49	1	50	0	98.0%	37	160	47.8	2.5%	20	
Toluene	49.9	1	50	0	99.8%	47	150	52.9	5.8%	20	
Trichloroethene	50.4	1	50	0	100.8%	71	157	52.9	4.8%	20	

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

Environmental Services Laboratory

Date: *10-Jul-00*

CLIENT: Hahn & Associates
Work Order: 0007004
Project: 5015/PacTrust Seattle

QC SUMMARY REPORT

Continuing Calibration Verification Standard

Sample ID: **CCV** Batch ID: **05 8260 A-7/7** Test Code: **EPA 8260B** Units: **µg/L** Analysis Date **7/6/00** Prep Date:

Client ID: **0007004** Run ID: **ANGSTROM_000706A** SeqNo: **45881**

Analyte	Result	PQL	SPK value	SPK Ref Val	%REC	LowLimit	HighLimit	RPD Ref Val	%RPD	RPDLimit	Qual
1,1-Dichloroethene	52.7	1	50	0	105.4%	80	120	0			
1,2-Dichloropropane	51.3	1	50	0	102.6%	80	120	0			
Chloroform	51.1	1	50	0	102.2%	80	120	0			
Ethylbenzene	52	1	50	0	104.0%	80	120	0			
Toluene	52.5	1	50	0	105.0%	80	120	0			
Vinyl chloride	43.9	1.2	50	0	87.8%	80	120	0			
4-Bromofluorobenzene	47.9	0	50	0	95.8%	86	115	0			
Dibromofluoromethane	49.1	0	50	0	98.2%	86	118	0			
Toluene-d8	49.8	0	50	0	99.6%	88	110	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