FOCUSED SUBSURFACE INVESTIGATION REPORT

North Main Avenue and Simons Street
Ridgefield, Washington

August 8, 2006

Prepared for:

Hinrichs and Hinrichs LLC
Ridgefield, Washington

Prepared by:

Hahn and Associates, Inc.
Portland, Oregon

HAI Project No. 7032

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1.0 SUMMARY OF FINDINGS

Focused Subsurface Site Investigation activities were conducted at the subject site (0.2-acre property at the southeast corner of N Main Avenue and N Simons Street, Ridgefield, Washington) to evaluate whether historic dry cleaning operations located on the adjoining property to the south may have adversely affected soil and/or groundwater beneath the site. In July 2006, five direct push borings were completed at the site to facilitate the collection of soil and groundwater samples. A summary of the findings relating to the focused subsurface investigation activities is presented below.

1) Soils encountered in the borings consisted primarily of sands and silty sands to depths of approximately 13 to 15 feet below ground surface, underlain by a hard clay. Uppermost groundwater was encountered in the borings at a consistent depth of approximately 10 feet below ground surface and likely flows in a westerly direction.

2) Field screening of soil samples collected from the borings did not indicate potential contamination.

3) Groundwater samples collected from the four boring locations positioned along the southern property boundary (adjacent to the former dry cleaner site) were analyzed for volatile organic compounds (VOCs). The dry cleaning solvent tetrachloroethene (PCE) was detected in all four samples at concentrations up to 7,210 micrograms per liter.

    a) The location and type of contamination detected in groundwater suggests that releases from the adjacent historic dry cleaning operation have adversely affected groundwater beneath the subject property, the extent of which was not fully determined.

    b) PCE was detected in groundwater at concentrations above Washington Method A Cleanup Levels (for tap water) and above risk screening criteria for *Vapor Intrusion into Buildings* in residential and occupational settings.

4) Although the Washington Department of Ecology would not likely hold the property owner responsible for investigation or cleanup of the groundwater contamination that originates from off-site, the detected concentrations of PCE in groundwater beneath the property could significantly affect the redevelopment potential for the site and do place certain restrictions on the property owner.

5) Based on the preceding, the following recommendations are presented with respect to the identified groundwater contamination:

   a) The property owner should not exacerbate the contamination by activities such as the pumping of water wells, installation of deep utility lines, or significant dewatering.

   b) Any contaminated groundwater that may be dewatered at the site will require appropriate management and disposal

   c) The property owner should assure that the contamination does not present a vapor intrusion hazard to future structures at the site (e.g. through the use of vapor resistant construction techniques).

   d)

2.0 INTRODUCTION

Hahn and Associates, Inc. (HAI) was retained by Hinrichs and Hinrichs LLC (Hinrichs) to perform a focused subsurface investigation at the 0.2-acre property located at the southeast corner of the intersection of North Main Avenue and N Simons Street in Ridgefield, Washington (site; Figures 1 and 2). The purpose of the investigation activities was to evaluate whether a potential release of hazardous substances from a former dry cleaning operation (reportedly located on the adjacent property to the south of the site) may have adversely affected subsurface conditions at the site.

3.0 BACKGROUND

3.1 Site Location and Description

The site consists of two adjoining tax lots including the northern most lot (no address available) with dimensions of approximately 65 feet wide (north/south) by 100 feet long (east/west) and a second and smaller lot to the south (126 N Main Street) that is approximately 25 feet wide (north/south) by 100 feet long (east/west). The site is located within the NE ¼ of Section 24, Township 4 North, Range 1 West of the Willamette Meridian (W.M.).

The subject property is located on the U.S. Geological Survey (USGS) Ridgefield, Washington, 1990, 7.5-Minute Quadrangle. The property is relatively flat and is located at an approximate elevation of 80 - 85 feet above

mean seal level (msl). The site was landscaped with grass, trees and shrubs and no structures were present on the site at the time of the investigation.

Though not measured, it can be inferred that the uppermost groundwater flow will generally follow surface topography, flowing toward surface water bodies. It should be noted however, that the groundwater flow direction may vary significantly from the inferred direction, particularly, for example, if nearby pumping wells are present. Based on local topography, the local groundwater flow is inferred to be westerly, toward Lake River (located approximately 850 feet southwest of the site).

3.2 Relevant Historic Information

A former dry cleaner was reportedly located on the property adjoining the site to the south (Figure 2). Hinrichs became aware of the former dry cleaning operation during a meeting with the City of Ridgefield (City) Planning Department. During that meeting, a City employee mentioned having conducted work activities in the vicinity of the suspect property to the south that identified contamination in groundwater consistent with a release from a dry cleaner.

As part of the focused subsurface investigation, HAI completed historical information research in attempt to identify the location of the former dry cleaner building. Results of the historical information research is presented in Section 3.3, below.

3.3 Focused Historic Research

In an attempt to identify the location of the reported former dry cleaning operation on the adjoining property to the south, HAI reviewed a combination of information obtained from public records, aerial photographs, city directories, Sanborn Fire Insurance Maps, and interviews. The property to the south was vacant at the time of the investigation. The resources reviewed and results of the historic research to establish historical land use of the suspect property are as follows:

- Tax Assessment Records
  Agency Contacted: Clark County Department of Assessment and Taxation

- Cole City Directory for Vancouver, Washington, 1977, was reviewed for HAI by a research librarian at Fort Vancouver Public Library. Park Cleaners and Laundry, a dry cleaner, was listed at 122 Main Street N (assumed to be 122 N Main Avenue), Ridgefield, Washington. The librarian also indicated that the dry cleaner was listed at 122 Main Street N in a 1965 telephone book for Vancouver and its vicinity, although the name of the telephone book was not cited. The librarian also confirmed that the listing was not referenced in the Cole's City Directories for the 1980s.
- Polk City Directories (PCDs) for Vancouver, Washington, 1970 and 1988 were reviewed but did not include reverse directory coverage of Ridgefield, Washington. The "yellow page" sections of the directories were also reviewed for dry cleaners in Ridgefield, Washington, with negative results.
- Sanborn Fire Insurance Maps for Ridgefield, Washington, 1912, 1920, and 1930. The maps for 1920 and 1930 included coverage of the target area, but a dry cleaner did not appear on the maps.
- Aerial Photographs for 1948, 1953, 1963, 1973, 1983, and 1998, were obtained from U.S. Army Corps of Engineers Central Map Files, Portland, Oregon. Based on a review of the aerial photographs, a building was present on the western and central portion of the suspect property from at least 1948 through 1998 (Figure 2).

Based on our review of historic information, a dry cleaning operation was apparently present in the building located on the central and western portion of the property located at 122 N Main Avenue from at least 1965 to 1977.

3.4 Chemicals of Interest

Based on the presence of a historic dry cleaner on the property to the south and the reported detection of contamination associated with dry cleaning operations by the City, the chemicals of interest (COIs) for the site are:

- Volatile organic compounds (VOCs) consisting of chlorinated solvents commonly associated with dry cleaning operations, including the dry cleaning solvent tetrachloroethene (PCE) and its break down products trichloroethene (TCE), cis- and trans-1,2-dichloroethene (cis-1,2-DCE and trans-1,2-DCE, respectively), and vinyl chloride (VC).

4.0 OBJECTIVE AND SCOPE OF WORK

The objective of the focused subsurface investigation activities was to evaluate whether dry cleaning operations conducted at the adjacent property to the south have affected the subject property.

Since it can be difficult to identify sources of soil contamination relating to releases from dry cleaning facilities and since the dry cleaner was located on an off-site property, the investigation activities focused on evaluating groundwater conditions beneath the site.

The investigation activities included: 1) completing historical research to identify the location of the former drycleaner building; 3) subsurface investigation activities; 4) laboratory analytical testing of groundwater samples; and 5) data evaluation and reporting. To accomplish this objective, HAI conducted a focused soil and groundwater investigation utilizing direct-push sampling methodologies in selected locations on the subject property.

This report presents: (1) the technical approach and methodologies utilized to conduct the subsurface investigation; (2) a discussion of the results of the investigation; and (3) conclusions and recommendations.

5.0 PROJECT ACTIVITIES

5.1 Drilling/Sampling Locations and Rational

A total of five borings (B1 through B5) were completed to facilitate the collection of soil and groundwater samples at locations focusing on the location of the former dry cleaners. Boring locations are presented on Figure 2. Groundwater sampling screen interval depths are presented on Table 1.

Investigation activities focused on the collection of soil and groundwater samples along the southern site boundary to evaluate whether a potential release from the former dry cleaner may have affected soil and/or groundwater beneath the site.

Specifically, soil borings were placed at the following locations:

- Borings B1 through B4 were completed along the southern property boundary immediately adjacent to the suspect location of the former

dry cleaning operation (boring B4 was located adjacent [to the north] of the area behind [to the east] the former dry cleaning building).

- Boring B5 was completed further north of the southern property boundary in the western central portion of the site to evaluate the consistency of the subsurface lithology observed along the southern property boundary.

5.2 Drilling Procedures

HAI contracted with Geo-Tech Explorations, an Oregon-bonded and licensed monitoring well constructor of Tualatin, Oregon, to perform drilling activities at the site. Soil boring and sampling activities were conducted on July 11, 2006.

Direct push borings were completed using a truck mounted Geoprobe® unit to depths of 15 to 18 feet below ground surface (bgs). Groundwater samples were collected from each of the five borings. Following completion of the boring activities, the borings were backfilled with 3/8-inch bentonite chips to within 6 inches of the ground surface. Black top patch or top soil was placed in the upper 6 inches of the boring to match the surrounding grade.

The borings were completed in accordance with the Washington Administrative Code (WAC) for the Minimum Standards for Construction and Maintenance of Wells (WAC Chapter 173-160) and General Requirements for Resource Protection Well Construction and Geotechnical Soil Borings (WAC Chapter 173-160-400).

5.3 Soil Sampling and Field Screening Procedures

An HAI field representative was present during investigation activities to observe and document drilling and sample collection procedures, obtain field samples, perform field screening activities, prepare lithologic logs for each boring, and, if necessary, select and prepare samples for laboratory testing. A field estimate of the Unified Soil Classification System (USCS) is presented in the field logs (Appendix A).

Soil cores were collected continuously from each of the borings to the bottom of each boring. Soil cores were collected by advancing a 5-foot long, 1.5-inch inside diameter (ID) Macro-Core® sampler fitted with an acetate

sleeve. The full length of each soil core was observed for the potential presence of contamination (i.e., odor, discoloration, staining, sheen, etc.).

Discrete soil samples were selected from each of the cores on approximate 1.5-foot intervals for additional field screening, including headspace vapor measurements using a photoionization detector (PID) equipped with a 10.6-ev lamp measuring total organic vapors in parts per million (ppm). PID readings were recorded on the boring log for each borehole. The headspace measurement results are intended for use as a qualitative indicator of the possible presence of contamination and used for relative comparison purposes. The field lithologic logs including field screening results are provided in Appendix A.

Based on the lack of field screening evidence of contamination in soil and the off-site location of the former dry cleaner (suspected contaminant source), no soil samples were retained for laboratory testing.

5.4 Groundwater Sampling Procedures

Screening-level groundwater samples were collected from first encountered water at each of the five boring locations using a screen-point sampler. The screen-point sampler is constructed of a 4-foot section of 1-inch outside diameter (OD), 0.004-inch slotted stainless steel well screen housed within a 1.5-inch OD outer drive casing. The screen point sampler was advanced at each location approximately 5 feet beneath first encountered groundwater (encountered at a depth of approximately 10 bgs at each location). The outer drive casing was then retracted to expose the screen interval to formation water. The sampling screen intervals are presented on Table 1.

The groundwater samples were collected from the well point sampler using new disposable bailer tubing at each location. To minimize the potential for contaminant volatilization, the sample containers were filled completely so that no headspace remained. The sample containers were then labeled and transferred to a chilled thermally-insulated container for shipment to the analytical laboratory under chain-of-custody documentation.

5.5 Decontamination Procedures

To minimize the potential for cross contamination between sampling locations, downhole drilling equipment, soil sampling equipment, and reusable groundwater sampling equipment was thoroughly cleaned prior to

initiating work and between each sampling location. All reusable drilling and soil and groundwater sampling equipment was steam cleaned with potable water prior to use, and between boring locations. All soil and groundwater sampling equipment was decontaminated after each use using a detergent solution wash, followed by a double potable water rinse. New disposable tubing was used for the collection of each groundwater sample.

5.6 Investigative Derived Waste

Investigation derived waste (IDW) included excess soil sample, decontamination water, and personal protective equipments (PPE; e.g., protective gloves). Based on the lack of field screening evidence of contamination in sampled soil, excess soil sample waste was distributed on the ground surface in the heavily shrubbed area in the central portion of the site. Decontamination rinsate was placed on bare ground for percolation. PPE was disposed of as solid waste.

6.0 ANALYTICAL PROGRAM

The groundwater samples were transported in sealed and chilled containers under chain-of-custody documentation to Test America, a Washington-certified analytical laboratory located in Beaverton Oregon.

Four of the five groundwater samples (excluding the sample collected from boring B5) were analyzed for VOCs by U.S. Environmental Protection Agency (EPA) Test Method 8260B.

Groundwater analytical testing results are summarized on Table 1. The laboratory reports and chain-of-custody documentation for the groundwater sampling activities are included in Appendix B.

7.0 RESULTS

7.1 Subsurface Conditions

Geology - The native subsurface soils observed below 1.5 feet bgs at the site are predominantly fine sands and silty sands to depths ranging from 13 to 15 feet bgs. The sand unit is underlain by a hard clay extending to the bottom of each boring at depths ranging from 15 to 18 feet bgs.

Hydrogeology - Groundwater was encountered in the sand unit at a depth of approximately 10 feet bgs in each of the five borings, extending to the top of the clay layer encountered at 13 to 15 feet bgs, apparently acting as an aquitard.

The clay layer observed beneath the site during soil boring activities was encountered at slightly shallower depths in the eastern most borings. This "dip" to the west would likely influence groundwater perched atop the clay unit. Assuming a relatively level ground surface, groundwater perched atop the clay unit would generally be expected to flow in a westerly direction.

7.2 Analytical Testing Results

7.2.1 Reference Levels

To provide a framework for evaluating the significance of the testing results, groundwater data were compared to Washington State Model Toxics Control Act (MTCA) Method A Cleanup Levels for Groundwater ([Washington Administrative Code (WAC) 173-340-900, Table 720-1)], where established. If a Method A Cleanup Level has not been established for a detected chemical in groundwater, then the testing results were compared to MTCA Standard Method B Formula Values for Potable Groundwater (CLARC Version 3.1, November 2001).

Based on the planned redevelopment of the site, the data were also compared to Risk Based Concentrations (RBCs) established by the Oregon State Department of Environmental Quality (DEQ) for vapor intrusion into indoor air due to contaminant volatilization (DEQ; September 2003). Generic risk based concentrations for vapor intrusion to indoor have not currently been established for Washington. The reference levels are listed on Table 1 for comparison purposes.

7.2.2 Groundwater Sampling Results

The dry cleaning solvent PCE was detected in each of the four groundwater samples tested at concentrations ranging from 16.6 micrograms per liter (µg/L) (sample location B2) to 7,210 µg/L (sample location B3). No other VOCs were detected in any of the samples at or above their respective reporting limits.

It should be noted that the laboratory reporting limit for TCE for the samples collected from locations B1 and B3 (where the highest concentrations of PCE were detected) were above the MTCA Level A Cleanup Level for TCE in groundwater. The elevated laboratory reporting limits were due to the dilution factor necessary to quantify the high levels of PCE in the samples.

7.2.3 Discussion

Elevated concentrations of the chlorinated solvent PCE (a dry cleaning solvent) were detected in groundwater samples collected from the southern site boundary immediately adjacent to the suspected former location of a dry cleaning operation. PCE was detected in all of the tested samples above the MTCA Level A Cleanup Level of 5 µg/L (based on tap water ingestion) and at two locations above the vapor intrusion screening level for an occupational setting. Based on the location and type of contamination detected, it would appear that a release(s) from the historic dry cleaner has occurred and has affected groundwater beneath the subject property.

Interpretations of the distribution of PCE detected in groundwater during this investigation can indicate a plume that is extending from the former dry cleaner in one of two general directions: 1) to the northwest beneath a large portion of the subject property, or 2) to the southwest affecting only the southern margin of the subject property. Additional investigation would be necessary to verify which interpretation is correct.

The "plume clause" policy of the Washington Department of Ecology (Ecology) provides for an exemption (i.e. nonenforcement) from MTCA liability for sites where a hazardous substance has come to be located on the property solely as a result of migration in the groundwater from an off-site source. Based on this policy, it is unlikely that the subject property owner would be held responsible by Ecology for the investigation or cleanup of the groundwater contamination that originates from off-site, provided that the landowner did not contribute to or exacerbate the contamination by activities such as the pumping of water wells, installation of deep utility lines, or significant dewatering. However, the property owner does retain certain responsibilities with respect to such contamination, including: 1) appropriate management of any contaminated waste that may be generated at the property (e.g. as the result of dewatering contaminated groundwater); and 2) assuring that the contamination does not present a vapor intrusion hazard to existing and future structures at the site (e.g. installation of vapor mitigation

systems in existing structures and use of vapor resistant construction techniques in new structures).

Based on the preceding, although Ecology would not likely hold the property owner responsible for investigation or cleanup of the groundwater contamination that originates from off-site, such contamination could significantly affect the redevelopment potential for the site due to the possibility of a vapor intrusion hazard to future structures at the property, as well as the need to manage any contaminated water that may be generated as a result of dewatering at the site. Under no circumstances should the property owner install water wells at the property for any purpose, install deep utility lines that would intersect the water table in the area of the PCE plume, or conduct excessive long-term de-watering in the area of the PCE plume.

8.0 LIMITATIONS AND SIGNATURES

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

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

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

Hahn and Associates, Inc.

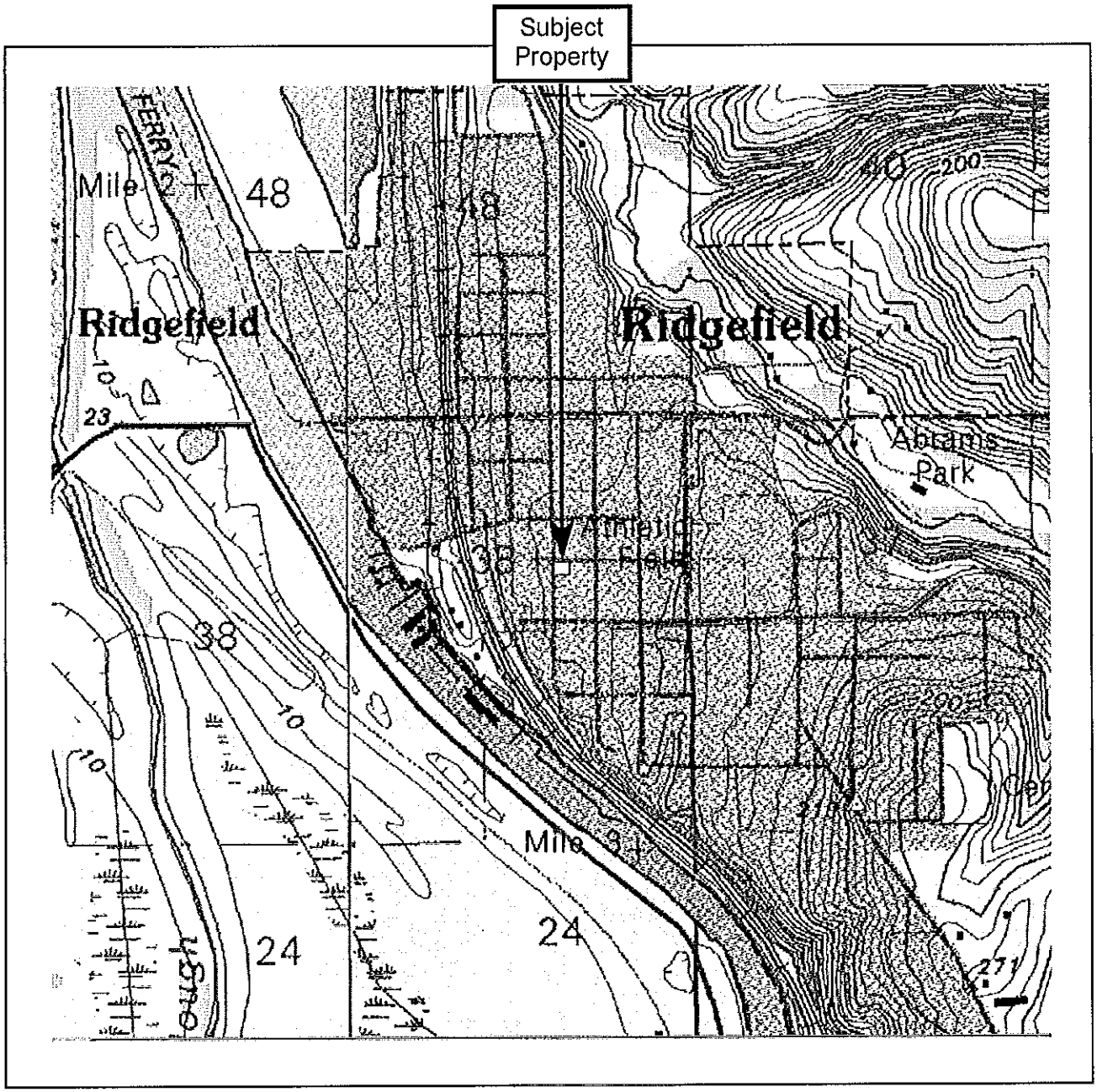
Prepared by:

Keary Knickerbocker
Sr. Project Manager

Reviewed by:

Roger E. Brown, L.G.
Principal

Date August 8, 2006



Note: Base Map from the Camas (1994), Washington-Oregon
USGS 7.5-Minute Quadrangle
Contour Interval: 10 Feet

NORTH

0 500 1000 2000

1"=1000' Scale in Feet

FIGURE 1
Site Location Map
Focused Subsurface Investigation
N Main Avenue and N Simons Street
Ridgefield, Washington

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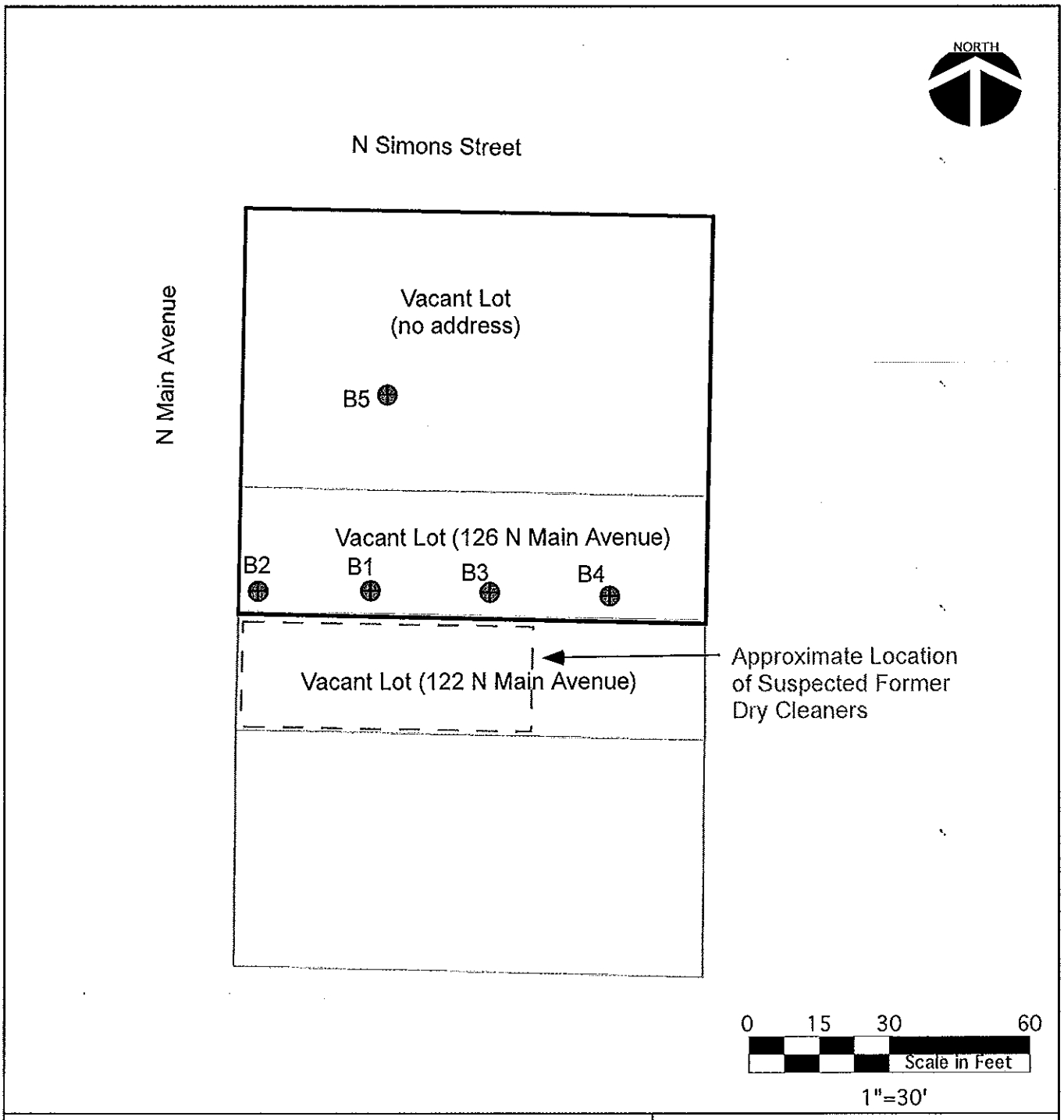
Project No. 7032 August 2006



LEGEND

- Subject Property Boundary
- Approximate Location of Former Structure
- Tax Lot Boundary
- B1 Sample Location and Number

FIGURE 2 - Site Plan and Sample Locations
Focused Subsurface Investigation
N Main Avenue and Simmons Street
Ridgefield, Washington

HAHN AND ASSOCIATES, INC.
Project No. 7032 August 2006

Appendix A

Field Boring Logs

HAHN AND ASSOCIATES, INC. 434 NW Sixth Avenue Portland, Oregon 97209 (503) 796-0717	**PUSH PROBE NUMBER** B-1	Page 1 of 1	
PROJECT: HINDV	HAI LOGGER: Ben Uhl	DRILL START	DRILL FINISH
	SAMPLING METHOD: Direct Push	Time: 0820	Time: 0910
	DRILLING METHOD: GeoProbe		
	EQUIPMENT TYPE: 6,600 Truck-Mount		
	DRILLER: ODonis/Zach	Date: 7-11-06	Date: 7-11-06
PROJECT No. 7032-	DRILLING CONTRACTOR: Boart Longyear		

BORING DIAMETER: 2'
CASING DIAMETER: N/A
SURFACE ELEVATION: Not Surveyed
TOP OF CASING ELEVATION: N/A

ABANDONMENT DETAILS	SAMPLE NUMBER *	TIME	HEADSPACE (ppm)	LAB RESULT NWTPH-Dx (ppm)	CORE INTERVAL	% RECOVERY	DEPTH (feet bgs)	GROUNDWATER	IMPACTED ZONE	STRATA (USCS)	SOIL DESCRIPTION
		0830	0.0								(0.0-0.1) Grass + Roots
							1				(0.1-5.0) sandy SILT brown damp, mod graded, non-plastic, loose, no gravel, sand-fine grained, no OSD
							2			SM	
		0831	0.0								
							3				
							4				
BENTONITE CHIPS		0832	0.0		↓	↓	5				
		0842	0.0								(5.0-5.8) sandy SILT, AA, no OSD.
							6				(5.8-10.0) SAND, brown, moist, fine-grained, uniform, loose, non-plastic, mod graded, no gravel, no OSD
							7				
		0842	0.0				8				
							9				
		0843	0.0		↓	↓	10	▽			
		0857	0.0							SP	(10.0-14.6) SAND, AA, SATURATED, no OSD
							11				
							12				
		0858	0.0				13				(14.6-18.0) CLAY, brown, damp, hard, med plastic, no gravel, no OSD
							14				
	100	0900	0.0		↓	↓	15				
		0908	0.0								Screen: 11.0-15.0' bgs 0.010" Stainless Steel
							16				
BENTONITE CHIPS							17			CH	
		0909	0.0		↓	↓	18				
							19				END Boring @ 18.0' bgs.
							20				

* Sample No. Prefix: 7032-060711-100
3x40mL VOA, HCl (Hex) (900)

GW Sample Info: 10.0' bgs

AA = as above
OSD = odor, sheen by sheen test, discoloration

HAHN AND ASSOCIATES, INC.
434 NW Sixth Avenue
Portland, Oregon 97209
(503) 796-0717

PROJECT: HININV

PROJECT No. 7032

PUSH PROBE NUMBER B-2

Page 1 of 1

HAI LOGGER: Ben Uhl
SAMPLING METHOD: Direct Push
DRILLING METHOD: GeoProbe
EQUIPMENT TYPE: 6,600 Truck-mount
DRILLER: Odonis / Zane
DRILLING CONTRACTOR: Boart Longyear

DRILL START	DRILL FINISH
Time: 1215	Time: 1247
Date: 7-11-06	Date: 7-11-06

BORING DIAMETER: 2"
CASING DIAMETER: N/A
SURFACE ELEVATION: Not Surveyed
TOP OF CASING ELEVATION: N/A

ABANDONMENT DETAILS	SAMPLE NUMBER*	TIME	HEADSPACE (ppm)	LAB RESULT NWTPH-Dx (ppm)	CORE INTERVAL	% RECOVERY	DEPTH (feet bgs)	GROUNDWATER	IMPACTED ZONE	STRATA (USCS)	SOIL DESCRIPTION
		1217	0.0				1			mL	(0.0-0.1) Grass + Roots (0.1-1.0) SILT, brown, dry, loose, poorly graded, non-plastic, no OSD
		1217	0.0				3			SM	(1.0-5.0) SAND, brown, damp, fine-grained, uniform, loose, mod-graded, no OSD, no gravel, non-plastic
BENTONITE CHIPS		1218	0.0				5				
		1220	0.0				6				(5.0-10.0) SAND, AA, moist, no OSD
		1220	0.0				8				
		1221	0.0				10	▽		SM	14.8 @ 1317 (10-15.0) AA, SAND, no OSD, saturated.
		1227	0.0				11				
		1227	0.0				13				
	104	1230					14				
		1228	0.0				15				(14.8-15.0') CLAY, brown, moist, very dense, poorly graded, no gravel, med plasticity, stiff, no OSD
BENTONITE CHIPS		1246	0.0				17			CH	(15.0-18.0) CLAY, AA, no OSD
		1246	0.0				18				END BORING @ 18.0' Screen: 11-14.0' bgs 0.010" Stainless Steel
							19				
							20				

* Sample No. Prefix: 7032-060711-104
3x40mL w/HCl, VOAs (VOC) (1230)

GW Sample Info: 10.0' bgs

AA = as above
OSD = odor, sheen by sheen test, discoloration

HAHN AND ASSOCIATES, INC. 434 NW Sixth Avenue Portland, Oregon 97209 (503) 796-0717	**PUSH PROBE NUMBER** B-3	Page 1 of 1	
PROJECT: HININV	HAI LOGGER: Ben Uhl SAMPLING METHOD: Direct Push DRILLING METHOD: GeoProbe EQUIPMENT TYPE: 6,600 Truck-mount DRILLER: Odonis / Zane	DRILL START Time: 1132 Date: 7-11-06	DRILL FINISH Time: 1157 Date: 7-11-06
PROJECT No. 7032	DRILLING CONTRACTOR: Boart Longyear		

ABANDONMENT DETAILS	SAMPLE NUMBER *	TIME	HEADSPACE (ppm)	LAB RESULT NWTPH-Dx (ppm)	CORE INTERVAL	% RECOVERY	DEPTH (feet bgs)	GROUNDWATER	IMPACTED ZONE	STRATA (USCS)	SOIL DESCRIPTION
											BORING DIAMETER: 2'
											CASING DIAMETER: N/A
											SURFACE ELEVATION: Not Surveyed
											TOP OF CASING ELEVATION: N/A
											SOIL DESCRIPTION
		1137	0.0								(0.0-0.1) Grass + Roots
							1				(0.1-5.0) SAND, brown, damp (4-5'), fine-grained, sub-rounded, non-plastic, mod graded, no OSD
							2				
		1138	0.0				3			SM	
							4				
BENTONITE CHIPS		1138	0.0		↓	↓	5				
		1142	0.0				6				(5.0-10.0') SAND, AA, moist, no OSD.
							7				
		1142	0.0				8			SM	
							9				
		1143	0.0		↓	↓	10	▽			
		1147	0.0				11				(10.0-13.0) SAND, AA, SATURATED, no OSD
							12				
		1148	0.0				13				
	103	1150					14				(13.0-15.0') CLAY brown, very dense/hard, mod plasticity, poorly graded, no OSD, moist
		1148	0.0		↓	↓	15			CH	
							16				REFUSAL @ 15.0' bgs (Hard clay.)
							17				Screen: 11-15' bgs 0.010" Stainless Steel
							18				
							19				
							20				

* Sample No. Prefix: 7032-060711-103
3x 40mL w/HCl, VOA (VOC) (1150)

GW Sample Info: 10.1' bgs.

AA = as above
OSD = odor, sheen by sheen test, discoloration

HAHN AND ASSOCIATES, INC.
434 NW Sixth Avenue
Portland, Oregon 97209
(503) 796-0717

PROJECT: HIN INV

PROJECT No. 7032

PUSH PROBE NUMBER B-4

HAI LOGGER: Ben Uhl
SAMPLING METHOD: Direct Push
DRILLING METHOD: GeoProbe
EQUIPMENT TYPE: 6,600 Truck-Mount
DRILLER: ODANIS / Zach
DRILLING CONTRACTOR: Boart Longyear

DRILL START	DRILL FINISH
Time: ~~1037~~ 1050	Time: 1117
Date: 7-11-06	Date: 7-11-06

BORING DIAMETER: 2'
CASING DIAMETER: N/A
SURFACE ELEVATION: Not Surveyed
TOP OF CASING ELEVATION: N/A

ABANDONMENT DETAILS	SAMPLE NUMBER *	TIME	HEADSPACE (ppm)	LAB RESULT NWTPH-Dx (ppm)	CORE INTERVAL	% RECOVERY	DEPTH (feet bgs)	GROUNDWATER	IMPACTED ZONE	STRATA (USCS)	SOIL DESCRIPTION
BENTONITE CHIPS		1058	0.0				1			ML	(0.0-0.1) Grass + Roots (0.1-1.5) sandy SILT w/ some gravel, brown, sand fine grain, gravel - sub-angular ~1-2mm, dry, non-plastic, well graded, no OSD.
		1058	0.0				3			SM	(1.5-5.0) silty SAND, brown, damp fine-grained, non-plastic, mod graded, no OSD
		1059	0.0				5				
		1103	0.0				6				(5.0-5.7) silty SAND AA w/ some gravel/cobble, silt + SAND AA, Gravel/Cobble large, sub-angular (8"ea), no OSD
		1103	0.0				8				(5.7-10.0) SAND fine-grained sub-rounded brown, ~~damp~~ moist, loose dense, non plastic, mod graded, no OSD
		1104	0.0				10	▽		SM	(10.0-13.5) SAND, AA, no OSD, SATURATED
		1109	0.0				11				
		1110	0.0				12				
	102	1110					13				
		1110	0.0		(RD)		14			CH	(13.5-15.0) CLAY, brown, damp mod plasticity, extremely hard, poorly graded no OSD.
							15				
							16				(RD) END BORING @ 15.0' bgs (REFUSAL, Hard clay).
							17				Screen: 11-15.' bgs 0.010" Stainless Steel
							18				
							19				
							20				

* Sample No. Prefix: 7037-060711-102
3x40 mL w/HCl, VOA CLEAR (1110)

GW Sample Info: 10.0' bgs

AA = as above
OSD = odor, sheen by sheen test, discoloration

HAHN AND ASSOCIATES, INC. 434 NW Sixth Avenue Portland, Oregon 97209 (503) 796-0717	**PUSH PROBE NUMBER** B-5	Page 1 of 1	
PROJECT: HININV	HAI LOGGER: Ben Uhl	DRILL START Time: 0930	DRILL FINISH Time: 1013
	SAMPLING METHOD: Direct Push		
	DRILLING METHOD: GeoProbe		
	EQUIPMENT TYPE: 6,600 Truck-mount		
	DRILLER: O'DENIS / Zack.	Date: 7-11-06	Date: 7-11-06
PROJECT No. 7032	DRILLING CONTRACTOR: Boart Longyear		

BORING DIAMETER: 2'
CASING DIAMETER: N/A
SURFACE ELEVATION: Not Surveyed
TOP OF CASING ELEVATION: N/A

ABANDONMENT DETAILS	SAMPLE NUMBER *	TIME	HEADSPACE (ppm)	LAB RESULT NWTPH-Dx (ppm)	CORE INTERVAL	% RECOVERY	DEPTH (feet bgs)	GROUNDWATER	IMPACTED ZONE	STRATA (USCS)	SOIL DESCRIPTION
Bentonite chips		0936	0.0				1			ML	(0.0-0.1) Grass + Roots (0.1-1.8) SILT, brown, med grain, sub-rounded, dry, non-plastic, loose, poorly graded, no OSD
		0937	0.0				3			SM	(1.8-4.0) SAND fine-grained, sub-rounded, brown, dry, loose, non-plastic, mod graded, no OSD
		0937	0.0				4				
		0944	0.0				6				(5.0-5.5) SAND, AA, no OSD (5.5-10.0) SAND, AA, wet
		0944	0.0				7			SM/SP	
		0945	0.0				10	▽			14.8 (BH)
		0951	0.0				11				(10.0-15.0) AGB SAND AA, SATURATED, no OSD
	101-70950						12				
		0952	0.0				13			SM	
		0958	0.0				15				(14.8-18.0) CLAY, brown, damp, dense, med plastic, poorly graded, no OSD
Bentonite chips			0.0				16				
			0.0				17			CH	
			0.0				18				
							19				END BORING @ 18.0' bgs Screen: 11-15' bgs 0.010" Stainless Steel.
							20				

* Sample No. Prefix: 7032-060711-101 (0950)
3x40mL w/HCl, VOA (VOCs)

GW Sample Info: 10.0' bgs

AA = as above
OSD = odor, sheen by sheen test, discoloration

Appendix B

Laboratory Reports and Chain-of-Custody Documentation

TestAmerica
ANALYTICAL TESTING CORPORATION

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

July 26, 2006

Keary Knickerbocker
Hahn and Associates, Inc.
434 NW Sixth Ave., Suite 203
Portland, OR 97209

RE: HININV

Enclosed are the results of analyses for samples received by the laboratory on 07/12/06 16:20. The following list is a summary of the Work Orders contained in this report, generated on 07/26/06 12:02.

If you have any questions concerning this report, please feel free to contact me.

Work Order	Project	ProjectNumber
PPG0415	HININV	7032

Roxanne L. Clifton, Project Manager

TestAmerica
ANALYTICAL TESTING CORPORATION

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Hahn and Associates, Inc.	Project Name:	HININV	
434 NW Sixth Ave., Suite 203	Project Number:	7032	Report Created:
Portland, OR 97209	Project Manager:	Keary Knickerbocker	07/26/06 12:02

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
7032-060711-100	PPG0415-01	Water	07/11/06 09:00	07/12/06 16:20
7032-060711-102	PPG0415-03	Water	07/11/06 11:10	07/12/06 16:20
7032-060711-103	PPG0415-04	Water	07/11/06 11:50	07/12/06 16:20
7032-060711-104	PPG0415-05	Water	07/11/06 12:30	07/12/06 16:20

Roxanne L. Clifton, Project Manager

TestAmerica
ANALYTICAL TESTING CORPORATION

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Hahn and Associates, Inc.	Project Name: **HININV**	
434 NW Sixth Ave., Suite 203	Project Number: 7032	Report Created:
Portland, OR 97209	Project Manager: Keary Knickerbocker	07/26/06 12:02

Volatile Organic Compounds per EPA Method 8260B

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PPG0415-01 (7032-060711-100)		**Water**			**Sampled: 07/11/06 09:00**					
Acetone	EPA 8260B	ND	-----	1250	ug/l	50x	6070595	07/17/06 09:48	07/17/06 17:52	
Benzene	"	ND	-----	50.0	"	"	"	"	"	
Bromobenzene	"	ND	-----	50.0	"	"	"	"	"	
Bromochloromethane	"	ND	-----	50.0	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	50.0	"	"	"	"	"	
Bromoform	"	ND	-----	50.0	"	"	"	"	"	
Bromomethane	"	ND	-----	250	"	"	"	"	"	
2-Butanone (MEK)	"	ND	-----	500	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	250	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	50.0	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	50.0	"	"	"	"	"	
Carbon disulfide	"	ND	-----	500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	50.0	"	"	"	"	"	
Chlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
Chloroethane	"	ND	-----	50.0	"	"	"	"	"	
Chloroform	"	ND	-----	50.0	"	"	"	"	"	
Chloromethane	"	ND	-----	250	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	50.0	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	50.0	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	250	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	50.0	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	50.0	"	"	"	"	"	
Dibromomethane	"	ND	-----	50.0	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	250	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	50.0	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	50.0	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	50.0	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	50.0	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	50.0	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	50.0	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	50.0	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	50.0	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	50.0	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	50.0	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	50.0	"	"	"	"	"	
Ethylbenzene	"	ND	-----	50.0	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	200	"	"	"	"	"	
2-Hexanone	"	ND	-----	500	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	100	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	100	"	"	"	"	"	

Roxanne L. Clifton, Project Manager

TestAmerica
ANALYTICAL TESTING CORPORATION

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Hahn and Associates, Inc.	Project Name: **HININV**	
434 NW Sixth Ave., Suite 203	Project Number: 7032	Report Created:
Portland, OR 97209	Project Manager: Keary Knickerbocker	07/26/06 12:02

Volatile Organic Compounds per EPA Method 8260B

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PPG0415-01 (7032-060711-100)		**Water**			**Sampled: 07/11/06 09:00**					
4-Methyl-2-pentanone	EPA 8260B	ND	-----	250	ug/l	50x	6070595	07/17/06 09:48	07/17/06 17:52	
Methyl tert-butyl ether	"	ND	-----	50.0	"	"	"	"	"	
Methylene chloride	"	ND	-----	250	"	"	"	"	"	
Naphthalene	"	ND	-----	100	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	50.0	"	"	"	"	"	
Styrene	"	ND	-----	50.0	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	50.0	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	50.0	"	"	"	"	"	
Tetrachloroethene	"	**4890**	-----	50.0	"	"	"	"	"	
Toluene	"	ND	-----	50.0	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	50.0	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	50.0	"	"	"	"	"	
Trichloroethene	"	ND	-----	50.0	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	50.0	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	50.0	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	50.0	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	50.0	"	"	"	"	"	
Vinyl chloride	"	ND	-----	50.0	"	"	"	"	"	
o-Xylene	"	ND	-----	50.0	"	"	"	"	"	
m,p-Xylene	"	ND	-----	100	"	"	"	"	"	
Surrogate(s): 4-BFB		*90.0%*		*80 - 120 %*		*1x*			"	
1,2-DCA-d4		*99.0%*		*80 - 120 %*		"			"	
Dibromofluoromethane		*95.0%*		*80 - 120 %*		"			"	
Toluene-d8		*93.0%*		*80 - 120 %*		"			"	
PPG0415-03 (7032-060711-102)		**Water**			**Sampled: 07/11/06 11:10**					
Acetone	EPA 8260B	ND	-----	50.0	ug/l	2x	6070595	07/17/06 09:48	07/17/06 18:20	
Benzene	"	ND	-----	2.00	"	"	"	"	"	
Bromobenzene	"	ND	-----	2.00	"	"	"	"	"	
Bromochloromethane	"	ND	-----	2.00	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	2.00	"	"	"	"	"	
Bromoform	"	ND	-----	2.00	"	"	"	"	"	
Bromomethane	"	ND	-----	10.0	"	"	"	"	"	
2-Butanone (MEK)	"	ND	-----	20.0	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	10.0	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	2.00	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	2.00	"	"	"	"	"	
Carbon disulfide	"	ND	-----	20.0	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	2.00	"	"	"	"	"	
Chlorobenzene	"	ND	-----	2.00	"	"	"	"	"	

TestAmerica - Portland, OR

he results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Roxanne L. Clifton, Project Manager

TestAmerica
ANALYTICAL TESTING CORPORATION

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Hahn and Associates, Inc.	Project Name: **HININV**	
434 NW Sixth Ave., Suite 203	Project Number: 7032	Report Created:
Portland, OR 97209	Project Manager: Keary Knickerbocker	07/26/06 12:02

Volatile Organic Compounds per EPA Method 8260B

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PPG0415-03 (7032-060711-102)		**Water**				**Sampled: 07/11/06 11:10**				
Chloroethane	EPA 8260B	ND	-----	2.00	ug/l	2x	6070595	07/17/06 09:48	07/17/06 18:20	
Chloroform	"	ND	-----	2.00	"	"	"	"	"	
Chloromethane	"	ND	-----	10.0	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	2.00	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	2.00	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	10.0	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	2.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	2.00	"	"	"	"	"	
Dibromomethane	"	ND	-----	2.00	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	2.00	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	2.00	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	2.00	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	10.0	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	2.00	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	2.00	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	2.00	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	2.00	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	2.00	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	2.00	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	2.00	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	2.00	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	2.00	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	2.00	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	2.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	8.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	20.0	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	4.00	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	4.00	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	10.0	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	2.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	10.0	"	"	"	"	"	
Naphthalene	"	ND	-----	4.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	2.00	"	"	"	"	"	
Styrene	"	ND	-----	2.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	2.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	2.00	"	"	"	"	"	
Tetrachloroethene	"	**188**	-----	2.00	"	"	"	"	"	
Toluene	"	ND	-----	2.00	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	2.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	2.00	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	2.00	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	2.00	"	"	"	"	"	

Roxanne L. Clifton, Project Manager

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BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Hahn and Associates, Inc.	Project Name: **HININV**	
434 NW Sixth Ave., Suite 203	Project Number: 7032	Report Created:
Portland, OR 97209	Project Manager: Keary Knickerbocker	07/26/06 12:02

Volatile Organic Compounds per EPA Method 8260B

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PPG0415-03 (7032-060711-102)		**Water**			**Sampled: 07/11/06 11:10**					
Trichloroethene	EPA 8260B	ND	-----	2.00	ug/l	2x	6070595	07/17/06 09:48	07/17/06 18:20	
Trichlorofluoromethane	"	ND	-----	2.00	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	2.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	2.00	"	"	"	"	"	
Vinyl chloride	"	ND	-----	2.00	"	"	"	"	"	
o-Xylene	"	ND	-----	2.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	4.00	"	"	"	"	"	
Surrogate(s): 4-BFB		*91.5%*			*80 - 120 %*	*1x*			"	
1,2-DCA-d4		*102%*			*80 - 120 %*	"			"	
Dibromofluoromethane		*105%*			*80 - 120 %*	"			"	
Toluene-d8		*92.5%*			*80 - 120 %*	"			"	
PPG0415-04 (7032-060711-103)		**Water**			**Sampled: 07/11/06 11:50**					
Acetone	EPA 8260B	ND	-----	1250	ug/l	50x	6070595	07/17/06 09:48	07/17/06 16:55	
Benzene	"	ND	-----	50.0	"	"	"	"	"	
Bromobenzene	"	ND	-----	50.0	"	"	"	"	"	
Bromochloromethane	"	ND	-----	50.0	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	50.0	"	"	"	"	"	
Bromoform	"	ND	-----	50.0	"	"	"	"	"	
Bromomethane	"	ND	-----	250	"	"	"	"	"	
2-Butanone (MEK)	"	ND	-----	500	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	250	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	50.0	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	50.0	"	"	"	"	"	
Carbon disulfide	"	ND	-----	500	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	50.0	"	"	"	"	"	
Chlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
Chloroethane	"	ND	-----	50.0	"	"	"	"	"	
Chloroform	"	ND	-----	50.0	"	"	"	"	"	
Chloromethane	"	ND	-----	250	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	50.0	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	50.0	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	250	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	50.0	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	50.0	"	"	"	"	"	
Dibromomethane	"	ND	-----	50.0	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	250	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	50.0	"	"	"	"	"	

TestAmerica - Portland, OR

he results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.

Roxanne L. Clifton, Project Manager

TestAmerica
ANALYTICAL TESTING CORPORATION

PORTLAND, OR 9405 S.W. NIMBUS AVENUE
BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Hahn and Associates, Inc.	Project Name: HININV	
434 NW Sixth Ave., Suite 203	Project Number: 7032	Report Created:
Portland, OR 97209	Project Manager: Keary Knickerbocker	07/26/06 12:02

Volatile Organic Compounds per EPA Method 8260B

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PPG0415-04 (7032-060711-103)		**Water**			**Sampled: 07/11/06 11:50**					
1,2-Dichloroethane	EPA 8260B	ND	-----	50.0	ug/l	50x	6070595	07/17/06 09:48	07/17/06 16:55	
1,1-Dichloroethene	"	ND	-----	50.0	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	50.0	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	50.0	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	50.0	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	50.0	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	50.0	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	50.0	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	50.0	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	50.0	"	"	"	"	"	
Ethylbenzene	"	ND	-----	50.0	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	200	"	"	"	"	"	
2-Hexanone	"	ND	-----	500	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	100	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	100	"	"	"	"	"	
4-Methyl-2-pentanone	"	ND	-----	250	"	"	"	"	"	
Methyl tert-butyl ether	"	ND	-----	50.0	"	"	"	"	"	
Methylene chloride	"	ND	-----	250	"	"	"	"	"	
Naphthalene	"	ND	-----	100	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	50.0	"	"	"	"	"	
Styrene	"	ND	-----	50.0	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	50.0	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	50.0	"	"	"	"	"	
Tetrachloroethene	"	**7210**	-----	50.0	"	"	"	"	"	
Toluene	"	ND	-----	50.0	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	50.0	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	50.0	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	50.0	"	"	"	"	"	
Trichloroethene	"	ND	-----	50.0	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	50.0	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	50.0	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	50.0	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	50.0	"	"	"	"	"	
Vinyl chloride	"	ND	-----	50.0	"	"	"	"	"	
o-Xylene	"	ND	-----	50.0	"	"	"	"	"	
m,p-Xylene	"	ND	-----	100	"	"	"	"	"	
Surrogate(s): *4-BFB*		*92.0%*		*80 - 120 %*		*1x*			"	
1,2-DCA-d4		*107%*		*80 - 120 %*		"			"	
Dibromofluoromethane		*107%*		*80 - 120 %*		"			"	
Toluene-d8		*99.0%*		*80 - 120 %*		"			"	

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Roxanne L. Clifton, Project Manager

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BEAVERTON, OR 97008-7132
ph: (503) 906.9200 fax: (503) 906.9210

Hahn and Associates, Inc.	Project Name: **HININV**	
434 NW Sixth Ave., Suite 203	Project Number: 7032	Report Created:
Portland, OR 97209	Project Manager: Keary Knickerbocker	07/26/06 12:02

Volatile Organic Compounds per EPA Method 8260B

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PPG0415-05 (7032-060711-104)		**Water**			**Sampled: 07/11/06 12:30**					
Acetone	EPA 8260B	ND	-----	25.0	ug/l	1x	6070595	07/17/06 09:48	07/17/06 18:49	
Benzene	"	ND	-----	1.00	"	"	"	"	"	
Bromobenzene	"	ND	-----	1.00	"	"	"	"	"	
Bromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromodichloromethane	"	ND	-----	1.00	"	"	"	"	"	
Bromoform	"	ND	-----	1.00	"	"	"	"	"	
Bromomethane	"	ND	-----	5.00	"	"	"	"	"	
2-Butanone (MEK)	"	ND	-----	10.0	"	"	"	"	"	
n-Butylbenzene	"	ND	-----	5.00	"	"	"	"	"	
sec-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
tert-Butylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Carbon disulfide	"	ND	-----	10.0	"	"	"	"	"	
Carbon tetrachloride	"	ND	-----	1.00	"	"	"	"	"	
Chlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Chloroethane	"	ND	-----	1.00	"	"	"	"	"	
Chloroform	"	ND	-----	1.00	"	"	"	"	"	
Chloromethane	"	ND	-----	5.00	"	"	"	"	"	
2-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
4-Chlorotoluene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromo-3-chloropropane	"	ND	-----	5.00	"	"	"	"	"	
Dibromochloromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dibromoethane	"	ND	-----	1.00	"	"	"	"	"	
Dibromomethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,4-Dichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
Dichlorodifluoromethane	"	ND	-----	5.00	"	"	"	"	"	
1,1-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
cis-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
trans-1,2-Dichloroethene	"	ND	-----	1.00	"	"	"	"	"	
1,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,3-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
2,2-Dichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,1-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	
cis-1,3-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	
trans-1,3-Dichloropropene	"	ND	-----	1.00	"	"	"	"	"	
Ethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Hexachlorobutadiene	"	ND	-----	4.00	"	"	"	"	"	
2-Hexanone	"	ND	-----	10.0	"	"	"	"	"	
Isopropylbenzene	"	ND	-----	2.00	"	"	"	"	"	
p-Isopropyltoluene	"	ND	-----	2.00	"	"	"	"	"	

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434 NW Sixth Ave., Suite 203	Project Number: 7032	Report Created:
Portland, OR 97209	Project Manager: Keary Knickerbocker	07/26/06 12:02

Volatile Organic Compounds per EPA Method 8260B

TestAmerica - Portland, OR

Analyte	Method	Result	MDL*	MRL	Units	Dil	Batch	Prepared	Analyzed	Notes
PPG0415-05 (7032-060711-104)		**Water**			**Sampled: 07/11/06 12:30**					
4-Methyl-2-pentanone	EPA 8260B	ND	-----	5.00	ug/l	1x	6070595	07/17/06 09:48	07/17/06 18:49	
Methyl tert-butyl ether	"	ND	-----	1.00	"	"	"	"	"	
Methylene chloride	"	ND	-----	5.00	"	"	"	"	"	
Naphthalene	"	ND	-----	2.00	"	"	"	"	"	
n-Propylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Styrene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	"	ND	-----	1.00	"	"	"	"	"	
Tetrachloroethene	"	**16.6**	-----	1.00	"	"	"	"	"	
Toluene	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trichlorobenzene	"	ND	-----	1.00	"	"	"	"	"	
1,1,1-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
1,1,2-Trichloroethane	"	ND	-----	1.00	"	"	"	"	"	
Trichloroethene	"	ND	-----	1.00	"	"	"	"	"	
Trichlorofluoromethane	"	ND	-----	1.00	"	"	"	"	"	
1,2,3-Trichloropropane	"	ND	-----	1.00	"	"	"	"	"	
1,2,4-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
1,3,5-Trimethylbenzene	"	ND	-----	1.00	"	"	"	"	"	
Vinyl chloride	"	ND	-----	1.00	"	"	"	"	"	
o-Xylene	"	ND	-----	1.00	"	"	"	"	"	
m,p-Xylene	"	ND	-----	2.00	"	"	"	"	"	
Surrogate(s): 4-BFB		*91.0%*			*80 - 120 %*	"			"	
1,2-DCA-d4		*104%*			*80 - 120 %*	"			"	
Dibromofluoromethane		*102%*			*80 - 120 %*	"			"	
Toluene-d8		*87.0%*			*80 - 120 %*	"			"	

Roxanne L. Clifton, Project Manager

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434 NW Sixth Ave., Suite 203	Project Number:	7032	Report Created:
Portland, OR 97209	Project Manager:	Keary Knickerbocker	07/26/06 12:02

Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Portland, OR

QC Batch: 6070595 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6070595-BLK1)							Extracted: 07/17/06 09:48							
Acetone	EPA 8260B	ND	---	25.0	ug/l	1x	--	--	--	--	--	--	07/17/06 14:06	
Benzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromodichloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromoform	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Bromomethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Butanone (MEK)	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
n-Butylbenzene	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
sec-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
tert-Butylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Carbon disulfide	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Carbon tetrachloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloroform	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Chloromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
2-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
4-Chlorotoluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromo-3-chloropropane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Dibromochloromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dibromoethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dibromomethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,4-Dichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Dichlorodifluoromethane	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,2-Dichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
2,2-Dichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
cis-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
trans-1,3-Dichloropropene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Ethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	

Roxanne L. Clifton, Project Manager

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Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Portland, OR

QC Batch: 6070595 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
Blank (6070595-BLK1)								Extracted: 07/17/06 09:48						
Hexachlorobutadiene	EPA 8260B	ND	---	4.00	ug/l	1x	--	--	--	--	--	--	07/17/06 14:06	
2-Hexanone	"	ND	---	10.0	"	"	--	--	--	--	--	--	"	
Isopropylbenzene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
p-Isopropyltoluene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
4-Methyl-2-pentanone	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Methyl tert-butyl ether	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Methylene chloride	"	ND	---	5.00	"	"	--	--	--	--	--	--	"	
Naphthalene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
n-Propylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Styrene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2,2-Tetrachloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Tetrachloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Toluene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trichlorobenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,1-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,1,2-Trichloroethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichloroethene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Trichlorofluoromethane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,3-Trichloropropane	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,2,4-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
1,3,5-Trimethylbenzene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
Vinyl chloride	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
o-Xylene	"	ND	---	1.00	"	"	--	--	--	--	--	--	"	
m,p-Xylene	"	ND	---	2.00	"	"	--	--	--	--	--	--	"	
Surrogate(s): 4-BFB		*Recovery: 91.0%*			*Limits: 80-120%*	"							*07/17/06 14:06*	
1,2-DCA-d4		*99.0%*			*80-120%*	"							"	
Dibromofluoromethane		*98.0%*			*80-120%*	"							"	
Toluene-d8		*95.0%*			*80-120%*	"							"	

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Volatile Organic Compounds per EPA Method 8260B - Laboratory Quality Control Results

TestAmerica - Portland, OR

QC Batch: 6070595 **Water Preparation Method: EPA 5030B**

Analyte	Method	Result	MDL*	MRL	Units	Dil	Source Result	Spike Amt	% REC	(Limits)	% RPD	(Limits)	Analyzed	Notes
LCS (6070595-BS1)								Extracted: 07/17/06 09:48						
Benzene	EPA 8260B	19.8	---	1.00	ug/l	1x	--	20.0	99.0%	(80-120)	--	--	07/17/06 10:45	
Chlorobenzene	"	19.9	---	1.00	"	"	--	"	99.5%	(80-124)	--	--	"	
1,1-Dichloroethene	"	19.3	---	1.00	"	"	--	"	96.5%	(78-120)	--	--	"	
Toluene	"	20.2	---	1.00	"	"	--	"	101%	(80-124)	--	--	"	
Trichloroethene	"	19.6	---	1.00	"	"	--	"	98.0%	(80-132)	--	--	"	
Surrogate(s): 4-BFB		*Recovery: 105%*			*Limits: 80-120%*	"							*07/17/06 10:45*	
1,2-DCA-d4		*104%*			*80-120%*	"							"	
Dibromofluoromethane		*103%*			*80-120%*	"							"	
Toluene-d8		*100%*			*80-120%*	"							"	
Matrix Spike (6070595-MS1)							QC Source: PPG0582-01	Extracted: 07/17/06 09:48						
Benzene	EPA 8260B	20.7	---	1.00	ug/l	1x	ND	20.0	104%	(80-124)	--	--	07/17/06 11:14	
Chlorobenzene	"	20.6	---	1.00	"	"	ND	"	103%	(72.9-134)	--	--	"	
1,1-Dichloroethene	"	20.1	---	1.00	"	"	ND	"	100%	(79.3-127)	--	--	"	
Toluene	"	21.1	---	1.00	"	"	ND	"	106%	(79.7-131)	--	--	"	
Trichloroethene	"	19.8	---	1.00	"	"	ND	"	99.0%	(68.4-130)	--	--	"	
Surrogate(s): 4-BFB		*Recovery: 104%*			*Limits: 80-120%*	"							*07/17/06 11:14*	
1,2-DCA-d4		*105%*			*80-120%*	"							"	
Dibromofluoromethane		*108%*			*80-120%*	"							"	
Toluene-d8		*104%*			*80-120%*	"							"	
Matrix Spike Dup (6070595-MSD1)							QC Source: PPG0582-01	Extracted: 07/17/06 09:48						
Benzene	EPA 8260B	20.0	---	1.00	ug/l	1x	ND	20.0	100%	(80-124)	3.44%	(25)	07/17/06 11:43	
Chlorobenzene	"	20.2	---	1.00	"	"	ND	"	101%	(72.9-134)	1.96%	"	"	
1,1-Dichloroethene	"	19.8	---	1.00	"	"	ND	"	99.0%	(79.3-127)	1.50%	"	"	
Toluene	"	20.7	---	1.00	"	"	ND	"	104%	(79.7-131)	1.91%	"	"	
Trichloroethene	"	19.0	---	1.00	"	"	ND	"	95.0%	(68.4-130)	4.12%	"	"	
Surrogate(s): 4-BFB		*Recovery: 105%*			*Limits: 80-120%*	"							*07/17/06 11:43*	
1,2-DCA-d4		*102%*			*80-120%*	"							"	
Dibromofluoromethane		*106%*			*80-120%*	"							"	
Toluene-d8		*102%*			*80-120%*	"							"	

Roxanne L. Clifton, Project Manager

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Hahn and Associates, Inc.	Project Name:	HININV	
434 NW Sixth Ave., Suite 203	Project Number:	7032	Report Created:
Portland, OR 97209	Project Manager:	Keary Knickerbocker	07/26/06 12:02

Notes and Definitions

Report Specific Notes:

None

Laboratory Reporting Conventions:

DET	-	Analyte DETECTED at or above the Reporting Limit. Qualitative Analyses only.
ND	-	Analyte NOT DETECTED at or above the reporting limit (MDL or MRL, as appropriate).
NR/NA	-	Not Reported / Not Available
dry	-	Sample results reported on a Dry Weight Basis. Results and Reporting Limits have been corrected for Percent Dry Weight.
wet	-	Sample results and reporting limits reported on a Wet Weight Basis (as received). Results with neither 'wet' nor 'dry' are reported on a Wet Weight Basis.
RPD	-	RELATIVE PERCENT DIFFERENCE (RPDs calculated using Results, not Percent Recoveries).
MRL	-	METHOD REPORTING LIMIT. Reporting Level at, or above, the lowest level standard of the Calibration Table.
MDL*	-	METHOD DETECTION LIMIT. Reporting Level at, or above, the statistically derived limit based on 40CFR, Part 136, Appendix B. *MDLs are listed on the report only if the data has been evaluated below the MRL. Results between the MDL and MRL are reported as Estimated Results.
Dil	-	Dilutions are calculated based on deviations from the standard dilution performed for an analysis, and may not represent the dilution found on the analytical raw data.
Reporting Limits	-	Reporting limits (MDLs and MRLs) are adjusted based on variations in sample preparation amounts, analytical dilutions and percent solids, where applicable.
Electronic Signature	-	Electronic Signature added in accordance with TestAmerica's *Electronic Reporting and Electronic Signatures Policy.* Application of electronic signature indicates that the report has been reviewed and approved for release by the laboratory. Electronic signature is intended to be the legally binding equivalent of a traditionally handwritten signature.

Roxanne L. Clifton, Project Manager