

Department of Environmental Quality

Northwest Region 2020 SW Fourth Avenue Suite 400 Portland, OR 97201-4987 (503) 229-5263 Voice TTY (503) 229-5471

June 7, 2001

BEN DAVIS GRAND CENTRAL BAKERY 2228 SE HAWTHORNE PORTLAND OREGON 97214

> Re: Grand Central Bakery File No. 26-01-0005

Dear Mr. Davis:

The Department has completed its review of the information submitted to date concerning the underground storage tank (UST) cleanup at 2228 SE Hawthorne Boulevard in Portland, Oregon. The Department has determined that the cleanup appears to have met the requirements of Oregon Administrative Rules (OAR) 340-122-205 through 340-122-360 and that no further action is required at this time.

This determination is a result of our evaluation and judgment based on the regulations and facts as we now understand them, including:

- 1. An automotive service station was located on the property from 1925 till 1957. During a Phase I Environmental Site Assessment of the property in 1992 no records of the size, location, or removal of fuel tanks could be located.
- 2. During a Phase II Environmental Site Assessment of the property in 1996 a geophysical survey of the site was conducted to search for buried tanks but no tanks were identified. Historical aerial photos of the site were studied to locate former structures, pump islands, and USTs. The station building and islands were located but tank locations could not be determined.
- 3. Seven push probe holes were driven around the island and station building. Soil samples from all borings were analyzed for total petroleum hydrocarbon (TPH). A sample from P-3 at 4.5 feet below ground surface (bgs) indicated TPH in the gasoline range at 352 parts per million (ppm). This concentration exceeds the Departments Soil Matrix cleanup level of 80 ppm. Diesel/oil range hydrocarbons were detected at a concentration below matrix standards. A deeper sample from P-3 at 8.5 feet bgs did not detect TPH.
- 4. The P-3 soil sample from 4.5 feet was further analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) constituents. BTEX constituents were all below current risk standards for a commercial setting.
- 5. Groundwater was not encountered in any of the push probe holes.

A pocket of soil contamination remains at the site approximately 30 feet south of Hawthorne

Ben Davis June 7, 2001 Page 2

Boulevard and 30 feet west of the bakery building. The Department approves leaving contamination in place since there are no apparent risks to human health and the environment.

The Departments approval to leave contamination is based on the site conditions described in the report as they exist today. Should you ever excavate the contaminated soil, you are responsible for proper management of the soil and any cleanup necessary at that time. You are also responsible for notifying potential purchasers of the property about this remaining contamination.

The Department's determination will not be applicable if new or undisclosed facts show that the cleanup does not comply with the referenced rules. The Department's determination also does not apply to any conditions at the site other than the release of petroleum hydrocarbons specifically addressed in the report.

Please note that pursuant to OAR 340-122-360(2), a copy of your report must be retained until ten (10) years after the first transfer of the property. We recommend that a copy of this information be kept with the permanent property records.

Your efforts to comply with the regulations to ensure that your property has been adequately cleaned up have been appreciated. If you have any questions, please feel free to contact me at (503) 229-6242.

Sincerely,

Robert Williams

UST Cleanup Specialist

cc: Robert Ede

Hahn & Associates Inc

434 NW Sixth Avenue Suite 203

Portland, OR 97209 3600

(rkw:RKW)

Mar-29-01 12:54PM;

Hahn and Associates, Inc. 434 NW 6th Avenue, Suite 203 Portland, Oregon 97209-3600 Ph. 503/796-0717 Fax: 503/227-2209

From: Rob B. Ede, R.G. rede@hahnasoc.com

3/29/01

To: Mr. Bob Williams Oregon Dept. Of Env. Quality 2020 SW 4th Avenue, Suite 400 Portland OR 97204-1390

Phone: Fax: (503) 229-6945

Project No.: 9999

Page 1 of Pages

Message:

HERE IS THE REPORT YOU REQUESTED.

I Hope this is what you need to close
this site out.

-Ryands Rb Ste

INTRODUCTION

GeoPotential performed a subsurface locating survey for HAI, Portland, Oregon.

TIMING

Field work was performed on June 10, 1996. Report and site diagrams completed and mailed to HAI on June 12, 1996.

PURPOSE

The subsurface locating survey was designed to locate any underground storage tanks (USTs) located within specified areas of the SURVEY SITE.

SURVEY SITE

The SURVEY SITE consisted of the asphalt covered parking lot located at 2228 SE Hawthorne Blvd. in Portland, Oregon (see accompanying MAGNETIC MAP).

Historical information indicated that a service station had previously occupied the SITE.

SURVEY SPECIFICATIONS

Three geophysical instruments were used for the survey:

- 1. AQUA-TRONICS A-6 ELECTROMAGNETIC TRACER (EM SURVEY).
- 2. GEOMETRICS G-858G MAGNETOMETER (MAG SURVEY).
- 3. MALA RAMAC GROUND PENETRATING RADAR (GPR SURVEY).

EM, MAG and GPR surveys can detect USTs, buried waste drums, former tank pits, conductive utilities and other buried objects. An arbitrary rectangular coordinate system was laid out over the SITE and continuous readings on traverses with 5 foot traverse intervals were made to measure the MAG and EM fields. The MAG and EM data were downloaded to a computer then edited, gridded and contoured to produce the MAGNETIC and EM MAPS. The MAGNETIC MAP is contoured in values of nanoTesla (nT) and the EM MAP in millivolts (mV). MAG and EM low anomalies are hachured on these MAPS.

Page 3

Also provided are shaded and SURFACE PLOTS of the MAG and EM data. These maps visually enhance the MAG and EM ANOMALIES. MAG and EM ANOMALIES of interest are the high amplitude anomalies which show up on the shaded maps as light colored areas. A MAGNETIC MODEL of a UST is presented to demonstrate the type of magnetic anomaly produced by a UST.

Five GPR PROFILES A, B, C, D, AND E were acquired along the GPR PROFILE locations shown on the MAPS to investigate MAG and EM anomalies which indicated possible USTs. A 400 MHz antenna was used for acquisition and an assumed subsurface velocity of 80 meters/nanosecond was used to process the GPR data.

RESULTS

The results are shown on the accompanying MAGNETIC and EM MAPS and GPR PROFILES.

Inspection of the MAG and EM MAPS indicated a series of anomalies occurring in the area covered by the GPR PROFILES. Analysis of these anomalies and the corresponding GPR PROFILES indicate that these anomalies are caused by subsurface features other then USTs, possibly debris from a building which previously occupied this location.

A east-west series of EM ANOMALIES crossing the SITE at 65 north do not have corresponding MAG ANOMALIES and are not the amplitude or shape of UST EM ANOMALIES. This may be an old utility line.

All other anomalies on the SITE are either caused by surface features or are to small to be of interest.

LIMITATIONS

Geophysical surveys consist of interpreting geophysical responses from subsurface objects. Since a variety of subsurface objects can produce identical geophysical responses it is necessary to perform intrusive investigations (drilling or excavating) to confirm the geophysical interpretation. In addition many subsurface objects may produce no geophysical response. The use of this geophysical interpretation is the sole responsibility of the client.

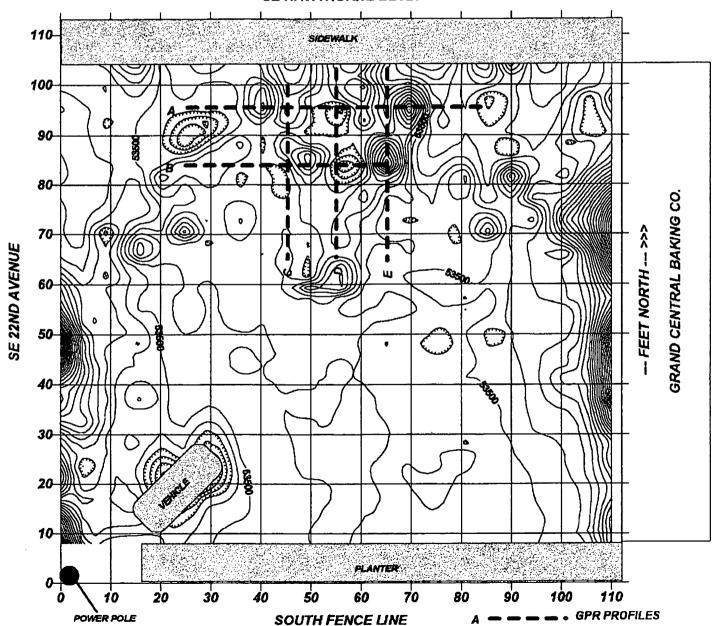
Ralph Soule GeoPotential

June 12, 1996

June 10, 1996

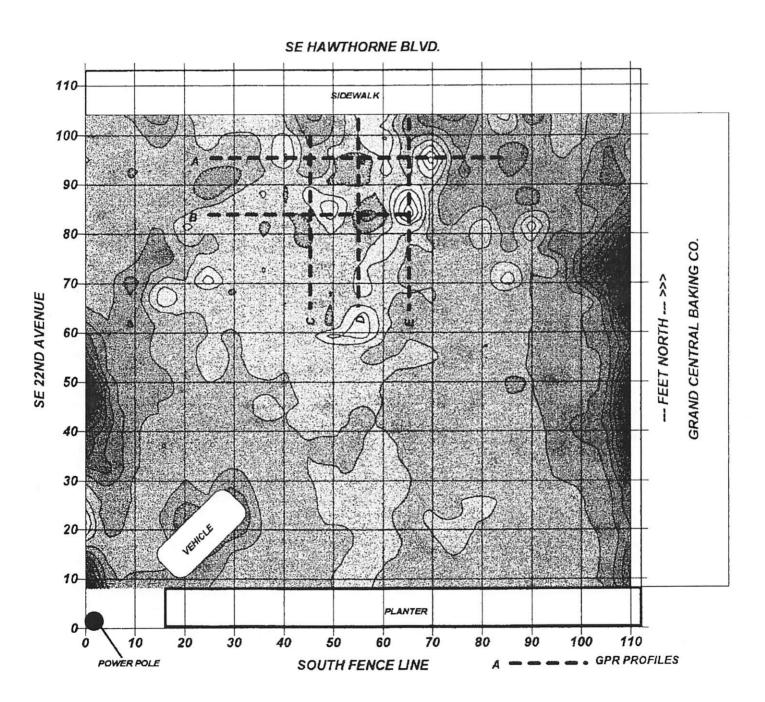
MAGNETIC MAP (CI = 500 nT)

SE HAWTHORNE BLVD.

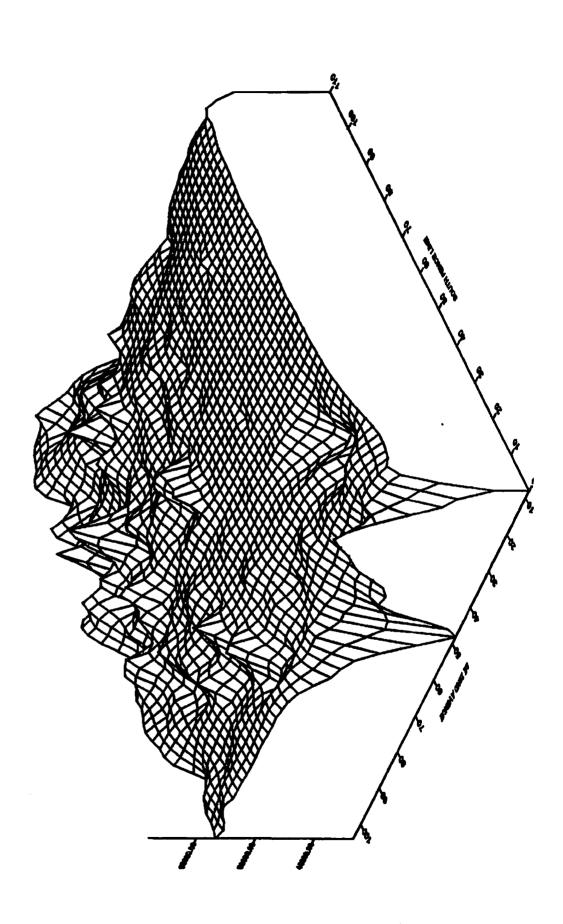


June 10, 1996

MAGNETIC MAP (CI = 1000 nT)



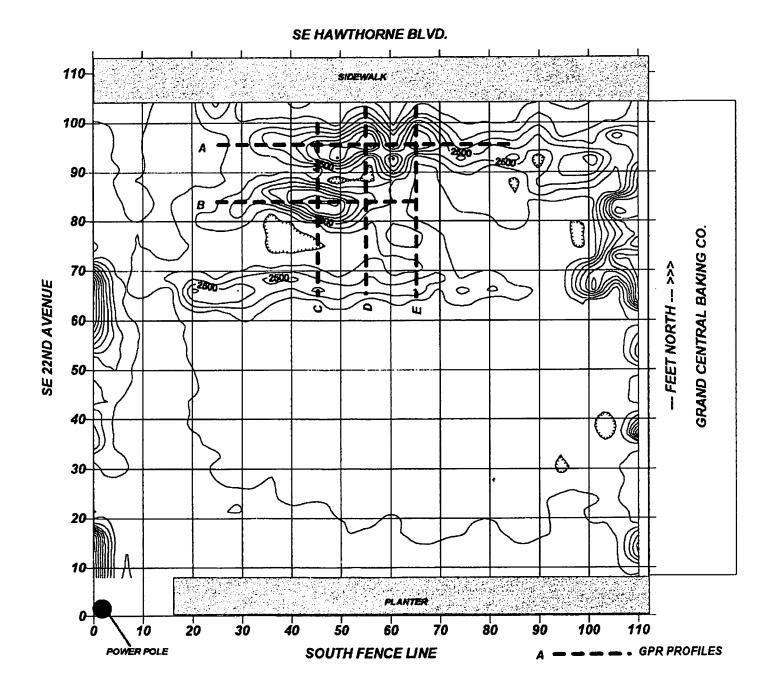
June 10, 1996



June 10, 1996

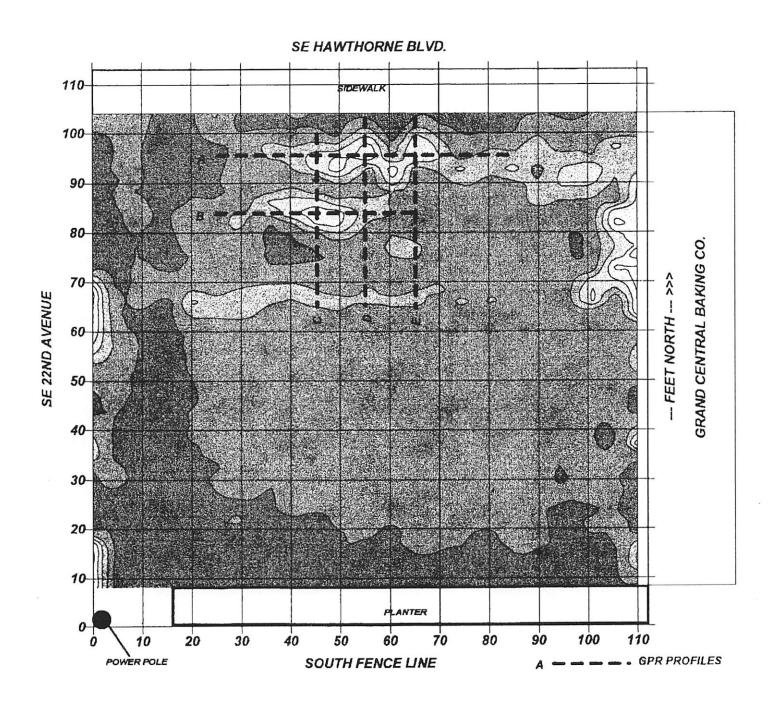
Sent By: HAHN * ASSOCIATES;

EM MAP (CI = 500 mV)

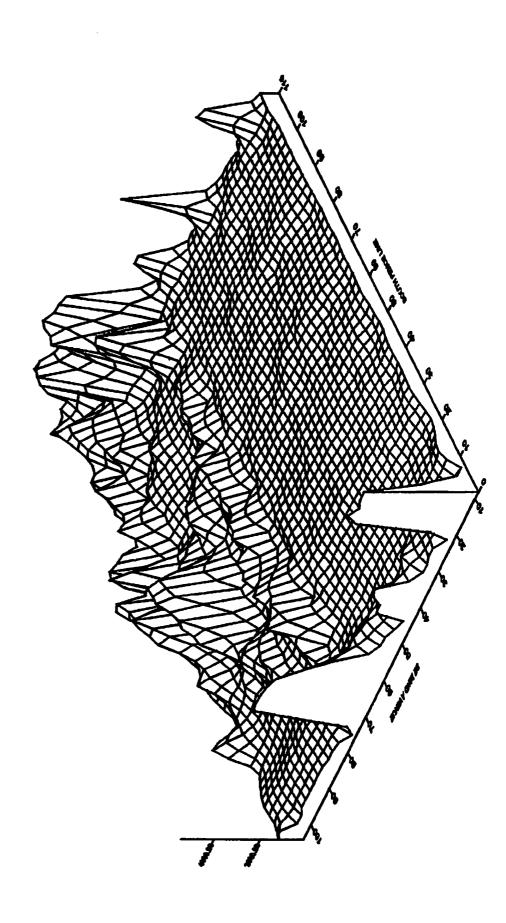


June 10, 1996

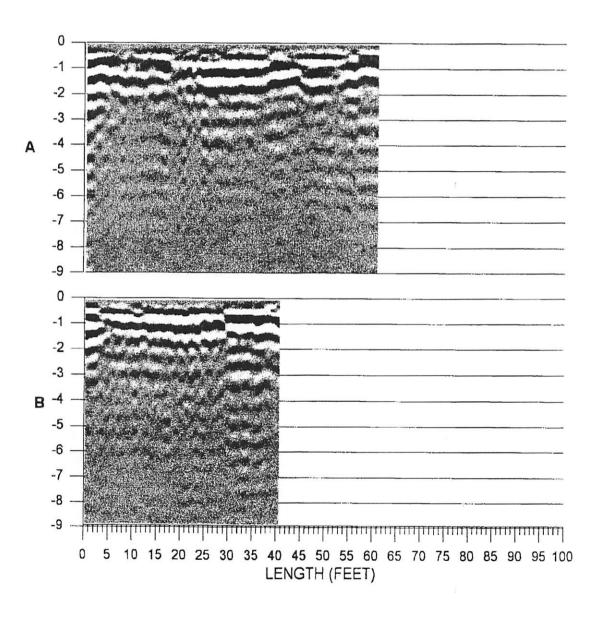
EM MAP (CI = 1000 mV)



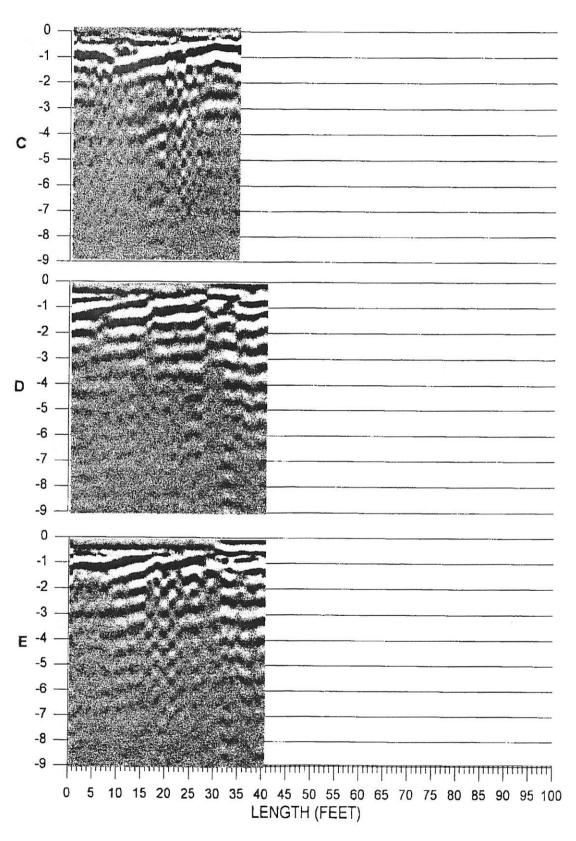
June 10, 1996



GROUND PENETRATING RADAR PROFILES



GROUND PENETRATING RADAR PROFILES





ENVIRONMENTAL & EXPLORATION GEOPHYSICS

437 N.E. LIBERTY AVE. GRESHAM, OR 97030 • PH (503) 665-7520 • FAX (503) 492-4404 E-MAIL: GeoPotential@ortel.org

RESULTS

SUBSURFACE MAPPING SURVEY FOR UNDERGROUND STORAGE TANKS

AT

PARKING LOT 2228 SE HAWTHORNE BLVD. PORTLAND, OREGON

PERFORMED FOR

HAI 434 NW 6TH AVENUE, SUITE 203 PORTLAND, OREGON 97209-3600

PERFORMED BY

GEOPOTENTIAL
437 NE LIBERTY AVENUE
GRESHAM, OREGON 97030

JUNE 10, 1996

FIGURES

MAR 1 9 2001

NORTHWEST REGION

PHASE II ENVIRONMENTAL SITE ASSESSMENT **ACTIVITIES**

Former Automotive Service Station 2228 SE Hawthorne Boulevard Portland, Oregon

September 13, 1996

Prepared for:

Dragonfly Gardens Portland, Oregon

Prepared by:

Hahn and Associates, Inc. Portland, Oregon

HAI Project #3545

HAHN AND ASSOCIATES, INC. ENVIRONMENTAL MANAGEMENT

September 13, 1996

Mr. Roy Katzen Dragonfly Gardens 3575 SE Division Street Portland, Oregon 97202

HAI Project #3545

SUBJECT: Phase II Environmental Site Assessment, Former Automotive Service Station, 2228 SE Hawthorne Boulevard, Portland, Oregon

Dear Mr. Katzen:

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 Phase II activities were conducted to identify impacts to soils at the site, if any, as a result of the operations of an automotive service station that was formerly located at the subject property.

Background

1

The subject property is currently used as a parking lot for the Grand Central Baking Company, a restaurant and bakery located immediately east of the site.

As discussed in a Phase I ESA report written by HAZCON, Inc., dated January 1992, an automotive service station was located on the subject property from 1925 until 1957. In addition to fueling, the service station reportedly conducted automobile repairs, as evidenced by the addition of an automotive repair shop, including greasing pits, to the east end of the service station structure in 1930. The service station was demolished in 1957.

The Phase I ESA was unable to identify any records indicating the size, location, or the removal of underground storage tanks (USTs) at the site. As such, on June 10, 1996, GeoPotential of Gresham, Oregon, under the supervision of HAI, conducted a geophysical investigation to ascertain the presence of USTs beneath the subject property. The results of the geophysical survey were included in a GeoPotential report dated June 10, 1996 entitled Results, Subsurface Mapping Survey for Underground Storage Tanks, Parking Lot, 2228 SE Hawthorne Boulevard, Portland, Oregon. As detailed in the referenced report, the geophysical survey did not result in the identification of USTs beneath the site.

Prior to implementing any field activities associated with the Phase II ESA, aerial photographs that include the referenced property were reviewed to ascertain the locations of former structures, pump islands, and USTs associated with the former service station. A 1956 aerial photograph of the area depicts the location of the former service station building, as well as the apparent pump island location. The location of the USTs could not be ascertained from the aerial photograph. A map of the existing property, including the location of the former service station structure and pump island as configured in 1956, is provided as Figure 2.

434 NW SIXTH AVENUE, SUITE 203 • PORTLAND, OREGON 97209-3600 503/796-0717 OFFICE • 503/227-2209 FAX

Recycled Recyclable

September 13, 1996

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Page 2 of 6 September 13, 1996 HAI Project No. 3545

Field Activities

On August 9, 1996, HAI installed seven soil probes (P-1 through P-7) at the site (Figure 2). The soil probes were installed to depths ranging from 10 to 25 feet below ground surface (bgs), with no groundwater encountered in any of the probe borings. The soil probes were installed in the vicinity of the former pump island, at likely former UST locations, and in the probable vicinity of the former automotive repair shop/greasing pit(s).

The soil probes were installed by Geo-Tech Explorations, Inc. of Portland, Oregon. The soil probes were installed with a 1.5-inch outside diameter (OD) hydraulically-driven steel rod. Soil samples were collected using a 1-inch OD stainless steel split spoon that was advanced into the undisturbed soils 2 feet ahead of the probe tip. The soil probe was used to collect soil cores at 2 to 4-foot intervals to the bottom of each probe.

Upon being brought to the surface, 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 geologist in the field. Boring logs that describe the soils encountered are included in Appendix A. An estimate of the Unified Soil Classification System (USCS) soil type designation is shown on the boring logs. The USCS designation was a field estimate only and was not confirmed by laboratory analyses.

The soil samples were field-screened for the presence of organic vapors by the headspace method using a Photovac MicroTip model MP-1000 equipped with a 10.6 ev lamp and photoionization detector (PID). 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 the boring logs in parts per million (ppm). The headspace method results should be considered qualitative and should be used for comparison purposes only.

Following completion of each soil probe installation, each probe boring was backfilled with granular bentonite to within six inches of ground surface, and then capped with black-dyed cement to match the surrounding surface.

Decontamination Procedures

All soil probe and sampling equipment were steam-cleaned between probe locations to prevent cross-contamination.

Page 3 of 6 September 13, 1996 HAI Project No. 3545

Investigative Derived Waste

Soil wastes were not generated during the investigative activities. Since a sheen was not observed on the equipment decontamination or purge water, this water was placed on the ground surface in a planted landscape area located on the subject property.

Analytical Tests

All soil samples were shipped with chain-of-custody documentation in sealed and chilled containers to Hughes Analytical Laboratory of Gresham, Oregon.

Based on the results of field screening methodologies (visual, olfactory, and vapor headspace methods), soil samples from each probe location that appeared to have the greatest potential to contain contamination were selected for laboratory analyses.

Select soil samples from each probe location were analyzed for hydrocarbon identification (HCID) of total petroleum hydrocarbons (TPH) by the Oregon Department of Environmental Quality (ODEQ) Method TPH-HCID. Because the TPH-HCID analyses indicated the presence of gasoline and oil-range petroleum hydrocarbons at one probe location, soil samples from this probe were also analyzed for gasoline range TPH by ODEQ Method TPH-G, and for diesel and oil-range TPH by ODEQ Method TPH-418.1M such that the concentration of identified petroleum hydrocarbons could be quantified. Additionally, one soil sample indicating the presence of gasoline and oil range petroleum hydrocarbons was also analyzed for benzene, toluene, ethylbenzene, and xylene (BTEX) by United States Environmental Protection Agency (EPA) Method 8020.

The laboratory report and chain-of-custody documentation for the soil sampling are included within Appendix B.

Results and Discussion

Subsurface Conditions

The subsurface soils encountered during drilling activities were very fine and fine grained sands to the maximum depth of investigation of 25 feet below ground surface (bgs). The identified sands were uniform in nature, and did not appear to be composed of fill material. Groundwater was not encountered in any of the soil probe borings.

Soil Cleanup Standard

The cleanup standards for soils contaminated with petroleum hydrocarbons from underground storage tank systems are determined by a matrix evaluation as defined in Oregon Administrative Rules (OAR) 340-122-305 to 340-122-360 and administered by the ODEQ. A calculation of the matrix parameters suggests that the subject property would be a Level 2 site and thus an 80 ppm cleanup standard would apply to any UST-related gasoline

Phase II Environmental S. Assessment Former Automotive Service Station 2228 SE Hawthorne Boulevard Portland, Oregon Page 4 of 6 September 13, 1996 HAI Project No. 3545

contamination, and a 500 ppm cleanup standard would apply to any UST related diesel and/or oil contamination at the subject site (Appendix C).

Soil Analytical Results

Laboratory analyses of soil samples collected from all soil probe borings with the exception of probe location P-3, as discussed below, indicate that petroleum hydrocarbons were not detected.

Gasoline and oil-range petroleum hydrocarbons were detected in soil sample 3545-960809-017 at concentrations of 352 parts per million (ppm) and 296 ppm, respectively. BTEX constituents were also detected at low concentrations in this soil sample. The referenced soil sample was collected at a depth of 4.5 feet bgs from probe location P-3. Analysis of the soil sample collected at 8.5 feet below ground surface at the same probe location did not result in the detection of petroleum hydrocarbons. The analytical results for the soil samples are summarized on Table 1.

Discussion

1

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Gasoline and oil-range petroleum hydrocarbons were detected in soil at one location on the northeastern portion of the property at concentrations of 352 and 296 ppm respectively. The identified gasoline-range petroleum hydrocarbon concentration in soil is greater than the 80 ppm ODEQ Level 2 Cleanup Standard for petroleum contaminated UST sites, while the oil-range petroleum hydrocarbon concentration was detected below the 500 ppm standard for diesel and oil.

Although total gasoline-range petroleum hydrocarbons exceed the ODEQ Level 2 Cleanup Standard, constituent-specific data from the same sample indicate that all BTEX constituents were identified at concentrations below Soil Cleanup Levels as provided in the ODEQ Soil Cleanup Table (OAR 340-122-045).

The petroleum impacted soil was identified in a sample collected at a depth of 4.5 feet bgs at the P-3 soil probe location. Impacted soils at this portion of the site appear to be limited laterally and vertically as evidenced by the non-detection of petroleum hydrocarbons at 8.5 feet bgs in soil probe P-3, and the non-detection of petroleum hydrocarbons at adjacent soil probe locations P-4, P-6, and P-7. Figure 3 depicts the results of TPH analyses in soil samples collected from the site.

The source for the identified impact to soil may be a spill or leak associated with the former fueling island piping and/or the former automotive repair shop, both of which were likely located in the vicinity of soil probe P-3.

Based on the results of the Phase II ESA, it appears that the identified soil impacts are limited to a small area beneath the northeastern portion of the subject property. The zone of petroleum contaminated soil is defined to occur above the high groundwater table. This zone is capped with impermeable asphalt that precludes human contact and also prevents leaching by percolating waters. Additionally, because constituent-specific

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BTEX data from the soil sample collected at the area of TPH impact indicated no detections above conservative ODEQ Soil Cleanup Levels, it does not appear that impacted soils pose either a significant risk to human health or the environment, or a hazardous or toxic condition at the subject property. As such, it appears that no remedial or further investigatory activities are warranted at the site.

Conclusions and Recommendations

- Laboratory analyses of soil samples collected from all soil probe borings with the
 exception of probe location P-3 indicate that petroleum hydrocarbons were not
 detected.
- Gasoline-range petroleum hydrocarbons were detected in soil at one location on the northeastern portion of the property at a concentration exceeding ODEQ Soil Cleanup Levels. Oil-range petroleum hydrocarbons were detected in the same soil sample, but at concentrations below ODEQ Soil Cleanup Levels.
 - Constituent-specific data from the impacted soil indicates that benzene, toluene, ethylbenzene, and xylene concentrations are all below ODEQ Soil Cleanup Standards.

Based on the preceding, it appears that the identified soil impacts are limited to a small area beneath the northeastern portion of the subject property. Additionally, because BTEX concentrations were below conservative ODEQ Soil Cleanup Levels, it does not appear that impacted soils pose a significant risk or a hazardous or toxic condition at the subject property. As such, no remedial activities or further investigation are recommended for the subject property.

Limitations

Analytical results presented in this report document only the concentrations of the target analytes in the particular sample and not the property as a whole. Samples have been taken from those areas identified as having the greatest risk of contamination. Unless a comprehensive statistical sampling program is conducted, however, one cannot conclude with complete confidence that contaminants may not be found in significantly higher or lower concentrations in other parts of the property. The scope of this investigation was dictated by the client's determination of an appropriate balance between cost and the increased certainty that flows from a more comprehensive investigation.

Page 6 of 6 September 13, 1996 HAI Project No. 3545

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

Sincerely,

Robert B. Ede

Project Manager

TABLE 1 Summary of Laboratory Analytical Results For Soil Samples

Phase II Environmental Assessment Activities Former Automotive Service Station 2228 SE Hawthorne Boulevard Portland, Oregon

Soil Probe Number	Sample Number	Date Sampled	Sample Depth						cal Results				
					Method TP	H-HCID	Method TPH-G	Method 418.1M	g (ppm)		EPA Method	8020	
		·	(feet bgs	Gasoline	Diesel	Oil	Gasoline	Diesel/Oil	Benzene	Toluene	Ethyl benzene	Xylenes	Total BTE
P-1	3545-960809-007	9-Aug-96	14.5	ND>20	ND>50	ND>100	<u>.</u>	-		-		-	
P-2	3545-960809-012	9-Aug-96	6.5	ND>20	ND>50	ND>100	-				1.	-	-
P-3	3545-960809-017	9-Aug-96	4.5	Detect	ND>50	Detect	352	296	0.070	0.129	0040		
P-3	3545-960809-019	9-Aug-96	8.5	-	•		ND>10	ND>25	-	- 0.129	0.349	3.010	3.56
P-4	3545-960809-022	9-Aug-96	2.0	ND>20	ND>50	ND>100	-	-	•	-		-	
P-4	3545-960809-023	9-Aug-96	4.0	ND>20	ND>50	ND>100	•	-	•	-		-	
P-5 8	3545-960809-030	9-Aug-96	6.0	ND>20	ND>50	ND>100			-	-			
P-6 3	3545-960809-034	9-Aug-96	4.5	ND>20	ND>50	ND>100	•	-		-	-		<u> </u>
	3545-960809-038	9-Aug-96	4.0	ND>20	ND>50	ND>100	-	-		-	-		
erence Sta E: bg	ndarda* 3s = below ground surfa	ce					80	500	0.1	80	100	800	•

BTEX = benzene, toluene, ethylbenzene, xylene

DEQ - Oregon Department of Environmental Quality

HCID = hydrocarbon identification

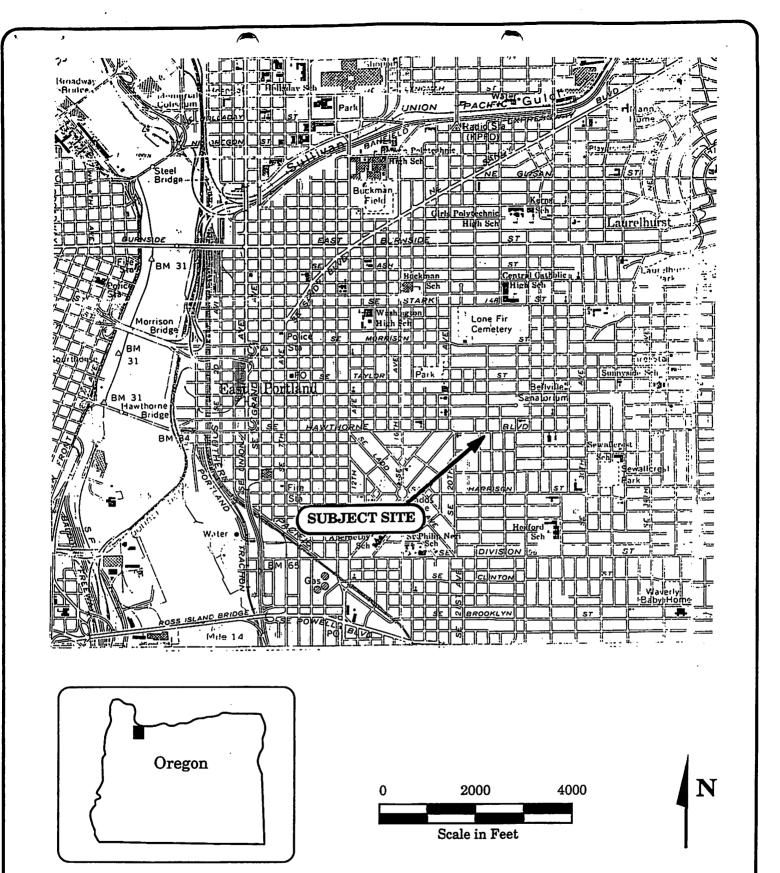
mg/kg = milligrams/kilogram

ND = not detected above detection limit indicated

ppm = parts per million

TPH = total petroleum hydrocarbons

^{• =} TPH standards based on the ODEQ UST Level 2 Soil Cleanup Standards (OAR 340-122-335); BTEX standards based on Soil Cleanup Levels in the Soil Cleanup Table (OAR 340-122-045).



Note: Base Map from Portland, Oregon (1977) and Mount Tabor, Oregon (1978) USGS 7.5 Minute Quadrangles, Contour Interval = 10 Feet

Project # 3545

September 1996

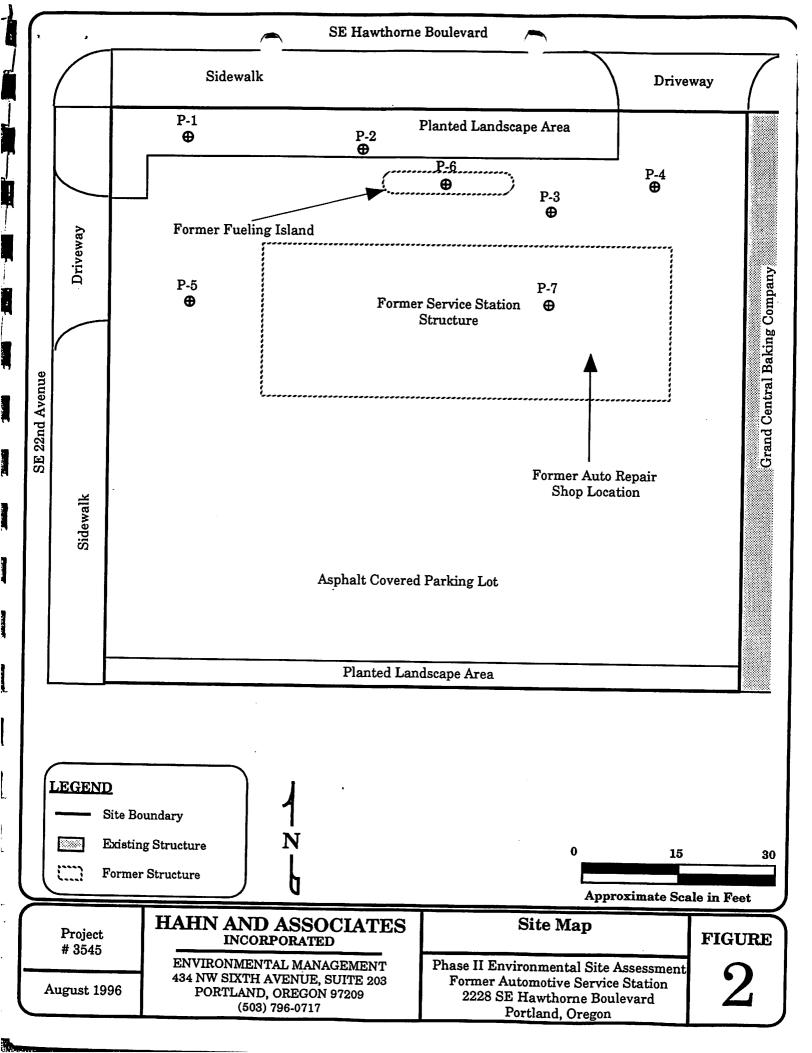
HAHN AND ASSOCIATES INCORPORATED

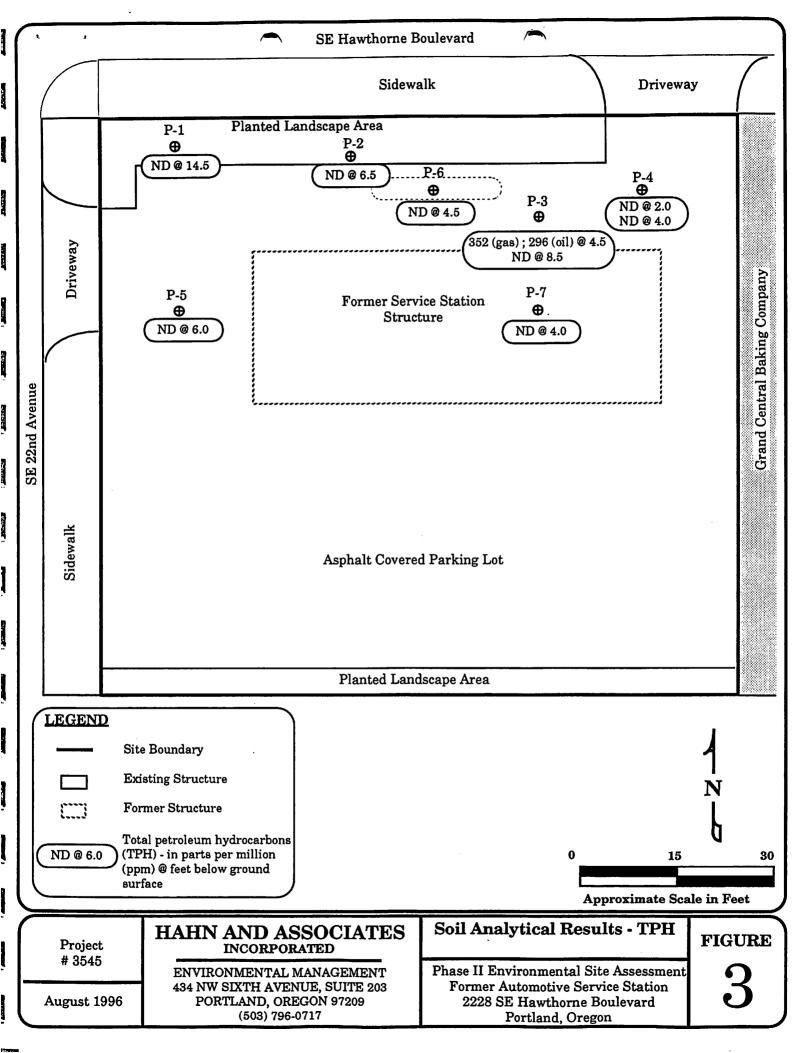
ENVIRONMENTAL MANAGEMENT 434 NW SIXTH AVENUE, SUITE 203 PORTLAND, OREGON 97209 (503) 796-0717

Location Map

Phase II Environmental Site Assessment Former Automotive Service Station 2228 SE Hawthorne Boulevard Portland, Oregon **FIGURE**

1





APPENDIX A

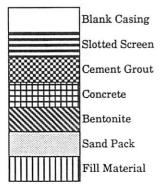
Soil Probe Logs

KEY TO BORING LOGS

Soil classification in this report is based upon visual and manual field observations which include moisture, consistency, plasticity and grading estimates and should not be construed to imply field or laboratory testing unless presented herein. Soils are classified in accordance with the Unified Soil Classification System. Stratigraphic boundaries are approximate representations only. No warranty is provided as to the continuity of soil strata between borings.

		UNIFIED SOIL	CLASSI	FICATION	SYSTEM (USCS)
	MAJOR DIVISIO	NS	GROUP	SYMBOLS	TYPICAL NAMES
	GRAVELS	Clean Gravels With Little or	GW		Well Graded Gravels, Gravel-Sand Mixtures
COURSE	More Than Half the Course Fraction is	No Fines	GP		Poorly Graded Gravels, Gravel-Sand Mixtures
SOILS	Larger Than No. 4 Sieve Size	Gravels With Over 12% Fines	GM		Silty Gravels, Poorly Graded Gravel-Sand-Silt Mixtures
			GC		Clayey Gravels, Poorly Graded Gravel-Sand-Clay Mixtures
More Than Half is	SANDS	Clean Sands With Little or	sw		Well Graded Sands, Gravelly Sands
Larger Than #200 Sieve	More Than Half the Course Fraction is	No Fines	SP		Poorly Graded Sands, Gravelly Sands
	Smaller Than No. 4 Sieve Size	Sands With Over 12% Fines	SM		Silty Sands, Poorly Graded Sand-Silt Mixtures
4.1		part 1/28/2	sc		Clayey Sands, Poorly Graded Sand-Clay Mixtures
	SILTS AN	ID CLAYS	ML		Inorganic Silts and Very Fine Sands, Rock Flour, Silty or Clayey Fine Sands, or Clayey Silts with Slight Plasticity
FINE GRAINED	Liquid Limit I	Less Than 50%	CL		Inorganic Clays of Low to Medium Plasticity, Gravelly Clays, Sandy Clays, Silty Clays, Lean Clays
SOILS		*	OL		Organic Clays and Organic Silty Clays of Low Plasticity
More Than Half is	SILTS AN	ND CLAYS	МН		Inorganic Silts, Micaceous or Diatomaceous Fine Sandy or Silty Soils, Elastic Silts
Smaller Than #200 Sieve		reater Than 50%	СН		Inorganic Clays of High Plasticity, Fat Clays
	***************************************		ОН		Organic Clays of Medium to High Plasticity, Organic Silts
I	HIGHLY ORGANIC	SOILS	Pt		Peat and Other Highly Organic Soils

LEGEND FOR BORING LOGS



ABBREVIATIONS

NA	Not Applicable
ND	Not Detected Above Detection Limit
NS	Not Sampled
TPH	Total Petroleum Hydrocarbons
ppm	Parts Per Million
SPT	Standard Penetration Test
∇	Measured Static Water Level in Well
	Estimated Water Level During Drilling

	,											
	IN & AS			INC.							<u> </u>	
434	NW Sixt	h Aven	ue				S)I	L PR	OBE NUMBER P-1		
Port	land, Ore	egon										
(503	796-071	.7			HAI	LOGGE	R:			Rob Ede	DRILL	DRILL
PRO	JECT:		-		SAM	PLING	MET	HO	D:	Stainless Steel Soil Sampler	START	FINISH
Forn	aer Servi	ce Stat	ion		DRIL	LING N	METI	HOI	 D:	Hydraulic Soil Probe	Time:	Time:
2228	SE Haw	thorne	Boule	vard		IPMEN'				Geo Probe	9:00	10:30
	land, Ore			-	DRIL			<u> </u>		Keith Vidos	Date:	
	JECT #:	354	5			LING C	CONT	TRA	CTOR:	Geo-Tech Explorations, Inc.	Date: 9-Aug-96	Date: 9-Aug-96
Ë			63			T	T	1 .		BORING DIAMETER: 1.5-inch OI		9-wag-90
ABANDONMENT DETAILS	SAMPLE NUMBER*		HEADSPACE (ppm)	LAB RESULT TPH (ppm)	SPT (blows/0.5 feet)	RY	DEPTH (feet)	GROUNDWATER		CASING DIAMETER: N/A	<u>, </u>	
N SE	E P	TIME	ADSPA (ppm)	AB RESUL TPH (ppm)	SPT 80.51	S K	J) F	W	STRATA (USCS)			
		T		E E	SS /8	COV (%)	E	Z	US		<u>ea</u>	
BA	No E	1	HE	\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	logo	RECOVERY (%)	 	Š	S C	TOP OF CASING ELEVATION: N/A		
¥				H		<u></u>		ਤਿ]	SOIL DESCRIPTION		ĺ
Concre	to	4	ļ						GM :		0.5 feet	
ш		+	+	 	 		1	-		Silty Sandy GRAVEL - brown, dry, loose (0 to below ground surface)		
	∭	+	-	 	 	<u></u>	2					
	001	9:08	-	-		100				SAND - light brown, dry loose, very fine grain	ad noomle	
			-	†	1	10	3			SAND - light brown, dry, loose, very fine grain graded, no petroleum hydrocarbon odor (2.0-4.0 ground surface)	ed, poorly) feet below	,
						0			SP	ground surface)		
	<u> </u>	10.10	ļ		<u> </u>	0	4					
	002	9:12		 - -		100	5	ļ		SAND - as above, slightly moist, no petroleum hydrocarbon odor (4.0-6.0 feet below ground su		
	<u> </u>	 	 - -	<u> </u>	<u> </u>	10	Ð			nydrocarbon odor (4.0-6.0 feet below ground su	rface)	
		+	 	 	†	0	6					
	003	9:18		-	Ĺ	100				SAND - as above, moist, no petroleum hydrocar	bon odor	ı
	<u> </u>		0.2			100	7			(6.0-8.0 feet below ground surface)	5011 0401	
lar Bentonite	<u> </u>					10						ľ
8 g 8	<u> </u>	 			<u> </u>	100	8			SAND - brown, slightly moist, medium dense, v	ery fine	-
$\mathbb{R}^{\mathbb{R}}$	004	9:23	<u> </u>	-		100	9			grained, no petroleum hydrocarbon odor (8.0-10 below ground surface)	.0 feet	
			0.3			75	Ť			below ground surface)		
	<u></u>					0	10					ľ
Granul Granul	005	0.00				100				SAND - as above, fine grained, no petroleum hy odor (10.0-12.0 feet below ground surface)	drocarbon	l
lmill	J_005	9:33	4.5	-		100	_11			and all the second broading surface)		
	3		7.0			10	12					1
						100	14			SAND - as above, no petroleum hydrocarbon odo	··· (10.0	- 1
	006	9:50		-		100	13			14.0 feet below ground surface))r (12.U-	
			6.0			50						
	} ——					0	14			SAND as about		j
	007	9:54		ND		100	15			SAND - as above, moist, no petroleum hydrocart (14.0-16.0 feet below ground surface)	on odor	
	3	0.04	25.5	ן עזיי		100			SP	J		
						0	16					- 1
	3						\dashv					
	3						17					ľ
	}											- 1
	3					100	18			GANTO - 1		l
	008	10:05		-	-+	100	19			SAND - as above, no petroleum hydrocarbon odo 20.0 feet below ground surface)	r (18.0-	
			24.0			100	-			G		Į
	1					0	20			<u> </u>		1

<u></u>			> 70										
HAHN			-	NC.			20	TT	PRC	BE NUMBER P-1			
434 NW			2				JU	ıı	I TPC				
Portland		n								Del Die	DRILL	DRILL	
(503) 79						OGGER				Rob Ede	-	FINISH	
PROJE	CT:					LING M				Stainless Steel Soil Sampler	START	Time:	
Former	Service	Statio	n		DRILI	ING M	ETH	OD:		Hydraulic Soil Probe	1144110 5011 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1		
2228 SE	Hawth	orne I	Boulev	ard	EQUII	PMENT	'TYP					10:30	
	Portland, Oregon DRILLER:									Keith Vidos	Date:	Date:	
PROJE	CT #:	3545		,	DRILI	ING C	ONT	RA(CTOR:	Geo-Tech Explorations, Inc.	9-Aug-96	9-Aug-96	
F			63	E.	3	.	t)	ER		BORING DIAMETER: 1.5-inch O	D		
質な	SAMPLE NUMBER*		HEADSPACE (ppm)	AB RESUL TPH (ppm)	l ee	RECOVERY (%)	DEPTH (feet)	'AT	₹ 6	CASING DIAMETER: N/A			
		TIME	(ppm)	日 日	SPT s/0.5	(%)	H.(DW	SCA	SURFACE ELEVATION: Not Surve	yed		
	A E E E E E E E E E E	TI	₽ œ	HH.	S 8	ည္တ	PI	5	STRATA (USCS)	TOP OF CASING ELEVATION: N/A			
ABANDONMENT DETAILS	o Z		HE	LAB RESULT TPH (ppm)	SPT (blows/0.5 feet)	X	DE	GROUNDWATER	.	SOIL DESCRIPTION	I		
Bentonite													
			 	<u> </u>			22		SP				
			<u> </u>		-		23						
						100				SAND - as above, no petroleum hydrocarbo 25.0 feet below ground surface)	1 odor (23.0	.	
Granular IIIIIIIII	009	10:30		-		100	24			25.0 feet below ground surface)			
			130	<u> </u>	ļ	25	25						
				<u> </u>	1	0	20						
					 		26						
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1							27						
			-		ļ	ļ	28		į	De instanciant de 95 0 feet has			
		<u> </u>	 	 		<u> </u>	20	ł		Boring terminated at 25.0 feet bgs			
i							29			* Sample number prefix = 3545-960809-			
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ł	-						31	1					
			<u> </u>	-			32						
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							33						
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			<u> </u>	-	<u> </u>	1	35	4					
	 			-	+		36						
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				<u> </u>	┼	<u> </u>	37	4					
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L	l	1	1	J	1	1	40	<u>'L</u>	<u> </u>				

HAHN	I & AS	SOCIA	ATES.	INC.	Т						
	W Sixth			1110.			S	OT	Į, PR	OBE NUMBER P-2	
Portla	nd, Ore	gon					~	-		TODE IVENIBEIT	
1	96-071				HAI	LOGGE	R.			Rob Ede DRILL D	D
PROJE					_	PLING		THO	D.	C. I I C.	RILL
Forme	r Servic	e Stat	ion		100000000000000000000000000000000000000	LING N					NISH
	E Haw			vard		IPMEN			·	Coo Dook	
1.77	nd, Ore		Zouic	rara	DRIL		1 11	113		V-'-1 V' 1	1:25
PROJE		3545	5			LING C	CON	ΓRA	CTOR:	Coo Took E-land: Y	
Ę								1		BORING DIAMETER: 1.5-inch OD	ug-96
ABANDONMENT DETAILS	E *		HEADSPACE (ppm)	RESULT H (ppm)	SPT (blows/0.5 feet)	RY	DEPTH (feet)	GROUNDWATER		2.0 11011 015	
NO TA	SAMPLE NUMBER*	TIME	ADSPA (ppm)	AB RESUL TPH (ppm)	SPT s/0.5	RECOVERY (%)	J) F	W.A	STRATA (USCS)	SURFACE ELEVATION: Not Surveyed	
N N N	YAN UM	II	AD TO	3 R PH	SI Ws/(000	P	K	TR	SURFACE ELEVATION: Not Surveyed TOP OF CASING ELEVATION: N/A	
\BA	o z		HE	LAB	blo	RE	DE	ROI	N C	TOT OF GENERAL ELEVATION. IVA	
************			-					-		SOIL DESCRIPTION	
Concrete									GM		
IIIIII.]	1		below ground surface)	
							2	2		SAND light brown do la control	
	010	10:52	-	-		100				SAND - light brown, dry, loose, very fine grained, poorly graded, no petroleum hydrocarbon odor (2.0-4.0 feet below	
			-			50	3	1	SP	ground surface)	- 1
						0	4		SP		
	011	10:55		-		100				SAND - as above, slightly moist, no netroleum	- 1
			8.5			100	5			SAND - as above, slightly moist, no petroleum hydrocarbon odor (4.0-6.0 feet below ground surface)	- 1
						0	6				- 1
						100				SAND - as above, moist, no petroleum hydrocarbon odor	
	012	11:00	05.0	ND		100	7			(6.0-8.0 feet below ground surface)	
Bentonite			35.0			90	8				- 1
						100				SAND - as above, no petroleum hydrocarbon odor (8.0-	
ar B	013	11:05	-	-		100	9			10.0 feet below ground surface)	- 1
§₽						0	10		SP		- 1
ranul L	014	11:12				100	10			SAND - as above, slightly moist, no petroleum	- 1
101			-			20	11			hydrocarbon odor (10.0-12.0 feet below ground surface)	
						0					
	015	11:19				100	12	-		CANT	
	L		35.0			20	13			SAND - as above, moist, no petroleum hydrocarbon odor (12.0-14.0 feet below ground surface)	
						0				outland)	
						0	14				
-							15				
							10			Boring terminated at 14.0 feet bgs	
-							16			* Sample number prefix = 3545-960809-	
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				N 193			18				
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HAHN	& ASS	OCIAT	es, i	NC.												
434 NW	Sixth A	Avenue	•			SO	П	PRC	BE NUMBER P-3		İ					
Portlan	d, Orego	on									r					
(503) 79	-								Rob Ede	DRILL	DRILL					
PROJE	CT:								Stainless Steel Soil Sampler	START	FINISH					
Former		Statio	n						Hydraulic Soil Probe	Time:	Time:					
2228 SI				ard	-				Geo Probe	11:30	12:10					
Portlan									Keith Vidos	Date:	Date:					
PROJE		3545					_		Geo-Tech Explorations, Inc.	9-Aug-96	9-Aug-96					
<u> </u>				F.			8		BORING DIAMETER: 1.5-inch (D						
ABANDONMENT DETAILS	جُ ن		HEADSPACE (ppm)	LAB RESULT TPH (ppm)	RY	DEPTH (feet)	GROUNDWATER	₩	CASING DIAMETER: N/A							
	SAMPLE NUMBER*	图	ADSPA (ppm)	AB RESUL TPH (ppm)	RECOVERY (%)	J) I	W/	STRATA (USCS)	SURFACE ELEVATION: Not Surv	eyed						
	MA MA	TIME	E G	RI YH ((%)	PTF	Z	TR	TOP OF CASING ELEVATION: N/A	<u> </u>						
Na	\(\sigma \)	-	IE/	AB	RE	园	3OT	တ								
🖁			н -	1			ਦ		SOIL DESCRIPTIO	N						
Concrete								Asphal	Asphalt							
						1										
	}				-	2										
	016	11:35		-	100	_			SAND - light brown, slightly moist, loose, very fine grained, poorly graded, potential petroleum hydrocarbon odor (2.0-4.0 feet below ground surface)							
					0	3			grained, poorly graded, potential petroleum nydrocarbon odor (2.0-4.0 feet below ground surface)							
					0			SP								
					100	4			SAND - as above, slightly moist, potential p hydrocarbon odor (4.0-4.5 feet below ground	etroleum						
	017	11:38		352 (g); 296 (oil)	100	5										
	02.		100	002 (8), 200 (02)	0	<u> </u>	1		SAND - greenish-grey, moist, very fine grain petroleum hydrocarbon odor (4.5-6.0 feet be	ed, potentia	1					
					0	6			surface)							
	018	11:40	10	•	100	7			Surace/							
	}	<u> </u>	1.8		0	<u> </u>	1		SAND - brown, moist, loose, very fine grain graded, potential petroleum hydrocarbon od below ground surface)	ed, poorly	-4					
		 			0	8			graded, potential petroleum hydrocarbon od below ground surface)	or (6.0-6.0 ie	et					
		-	ĺ		100		1									
	019	11:45		ND	100	9			SAND - as above, potential petroleum hydro (8.0-10.0 feet below ground surface)	carbon odor						
		<u> </u>	18.0		10	10		SP	(0.0 10.0 10.0 50.0 g							
ranular Bentonite	020	11:50		<u> </u>	100	1	}		SAND - as above, no petroleum hydrocarbo	odor (10.0-						
% 5%	- 	12:00	10.0		100	11			12.0 feet below ground surface)							
linill					0		1									
	201	110.00			100	12	1		SAND - as above, no petroleum hydrocarbo	n odor (19 A						
	021	12:00	20.0	· -	90	13			14.0 feet below ground surface)	1 JUJI (12.U-						
		 	20.0	 	0	1.0	1									
		<u> </u>			0	14										
1		<u> </u>	ļ <u>-</u> -	1	<u> </u>	15	4									
1	<u></u>	 	-		ļ	16			Boring terminated at 14.0 feet bgs							
				 		1	1		* Sample number prefix = 3545-960809-							
						17			* Sample number prefix = 3545-960809-							
		-			<u> </u>	18	4									
		+			 	19										
		1	 		;	 	1									
					 	20										

																
	& ASS		•	INC.			~	\ 		ODE MUNDED D 4						
	V Sixth		е				SC)11	ı PK	OBE NUMBER P-4						
Portlar	id, Oreg	on														
	96-0717				HAI L	OGGE	R:			Rob Ede DRILL	DRILL					
PROJE	CT:				SAMP	LING I	MET	HOI	D:	Stainless Steel Soil Sampler START	FINISH					
Former	: Service	Stati	on		DRILI	LING M	ETH	IOD	:	Hydraulic Soil Probe Time:	Time:					
2228 S	E Hawtl	norne :	Boulev	ard	EQUI	PMEN1	וציד יו	PE		Geo Probe 12:50	13:25					
Portlar	d, Oreg	on			DRIL	LER:				Keith Vidos Date:	Date:					
PROJE		3545			DRILI	LING C	ONT	RA	CTOR:	Geo-Tech Explorations, Inc. 9-Aug-96 9-Aug-96						
TT.			63	L	G 8					BORING DIAMETER: 1.5-inch OD						
ABANDONMENT DETAILS	母类		HEADSPACE (ppm)	LAB RESULT TPH (ppm)	SPT (blows/0.5 feet)	RY	DEPTH (feet)	GROUNDWATER	4	CASING DIAMETER: N/A						
A PER	SAMPLE NUMBER*	TIME	ADSPA (ppm)	SE d	SPT s/0.5	RECOVERY (%)	J) E	W.	STRATA (USCS)	SURFACE ELEVATION: Not Surveyed						
) E	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \		\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	E E	22 × 25	ပ္ပြင္	E	3	US	TOP OF CASING ELEVATION: N/A	······································					
BA1	\ \alpha \overline{\overli		開		old	E E	DE	1 2	Ω ·							
₹	<u></u>						-	ଫ		SOIL DESCRIPTION						
Concrete			<u> </u>						Asphalt	Asphalt						
umm.			<u> </u> 		<u> </u> 		1									
							2			GANTS II I I I I I I I I I I I I I I I I I						
	022	12:55	85	ND		100		1		SAND - light brown, slightly moist, loose, very fine grained, poorly graded, some thin beds of brown organic matter, no petroleum hydrocarbon odor (2.0-4.0 feet below						
						50	3			matter, no petroleum hydrocarbon odor (2.0-4.0 feet below ground surface)	7					
						0			SP	ground surface)						
	023	13:00	<u> </u>	ND	<u> </u>	100	4			GANTS and a second seco						
	020	10.00	10.7	1112		100	5			SAND - as above, moist, no bedded organic matter, no petroleum hydrocarbon odor (4.0-6.0 feet below ground						
						0				surface)						
						0	6									
	024	13:03		-		100 90	~			SAND - as above, no petroleum hydrocarbon odor (6.0-8.0 feet below ground surface)						
$\mathbb{Z}_{\mathbb{Z}}$			-		l	0	7			G						
() () () () () () () () () () () () () (0	8									
Bentonite	025	13:10		-		100				SAND - as above, no petroleum hydrocarbon odor (8.0- 10.0 feet below ground surface)						
			-			100	9			10.0 feet below ground surface)						
						0	10		SP							
ranu						100				SAND - as above, no petroleum hydrocarbon odor (10.0-						
	026	13:17		-		100	11			12.0 feet below ground surface)						
illilli.			1.6			25										
	027	12.01				0	12			GAND 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1						
	021	13:21	0.0	<u> </u>		100	13			SAND - as above, moist, fine grained, no petroleum hydrocarbon odor (12.0-14.0 feet below ground surface)						
			3.0		-	0	10			(t t g.omia buriace)						
						0	14									
								ľ								
							15			Boring terminated at 14.0 feet bgs						
							16			* Sample number prefix = 3545-960809-						
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HAHN & ASSOCIATES,	INC							-			
434 NW Sixth Avenue	110.		SC)Ti	r. DD	OBE NUMBER P-5					
Portland, Oregon	1			<i>,</i> 1, 1	u I II	OBE NUMBER P-5					
(503) 796-0717		AI LOGGE	D.			Dab Dala	T ====				
PROJECT:		MPLING:				Rob Ede	DRILL	DRILL			
Former Service Station						Stainless Steel Soil Sampler	START	FINISH			
2228 SE Hawthorne Boule	_	RILLING N): 	Hydraulic Soil Probe	Time:	Time:			
	-	QUIPMEN	LTY	E		Geo Probe 13:30 14:00					
Portland, Oregon PROJECT #: 3545		RILLER: RILLING C	ירואריי	D A	CTIOD.	Keith Vidos Date: Date:					
			_		CIOR:	Geo-Tech Explorations, Inc.	9-Aug-96	9-Aug-96			
ABANDONMENT DETAILS SAMPLE NUMBER* TIME HEADSPACE (ppm)	LAB RESULT TPH (ppm) SPT	(blows/0.5 feet) RECOVERY (%)	et.	GROUNDWATER		BORING DIAMETER: 1.5-inch OI)				
BANDONMEN DETAILS SAMPLE NUMBER* TIME HEADSPACE (ppm)	AB RESULT TPH (ppm) SPT	olows/0.5 fee RECOVERY (%)	DEPTH (feet)	WA'	STRATA (USCS)	CASING DIAMETER: N/A					
MDONIA METAIL AMPLI UMBE TIME ADSPA (ppm)		3.0v3 (%)	TH	ND	18 S	SURFACE ELEVATION: Not Survey	ed				
MAN S. D.	# #		母(OO	25 E	TOP OF CASING ELEVATION: N/A					
A I	1	e -		GR		SOIL DESCRIPTION					
Concreto					Asphalt						
			1					1			
			2								
028 13:38		100				SAND - light brown, slightly moist, loose, very grained, poorly graded, no petroleum hydrocar (2.0-4.0 feet below ground surface)	fine				
-		50	3			(2.0-4.0 feet below ground surface)	oon ogor				
		0			SP						
029 13:40		0	4					ĺ			
025 13.40	 	100	5			SAND - as above, no petroleum hydrocarbon oc feet below ground surface)	lor (4.0-6.0				
		100	Ť								
		0	6								
030 13:48	ND	100				SAND - as above, no petroleum hydrocarbon od feet below ground surface)					
8.6		100	_7			leet below ground surface)					
		0	8								
0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.0	-	100	一			SAND - as above, large root present, no petrole hydrocarbon odor (8.0-10.0 feet below ground s	um ·				
0.0		100	9			hydrocarbon odor (8.0-10.0 feet below ground s	ırface)				
		10	10		SP			Ì			
Granu		100				SAND - as above, no petroleum hydrocarbon od	or (10.0-	l			
032 13:59	-	100	11			12.0 feet below ground surface)					
0.0		0						1			
		0	12								
		-	13			Boring terminated at 12.0 feet bgs		1			
		+		ĺ		* Sample number prefix = 3545-960809-					
			14								
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		+	15								
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			17								
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434 NW S	HAHN & ASSOCIATES, INC. 434 NW Sixth Avenue Portland, Oregon								PRO	BE NUMBER P	2-6		
(503) 796	•				HAI L	OGGER	<u></u>			Rob Ede		DRILL	DRILL
PROJEC					SAMP	LING M	1ETH	OI): 	Stainless Steel Soil Sampler		START	FINISH
Former S	Service	Statio	n		DRILL	ING M	ETH	OD	:	Hydraulic Soil Probe		Time:	Time:
2228 SE	Hawth	orne E	Boulev	ard	EQUII	PMENT	TYP	E		Geo Probe 14:10 14:3			
Portland	, Orego	n			DRILI					Keith Vidos		Date:	Date:
PROJEC	T#:	3545			DRILI	ING C	TMC	RA(CTOR:	Geo-Tech Explorations, Inc.	-	9-Aug-96	9-Aug-96
Ę	E									201111111111111111111111111111111111111	5-inch OI)	
HE SE	SAMPLE NUMBER*	53	HEADSPACE (ppm)	LAB RESULT TPH (ppm)	SPT (blows/0.5 feet)	RECOVERY (%)	DEPTH (feet)	GROUNDWATER	EA S)		<u>/A</u>		
N SE		TIME	ADSPA (ppm)	(E)	SPT s/0.5	OV))H	4DV	STRATA (USCS)		ot Survey	ed	
	85	E	AI P	B 1	SWO	EC	EPI	T)	ST (U	TOP OF CASING ELEVATION: N	/A		
ABANDONMENT DETAILS	2		H	LA	9	R	[Q	GR(SOIL DESC	RIPTION		
Concrete									Asphalt	Asphalt			
	- 1						1						
		-				-	2			SAND - light brown, slightly moist.	loose, very	fine	
	033	14:18		-		100				SAND - light brown, slightly moist, grained, poorly graded, no petroleu (2.0-4.0 feet below ground surface)	m hydrocai	rbon odor	
			22.6		<u> </u>	100	3		SP	(2.0-4.0 leet below ground surface)			
						0	4		: or				
						100				SAND - as above, moist, no petrole	ım hydroca	arbon odor	
Granular Bentonite	034	14:20		ND		100	5			(4.0-6.0 feet below ground surface)			
			39.2	-		10	6						
	035	14:25		 -		100				SAND - as above, slightly moist, no hydrocarbon odor (6.0-8.0 feet below	petroleum	l varfo oo)	
		_	7.3			75	7			nyarocarbon odor (6.0-8.0 feet belov	A Bromid 2	ui lace)	
				ļ	<u> </u>	0	 8						
	!				 	100		ł	SP	SAND - as above, no petroleum hyd 10.0 feet below ground surface)	lrocarbon o	dor (8.0-	
	036	14:30		-		100	9			10.0 feet below ground surface)			
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HAHN 434 NW				NC.			SO	IL.	PRO	BE NUMBER P-7					
Portland															
(503) 79					HAI L	OGGER	:			Rob Ede	DRILL	DRILL			
PROJE	CT:				SAMP	LING M	ETH	OD):	Stainless Steel Soil Sampler	START	FINISH			
Former	Service	Statio	n		DRILL	ING M	ETHO	D:	:	Hydraulic Soil Probe	Time:	Time:			
2228 SE	E Hawth	orne E	Boulev	ard	EQUIE	PMENT	TYP	<u> </u>		Geo Probe 14:40 15:00					
Portlan	d, Orego	n			DRILL					Keith Vidos	Date:	Date:			
PROJE	CT #:	3545			DRILL	ING C	ONTR	AC		Geo-Tech Explorations, Inc.	9-Aug-96	9-Aug-96			
Ę			ഥ	Ľ,	E.	_	E	띩		BORING DIAMETER: 1.5-inch OI	<u> </u>				
WE V	SAMPLE NUMBER*		HEADSPACE (ppm)	LAB RESULT TPH (ppm)	SPT (blows/0.5 feet)	RECOVERY (%)	DEPTH (feet)	GROUNDWATER	20	CASING DIAMETER: N/A					
NON!	API 1BE	TIME	ADSPA (ppm)	質点	SPT s/0.5	Ø 8 0 0 0 0 0 0 0 0 0 0 0 0 0	H		RA' ISC	SURFACE ELEVATION: Not Survey	ed				
N N N N N N N N N N N N N N N N N N N	[<u> </u>	T.	A.	B]	OW8	EC EC	EP	5	ST (C)	TOP OF CASING ELEVATION: N/A					
ABANDONMENT DETAILS	3. Z		HH _	I.A	9	24	a	GR		SOIL DESCRIPTION					
Concrete					<u> </u>				Asphalt	Asphalt		į			
					 							1			
							2			SAND - light brown, dry, loose, very fine grain graded, no petroleum hydrocarbon odor (2.0-4	ed, poorly				
	037	14:44	•	-		100				graded, no petroleum hydrocarbon odor (2.0-4 ground surface)	.0 feet belo	w			
					<u> </u>	90	3		SP	givaile series,					
					-	0	4		Sr		_				
	038	14:48	<u> </u>	ND		100				SAND - as above, moist, some olive gray zone inches, potential petroleum hydrocarbon odor	s in upper (4.0-6.0 fe	6- et			
Granular Bentonite			0.4			100	5			below ground surface)	•				
			<u> </u>	 -	<u> </u>	20	6								
			 	<u> </u>	 	100				SAND - light brown, moist, loose, very fine gr poorly graded, no petroleum hydrocarbon odo	ained,				
	039	14:52		-		100	7			poorly graded, no petroleum hydrocarbon odo feet below ground surface)	r (6.0-8.0				
			0.5	1	-	20	8								
		<u> </u>	<u> </u>	 	+	100	- 0		SP	SAND - as above, no petroleum hydrocarbon	odor (8.0-				
	040	14:58		 -	†	100	9			10.0 feet below ground surface)					
			0.3			20	10								
	-	<u> </u>		<u> </u>		0	10								
		 	<u> </u>		<u> </u>		11			Boring terminated at 10.0 feet bgs					
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APPENDIX B

Analytical Results and Chain-of-Custody Documentation

		HN AND AS					La	bor	atory	Hughe	s Analyt	ical Labo	rary					CH	IN OF	r Cr	JSTODY
		Environment							-		NE Glisan			97030			_	OIL	TILL OF		MIUDI
	434 NW	Sixth Avenue, Su (503) 796-0717 •					Lab	Pro	ject No.			-04		-			_	Chain	of Custod	ly No.	3545-1
rojec	t Manager	Rob Ede	F &X (003) 221-2	209	Т	T.ic	id	wit	h Sadi	ment Sar											
rojec	No.	3545			1				n sean Filtrate	ment sar	nbie	Total Co.	V # #						dat 4C (Y		7
rojec	: Name	PLYINV			1	Mu			60 Sam	ple	-	1 car Sec	lim Test Se	diment		Test Both			ainers Use		
ollec	ed by	Rob Ede]				One (which			Test Sep	ar Test Se	parately		Shake			esulta (Y o ary Fax Re		No No
этп	ents				I	latr	ix		Τ-		-				Perform		1.10410	- Tremme	ry rax ne	suirs	Yes
NOT	ES:													T	1		1	T	ī	1	
• If d	etection via ODE Q TPH-G and/or	Q TPH-HCID, the ODEQ TPH-G, as	en quantify the d appropriate.	letection with				p	HCID)*		6	SIM)									
Stan	dard Turn-Aroun	d Time for All Sar	mples		Soil	Water	Other	Number of Containers	TPH (ODEQ TPH-HCID)*	TPH-G (ODEQ)	TPH-418.1M (ODEQ)	PAHs - (EPA 8270 SIM)	BTEX (EPA 8020)							ВН	
b ID	Sample #	Date	Time	Sample Description		*	ٵ	Ž	=	=	#	P. P.	H		Ï					RUSH	ı
)[3545-960809- 001	9-Aug-96	9:08	P1; 2.0°	x	1	\dagger	1	-	-		<u> </u>	 	<u> </u>	+-	-	<u> </u>		1	H	Remarks
2	3545-960809- 002	9-Aug-96	9:12	P1; 4.0°	x	7	\dagger	1		 			-	-	+-		_		<u> </u>	H	
3	3545-960809- 003	9-Aug-96	9:18	P1; 6.0'	x	7	+	1			-		 	-	+-	<u> </u>		-		H	
1	3545-960809- 004	9-Aug-96	9:23	P1; 8.5	x	1	+	1			 			-	-	 		+	-	H	•
5	3545-960809- 005	9-Aug-96	9:33	P1; 10.5	x	7	+	1						-	-			<u> </u>	-	H	
و	3545-960809- 006	9-Aug-96	9:50	P1; 12.5	x	\top		1				-	 	-	-						
7	3545-960809- 007	9-Aug-96	9:54	P1; 14.5'	x		\dagger	1	X						+-					\vdash	
8	3545-960809- 008	9-Aug-96	10:05	P1; 18.5	x	1.	1	1	<u> </u>					1	+-			-		H	
1	3545-960809- 009	9-Aug-96	10:30	P1; 23.5	x			1	 -					1						\vdash	
)	3545-960809- 010	9-Aug-96	10:52	P2; 2.0°	x			1													
	3545-960809- 011	9-Aug-96	10:55	P2; 4.0	x		1	1												+	
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HAHN AND ASSOCIATES, INC.

Environmental Management

434 NW Sixth Avenue, Suite 203 • Portland OR 97209

Lab Project No.

21920 N.E. Glisan, Gresham, Oregon 97030

Chain of Custody No. 3545-2

100

Samples Received at 4C (Y or N) (503) 796-0717 • Fax (503) 227-2209 Liquid with Sediment Sample Test Both Appropriate Containers Used (Y or N) Test Sedim Test Sediment Provide Verbal Results (Y or N) Rob Ede No Project Manager Test Filtrate 3545 Provide Preliminary Fax Results Yes Multi-Phase Sample Project No. Test Separ Test Separately PLYINV Project Name Test One (which) Analyses to be Performed** Rob Ede Collected by Matrix Comments NOTES: PAHs - (EPA 8270 SIM) • If detection via ODEQ TPH-HCID, then quantify the detection with TPH-418.1M (ODEQ) ODEQ TPH-G and/or ODEQ TPH-G, as appropriate. BTEX (EPA 8020) TPH-G (ODEQ) Standard Turn-Around Time for All Samples RUSH Water Remarks Sample Description Time Date Sample # b ID أ P2; 8.5 3545-960809-11:05 9-Aug-96 013 1 X P2: 10.0° 3545-960809-11:12 9-Aug-96 014 1 P2; 12.0 3545-960809-11:19 9-Aug-96 015 1 x P3: 2.0 3545-960809-11:35 9-Aug-96 016 Δ 1 X P3: 4.5 3545-960809-11:38 9-Aug-98 017 MAN BAL X 1 P3; 6.0' 3545-960809-11:40 9-Aug-96 018 1 X P3; 8.5 3545-960809-11:45 9-Aug-96 019 1 X P3; 10.0 3545-960809-11:50 9-Aug-96 020 1 X P3; 13.0' 12:00 3545-960809-9-Aug-96 X P4: 2.0 3545-960809-12:55 9-Aug-96 022 X 1 P4; 4.0 3545-960809-13:00 9-Aug-96 X 1 P4; 6.0 13:03 3545-960809-Jem Hughe 9-Aug-96 **7**024 Company Company HAT Company Relinquished by Company Relinquished by

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HAUM WAN WOOG CT----

Environmental Management

434 NW Sixth Avenue, Suite 203 • Portland OR 97209

Lab Project No.

21920 N.E. Glisan, Gresham, Oregon 91030

Chain of Custody No. 3545-3

Samples Received at 4C (Y or N) (503) 796-0717 • Fax (503) 227-2209 Liquid with Sediment Sample Test Both Appropriate Containers Used (Y or N) Test Sedim Test Sediment Rob Ede Project Manager Test Filtrate Provide Verbal Results (Y or N) No 3545 Project No. Multi-Phase Sample Provide Preliminary Fax Results Yes Test Separ Test Separately FLYINV Project Name Test One (which) Rob Ede Analyses to be Performed** Collected by Matrix Comments NOTES: трн (обеф трн-нсгб)• If detection via ODEQ TPH-HCID, then quantify the detection with ODEQ TPH-G and/or ODEQ TPH-G, as appropriate. PAHs - (EPA 8270 SIM) TPH-418.1M (ODEQ) BTEX (EPA 8020) TPH-G (ODEQ) Standard Turn-Around Time for All Samples RUSH Soil Water Other Remarks Sample Description Time Date Sample # Lab ID 1 P4: 8.0 3545-960809-13:10 9-Aug-96 025 x 1 3545-960809-P4: 10.5 13:17 9-Aug-96 026 1 X P4: 12.0 3545-960809-13:21 9-Aug-96 027 X 1 P5: 2.0 3545-960809-13:38 9-Aug-96 028 1 X P5; 4.0° 3545-960809-13:40 9-Aug-96 029 X 1 P5; 6.0 3545-960809-13:48 9-Aug-96 030 X P5; 8.0 3545-960809-13:53 9-Aug-96 031 X P5: 10.5° 13:59 3545-960809-9-Aug-96 032 X 1 P6; 2.0 3545-960809-14:18 9-Aug-96 X 1 3545-960809-14:20 P6; 4.5 9-Aug-96 034 X 1 P6; 6.0' 3545-960809-14:25 9-Aug-96 x 1 P6; 8.0 3545-960809-Received by Hugher Received by 14:30 9-Aug-96 8/496 Time 11:07 036 ompany Time Date Company Relinquished by

Environmental Management Chain of Custody No. Lab Project No. 434 NW Sixth Avenue, Suite 203 • Portland OR 97209 (503) 796-0717 • Fax (503) 227-2209 Samples Received at 4C (Y or N) Liquid with Sediment Sample Test Both Appropriate Containers Used (Y or N) Rob Ede Project Manager Test Sedim Test Sediment Test Filtrate No 3545 Provide Verbal Results (Y or N) Project No. Multi-Phase Sample Yes FLYINV Provide Preliminary Fax Results Project Name Test Separ Test Separately Test One (which) Rob Ede Collected by Analyses to be Performed** Matrix Comments NOTES: трн (оред трн-нсір) • If detection via ODEQ TPH-HCID, then quantify the detection with PAHs - (EPA 8270 SIM) ODEQ TPH-G and/or ODEQ TPH-G, as appropriate. TPH-418.1M (ODEQ) Number of Containers BTEX (EPA 8020) TPH-G (ODEQ) Standard Turn-Around Time for All Samples RUSH Other Remarks Sample Description Time Sample # Date Lab ID 1 X 3545-960809-P7; 2.0 14:44 9-Aug-96 037 1 3545-960809-14:48 P7; 4.0 9-Aug-96 038 X 1 3545-960809-P7: 6.5 14:52 9-Aug-96 039 X 1 3545-960809-14:58 P7; 8.5 9-Aug-96 040 Relinquished by Relinquished by Company Date Company Relinquished by

3545-4



August 23, 1996

Mr. Rob Ede Hahn & Associates 434 NW 6th Ave., Suite 203 Portland, OR 97209-3600

Dear Mr. Ede:

Enclosed is the lab report for your samples which were received on August 12, 1996. The Hughes Report # is 96-0408 and the Client Project is 3545 FLYINV.

Fourty soil samples were received under a chain of custody. The samples were received in containers consistent with U.S. EPA (United States Environmental Protection Agency) protocol.

Standard Quality Assurance/Quality Control (QA/QC) procedures were performed as stated in "EPA Test Methods for Evaluating Solid Waste (SW-846)", 3rd Edition and "Standard Methods for the Examination of Water and Wastewater", 18th Edition. The EPA laboratory protocols followed include sample holding times, laboratory method blanks, laboratory matrix spikes, replicate samples and calibration standards. There were no significant variations from these protocols that would invalidate the analytical data.

Test methods may include minor modifications of detection limits or lists of parameters for the published methods. Solid samples are reported on a wet weight basis unless otherwise noted.

Compounds not detected are listed under results as ND.

Project Marage

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CLIENT JOB: FLYINV

CLIENT:

Hahn & Associates, Inc.

DATE: ITEMS:

August 23, 1996 Eight Soil Samples

METHOD:

TPH-HCID by GC/FID

per Oregon DEQ

Batch #: 960808AS, 960813AS

& 960820AS

SAMPLE I.D.	RESULT	SURROGATE RECOVERY, %	EXTRACTION DATE	ANALYSIS <u>DATE</u>
3545-960809-007	ND	110	08/13/96	08/13/96
3545-960809-012	ND	135	08/13/96	08/13/96
3545-960809-017	C ₆ -C ₁₂ *, C ₂₄ -C ₃₅ *	* 122	08/13/96	08/13/96
3545-960809-022	ND	95	08/13/96	08/13/96
3545-960809-023	ND	105	08/20/96	08/20/96
3545-960809-030	ND	113	08/13/96	08/13/96
3545-960809-034	ND	98	08/13/96	08/13/96
3545-960809-038	ND	58	08/13/96	08/13/96
Lab Blank	ND	114	08/13/96	08/13/96

Detection Limits: Gasoline - 20 mg/kg Diesel - 50 mg/kg Heavy Oil - 100 mg/kg

ND = Not Detected

^{*}Carbon range corresponds to gasoline.

^{**}Carbon range corresponds to heavy oil.



CLIENT JOB: FLYINV

CLIENT:

Hahn & Associates, Inc.

DATE:

August 23, 1996

ITEMS:

Two Soil Samples

METHOD:

TPH-G by GC/PID

per Oregon DEQ

Results in mg/Kg (ppm)

Batch #: 960819as

SAMPLE I.D.	RESULT	SURROGATE RECOVERY, %	EXTRACTION <u>DATE</u>	ANALYSIS <u>DATE</u>
3245-960809-017	352	95	08/19/96	08/19/96
3245-960809-019	ND	70	08/19/96	08/19/96
Lab Blank	ND	121	08/19/96	08/19/96
Detection Limit	10			



CLIENT JOB: FLYINV

CLIENT:

Hahn & Associates, Inc.

DATE:

August 23, 1996

ITEMS:

Two Soil Samples

METHOD:

TPH-418.1 Modified

per Oregon DEQ

Results in mg/Kg (ppm)

Batch #: 960821as

SAMPLE I.D.	RESULT	DATE <u>EXTRACTED</u>	DATE <u>ANALYZED</u>
3545-960809-017	296	08/21/96	08/21/96
3545-960809-019	ND	08/21/96	08/21/96
3545-960809-019 REPLICATE	ND	08/21/96	08/21/96
Lab Blank	ND	08/21/96	08/21/96
Detection Limit	25		

ND = Not Detected



CLIENT JOB: FLYINV

CLIENT:

Hahn & Associates, Inc.

DATE:

August 23, 1996

ITEMS:

One Soil Samples

METHOD:

BTEX per EPA Method 8020

Batch #: 960813as

Results in ug/Kg (ppb)

DESCRIPTION	<u>3545-960809-17</u>	LAB <u>BLANK</u>	DETECTION <u>LIMIT</u>
Benzene	70	ND	20
Toluene	129	ND	20
Ethylbenzene	349	ND	20
Total Xylenes	3010	ND	40
Surrogate Recovery,%	*	115	
Extraction Date: Analysis Date:	08/19/96 08/19/96	08/22/96 08/22/96	

ND = Not Detected

^{*}No surrogate was recovered for this sample due to sample matrix interference and sample dilution.

APPENDIX C

Soil Cleanup Standard Matrix Worksheet

Page 2 of 2 August 23, 1996 Project #3545

SOIL CLEANUP LEVEL DECISION MATRIX WORKSHEET

TOTAL POINTS: 39 Level 2 Cleanup Standard

If the Matrix Score evaluated is:

- A) Greater than 40, the site must be cleaned up to at least the Level 1 standard
- B) From 25 to 40, inclusive, the site must be cleaned up to at least Level 2 standards
- C) Less than 25, the site must be cleaned up to at least the Level 3 standard

NUMERIC SOIL CLEANUP STANDARDS

	Level 1	Level 2	Level 3
TPH (Gasoline)	40 ppm	80 ppm	130 ppm
TPH (Diesel/Oil)	100 ppm	500 ppm	1,000 ppm

NUMERIC SOIL CLEANUP STANDARDS FOR THIS SITE

Level 2 Cleanup Standard

Total Petroleum Hydrocarbons (TPH):

< 80 parts per million (ppm) for gasoline

< 500 ppm for diesel fuel and oil petroleum hydrocarbons

(12/91)

SOIL CLEANUP STANDARD MATRIX WORKSHEET

INTRODUCTION: This worksheet is intended to be used to determine the soil cleanup standard for the cleanup of motor fuel and heating oil releases from underground storage tanks (USTs). OAR 340-122-305 to 340-122-360

EVALUATION PARAMETERS:

1. DEPTH TO GROUNDWATER: Vertical distance (to nearest foot) from the surface of the ground to the highest seasonal elevation of the saturated zone.

Depth:	>100'	51-100'	25-50	<25°	POINTS: 7
Points:	1	4	7	10	

Source: Field Observation, Area Boring Logs

2. MEAN ANNUAL PRECIPITATION: From nearest appropriate weather station.

Inches:	<20"	20-45"	<u>>45"</u>	POINTS: 5
Points:	1	5	10	

Source: Oregon Climate Source Map, March 1993

3.NATIVE SOIL OR ROCK TYPE:

Permeability:	Low	Moderate	High	POINTS: 10
Points:	1	5	10	

Source: Field Observation

4. SENSITIVITY TO THE UPPERMOST AQUIFER:

Sensitivity:	Unusable	Potable not used	<u>Potable</u>	Sole Source	POINTS: 7
Points:	1	4	7	10	

Source: Worst Case Estimate

5. POTENTIAL RECEPTORS: Distance to nearest well that draws water from aquifer of concern and the number of people at risk.

Nearest Well:	<1/2 mile	1/2 - 2 miles	>2 mile	
Description:	Near	Medium	Far	
				POINTS: 10
Number of People:	>3.000	100-3,000	<100	
Description:	Many	Medium	Few	

Sources: Worst Case Estimate

TOTAL POINTS: 39

UST CLEANUP TELEPHONE USE REPORT

CALL FROM/TO:	Ben Davis	DATE:	3-15-01
WITH:	Grand Contral Bekory	TIME:	4:30
	(503) 232-0575		
REGARDING:	Grand Contral Bak	cry	
FILE NO:			
SUMMARY OF CAL			
Old gas s	tation site from 403	or 50's. Halos	1 did phese 1+2
	chose time and lote		
Com M pro	Il I I let at a co	marco (7) 7	-bar contil
	Il and thus not a c		
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not time a	my. Report Submitt	of al Jame tim	e LI COST
- receiving agr	coment (where is it.	.)	
cmail ada	lvess 6 bon @ grandco	ntralbating. com	
	7	7/1/11.	
		Staff Signature	



Department of Environmental Quality

Northwest Region 2020 SW Fourth Avenue Suite 400 Portland, OR 97201-4987 (503) 229-5263 Voice TTY (503) 229-5471

February 7, 2001

BEN DAVIS GRAND CENTRAL BAKERY 2230 SE HAWTHORNE BOULEVARD PORTLAND OREGON 97214

Re:

Grand Central Bakery

File No.: 26-01-0005

Dear Mr. Davis:

On February 5, 2001, we received the signed Cost Recovery Agreement which indicated your interest in participating in the Underground Storage Tank Cleanup Voluntary Cost Recovery Program.

At the current time, we have a backlog of projects, which have signed up for oversight through this program, and these are currently being assigned on a first come, first serve, basis. As additional staff resources become available, your project will be assigned to a project manager.

Our goal is to assign projects as soon as possible. However, at current demand levels, we are estimating there will be a three to six week wait before your project can be assigned. You will be notified when your project has been assigned.

We appreciate your interest in this program and look forward to working with you in the near future.

If you have any questions about the status of your site for assignment, please contact Andree Pollock at (503) 229-5474. If you have a general question about the regulations or cleanup activities at your site, please call (503) 229-5489 and ask to speak to the Underground Storage Tank Duty Officer.

Sincerely,

Andree Pollock, Manage

UST Cleanup and Compliance Section

UST CLEANUP TELEPHONE USE REPORT

CALL FROM/TO: Ben Davis DATE: 12/21/2000
WITH: Grand Central Bakery TIME:
TELEPHONE NO: (503) 737 - 0575
REGARDING: Phase II 254 D 2728
FILE NO: Neve yet
SUMMARY OF CALL
Ben owns Grand Central Bakery. Bought Property
The 1996. He was initiating a retivance of
was informed that by the Bank that petroleum
Contamination exists on his property (partial)
lat was Faces station bustonically)
Oneso Sample from a boring defected up to ssapping
Gasoline + BTEX constituents were and ppm, 0.129
0-349 + 300 respectively. This work was completed
by Hahn & Associates, Inc in 1996. Ben wanted
to know if this sit release was reported or If
it weeded to be repented.
I more sted- I would check w/ my manager & do
some further mustiquetion.
Read Staff Signature



Department of Environmental Quality

Northwest Region 2020 SW Fourth Avenue Suite 400 Portland, OR 97201-4987 (503) 229-5263 Voice TTY (503) 229-5471

January 25, 2001

BEN DAVIS GRAND CENTRAL BAKERY 2230 SE HAWTHORNE PORTLAND OR 97214

RE: GRAND CENTRAL BAKERY

File No.: 26-01-0005

On 01/12/2001, a release was reported from an underground storage tank (UST) system at your facility located at 2228 SE HAWTHORNE in PORTLAND, Oregon. As the responsible party for the facility, you are required to clean up the release according to OAR 340-122-201 through 340-122-360.

An Initial Report Form for UST Cleanup Projects is enclosed. This form needs to be completed and returned to this office within twenty (20) days from the date the release was reported. An outline of additional reporting requirements and due dates is also enclosed. A copy of the UST Cleanup regulations or an application for a letter of authorization for soil treatment will be provided upon request. As the responsible party, you should be aware of the requirements for cleanup, even if you have hired a qualified contractor or consultant to assist you.

Please reference the DEO File Number listed above in all future correspondence and reports.

By law, DEQ is required to recover project oversight costs. DEQ oversight begins with the initial site characterization and continues through site closure. Oversight includes activities such as reviewing reports, preparing correspondence, answering technical questions, site inspections, and enforcement actions. You will be receiving an invoice each month for all oversight activities performed to date.

DEQ's highest priority for oversight are those sites which pose the greatest hazard to human health, safety and the environment. As a result, many lower environmental priority sites will not be reviewed in detail or receive a final "No further action" or "closure" letter from DEQ until the higher priority sites are addressed. However, all projects - simple or complex - require at least some oversight. At a minimum, sufficient review of reports and data submitted is conducted to determine the environmental priority of the cleanup project.

Page 2

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For those responsible parties who desire DEQ oversight, regardless of environmental priority, we have developed a Responsible Party Priority Site Program. To receive oversight and more effectively schedule your project, you will be asked to sign an agreement requesting priority review and confirming your agreement to pay DEQ oversight costs in a timely manner.

Not entering into the Agreement does not release you from responsibility for investigation and/or cleanup of the contamination; nor does it mean that you are exempt from paying for DEQ oversight costs. Please be aware that there may be a waiting list for assignment to the next available project manager, and that these projects are assigned on a first come, first served basis.

Please read the attached information on the cost recovery and invoice process. We have also included information about the Responsible Party Priority Site Program and an agreement, if you are interested in expediting review of your project. You may contact the Waste Management and Cleanup Program at (503) 229-6635 if you have questions about cost recovery.

Thank you for your cooperation and continued efforts to comply with the regulations. If you have any questions about the regulations and/or your cleanup project, please call (503) 229-5263 and ask to speak to the Underground Storage Tank Duty Officer.

Sincerely,

Tina Leppaluoto, UST Specialist -- Underground Storage Tanks

Cleanup and Compliance Section

Enclosures

* ETROLEUM RELEASE FORM *

Please Check All That Apply

INCIDENT	INFORMATION
RECEIVED BY: (Dept. use only) KAN	LOG NBR: (Dept. use only) 26-01-0005
DATE REPORTED: (today's date) 1 /23 / 2001	
SITENAME: Grand Central Bakery	
SITE ADDRESS: 2228 SE Howthorne	NON-REGULATED UST
SITE CITY: Portland ZIP: 977214	REGULATED UST & FAC NBR:
SITE COUNTY: MULT PHONE: 503 2320	HEATING OIL TANK
REPORTED BY (person reporting this release to the Dept.)	CONTACTS RESPONSIBLE PARTY (person responsible for remedial action)
NAME: Ben Davis	NAME:
COMPANY: Grand Central Bakery	COMPANY:
ADDRESS: 2230 SE Hawthorne	ADDRESS:
CITY: Portland ZIP: 977214	CITY: ZIP:
STATE: OR PHONE: 503 232 0575	STATE:PHONE:
EMAIL:	EMAIL:
INVOICE CONTACT (required, may be same as responsible party)	OTHER CONTACT(S) (not required)
NAME:	NAME:
COMPANY:	
ADDRESS:	ADDRESS:
CITY:ZIP:	CITY:ZIP:
STATE:PHONE:	STATE:PHONE:
SITE	ASSESSMENT
DATE DISCOVERED: 9 / 13 / 96	DATE TANK IS EMPTY://
CONFIRMATION: during phase Tiscovery:	CAUSE:
☐ SD STAFF: DEO ☐ RM) ROU	ITINE MONITORING TL) TANK LEAK OMMISSIONING PL) PIPE LEAK
LR) LAB: RP	PLAINT OF) OVERFILL
	NTORY CONTROL SS) SURFACE SPILL ASSESSMENT PV) PUMP/VALVE LEAK
CN) CONTRACTOR	
OT) OTHER OT) OTH	CAMINANTS
☐ UG) UNLEADED GASOLINE ☐ WO) WAS	
MG) MISC. GASOLINE LB) LUBI	RICANT SOT) OTHER HEAVY OF 1. CLOSPY
DS) DIESEL (motor fuel) SV) SOLV	PACTS
SL) SOIL GW) GROUNDWATER SW) SURFACE WA	TER DW) DRINKING WATER
2007000	BUILDING (FREE PRODUCT.)
SITE-MANAGEMENT (THIS SECTION DEPT. USE ONLY)
RELEASE STOPPED:/FI	NAL REQUEST INVOICE DATE: 04 ,04 ,01
CLEANUP STARTED:/	NO FURTHER ACTION: 06 / 07 / 01
NOTES/COMMENTS.	se this to be reportable so it wasn't
DEC determined this is reported	e release. Historical Cons Stration, No
Tonks remain on stoperty	
LUST 28/JUL/1999 GET	And the street of the street and the street of the street

FEB 05 2001

NORTHWEST REGION

COST RECOVERY AGREEMENT

This document serves as an agreement between the undersigned (hereinafter "you") and the Department of Environmental Quality (DEQ) regarding DEQ review and oversight of the investigation and/or cleanup of petroleum (hazardous substances) at the property located at:

Facility Name: GRAND CENTRAL BAKERY

Address: 2230 SE HAWTHORNE BLVD

City, Zip: PORTLAND, OR 97214

File/Log #: 26-01-005

DEQ agrees to review environmental documents submitted by you or on your behalf regarding the investigation and/or cleanup of the above-referenced site. Additional details regarding DEQ oversight will be established upon review of the initial site data.

DEQ requires that persons requesting DEQ review and oversight of investigation and cleanup activities agree to the terms of this cost recovery agreement and pay project oversight costs.

DEQ project oversight costs will include direct costs and indirect costs. Direct costs include site-specific expenses and legal costs. Indirect costs are those general management and support costs of the DEQ, including the Waste Management and Cleanup Division (WMCD), allocable to DEQ oversight of this agreement and not charged as direct, site-specific costs. Indirect charges are based on a percentage of direct personal services costs. Review and oversight costs shall not include any unreasonable costs or costs not otherwise recoverable by DEQ under ORS 465.255.

DEQ costs are due within thirty (30) days of issuance of the monthly statement, by a check made payable to the "Department of Environmental Quality".

Electing not to enter into this agreement does not release you from any responsibility that you might have for any reporting requirements, investigation and/or cleanup of petroleum (hazardous substances) at the above referenced facility. This does not preclude the DEQ from conducting audits or inspections of all or portions of the investigation and cleanup activities associated with this facility. Enforcement action may be initiated if any violation of DEQ requirements is found.

Either DEQ or you may terminate this agreement by giving 15 days advance written notice to the other. Only those costs incurred or obligated by DEQ prior to the effective date of any termination of the agreement shall be recoverable under this Agreement. Termination of this agreement will not affect any other right DEQ may have for recovery of costs under any applicable law.

You will hold DEQ harmless for any claims (including but not limited to claims of property damage or personal injury) arising from DEQ review and/or oversight activities under this agreement.

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Cost Recovery Agreement Page Two

This agreement is not and shall not be construed to be an admission by you of any liability under ORS 465.255 or any other law or as a waiver by you of any defense to such liability. This agreement is not and shall not be construed to be a waiver, release, or settlement of claims that DEQ may have against you or any other responsible person nor is this agreement a waiver of any enforcement authority that DEQ may have.

The DEQ Northwest Region Tanks Program will be responsible for the review and oversight of the investigation and cleanup activities associated with the property. Please refer all site-specific inquiries to them at (503) 229-5263, 2020 SW Fourth Avenue, Portland, OR 97201.

All inquiries regarding cost recovery and/or invoices should be directed to (503) 229-5812.

If the terms of this agreement are acceptable, please have it executed by an authorized officer in the space provided below. In order to more effectively schedule your project, please return this agreement within 30 days of receipt to: DEQ Northwest Region Office, Tanks Program, 2020 SW Fourth Avenue, Portland, OR 97201.

Accepted and agreed to this day of 1 E S, ***
By: BEN DAVIS PRES. GRAND CENTRAL BAKERY Title: MEMBER GCB PROPERTIES LLC
Title: WIBMER GCS PEOPERINGS
Please provide the following information as to where the invoices should be sent. Individual Name: BEN DAVIS
Title: PRESIDENT
Company Name: GRAND CENTRAL BAKERY
Mail Address: 2230 SE HAWTHORNE BUD
City, State, Zip: PORTLAND, OR 97214
Phone Number: 503 Z3Z-0575

FILE NAME: Grand (entral Bakory LOGNO. 26 - 01 - 0005

NWR'S NFA TRACKING CHECKLIST

ROUTE TO	ACTIVITY	RESPONSIBLE PERSON	DATE COMPLETED
	Sequent checked by project manager to make sure fees paid and tanks closed and that UST compliance issues have been resolved.	Bu	3-26
	OTIS updated with soil disposal, public notice, and other applicable information by project manager.	BU	3-20
525-0x	Draft NFA prepared by Project Manager (PM) and submitted to NRS-4 Hydro or Manager for review	BW	3-26
- 1	Draft NFA approved by NRS-4 Hydro (or Manager, if necessary) and submitted for data entry	AM	4/2
	SEQUENT updated with final invoice request date and new green sheet information.	50	4/4
	OPTIONAL STEP: Expedited payment request by responsible party (RP) is handled by =====>>		
	OPTIONAL STEP: Estimated Expedited Payment Amount given to RP by =====>>		
	To Administrative staff for cost recovery entries	SP.	4/4
	Final invoice paid notice received from Business Office and PM informed by Manager	M	6/7/61
	Final NFA drafted and signed by PM (and Manager, if necessary), and sent for data entry	BW	6/7/61
	SEQUENT updated with filed closed information.	Ŕ	6-7-01
	Proofreading letter and file closure activities	Two	6/7/1
	Copies made and mailed	80	6-7-01

NFA PROCESS COMPLETE