

Limited Phase II Site Assessment

for

3744 Depot Road Hayward, CA

Prepared For:

LOTZ and ASSOCIATES
22320 Foothill Blvd.
Hayward, CA

By:

PIERS Environmental Services

3131 S. Bascom Ave., Suite 5 Campbell, CA 95008

September 12, 1995

3131 S. Bascom Avenue, #5 Campbell, CA 95008

Tel. (408) 559-1248 Fax (408) 559-1224

September 12, 1995

Lotz and Associates 22320 Foothill Blvd. Hayward, CA 94541

Re:

Limited Phase II Environmental Assessment 3744 Depot Road, Hayward, California

Gentlemen,

PIERS Environmental Services, Inc. has prepared this Limited Phase II Site Environmental Assessment for the above site. If you have questions, please feel free to call.

Sincerely,

PIERS Environmental Services, Inc.

Stuart G. Solomon, REA No. 4468

R. Curtis Payton

Registered Geologist No. 5608

No. 5608

Limited Phase II Site Assessment

Prepared for:

Lotz and Associates 22320 Foothill Blvd. Hayward, CA 94541

Site:

3744 Depot Road, Hayward, California

September 12, 1995

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1.0 INTRODUCTION AND SITE ENVIRONMENTAL HISTORY

The subject site is currently vacated, and in the process of being sold. waste oil tank and a 1000 gallon gasoline tank were apparently excavated and removed from the ground in the late 1980's by the previous tenant without a permit. The tanks were subsequently disposed of by the tenant. No soil samples were retrieved at the time of removal, and no tank closure report submitted. Subsequent to the tank removals, the Alameda County Department of Environmental Health (ACDEH) became aware of the situation, and requested that the property owner collect samples from the tank excavations. An environmental consultant apparently collected the required samples, however, a report on the sample results was not forwarded to the agency. The consultant has since closed the business, and no records are available. The previous tenant and property owners (Patricia and Kenneth Hein) are now (assumed) bankrupt, and the property has been foreclosed on by the lender (Jack Lotz and Jesse Allen). Both the former and current owners are now considered the Responsible Parties for the environmental requirements at this site.

2.0 PURPOSES AND OBJECTIVES

This project was performed in accordance with the workplan (Site Reconnaissance Workplan for 3744 Depot Road, Hayward, California) submitted to and approved by Ms. Amy Leech of the Alameda County Department of Environmental Health (ACDEH). The objective purposes of the work were to; a) reconstruct - through interviews and reconnaissance the removal of both tanks in order to write a tank removal report on each; b) install borings in the immediate areas of both tanks, and collect samples of the soil and groundwater beneath the former tanks to assess the extent of hydrocarbons in the soil and groundwater, and; c) write a technical report on the findings.

3.0 INVESTIGATION SCOPE OF WORK



- 3.1 PIERS personnel visited the Property with the previous tenant who was present to witness the tank excavations and recreated (as completely as possible) the details of the tank disposal and the previously existing conditions.
- 3.2 In accordance with the approved work plan, PIERS installed five temporary exploratory borings, the fifth boring was installed in accordance with the on-site requirements of Amy Leech of the Alameda County Department of Environmental Health in areas depicted on Figure 1 (attached). Soil samples were collected from each boring, and groundwater grab samples were collected from the downgradient boring at each tank pit. A third groundwater grab sample was collected from a well discovered along the western property line by Amy Leech during her site visit.

- 3.3 The samples were analyzed at a State-certified laboratory: the two waste oil tank soil samples, one waste oil tank groundwater sample, and the water sample from the newly discovered well (4 total) were analyzed for TPHg, TPHd, BTEX, Oil and Grease, Lust 5 Metals, Volatile Organic Compounds, and Semi-Volatile Organic Compounds. The two gasoline tank soil samples and one gasoline tank groundwater sample (3 total) were analyzed for TPHg and BTEX.
- 3.4 The borings were sealed with neat cement in accordance with regulatory agency protocol.

4.0 PREVIOUS TANK REMOVALS AND DISPOSAL

PIERS interviewed Mr. Randy Hein, the son of the previous Property owner. Mr. Hein recalls that the tanks were both excavated in early 1992. Both tanks were reportedly empty upon their removal. The 1000 gallon gasoline tank was apparently placed on a trailer in the yard, and the bung openings left open. The 200 gallon waste oil tank was set on the ground within the covered shed.

The waste oil tank was apparently cut into small pieces sometime in 1994, and trucked (along with other scrap metal) to a metal recycler in Oakland. The name of the recycler was not known. The gasoline tank was cut into scrap pieces in (approximately) early 1995. This also was trucked along with other scrap metal to the Oakland metal recycler. Both tanks were reportedly "dry" when they were cut into pieces.

TAT Environmental apparently collected soil samples in May of 1992 from both excavation pits. Apparently, no laboratory report was ever filed with the Agency, nor could PIERS find a copy of such. Mr. Stuart Solomon, of PIERS Environmental Services, attempted to locate TAT Environmental without success.

No other data was available on the tank removals

5.0 EXPLORATORY BORINGS

On August 29, 1995, PIERS Environmental completed five exploratory borings at the site. Ms. Amy Leech of the ACDEH was present to witness the borings. The fifth boring was added to the workplan as requested by Ms. Leech on site. The borings were located in areas depicted on Figure 2 attached hereto. The borings were advanced using a clean 3.5 inch hand auger. Seil samples were collected using a pre-cleaned hand driven soil sampler equipped with clean brass liners. The PIERS Sampling Protocol is attached to this document as Appendix 2. Gas-SW@7' was located approximately 5 ft. to the southwest of the former gasoline tank. This boring was completed to a total depth of 7 ft.

Below Grade Surface (BGS), and the soil sample collected from the bottom of the hole. Gas-NW@ 7' was positioned approximately 5 ft. to the northwest of the former gasoline tank. This boring was completed to a total depth of 9 ft. BGS, and the soil sample collected at a depth of 7 ft. BGS. A grab groundwater sample was collected from the depth of groundwater (8 ft. BGS), and labeled Gas-GWS_Disp@2' was positioned at the location of the former gasoline dispenser. This boring was advanced to a depth of approximately two feet BGS and the soil sample collected from the bottom of the boring. WO-SW@7' was positioned approximately 5 ft. to the southwest of the former waste oil tank. This boring was advanced to a depth of approximately seven ft. BGS, and the soil sample collected from the bottom of the boring. WO-NW@8.5 ft. was positioned approximately 5 ft. to the northwest of the former waste oil tank and the soil sample collected from a depth of 9.5 ft. BGS. This boring was advanced to a depth of 12 ft. BGS. A grab groundwater sample (WO-GWS) was also collected from this boring. Depth to water was at 10 ft. BGS. A sump/well was discovered along the western property line, approximately 220 ft. from the northern Property line. At the request of Amy Leech, a grab sample of water from this "well" was collected. The sample is labeled MW1-GWS.

5.1 Sampling Detail

The borings were installed using a clean 3 inch hand auger. Soil throughout the borings was inspected for physical evidence of discoloration and contamination. The borings were logged using the Unified Soil Classification System. Each of the borings was advanced to the desired depth, and a clean 2 inch diameter by 6 inch long hand driven sampler was driven into the soil. The 6 inch brass ring was removed from the sampler, sealed, capped, and immediately labeled. The groundwater grab samples were collected by inserting a new disposable bailer into the boring, and extracting the water. Water samples collected from the borings were decanted into clean glassware supplied by the analytical laboratory. A Chain-of-Custody was filled out, with each sample I.D., depth, location, time, and date denoted on the form. The samples were immediately placed on ice and sent to Hull Development Labs, Inc. - a California State Department of Health Services certified laboratory.

The two waste oil tank soil samples, one waste oil tank groundwater sample, and the water sample from the newly discovered well (4 total) were analyzed for TPHg, TPHd, BTEX, Oil and Grease, Lust 5 Metals, Volatile Organic Compounds, and Semi-Volatile Organic Compounds. The two gasoline tank soil samples and one gasoline tank groundwater sample (3 total) were analyzed for TPHg and BTEX.

The legal Chain of Custody and laboratory chemical analyses results can be found in **Appendix 1** attached hereto. Boring logs are contained in **Appendix 3**.

6.0 SUBSURFACE CONDITIONS

Sediments encountered in each boring consisted of primarily, high plasticity dark olive gray clay from approximately 1 ft. below grade surface and black to dark-brown silty organic clay from about 4 ft. below grade to the bottom of the holes. The soil stratification was generally consistent in each of the borings. Groundwater was encountered at a depth of approximately 8.5 ft. To 10.5 ft. BGS. Boring logs are presented in Appendix 3.

7.0 ANALYTICAL LAB TEST RESULTS

Table 1:

(ND= Not Detected, at or above, laboratory method reporting limit -- NR= Not Run)

TEST	#9593 Gas-	89594 Gas-	B9596 Disp@2'					B9600
	SW@7"	NW@7	NSDUE		8548000			GWS
Sample Matrix	SOIL	SOIL	SOIL	ŞΦIL	SOIL.;	-		السير ا
TRPH (O&G)	NR	NR	NR	1,100 p þ m	3,300 °	NR	390 ppn	Gingpon #
Semi- Volatiles	NR	NR	NR	ND	2,795 ppb	NR	57 ppb	ND
Volatiles	NR	NR	NR	9.1 ppb 🕏	396.3 ppb	NR	141 ppt	ND
TPHd	NR	NR	NR	9.4 pipna	56 ppm	NR .	600 ppb	ND
TPHg	ND	Majord	ND	2 ppm ^s	2 ppm	43,000 ppb	ND	ND
Benzene	ND	12 ppb	ND	9.1 ppb	63 ppb	300 ppb	103 ppb	ND
Toluene	ND	The state of	ND	ND	6.3 ppb	360 ppb	ND	ND
Ethyl- Benzene		· Majori P	ND	ND	171 ppb	1,400 ppb	17 ppb	ND
Xylenes	ND	*MODBLippb *	19 pp	ND	55 ppb	1 0,000 ppb	21 ppb 🤰	ND
Cad.	NR	NR	NR	ND	ND	NR	ND	ND
Chrom.	NR	NR	NR	24 ppm	27 ppm.	NR	ND	ND
Lead	NR	NR	NR	11 ppm	12 ppm	NR	ND	ND
Nickel	NR	NR	NR	36 ppm ¹	43 ppm	NR	TOURS J	ND
Zinc	NR	NR	NR	37 ppm*	- ppm	NR	ND	ND

8.0 BOREHOLE SEALING

The boreholes were sealed to the surface using a cement slurry.

9.0 CONCLUSIONS AND RECOMMENDATIONS

Gasoline Tank:

Groundwater in the area of the former gasoline tank has been impacted: The extent of the groundwater plume should be delineated. This could be accomplished by installing several exploratory borings, and collecting grab samples of the groundwater. Once the extremities of the plume are defined, a plan for remediation and groundwater monitoring can be formulated.

Waste Oil Tank:

Soil and groundwater in the vicinity of the former waste oil tank has been impacted by a variety of constituents including Oil and Grease, Semi-Volatile Organic Compounds, Volatile Organic Compounds, and Gasoline and Diesel Petroleum Hydrocarbons. The extent of the soil and groundwater plumes should be delineated. This could also be accomplished by installing several exploratory borings, and collecting soil and grab samples of the groundwater. Once the extremities of the plume are defined, a plan for remediation and groundwater monitoring can be formulated.



Existing Monitoring Well:

Groundwater collected from MW-1 contained only Total Recoverable Petroleum Hydrocarbons (TRPH). The presence of TRPH may have been caused by run-off. PIERS recommends that the well casing be secured in order to prevent future run-off intrusion, and that the well be used as a third point of groundwater elevation monitoring for future gradient studies. Additional monitoring in the future may show a reduction of TRPH after well head rehabilitation. The well casing can be surveyed along with the (assumed) additionally required well on site.

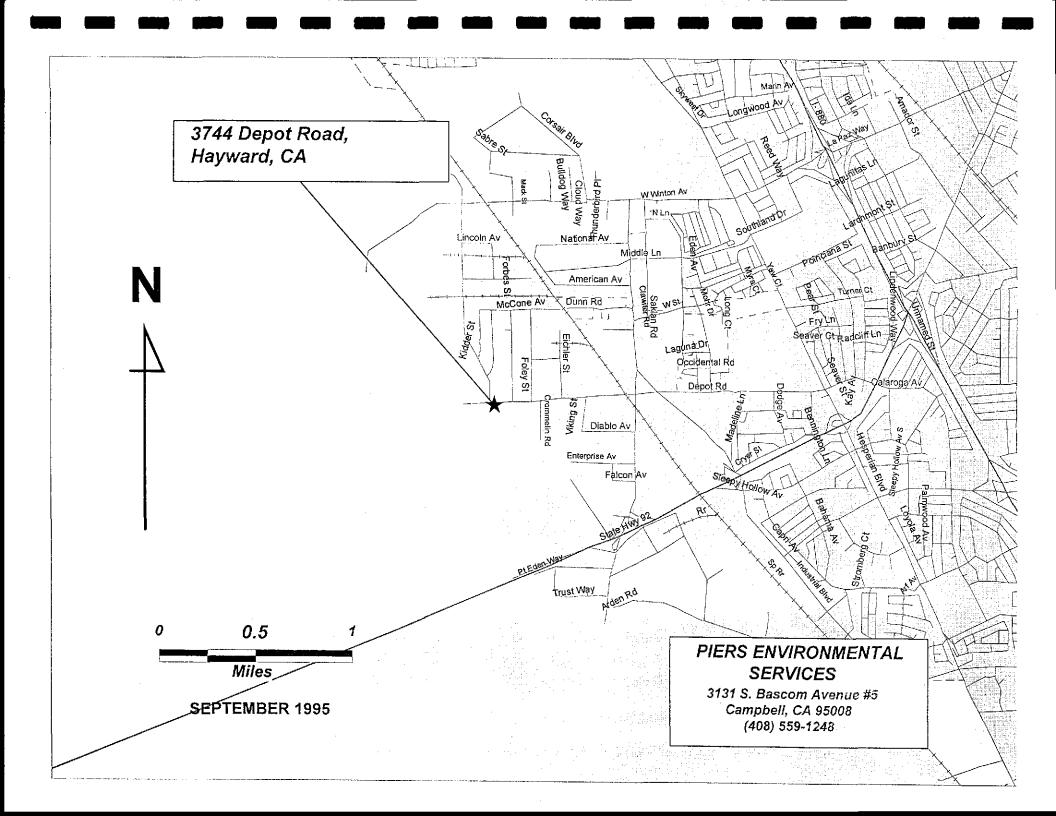
Gosibly persons you

10.0 LIMITATIONS

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10.0 LIMITATIONS

A Phase II investigation does not guarantee that the property has not been environmentally impacted. Samples are taken from suspected areas only, and may not be representative of conditions elsewhere on the site. PIERS Environmental shall not be responsible for conditions or consequences arising from facts and information that were withheld or concealed, or not fully disclosed at the time this evaluation was performed. Conclusions and recommendations made in this report for this site and are based on the data and available information reviewed during the assessment. This preliminary site assessment was prepared to assist in decisions regarding this property, and its possible environmental hazards. This report must be reviewed in the context of the entire document, and any previous work and documents prepared for this site. PIERS Environmental is not responsible for analytical laboratory errors and reporting. No warranties are expressed or implied.



FACSIMILE

3744 Depot Road Map Replacement

Date: November 3, 1984 / 1994

Pages: 2, including this cover sheet.

Dear Amy,

Flease replace Figure 2 of our Depot Road Assessment Report with this revised map. We have added dimentional measurements to show proximity of various points. The hard copy driginal has been mailed. We apologize for the delay in getting this to you. Please feel free to dall me if you have any questions whatsoever.

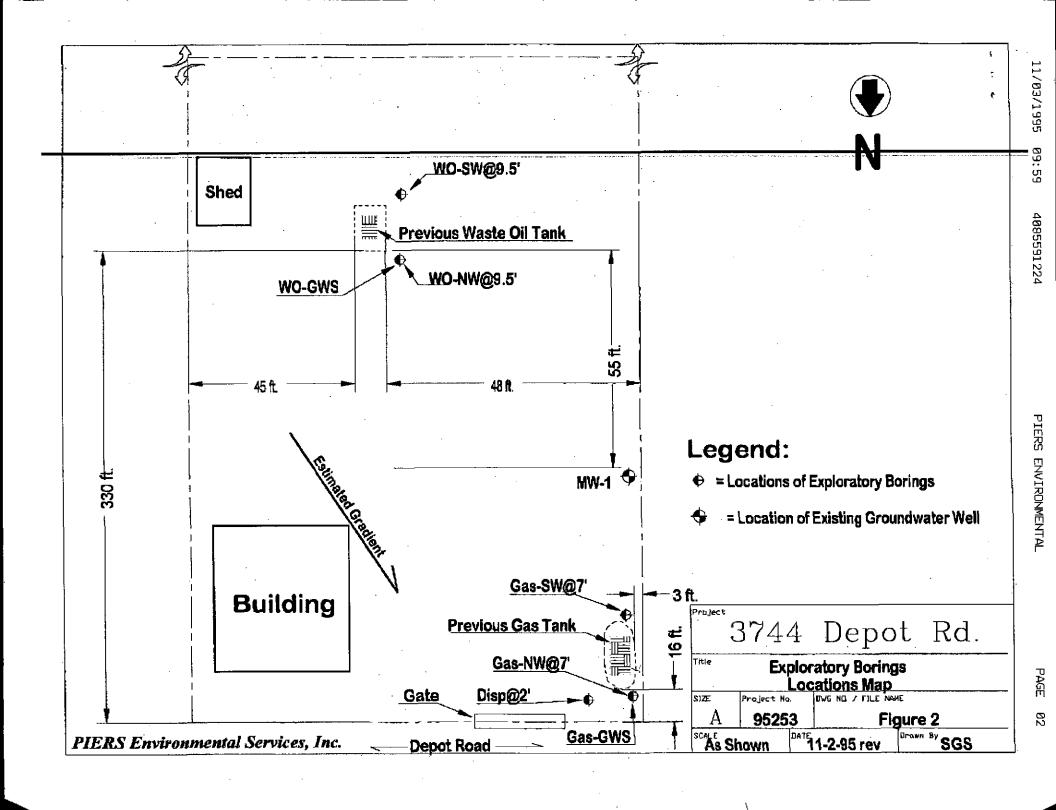
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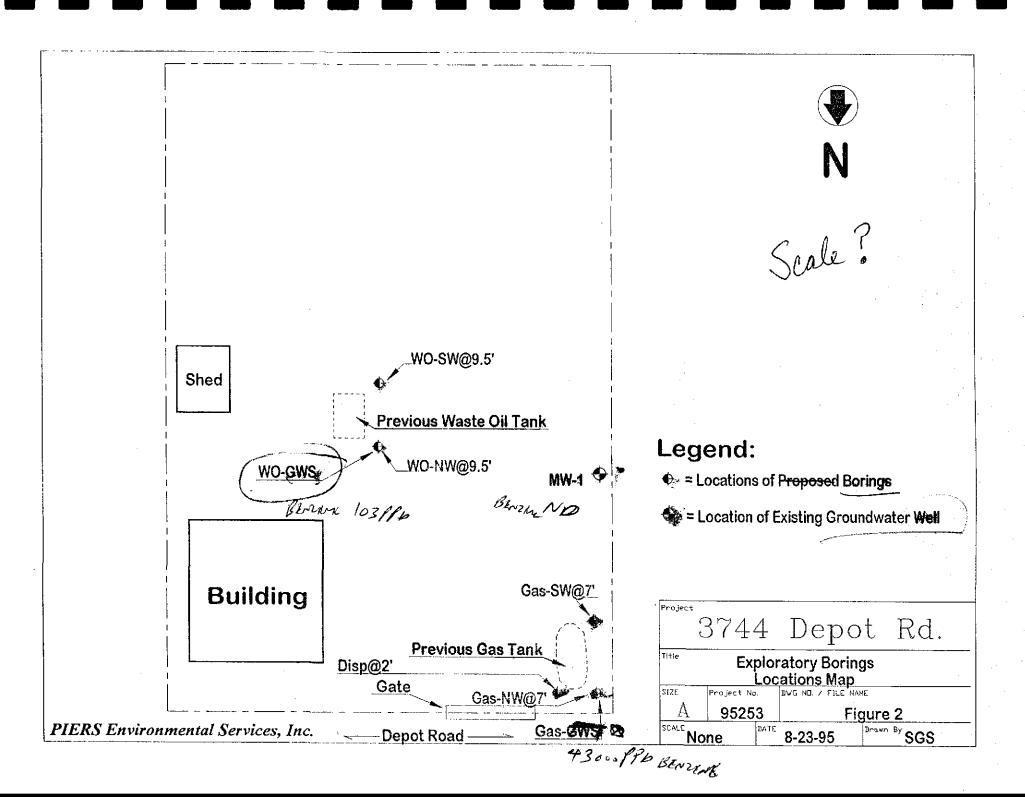
Huart G. Solomon

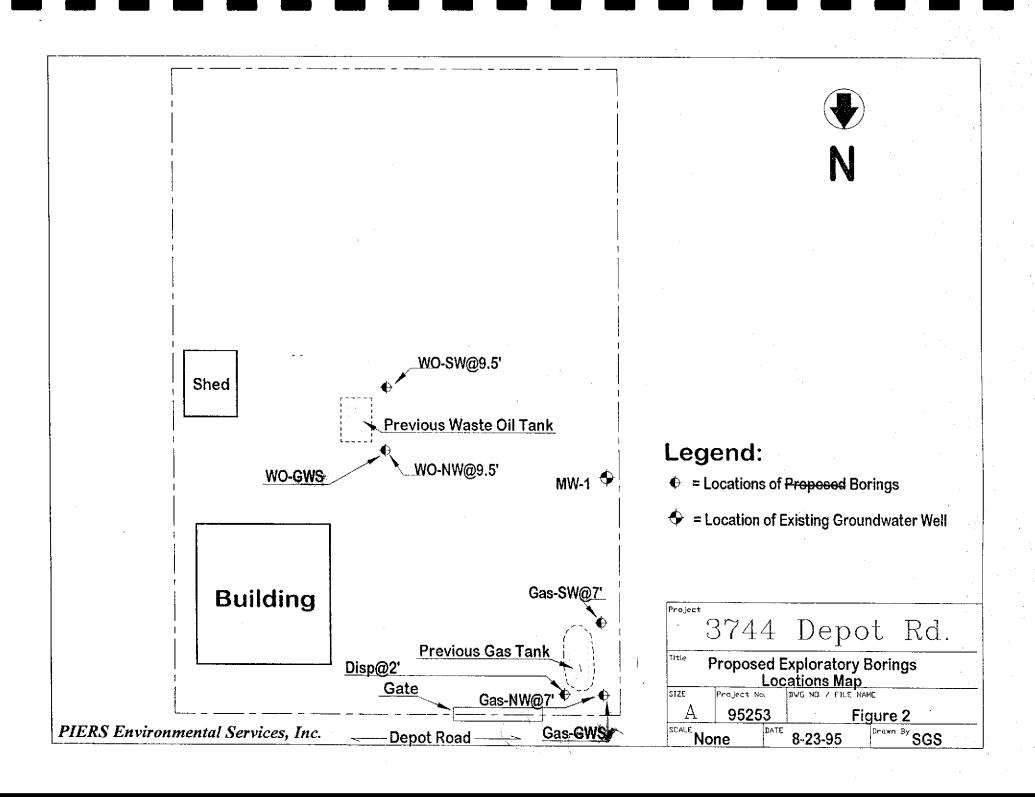
From the desk of...

Stuart G. Solomon President PIERS Environmental Services, Inc. 3131 S. Bascom Ava. Suita 5 Campbell, CA 95008

> (408) 559-1248 Fax: (408) 559-1224







APPENDIX 1

ANALYTICAL LABORATORY TEST RESULTS AND CHAIN OF CUSTODY

18 September, 1995

Stu Solomon Piers Environmental Services 3131 South Bascom Avenue, Suite 5 Campbell, CA 95008

Dear Stu:

Please find enclosed the hard copy report for subcontracted Volatile Organics by 8240, and Semivolatile Organics by 8270 analyses. Project:

Samples Submitted:

08/29/95

This follows up the report package faxed to you on 09/11/95 and mailed on 09/12/95 which included a copy of this analysis. Please insert the enclosed hard copy into your Hull Labs report package for your files.

If you have any questions or need additional information please feel free to call me at (408) 735-1550 X24. We appreciate your business

Sincerely,

Alla An

Allan Aks

AA/slh

shell/entech/aasubltr.doc

Hull Development Labs

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • Telephone: (408) 735-1550 (800) 287-1799 • Fax: (408) 735-1554

Chain of Custody/Analysis Work Order

Purchase Order #:

Sampler/Company:

Special Instructions/Comments

Project ID: LOTZ

LAB USE ONLY

No

Samples arrived chilled and intact:

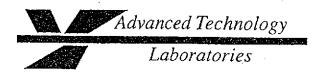
Client: RERS

Address:

Contact:

Telephone #:

		2095 Novn										•			
			Sample In	formation					<u> </u>			d Anal	ysis		
Lab#	Sample ID	Grab/ Composite	Matrix	Date Collected	Time Collected	Pres.	Sample Container	1744 157E,	TP#/c	8270	0.\$ 6	LOF+ Metals			
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69599	W0-6-WS		water		230	12		Y Y	X	K	×	>			
	mw1-6w)	water		1230	(4)	1 liter Ambi		X	. ×		×			
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Reling/By:			· · · · · · · · · · · · · · · · · · ·	Received	Ву:				Date				l'ine		



September 6, 1995

ELAP No.: 1838

Hull Development Labs 525 Del Rey Ave. Ste. E Sunnyvale, CA 94086

ATTN: Mr. Mike Golden

Client's Project #:

Piers

Lab No.:

7794-001/004

Gentlemen:

Enclosed are the results for sample(s) received by Advanced Technology Laboratories and tested for the parameters indicated in the enclosed chain of custody.

Thank you for the opportunity to service the needs of your company. Please feel free to call me at (310) 989 - 4045 if I can be of further assistance to your company.

Sincerely,

Edgar P. Caballero Laboratory Director

EPC/kk

Enclosures

This cover letter is an integral part of this analytical report.

This report pertains only to the samples investigated and does not necessarily apply to other apparently identical or similar materials. This report is submitted for the estimate use of the client to whomit is addressed. Any reproduction of this report or use of this Laboratory's name for advertising or publicity purposes without authorization is prohibited.

Client:

Hull Development Labs, Inc

Attn:

Mr. Mike Golden

Client's Project: Date Received:

Piers 09/01/95

Matrix: Units:

Extraction Method: 3510

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Pg. 1 of 2

EPA Method 8270		
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Date Sam	pled:	<u> </u>		08/30/	95	08/30/	95			ļ				ļ		ļ	
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2-Chiorophenol	10	10	ND		NO		ND			ļ	 	}	 		 	}	· · ·
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Benzyl Alcohol	20	20	ND		ND		ND			-	 					 	
1,2-Dichlorobenzene	10	10	ND		ND	_	ND				 	<u> </u>		 	-	ļ	ļ
2-Methylphenol	10	10	ND		ND		ND			 	 		<u> </u>			-	
bis(2-chloroisopropyl)ether	10	10	ND	12	ND		ND			-				 	 		
n-Nitroso-di-n-propylamine	10	10	ND	12	ND		ND		 -	ļ			-	 	-		
4-Methylphenol	10	10	ND		ND		ND							-			
Hexachloroethane	10	10	ND	-	ND		ND								 		
Nitrobeazene	10	10	ND		ND		ND			<u> </u>							
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bis(2-Chloroethoxy)methane	10	10	ND		ND		ND										
2,4-Dichlorophenol	10	10	ND		ND		ND										
Benzoic Acid	50	50	ND	60	ND		ND										
1,2,4-Trichlorobenzene	10	10	ND	12	ND		ND								ļ <u>-</u>		
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4-Chloroaniline	20	20	ND	24	ND		ND										
Hexachlorobutadiene	10	10	ND	12	ND		ND										
4-Chloro-3-methylphenol	20	20	ND	24	ND	24	ND										
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Hexachlorocyclopentadiene	20	20	ND	24	ND		ND									 	
2,4,6-Trichlorophenol	10	10	ND	12	ND		ND	\longrightarrow									
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2-Chloronaphthalene	10	10	ND	12	ND	_	ND				<u> </u>					i	
2-Nitroaniline	50	50	ND	60	ND	-	ND										
Dimethylphthalate	10	10	ND	12	ND		ND										
Acenaphthylene	10	10	ND	12	ND		ND						-				
2,6-Dinitrotoluene	10	10	ND	12	ND		ND							-			
3-Nitroaniline	50	50	ND	60	<u>(dy</u>	60	ND										

MDL	=	Method Detection Limit
ND	=	Not Detected (Below DLR)
DLR	=	MDL x Dilution Factor

NA = Not Analyzed

Approved/Reviewed By	:
----------------------	---

Yun Pan

Date: 9/7/95

Department Supervisor

Client:

Hull Development Labs, Inc

Attn:

Mr. Mike Golden

Blient's Project: Date Received:

Piers

Matrix:

09/01/95

Units:

Water* ug/l

Extraction Method: 3510

era mensada 276 (Coal'd) 🔌

Pg. 2 of 2

Lab No.: Method Blank 7794-003 7794-004 B9599 B9600 Client Sample I.D.: MDL DLR DLR DLR ANALYTE 10 10 ND 12 ND 12 ND Acenaphthene ND50 ND 60 ND 60 50 2,4-Dinitrophenol ND ND 12 10 10 ND 12 Dibenzofuran ND ND ND 60 50 50 60 4-Nitrophenol ND ND 12 ND 12 2,4-Dinitrotoluene 10 10 ND 12 ND 12 ND 10 10 Fluorene ND 12 ND 12 ND10 10 Diethylphthalate ND. ND 12 4-Chlorophenyl-phenyl ether 10 16 ND 12 **6**0 ND ND ND 60 50 50 4-Nitroaniline 60 ND ND 60 ND 5₩ 50 4,6-Dinitro-2-methylphenol 12 ND 12 ND ND 10 10 n-Nitrosodiphenylamine 10 10 ND 12 ND12 ND 4-Bromophenyl-phenyl ether ND 10 10 NI 12 ND12 Hexachlorobenzene ND ND 60 60 50 50 ND Pentachlorophenol ND 12 ND ND 12 Phenanthrene 10 10 ND 12 ND 12 ND 10 10 Anthracene ND ND 12 ND 12 Di-n-butylphthalate 10 10 ND ND 12 10 10 ND 12 Fluoranthene 12 ND NDND 12 10 10 Pyrene ND 12 ND 12 NDButylbenzylphthalate 10 10 ND 12 ND 10 10 ND 12 Benzo[a]anthracene ND ND 24 ND 24 3,3'-Dichlorobenzidine 20 20 ND ND 12 ND 12 10 10 Chrysene ND ND 12 鰋 12 bis(2-Ethylheryf)phthalate 10 10 ND 12 ND 12 ND 10 10 Di-n-octylphthalate 12 ND 12 ND ND 10 10 Benzo[b]fluoranthene ND12 ND 12 ND 10 10 Benzo[k]fluoranthene 12 ND12 ND 10 10 NDBenzo[a]pyrene ND ND12 ND 12 10 Indeno[1,2,3-cd]pyrene 10 NDND12 ND 12 10 10 Dibenz[a,h,]anthracene ND. ND 12 10 10 ND 12 Benzo[g,h,i]pervlene

MDL = Method Detection Limit ND = Not Detected (Below DLR) DLR = MDL x Dilution Factor

NA - Not Analyzed

Approved/Reviewed By:

Department Supervisor

Date:____9/8/95

The cover letter is an integral part of this analytical report,

Spike Recovery and RPD Summary Report - WATER (ug/1)

!ethod

: C:\HPCHEM\1\METHODS\8270-3.M

ritle

: 8270 TCL

Last Update : Wed Aug 30 11:36:57 1995 Response via : Continuing Calibration

Non-Spiked Sample: SB1328.D

Spike Sample Spike

Duplicate Sample

File ID : SS1329.D

Sample : BLANK WATER MS 11-1ml W085

SS1330.D BLANK WATER MSD 11-1ml W085

Acq Time: 30 Aug 95 12:33 pm

30 Aug 95 1:15 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD .	QC RPD	Limits 8 Rec
Phenol 2-Chlorophenol 1,4-Dichlorobenzene n-Nitroso-di-n-propy 1,2,4-Trichlorobenze 4-Chloro-3-methylphe Acenaphthene	0.0	200 200 100 100 200 100 200	71 131 47 45 59 163 77	66 118 48 41 60 155 73	35 66 47 45 59 81 77	33 59 48 41 60 77 73 46	8 10 2. 9 1 5	42 40 28 38 28 42 31 50	12-110 27-123 36- 97 41-116 39- 98 23- 97 46-118 10- 80
4-Nitrophenol ,4-Dinitrotoluene Pentachlorophenol Pyrene	0.0	100 200 100	88 164 87	81 149 83	88 82 87	81 75 83	8 9 4	38 50 31	24- 94 9-103 26-127

OC Batch #: 958270W085

Reviewed/Approved By: _

Yun Pan

Organics Supervisor

Date: _ 9/7/95

Client:

Hull Development Labs, Inc.

Attn:

Mr. Mike Golden

Client's Project;

Piers

Date Received:

09/01/95

Matrix:

Soil 🏶

Units:

ug/kg

Extraction Method: 3550

who who had a . 5'

Pg. 1 of 2

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Lab	No.:	Metho	d Blank	7794-0		7794-0				 					<u> </u>
Client Sample				B9597		B9598		<u> </u>		1		ļ			
Date San				08/30/5		08/30/						ļ			
QC Ba	tch#:	958270	S084	958270		95827						ļ <u> </u>			
Date Extra		09/05/9		09/05/9		09/05/				 					
Date Anal	lyzed:	09/06/2	95	09/06/		09/06/	95	ļ.—-				<u></u>		<u> </u>	
Analyst In	itials:	SP		SP		SP						<u> </u>			ļ
Dilution F:		1	aleksiya sala sala	1	New 2 111 121	1	T Follooousposi	5.0 500 5.0	Profit radotices	15/9/90/501	1.50.88 (8.18)	l ista	-::::::::::::::::::::::::::::::::::::::		
ANALYTE	MDL	DLR		DLR		DLR	+	0.0003		100,000	\$5000 pre_120	0.4 S B A B C	100.000.000	- 10 0110 - 21 1989	
Phenol	330	330	NE		ND		NO	<u> </u>			 	ļ			
bis (2-Chloroethyl)ether	330	330	NI		ND		ND	 			ļ - —	<u> </u>			
2-Chlorophenol	330	330	NI		ND		ND			<u> </u>		<u> </u>			
1,3-Dichlorobenzene	330	330	NI	+	ND		ND	 			 				
1,4-Dichlorobenzene	330	330	NE		ND		ND				 	 			-
Benzyl Alcohol	660	660	NI		ND		ND				 	 			
1,2-Dichlorobenzene	330	330	NI		ND		ND			-	├─-				
2-Methylphenol	330	330	NE		MD		ND	-		-					
bis(2-chloroisopropyl)ether	330	330	NI		ND		ND				ļ 	-			
n-Nitroso-di-n-propylamine	330	330	NE		ND		ND				·	<u> </u> 			
4-Methylphenol	330	330	NI		ND		ND			-					
Hexachloroethane	330	330	NE		ND	 	ND			<u> </u>					
Nitrobenzene	330	330	NI		ND		ND				 				
Isapharone	330	330	NI		ND		ND			ļ					
2-Nitrophenol	330	330	NL	-	ND		UND								
2,4-Dimethylphenol	330	330	NI		ND		ND				ļ				
bis(2-Chloroethoxy)methane	330	330	NI		ND		ND			<u> </u>	ļ. 				
2,4-Dichlorophenol	330	330	NI	330	ND		ND								
Benzoic Acid	1650	1650	NU	1650	ND		ND	 -							
1,2,4-Trichlorobenzene	330	330	<u>NE</u>	**	ND		ND					ļ.—.–		· · · · · · · · · · · · · · · · · · ·	
Naphthaiene	330	330	NT		ND								<u> </u>		
4-Chloroaniline	660	660	NI		ND	-	ND								
Hexachlorobutadiene	330	330	NE		ND		ND								
4-Chloro-3-methylphenol	660	660	ND	660	ND	-	ND			-	ļ 				
2-Methylnaphthalene	330	330	NE	330	ND							-			
Hexachlorocyclopentadiene	660	660	NI	+	ND		ND				!				
2,4,6-Trichlorophenol	330	330	NE	τ	ND		ND				!				
2,4,5-Trichlorophenol	500	500	ND		ND		ND								
2-Chloronaphthalene	330	330	NE	330	ND	330	ND				ļ <u>-</u>				
2-Nitroaniline	1650	1650	NE	1650	ND		ND			ļ					
Dimethylphthalate	330	330	NE	330	ND	330	ND			ļ <u> </u>					
Acenaphthylene	330	330	NE	330	ND	330	ND								
2,6-Dinitrotoluene	330	330	NE	330	ND	330	ND								
3-Nitroaniline	1650	1650	NE	1650	ND	1650	ND								

MDL = Method Detection Limit
ND = Not Detected (Below DLR)
DLR = MDL x Dilution Factor

NA = Not Analyzed

Approved/Reviewed By:___

21-

Yun Pan

Department Supervisor

Date: 3/7/95

The cover letter is an integral part of this analytical report.

Client:

Huli Development Labs, Inc.

Attn:

Mr. Mike Golden

Client's Project:

Piers

Date Received:

09/01/95

Matrix:

Soft 🧎

Units:

ug/kg

Extraction Method: 3550

Pg. 2 of 2

SEFA Maines \$170 (Seet 9) ...

-	Lab No.;	Matha	d Blank	7794-1		770.4		~- 		T		T		T	T
Client Co	mple LD.:	Macano	o Biank	B9597		7794-4 B9598						 			
ANALYTE	MDL	DLB		DLR		DLR		3.44.0			22:32:03-33	1000		800.000.000	1 1 1 2 2 2 3 3 3 3 3
Accnaphthene	330	330	ND		ND	-	ND		***	354,36			1	100 0000 100 0 mg mg mg	
2,4-Dinitrophenol	1650	1650	ND		ND		ND							<u> </u>	· · · · · · · · · · · · · · · · · · ·
Dibenzofuran	330	330	ND		ND		ND			-	<u> </u>	<u> </u>		 	
4-Nitrophenol	1650	1650	ND		ND	·	ND					†			
2,4-Dinitrotoluene	330	330	ND	330	ND	_	ND				· · · · · · · · · · · · · · · · · · ·			 	
Fluorene	330	330	ND	330	ND	330	ND								† ———
Diethylphthalate	330	330	ND	330	ND	330	ND								
4-Chlorophenyl-phenyl ether	330	330	ND	330	ND	330	ND		· .				i		
4-Nitrozniline	1650	1650	ND	1650	ND	1650	ND								
4,6-Dinitro-2-methylphenol	1650	1650	ND	1650	ND	1650	ND								
n-Nitrosodiphenylamine	330	330	ND	330	ND	330	ND				·				
4-Bromaphenyl-phenyl ether	330	330	ND	330	ND	330	ND								
Hexachlorobenzene	330	330	ND	330	ND	330	ND								
Pentachlorophenol	1650	1650	ND	1650	ND	1650	ND		""						
Phenanchrene	330	330	ND	330	ND	330	ND		i						
Anthracene	330	330	ND	330	ND	330	ND								· · · · · · · · · · · · · · · · · · ·
Di-n-butylphthalate	330	330	ND	330	ND	330	ND								
Fluoranthene	330	330	ND	330	ND	_330	ND								
Pyrene	330	330	DD	330	ND	330	ND								
Butylbenzylphthalate	330	330	ND	330	ND	330	ND								
Benzo[a]anthracene	330	330	ND	330	ND	330	ND								
3,3'-Dichlorobenzidine	660	660	ND	660	ND	660	ND								
Chrysene	330	330	ND	330	ND	330	ND								
bis(2-Ethylhexyl)phthalate	330	330	ND	330	ND	330	ND								
Di-n-octylphthalate	330	330	ND	330	ND	330	ND								
Benzo[b]fluoranthene	330	330	ND	330	ND	330	ND					_			
Benzo[k]fluoranthene	330	330	ND	330	ND	330	ND								
Benzo[a]pyrene	330	330	ND,	330	ND	330	ND								
Indeno[1,2,3-cd]pyrene	330	330	ND	330	ND	330	ND								
Dibenz[a,h,]anthracene	330	330	ND	330	ND	330	ND		T						
Benzo[g,h,i perylene	330	330	ND.	330	ND	330	ND			T			Ţ		

MDL = Method Detection Limit ND = Not Detected (Below DLR) DLR = MDL x Dilution Factor

NA = Not Analyzed

Approved/Reviewed By:

Yun Pan

Department Supervisor

9/7/95

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report - SOIL (ug/kg)

Method

: C:\HPCHEM\1\METHODS\8270-3.M

Title

: 8270 TCL

Last Update : Wed Aug 30 10:34:03 1995 Response via : Continuing Calibration

Non-Spiked Sample:

S01321.D

Spike Sample

6:55 pm

Duplicate Sample

Acq Time:

SS1322.D

29 Aug 95

Sample : 7794-2 MS SOIL E-9/5/95 SO84

SS1323.D

Spike

7794-2 MSD SOIL E-9/5/95 SO84

29 Aug 95 7:37 pm

Sample Spike Spike Dup Spike Dup QC Limits Conc Added Res Res %Rec %Rec RPD % Rec Phenol ND200 160 149 79 35 26- 90 2-Chlorophenol ND200 154 144 77 72 7 50 25~102 1,4-Dichlorobenzene 0.0 100 53 52 53 52 2 27 28-104 n-Nitroso-di-n-propy ND100 58 58 57 57 0 38 41-126 1,2,4-Trichlorobenze 0.0 100 63 64 63 64 2 23 38-107 4-Chloro-3-methylphe ND200 182 164 91 82 10 33 26-103 Acenaphthene ND100 77 73 77 73 5 19 31-137 -Nitrophenol ND200 227 195 113 97 15 50 11-114 2,4-Dinitrotoluene ND 100 87 80 86 78 10 47 28-89 Pentachlorophenol ND200 140 117 70 58 18 47 35-142 Pyrene ND100 91 89 86 83 36 35-142

QC Batch #: 958270S084 ·

Reviewed/Approved By:

Yun Pan

Organics Supervisor

Date: __9/7/95

Client: Hull Development Labs, Inc.

Attn: Mr. Mike Golden

Client's Project: Piers
Date Received: 09/01/95
fatrix: Scill
Jnits: ug/kg
Date Amended: 09/11/95

Colo 500 17 NO 9,5

EPA Method 8240 Lab No.: Method Blank 7794-001 7794-002 139598 B9597 Client Sample I.D.: 08/30/95 08/30/95 Date Sampled: QC Batch #: 958240S2079 958240S2079 958240S2079 Date Analyzed: 09/11/95 09/11/95 09/11/95 RR RRAnalyst Initials: RR Dilution Factor: DLR ANALYTE MDL DLR DLR ND NU ND 5 Chloromethane ND ND 5 ND 5 Vinyl Chloride ND ND 5 5 ND 5 5 Bromomethane ND ND 5 ND 5 5 Chloroethane 5 ND 5 ND 5 NO Trichlorofluoromethane 5 -50 50 ND 50 50 ND Acetone ND 5 ND ND 5 1,1-Dichloroethene 5 ND ND 5 ND Carbon Disulfide 25 ND 25 ND ND 25 25 Methylene Chloride ND 5 ND 5 ND trans-1,2-Dichloroethene ND 5 ND 5 1,1-Dichloroethane 5 ND 5 ND ND ND 5 Chloroform 5 ND ND 5 ND 1,2-Dic. doroethane ND ND 5 5 5 ND Vinyl Acetate 50 ND 50 ND 50 ND 50 2-Butanone ND ND ND1,1,1-Trichloroethane ND. 5 ND ND Carbon Tetrachloride 5 ND ND. 5 ******* Benzene ND 5 ND ND 5 1,2-Dichloropropane ND ND 5 5 ND 'richloroethene ND 5 ND ND Bromodichloromethane ND 5 5 ND ND 2-Chloroethyl Vinyl Ether ND 5 ND 5 5 ND cis-13-Dichloropropene 5 ND ND ND trans-1,3-Dichloropropene 5 ND 5 ND ND 1,1,2-Trichloroethane ND ND 5 ND Dibromochloromethane 5 ND ND 5 NDBromoform 50 ND 50 50 ND ND4-Methyl-2-Pentanone 50 5 5 ND ND 5 Toluene ND 50 ΝĎ 50 50 ND50 2-Hexanone 5 ND 5 5 ND 5 ND Tetrachloroethene ND ND 5 Chlorobenzene 5 51 ND ND 5 ND 5 Ethylbenzene 5 200 5 ND 5 ND Xvlene (Total) 5 ND ND 5 ND 5 Styrene ND 5 ND ND 3,3,2,2-Tetrachloroethane 5 ND 5 ND ND 5 5 1.3-Dichlorobenzene ND ND 1,4-Dichlorobenzene 5 ND

						Additi	onal 8240	Analy	des						
Acrolein	50	50	NA	50	NA	50	NA			<u> </u>	 		 <u> </u>	ļ	
Acrylonitrile	50	50	NA	50	NA	50	NA			<u> </u>	<u></u>	L	 		<u> </u>

ND.

ND

MDL = Method Detection Limit ND = Not Detected (Below DLR).

DLR = MDL X Dilution Factor

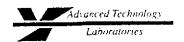
NA = Not Analyzed

1,2-Dichlorobenzene

Department Supervisor

Date: 9/11/75

The cover letter is an integral part of this analytical report



Spike Recovery and RPD Summary Report - SOIL (ug/kg)

Method : C:\HPCHEM\1\METHODS\8240X.M itle : VOA 8240-624 TCL _ast Update : Tue Sep 05 13:31:21 1995 Response via : Continuing Calibration

Non-Spiked Sample: V04851.D

Spike Sample Spike

Duplicate Sample

File ID: VS4857.D

Sample : 7792-001 50 ppb MS 8240 SOIL 7792-001 50 ppb MSD Acq Time: 5 Sep 95 10:53 pm 5 Sep 95 11:24 pm

VS4858.D 7792-001 50 ppb MSD 8240 SOIL

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC RPD	Limits % Rec
1,1-Dichloroethene Benzene Trichloroethene Toluene Chlorobenzene	0.0	50 50 50 50 50	48 49 44 51 45	48 49 44 51 44	97 97 88 100 91	96 98 87 101 88	1 0 1 1 3	23 21 23 21 19	37-166 68-133 65-129 74-136 83-122

OC Batch # 958240S2079

Reviewed/Approved By:___

Date:_ 9/7/95

Yun Pan Organics Supervisor Client: Hull Development Labs, Inc.

Attn: Mr. Mike Golden

Client's Project: Piers
Date Received: 09/01/95
Vatrix: Water

Units:

ug/l

					31		

T a T	i No.:	Math	od Blank	7704	003	7794-	ሀሀፕ	Γ	•	T^{-}		Τ		T	 Т	
Client Sample			JG DIAIIA	B9599		B2600				+		 			 †	
Date San				08/30/		08/30		,		 		 -		+	 +-	
			1V2078		W2078		NV2078			\dagger					 	
Date Anal		09/05/		09/05/		09/05/				-		 			 	
Analyst Ir		+		RR		RR				 					 	·
Dilution F		1		1		1				 	- · ·			†	 	
ANALYTE		DLR	A 888 (64)	DLR	: ::::::::::::::::::::::::::::::::::::	DLR	200.000		80.00000	1.000	10 109 1080	100000	000000000000000000000000000000000000000		3 (3)	1.00000
Chloromethane	5	5	ND	5	ND	5	ND			1						1
Vinyl Chloride	5	5	ND		ND	5	ND			i						
Bromomethane	5	5	ND	5	ND	5	ND					<u> </u>				
Chloroethane	5	5	ND	5	ND	. 5	ND									
Trichlorofluoromethane	5	5	ND	5	ND	5	ND									
Acetone	50	50	ND	50	ND	50	ND				-	i		1		
1,1-Dichloroethene	5_	5	ND	5	ND	5	ND									
Carbon Disulfide	5	5	ND	5	ND	5	ND									
Methylene Chloride	20	20	ND	20	ND	20	ND									
trans-1,2-Dichloroethene	5_	5	ND	5	NID	5	ND									
1,1-Dichloroethane	5	5	ND	5	ND	5	ND									
Chloroform	5	5	ND	5	ND	5	ND									
1,2-Dichloroethane	5	5	ND	. 5	ND	5	ND									
Vinyl Acetate	5	5.	ND	5	ND	5	ND									
2-Butanone	50	50	ND	50	ND	50	ND									
1,1,1-Trichloroethane	5	5	ND	5	ND	5	ND							ļ		
Carbon Tetrachloride	5	5	ND	5	ND	5	ND									
Benzene	5	5	ND	5	103	5	ND									
1,2-Dichloropropane	5	5	ND	5	ND	5	ND									
frichloroethene	5	5	ND	5	ND	5	ND									
Bromodichloromethane	5	5	ND	5	ND	5	ND									
2-Chlaroethyl Vinyl Ether	5	5	ND	5	ND	5	ND									
cis-1,3-Dichloropropene	5	5	ND	5	ND	5	ND			-						
trans-1.3-Dichloropropene	5	5	ND	5	ND	5	ND			l						
1,1,2-Trichloroethane	5	5	ND	5	ND	5	ND									
Dibromochloromethane	5		ND	5	ND	_ 5	ND									
Вготоботт	5	5	ND	5	ND	5	ND ^f								ĺ	
4-Methyl-2-Pentanone	50	50	ND	50	ND	50	ND	Į					Ì			
Toluene	. 5	5	ND	5	ND	5	ND									
2-Hexanone	50	50	ND	50	ND	50	ND		1				i			
Tetrachloroethene	5	5	ND	5	ND	5	ND						Ì			
Chlorobenzene	5	5	ND	5	ND	5	ND									
Ethylbenzene	5	5	ND	5	17	5	ND						ĺ			
Xylene (Total)	5	5	ND	5	21	5	ND									
Styrene	5	5	ND	5	ND	5	ND									
1,1,2,2-Tetrachloroethane	5	5	ND	5	ND	5	ND									
1,3-Dichlorobenzene	5	5	ND	5	ND	5	ND									
1.4-Dichlorobenzene	5	5	ND	5	ND	5	ND						1	$\neg \neg$		
1.2-Dichlorobenzene	5	5	ND	5	ND	5	ND			1				$\neg \neg$		

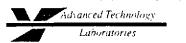
						Addition	al 8240	Analy	1es						
Acrolein	50	50	NA	50	NA	50 !	NA			1				<u> </u>	1
Acrylonitrile	50	50	NA	50	NA	50	NA					I			
NDL = Method Detection Limit															

MDI, = Method Detection Limit
ND = Not Detected (Below DLR).
DLR = MDI, X Dilution Factor

NA = Not Analyzed

Reviewed/Approved By:	37-	Date:	917/95
	Yun Pan		
	Department Supervisor		

The cover letter is an integral part of this analytical report



Spike Recovery and RPD Summary Report - WATER (ug/L)

Method

: C:\HPCHEM\1\METHODS\8240X.M : VOA 8240-624 TCL

"itle

⊥ast Update : Tue Sep 05 13:31:21 1995 Response via : Continuing Calibration

Non-Spiked Sample: VB4844.D

Spike Sample Spike

Duplicate Sample

File ID : VS4855.D

Sample : Blank Water 50 ppb MS 8240 Acq Time: 5 Sep 95 9:50 pm

VS4856.D Blank Water 50 ppb MSD 8240

5 Sep 95 10:21 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC RPD	Limits % Rec
1,1-Dichloroethene Benzene Trichloroethene Toluene Chlorobenzene	0.0	50 50 50 50 50	46 46 44 45 44	46 45 43 43	93 92 88 89 88	92 90 85 86 87	1 2 3 4 2	19 15 16 15 14	49-154 67-128 67-130 74-123 80-122

OC Batch # 958240W2078

Reviewed/Approved By:__

Date: 9/7/95

Yun Pan Organics Supervisor

Hull Development Labs, Inc.

CA ELAP# 1369

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Subcontract Chain of Custody

Subconduct Labo		Dwe Sent	Project Name:	······································	Date Date:	
Advanced Techno	ology	8/31/95	PIERS		9/8/95	
Sample ID and Source	Matrix	Required Analysis	Date Taken	Time Taken	Containers	Pres7
B9597	Soil	8240,8270	8/29/95		Brass tube	
B9598	Soil	8240,8270	8/29/95		Bress tube	
В9599	Water	8240,8270	8/29/95		2X1LAmber 2 x 40ml VOA	
B9600	Water	8240,8270	8/29/95		2X1LAmber 2 x 40ml VOA	
			_			
						

Allen An	Regional By:	wight	8/31/95	Time: 4240PM
Reinspreshed By: Cal Overright	Received By:	Nguyen	9/15/95	Time:
Reference By:	Received By:		(Date:	Time:

Fax results to (408) 735~1554

Environmental Analysis Since 1983

Hull Development Labs

525 Del Rey Avenué, Suite E • Sunnyvale, CA 94086 • Telephone: (408) 735-1550 (800) 287-1799 • Fax: (408) 735-1554

Chain of Custody/Analysis Work Order

Project ID:

Client: PIERS

		I F K.				Proje	ct ID:				LAB USE ONLY				
1	Address:			<u> </u>	Purc	hase Or	der #:						_		
Telep	Contact: Sphone #: Ceceived: E	WY-55	[-1248		umpler/Comp Halsal Decial Instruc		Telep Z comments	hone #;	415		mples a	rrive	No	nner intac	t:
			Sample In	formation						Tolog Ro	equeste	d Anal	ysis		
Lab#	Sample 1D	Grab/ Composite	Matrix	Date Collected	Time Collected	Pres.	Sample Container	1747 1570 1570 15	P/#JJ	8270/	5 \$.0	1-15++ Matris			
	CARSSURT		5011	8(5495	1030	11	283 Bras		- i	•			 	 	
	1945-NULT		1(11	11-50-		11	X				 	 	 	<u> </u>
	GASGUS		water	lt.	1043	/2	HO ml york					 	 		
B>35%	Dispo 21		5011	1 (115		12x3 Brass	×				 		 	-
B9597	wo sney		Soil) 2x3Bres						 	-	ļ
BY538	WO-NWYS	<i>(</i>	t (1150	\ <u>C</u>	11	×				×	ļ	 	
39599	W0-6/W5		water		230	(4)	The Anders	/		<u> </u>	*	<u> </u>	ļ	 	
5960	nous - Gus	-	water		1230	(4)	1 liter Anders 1 liter Amber	4	X	<u></u> X_	Υ	<u>×</u>	-		
Reling By:	1763			Received I	By: Mu	1 (<u>4 </u>	Mg LI VOA	<u> </u>	Date Date	× 8/30/	95		ime	440	
mennde tij .				Received E	By:				Date			Т	ime		

Piers Environmental Services 3131 South Bascom Ave., Suite 5 Campbell, CA 95008 Attn: Stu Solomon

Date:	9/11/95
Date Received:	8/30/95
Date Analyzed:	9/6/95
Project:	
Sampled By:	ERS

Certified Analytical Report

Soil Sample Analysis:

Sample ID	Sample	Sample	Lab#	DF	TPH-	Benzene	Toluene	Ethyl	Xylene
•	Date	Time	·		Gas			Benzene	
Gas-SW@7'	8/29/95	1030	B9593	1	ND	ND	ND	0.014#	
Gas-NW@7'	8/29/95	1100	B9594	1	7.0	0.012	0.014	0.08	1.04
DISP@2'	8/29/95	1115	B9596	1	ND	ND	ND	ND	0.073

- 1. PQL=Dilution Factor x MDL
- 2. Analysis performed by Hull Development Labs, Inc. (CAELAP #1369)

Summary of Methods and Detection Limits:

	TPH-Gas	Benzene	Toluene	Ethylbenzene	Xylenes
EPA Method #	8015M	8020	8020	8020	8020
Units *	mg/kg*	mg/kg *	mg/kg	mg/kg *	me/kg y
MDL	1.0 mg/kg	0.005 mg/kg	0.005 mg/kg	0.005 mg/kg	0.005 mg/kg

Michael N. Golden, Lab Director

DF=Dilution Factor
MDL=Method Detection Limit

PQL=Practical Quantitation Limit ND=None Detected at or above PQL

Piers Environmental Services 3131 South Bascom Ave., Suite 5 Campbell, CA 95008 Attn: Stu Solomon

Date:	9/11/95
Date Received:	8/30/95
Date Analyzed:	9/6/95
Project:	
Sampled By:	ERS

Certified Analytical Report

Water Sample Analysis:

Test	GAS-GWS	Units	MDL	EPA Method#			
Sample Matrix	Water	1					
Sample Date	8/29/95						
Sample Time	1045						
Lab#	B9595						
DF-Gas/BTEX	100						
TPH-Gas	43,000	μg/liter	50.0 µg/l	8015M			
Benzene	300	μ <u>c</u> /liter	0.5 µg/l	8020			
Toluene	360	μg/liter	0.5 μg/l	8020			
Ethyl Benzene	1,400	. μg/liter	0.5 μg/l	8020			
Xylenes	10,000	μg/liter	0.5 μg/l	8020			

1. PQL=DF x MDL

2. Analysis performed by Hull Development Labs, Inc. (CAELAP #1369)

Michael N. Golden, Lab Director

DF=Dilution Factor
MDL=Method Detection Limit

PQL=Practical Quantitation Limit ND=None Detected at or above PQL

Piers Environmental Services 3131 South Bascom Ave., Suite 5 Campbell, CA 95008 Attn: Stu Solomon

Date:	9/11/95
Date Received:	8/29/95
Date Analyzed:	9/7/95
Project:	
Sampled By:	ERS

Certified Analytical Report

Soil Sample Amalysis:

Test	WO-SW@7'	WO-NW@9.5'	Units	MDL	EPA Method#
Sample Matrix	Soil	Soil	!		
Sample Date	8/29/95	8/29/95			
Sample Time	1115	1150			
Lab#	B9597	B9598			
TRPH	1,100	3,300	i mg/kg	50.0 mg/kg	418.1
Semivolatile Organics	ND	2,795	μg/kg	See Report	8270
Volatile Organics	9.1	396.3	∌ μg/kg	See Report	8240
DF-Diesel	1	l			
TPH-Diesel	9.4	56	nng/kg	1.0 mg/kg	8015M
DF-Gas/BTEX	1	1	1 00		·
TPH-Gas	2	<u>.</u> 2	🥻 mg/kg	1.0 mg/kg	8015M
Benzene	0.0091	0,063	mg/kg	0.005 mg/kg	8240
Toluene	ND	0.0093	mg/kg	0.005 mg/kg	8240
Ethyl Benzene	ND	0,171	mg/kg	0.005 mg/kg	8240
Xylenes	ND	0.055	mg/kg	0.005 mg/kg	8240

- 1. PQL=DF x MDL
- 2. EPA 8240 & EPA 8270 analysis performed by Advanced Technology Laboratories (CAELAP #1838); see ATL report for individual compounds, detection limits, and analysis dates
- 3. Remaining analysis performed by Hull Development Labs, Inc. (CAELAP #1369)

Michael N. Golden, Lab Director

DF=Dilution Factor MDL=Method Detection Limit PQL=Practical Quantitation Limit
ND=None Detected at or above PQL

Piers Environmental Services 3131 South Bascom Ave., Suite 5 Campbell, CA 95008 Attn: Stu Solomon

Date:	9/11/95
Date Received:	8/29/95
Date Analyzed:	9/6/95
Project:	
Sampled By:	ERS

Certified Analytical Report

Soil Sample Analysis:

Test	WO-SW@7'	WO-NW@9.5'	Units	MDL	EPA Method #	
Sample Matrix	Soil	Soil		······································		
Sample Date	8/29/95	8/29/95				
Sample Time	1115	1150				
Lab #	B9597	B9598				
Cadmium	ND	ND	mg/kg	0.5 mg/kg	7130	
Chromium	24	2.7	mg/kg	0.5 mg/kg	7190	
Lead	11	12	mg/kg	0,5 mg/kg	7420	
Nickel	36	43	mg/kg	0.5 mg/kg	7520	
Zinc	3 7	34	mg/kg	0.5 mg/kg	7950	

Analysis performed by Hull Development Labs, Inc. (CAELAP #1369

Michael N. Golden, Lab Director

MDL=Method Detection Limit

ND=None Detected at or above MDL

Hull Development Laba Inc. Client: Nir. Mika Golden Attn:

Client's Project: Piers Date Received: 89/01/95 Matrix:

Soil 200 Units: ug/kg

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I.o.	No.:			7794	001	7794-	003 /									L	
Client Sampl	r LD.:	••		B959	7 /	8959	89593										
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Chloromethane	5						ND		<u> </u>	ļ	ļ		<u> </u>		<u> </u>	<u> </u>	
Vinyt Chleride	- 5	5.			+		ND				ļ <u>.</u>		<u> </u>	<u> </u>			J
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Chlorosthane	5	5		5			ND.	-,	ļ <u></u>	 	ļ <u>.</u>		<u>ļ </u>	-	-	<u> </u>	↓
Trichlorofluoromethane	5		ND.	**			ND			·		Ļ	<u> </u>	 		- —	<u> </u>
Acctone	50	50	, NO	50	ND	_	1.00				ļ	-	<u> </u>		<u> </u>	-	
1,1-Dickleroethene	- 5		ND		ND		MD	<u>·</u>		<u> </u>				⊥		_	
Carbon Disulfide	5		ND	5	.MD						<u> </u>		<u> </u>		<u> </u>	4	ļ
Methylene Chloride	2.9	- 20	לנוא	20	ND	20	ND ND						L	<u> </u>	<u>!</u>	<u> </u>	↓
trans-1.2-Dichloroethene	5_	. 5	ND		מא		<u>TM</u>								<u>!</u>	<u>.</u>	ļ
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13-Dicaloryethane	5	:	ND.	5	7.0	5	NIX	·				Ļ		 -	J	 	<u>;</u>
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2-Butanone	50	50	ND	.50	, in	50	ND					!		<u> </u>		<u> </u>	<u> </u>
1.1.1 Trichloroethane	5	5	ND	5	ND.	5_	ND							↓	<u>!</u>		
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cis-1,3-Dichloropropens	5 !		ND	5	NID:	5 !	מא	<u>i</u>						1	<u> </u>		
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Bromoform	5	5 :	ND	5	<u> ND</u>	<u> </u>	ND		!						i		
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,122-Teirschloraethane	5	- 5	ND	5	ND	5	ND	i	ĺ								
3-Dichiorobenzene	5	5	ND	5	NIX	5 !	ND.	1		1	i	 		1	<u>i</u>		
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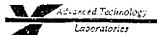
MDL = Method Detection Limit ND = Not Detected (Below DLR). DLR = MDL A Dilution Factor

NA - * Net Analyzed

Residued Approved By: __

Department Supervisor

The contented is an assignal part of the analytical region



Client:

Hull Development Labs, Inc.

Atta:

Mr. Mike Colden

Client's Project:

Date Received:

09/01/95

Piers

Matrix.

Unio:

Extraction Method: 3550

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Pg. 1 of 2

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MDL = Method Detection Limit ND = Not Defected (Below DLR)

DLR = MDL x Dilution Factor NA

Approved/Reviewed By:

Yun Pan Department Supervisor 9/7/95

The cover letter is an integral part of this analytical report.

Client:

Hull Development Labs, Inc.

Attn:

Mr. Mile Colden

Client's Project:

Piers

Date Received: Matrix:

09/01/95 Soil

Units

ար/եր Extraction Method: 3530

Pg. 2 of 2

EPA Method \$270 (Contd)

	Lab No.:				<u> </u>		1.092	<u>".</u> . ,	 		~~ †	· ·		-		-f- ·			
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anaeytr	MDF	DIR		DUR	Market S			N		412012	N 1	2000	** BOOK - 10 200		1	1	~ · · · · · · · · · · · · · · · · · · ·	(
Acces pathers	330	330	ND	:		1:	30			 				 	<u> </u>		· · · · · · · · · · · · · · · · · · ·	i	
2,4-Dinitrophenol	1650		ND				50	N	1	\vdash	}			}	† -	j			
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n-Nitroposiphenylamine	330	330	ŇΩ	_			330	<u> </u>		·†				†		Τ.			
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Di-n-butyiphthalate	330	330	ND				130	N	<u> </u>				<u></u>	1	<u> </u>	<u> </u>		 	
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3.31-Dichlorobenzidine	650	+	ND	660	1	מא	560 j	N	<u></u>	1			<u></u>	-	<u> </u>	+		į <u>. </u>	
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indeno[1.3.3-cd]pyrene	330	330		330	<u> </u>	9	330	_ N	-	<u>i</u>	!		<u>Ļ</u>		-			 	
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Benzolgh,ilperylene	330		N	330		ND	330	N)	\perp			<u> </u>	· 	<u>:</u>			1	

MDL = Method Detection Limit NO = Not Detected (Below DLR)

DLR = MDL x Dilution Factor NA × Not Analyzed

Yun Pan

Department Supervisor

9/7/95 Date:

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report - WATER (ug/L)

Method

: C:\HPCHEM\1\METHODS\8240X.M

Title : VOA 8240-624 TCL Last Update : Tue Sep 05 13:31:21 1995

Response via : Continuing Calibration

Non-Spiked Sample: VB4844.D

Spike Sample Spike

Duplicate Sample

File ID : VS4855.D

| VS4856.D

Sample : Blank Water 50 ppb MS 8240

Blank Water 50 ppb MSD 8240

Acq Time: 5 Sep 95 9:50 pm

5 Sep 95 10:21 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC RPD	Limits % Rec
1,1-Dichloroethene Benzene Trichloroethene Toluene Chlorobenzene	0.0	50 50 50 50	46 46 44 45 44	46 45 43 43	93 92 88 89 88	92 90 85 86 87	1 2 3 4 2	19 15 16 15 14	49-154 67-128 67-130 74-123 80-122

QC Batch # 958240W2078

Reviewed/Approved By:__

Date: 9/7/95

Yun Pan Organics Supervisor Spike Recovery and RPD Summary Report - SOIL (ug/kg)

: C:\HPCHEM\1\METHODS\8240X.M Method

: VOA 8240-624 TCL

Last Update : Tue Sep 05 13:31:21 1995 Response via : Continuing Calibration

Non-Spiked Sample: V04851.D

Spike Spike

Duplicate Sample Sample

File ID : VS4857.D

VS4858.D 7792-001 50 ppb MSD 8240 SOIL Sample : 7792-001 50 ppb MS 8240 SOIL Acq Time: 5 Sep 95 10:53 pm

5 Sep 95 11:24 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC RPD	Limits % Rec
1,1-Dichloroethene Benzene Trichloroethene Toluene Chlorobenzene	0.0	50 50 50 50	48 49 44 51 45	48 49 44 51 44	97 97 88 100 91	96 98 87 101 88	1 0 1 3	23 21 23 21 19	37-166 68-133 65-129 74-136 83-122

OC Batch # 958240\$2079

Date: 9/7/95 Reviewed/Approved By:

> Yun Pan Organics Supervisor

Spike Recovery and RPD Summary Report - SOIL (ug/kg)

Last Update : Wed Aug 30 10:34:03 1995

Response via : Continuing Calibration

Non-Spiked Sample: 501321.D

Spike Sample Spike

Duplicate Sample

Sample : 7794-2 MS SOIL E-9/5/95 SO84 Acq Time: 29 Aug 95 6:55 pm

File ID : SS1322.D

| SS1323.D | 7794-2 MSD SOIL E-9/5/95 SO84 | 29 Aug 95 7:37 pm

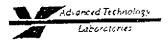
Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPĎ	QC RPD	Limits % Rec
Phenol 2-Chlorophenol 1,4-Dichlorobenzene n-Nitroso-di-n-propy 1,2,4-Trichlorobenze 4-Chloro-3-methylphe Acenaphthene 4-Nitrophenol 2,4-Dinitrotoluene Pentachlorophenol Pyrene	0.0	200 100 100 100 200 100 200 100 200 100 200 100	160 154 53 58 63 182 77 227 87 140	149 144 52 58 64 164 735 190 1189	79 77 53 57 63 91 77 113 86 70 86	74 72 52 57 64 82 73 97 78 58	7 7 2 0 2 10 5 15 10 18 3	35 50 27 38 23 33 19 50 47 47 36	26-90 25-102 28-104 41-126 38-107 26-103 31-137 11-114 28-89 35-142 35-142

QC Batch #: 9582705084

Reviewed/Approved By:

Organics Supervisor

Date: 9/7/95



QUALITY CONTROL RESULTS SUMMARY FOR GASOLINE ANALYSIS

GASOLINE

QC sample No.: BLANK SPIKE & DUP Date analyzed: 08-31-95

Matrix: WATER

Units: ug/L

Dilution factor:

COMPOUND			MS ug/L		MSD ug/L	MSD PR	RPD	QC LIMITS (ADVISORY) RPD PR
GASOLINE	226	¦. 0	220	97	197	! ! 87	11	25 50-150

= Spike sample MS

MSD = Spike sample duplicate

SR = Sample result

SA = Spike added

= Not calculated NC

= Out of limits

 $RPD = 100 \times (MS-MSD)/((MS+MSD)/2)$

 $PR = 100 \times ((MS \text{ or } MSD) - SR)/SA$

QUALITY CONTROL RESULTS SUMMARY FOR DIESEL ANALYSIS

QC sample No.: BLANK SPIKE & DUP

Date analyzed: Date analyzed: 09-07-95 Date extracted: 08-28-95

09-07-95

QC batch:

DS089507

SOIL Matrix:

Units: mg/Kg

Dilution factor:

COMPOUND	SA mg/Kg	SR mg/Kg	 MS mg/Kg	MS PR	MSD mg/Kg	MSD PR	 RPD	QC LIMITS (ADVISORY) RPD PR
DIESEL	25	 0	21	84	21	 84	0	25 50-150

MS = Spike sample

MSD = Spike sample duplicate

SR = Sample result

SA = Spike added

NC= Not calculated

** = Out of limits

 $RPD = 100 \times (MS-MSD)/((MS+MSD)/2)$

 $PR = 100 \times ((MS \text{ or } MSD) - SR)/SA$

QUALITY CONTROL RESULTS SUMMARY BTEX

QC sample No.: BLANK SPIKE & DUP Date analyzed: 08-31-95

Matrix: WATER

Units: ug/L Dilution factor: 1

COMPOUND	¦ SA ug/L	SR ug/L	 MS ug/L	MS PR	•	 MSD PR	•	(ADV	IMITS (ISORY) PR
BENZENE	20	0	19	95	19	95	0	25	50-150
TOLUENE	20	0	20	100	1.9	95	5	25	50-150

MS = Spike sample -

MSD = Spike sample duplicate

SR = Sample result

SA = Spike added

NC = Not calculated

** = Out of limits

 $RPD = 100 \times (MS-MSD)/((MS+MSD)/2)$

 $PR = 100 \times ((MS \text{ or } MSD) - SR)/SA$

Hull Development Labs, Inc.

525 Del Rey Avenue, Suite E Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: SM5520F/EPA 418.1

QC Batch: 95083

Date Analyzed:

8/28/95

Matrix: Soil Units: mg/kg

PARAMETER	SA mg/kg	SR mg/kg	MS mg/kg	MS PR	MSD mg/kg	MSD PR	RPD	QC LIMITS RPD	PR
TRPH	50	0	43	86	45	90	5%	25	50-150

Definition of Terms:

SA: Spike Added

SR: Sample Result

MS: Matrix Spike Result

MSD (PR): Matrix Spike % Recovery

MSD: Matrix Spike Duplicate Result

MSD (PR): Matrix Spike Duplicate % Recovery

RPD: Matrix Spike Recovery % Variance

LAB DIRECTOR:

M. Golden

QUALITY CONTROL RESULTS SUMMARY

METHOD: Flame Atomic Absorption

QC Batch #: 95083

Matrix: Soil

Date Analyzed: 8/25/95 Extraction Method: TTLC

Units: mg/kg

PARAMETER	Method #	SA mg/kg	SR mg/kg	MS mg/kg	MS %R	MSD mg/kg	MSD %R		QC LIMITS %R
Antimony	7040	4.9	2.0	6.2				Į.	150
ı Barium	7080	23.8	15.8						150
Beryllium	7090	15.2	0.0	14.0					150
Cadmium	7130	9.0	0.0	9.3					150
Chromium	7190	16.7	17.3í	29.3	72%				150
Cobalt	7200	10.1	7.2^{1}_{1}	20.5	132%	20.0			150
Copper	7210	19.6	23.4	42.5	97%	40.0	85%	1	150
Lead	7420	16.2	19.1	36.5	107%	35.0			150
Molybdenum	7480	9.4	0.0	8.5 i	90%	8.3	88%	50-	150
Nickel	7520	13.5	23.4	36.0	93%	35.0	86%	50-	150
'Silver	7760	6.51	0.0	7.1i	108%	6.9	106%	50-	150
/hallium	7840	12.7	0.0	7.0	55%	7.1	56%	50-	150
!Vanadium	7910	9.4	0.0	8.1 ¹	86%	8.0¦	85%	50-	150
Zinc	7950	19.9		100.5	110%	96.0	88%	50-	150

Definition of Terms:

na: Not Analyzed in QC batch

SA: Spike Added SR: Sample Result MS: Matrix Spike Result

MS (%R) Matrix Spike % Recovery

MSD Matrix Spike Duplicate Result

MSD (%R) Matrix Spike Duplicate % Recovery

LAB DIRECTOR:

M. Golden

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Piers Environmental Services 3131 South Bascom Ave., Suite 5 Campbell, CA 95008 Attn: Stu Solomon

Date:	9/11/95
Date Received:	8/30/95
Date Analyzed:	9/6/95
Project:	
Sampled By:	ERS

Certified Analytical Report

Water Sample Analysis:

Test	MIO WES	WINI-GWE	Units	MDL	EPA Method#
	<u> </u>				P
Sample Matrix	Water	Water	į.		
Sample Date	8/29/95	8/29/95			
Sample Time	230	1230			
Lab #	B9599	B9600			
TRPH	390	2.9	g mg/liter	0.50 mg/l	418.1
Volatile Organics	141	ND	μg/liter	See Report	8240
Semivolatile Organics	57	ND	μg/liter	See Report	8270
DF-Diesel	1	1			
TPH-Diesel	600	ND	μg/liter	50.0 μg/l	8015M
DF-Gas	1000\$	1			
TPH-Gas	ND	ND	μg/liter	50,0 μg/l	8015M
Велгене	103	ND	μg/liter	5.0 μg/l	8240
Toluene	ND	ND	μg/liter	5.0 μg/l	8240
Ethyl Benzene	17	ND	μg/liter	5.0 μg/l	8240
Xylenes	21	ND	μg/liter	5.0 μg/l	8240

- 1. PQL=DF x MDL
- 2. Sample diluted for TPH-Gasoline analysis due to matrix interferences
- 3. EPA 8240 and 8270 analysis performed by Advanced Technology Laboratories (CAELAP #1838); see ATL report for individual compounds and detection limits
- 4. BTEX analysis performed by EPA method 8240 due to matrix interferences using EPA method 8020
- Remaining analysis performed by Hull Development Labs, Inc. (CAELAP #1369)

Michael N. Golden, Lab Director

DF=Dilution Factor MDL=Method Detection Limit PQL=Practical Quantitation Limit
ND=None Detected at or above PQL

525 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (408) 735-1554

Piers Environmental Services 3131 South Bascom Avc., Suite 5 Campbell, CA 95008 Attn: Stu Solomon

Date:	9/11/95
Date Received:	8/30/95
Date Analyzed:	8/31/95
Project:	
Sampled By:	ERS

Certified Analytical Report

Water Sample Analysis:

~ Vonestie el

Test	WO-WGS	MW1-GWS	Units	MDL	EPA Method#
Sample Matrix	Water	Water			
Sample Date	8/29/95	8/29/95			
Sample Time	230	1230			
Lab #	B9599	B9600			-
Cadmium	ND	ND	mg/liter	0.05 mg/l	213.1
Chromium	ND	ND	mg/liter	0.05 mg/l	218.1
Lead	ND	ND	mg/liter	0.05 mg/l	239.1
Nickel	0.085	ND	mg/liter	0.05 mg/l	249.1
Zinc	ND	ND	mg/liter	0.10 mg/l	289.1

Analysis performed by Hull Development Labs, Inc. (CAELAP #1369)

Michael N. Golden, Lab Director

MDL=Method Detection Limit

ND=None Detected at or above MDL

Environmental Analysis Since 1983

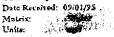
Client:

Hull Development Labs, Inc.

Attn:

Mr. Mike Golden

Cilent's Project: Piers



- Will Domeatic Well.

				السب				Jan 18	Ž.							-	
Lab	No.	Metho) Bbak	77944	003	7794	90±			 		ļ	····			-	
Client Sample	LD.:			B9595	<u></u>	B9600	<u> </u>					1		-}		ļ	
Date San		<u> -</u>		08/30/	95	08/30/	· · · · · · · · · · · · · · · · · · ·			ļ		ļ					
QC Bu	tch #:	95834 <u>7</u>	V2078	95524	VVZ078		NY2078			ļ		<u> </u>		-}			
Date Anal	yzed:	09/05/9	<u> </u>	09/05/	95	0.9/05/	98			ļ		<u> </u>		↓		 	
Anshri le	itials:	RR_		RR_	-	RR	, ,			ļ		<u> </u>				 	
Dilution Fa		1_1_		1		1 1	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,			<u> </u>	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	To be seen			of Association in	1 5 2 3 5	gyarar d
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Vinyl Chloride		5	NO		NE							ļ	ļ	 -	 	ļ	:
Bromoniethane	5	5	<u></u>							1		<u>i </u>	ļ			-	ļ -—
Chlorocthine		\rightarrow	<u>ND</u>		LAD			_,		ļ	<u></u>	1	ļ			<u> </u>	 ,
Trichlorofluoromethane	_5		ND.	5	ND ND	5	<u>ND</u>		L	<u> </u>		1	Ļ. <i>.</i> —	<u> </u>	ļ <u> </u>	ļ	ļ <u>.</u>
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1,1-Dichloroethene	5	<u> </u>	ממן	5	ND	-	ND			ļ	ļ	ļ	Ļ	1	1	Ļ	
Carbon Disuifide	5	=	ND		ND		ND			<u> </u>	<u> </u>		<u> </u>	<u> </u>	·}	 	
Methylene Chleride	20	30	ΝD				<u> ND</u>				ļ — · · · ·	ļ	 	<u> </u>	 		:
trans-12-Dichloroethene	5	5	NĐ	_	ND.		NID			ļ	Ļ—		1	 	 	 -	
1.1-Dichloraethans	5	_5	ND	5	מא	-	ND			Ļ	<u> </u>	<u> </u>	<u> </u>	ļ	ļ	;	}
Chieroferm	5	5	ND	- 5	מא:					<u> </u>	i ——	<u> </u>			<u> </u>	 	!
1.2-Dichleroethane	5		ND	. 5	מא	5	NU			<u> </u>	<u> </u>	↓ .—			<u> </u>	;	
Vlnyi Acrtate	5	. 5	ND	5	NO	5				Ļ. ~	ļ	ļ	ļ—	 	<u>; </u>	 	ļ
2-Butabone	50	50	ИD	50	םא		, NIX			<u> </u>	ļ-—	ļ <u>.</u>	ļ				<u></u>
1,1,1-Trichloroethans	5	5	עא	. 5	ND		ND					<u> </u>	Ļ	!	!	L	ļ. -
Carbon Tetrachloride			ND	5	ND		_ ND									<u> </u>	ļ · . <u> </u>
Benzene	5	5	ND	5	103	F. + 5	NU					ļ —	·	 	ļ ·	<u> </u>	<u>!</u>
I,2-Dichleropropane	5		ND	5	מא	- 5	<u>ND</u>			Ļ		<u> </u>	<u> </u>	1	<u> </u>		ļ .
Trichloroethene	5.	5	ND	5	ND		ND	إحدوس		<u> </u>	<u> </u>	<u> </u>		 	!	 	 -
Aromodichloromethane	5_		ND	. 5	ND		פיא			· • • •		 		├	!	<u> </u>	 _
2-Chloroethyl Vinyl Ether	5	5	מא	5	מא		ND					i		-	: ,	-	<u> </u>
ris-13-Dichloropropens	5	5 !	NO	5			ND			-		ļ,	<u> </u>	 	!		<u> </u>
trans-1,3-Dichloropropene	5	3 :	ND,		ND		ND	,				<u> </u>	!	 	. <u></u>	!	<u></u>
1,1,2-Trichioroethane	5	<u>\$</u> ;	ND		עַע יי		ND					ļ <u>—</u>	1	i	<u>i</u>	·	
Dibramochloromethane	5		<u>ND</u>		NTO		ND					<u> </u>	<u>_</u> <u>.</u>	<u> </u>		<u>'</u>	
Brumoform	5_		ON.	5	<u></u>	5	ND/				L		<u> </u>	1	<u> </u>		<u> </u>
4-Methyl-2-Pentanone	50	50	ND	50	ND	50	ND						ļ	ļ	.		
Tolucing	5	5]	ND	- 5	.000			!		<u> </u>			L	<u> </u>			
2-Hexanone	50	50.	NO	50	<u>></u>	50	\rightarrow	!				<u> </u>			<u>:</u>	}	
Tetrachloroethene		5	ND.		ND	5					<u> </u>		ļ	· · · · · · · · · · · · · · · · · · ·		
Chlorobensene	5			5	ND.	5 :				<u> </u>		<u> </u>		_	ļ		
Ethylbenzene	- 5		<u>vin</u>	5	15			!						ļ	•		
Xvlene (Total)	5		סא				ND					<u></u>		-	:	<u>-</u>	j
Styrene	5		ND		V.D.		ND									i	
1.1.2.2-Tetrachlorocthane	5	5	מת	5.	ND.		ND [†]					·i		!			
1.3.Dichlorobenzene	5	5	ND	. 5	44											:	i
1.+Dicblorobenzene	5!	. 5	ND	5	ND		ND.										
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Acrylenitrile	50 . 5	58 N.	sni	NA S	50 NA-		1 1		<u> </u>		<u> </u>	

MDL = Method Detection Limit ND = Not Detected (Below DLR): DLR = MDL X Dilution Factor

NA = Not Acalyzed

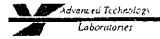
Designed Appeared	Re.	

Yun Pan

Department Supervisor

Date: 9/7/95

The cover letter is an energial part of this are years' report.



Client

Hull Development Labs, Inc.

Attn:

Mr. Mike Golden

Client's Project: Date Received:

Matrix Units:

Extracden Method: 3510

210 demente

Pg. 1 of 2

	Lab No.:	Metho	d Blank	7794.1	003	7794.	004			1	,	7		1		1	
Client Sar	mple LD.:			E9599		B960		† ··-·-		†	 .	†	· - · · · · · · · · · · · · · · · · · ·	† 		1	
Date	Sampled:			03/30/	95	08/30	93	-		\top		1		;		ì	
go	Betch #:	95827	680V70	95827	0VV085	95827	014'035	1		1				1		 	********
Date I	intracted;	09/06/	95	09/06/	95	09/06	95							1			
	Analyzed:	09/07/	95	09/07/	95	09/07	95							(1	
		5P		\$P		5 P		<u> </u>				!				i.	
Dilutio	n Factor:	1	······································	1.1	FTF	1.2		1		1							
ANALYTE				DLR			Carlon and the self	of the stay	20,000,000			13.			graph de la di graph de la graph graph de la graph de	ieses:	18.7.00
Phenol	10	10	ND		ND					<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	Ĺ		
bls (2-Chloroethyl)ether	10		ND		ND					ļ	ļ <u></u> -	<u> </u>	İ		! +	Ĺ	Ĺ
2-Chlorophenol	. 10	10	ND		<u> M</u> D	_12			ļ								<u> </u>
1,3-Dictiorobenzene	10	10	ND		ND	12	ND		<u> </u>								ł
1,4-Dichiorobenzene	10	10	NO	13	ND	12	ND		<u> </u>		ļ						
Benzyl Alcohol	20	20	ND	24	ND	24	NO		<u> </u>		ļ						
1,2-Dichtornhenzene	10	10	NO.	12	ND ND	12	ND		<u> </u>					İ			
2-Methylphenol	10	10	ND	12	ND	12	KUN										
bis(3-chlorolsapropy))ether	10	10	ND	12	ND	12	ND										
n-Nitroso-di-n-propylamine	10	10	ND	12	ND	17	ND								<u></u>	!	,
4-Methylphenol	10	10	ND	12	ND	12	ND										
Hexachloroethane	1 10	10	ND	12	ND	12	ND			-	- 						
Nitrobenzene	10	10	ND ND	12	ND	12	ND ND						<u> </u>	٠			
Isophorone 2-Nitrophonol	10	10	 +	12	ND	12					í		- !		!	<u>i</u>	
2-intropacnoi 2,4-Dimethylphenol	10	10	ND GN	12	ND ND	12	ND NT										
bis(2-Chloruethoxy)methane	10	10	ND	12	מלא	12					—~ 						
2,4-Dichlorophenol	10	10	ND	12	NT:					إإ			<u>:</u>				
Benzole Arid	: 50!	50	ND	60	ND	12 60	ND ND						·				
1,24-Trichlorobenzene	10	10	ND	12	······································	12	ND					1	<u>:</u>	\rightarrow			
Naubibalone	10.	10	ND	12		12	ND						-				
- Chiorogniline	20	20	ND	24		24	ND	·— ;			1		1				
Hexachlorobutadiene	10	10	מא	12	ND	12	מא	- 				-		- :		· ·	;
I-Chloro-J-methylehenol	20:	29	ND	24	3FD	24	ND:	<u>+</u>	<u>-</u>	÷			!	;		}	
-Mithyinaphthalene	10	10	NO	13	(ii)	42	ND	· 		-+		<u>i</u>				;	·-··
Jemchlorocyclopentadiene	20	20	ND	24	ND	24	ND		 			~ <u>-</u>	+				 ;
4.6-Trichteraphenol	10	10	NE	12	ND.	12	ND							<u>i</u>			 i
4.5-Trichloruphenoi	15	15 /	ND	18	ND	18	ND		i	1	- i		——·.}·	···· <u>!</u>			
-Chloronaphthaleve	10	10	ND	12	סא	12	ND		ī	 +							
-Nitroanillae	50	50	ND	60	ND	60			+	 †-				<u>:</u>		~	
)imethylphthalate	10	10	ND	12	ND.	12	ND		+		i	¦	¬-· 	-+			
cenaphthylene	10	10	ND	12	ND.	12	ND			- -	 	- i	- 1	1	\longrightarrow	<u>.</u>	
.6-Dinitrotoluene	10:	10	ND	12	ND.	12		• • •		-		\dashv		- 1			∤
-Nitroaniilne	50	50	ND	60	NDi	60	ND			<u>-</u> -		—-}·					

MCL = Method Detection Limit
ND = Not Detected (Below DLR)
DLR = MCL x Dilution Factor
NA = Not Analyzed

Approved/Reviewed By:____

Yun Pan

Department Supervisor

Date: 9/7/95



Hull Development Lubs, Inc. Client

Attn:

Mr. Miste Golden

Cilent's Project; Piers 09/01/95 Date Received:

Matrix Units:

Water 10g/1

Juno ((((Win . 3)

Pg. 2 of 2

	Lab No.;	Method	Blank	7794-003		77940	04/	_1		_}-		 	<u> </u>	 -			
Client S	ample I.D.:			139599		1 89600		<u>.</u>	************	-	ere in march de la comp	1	1 10 10 10			1 30 M	Francis:
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MDL = Method Detection Limit ND = Not Detected (Below DLR)

DUR = MDL x Dilution Factor

NA =: Not Analyzed

Approved/Reviewed By:

Yun Pan

Department Supervisor

9/8/95

The cover letter is an integral part of this analytical report.

Spike Recovery and RPD Summary Report - WATER (ug/1)

Method

: C:\HPCHEM\1\METHODS\8270-3.M

Title

: 8270 TCL

Last Update : Wed Aug 30 11:36:57 1995 Response via : Continuing Calibration

Non-Spiked Sample: \$B1328.D

Spike

Spike

Duplicate Sample Sample

Sample : BLANK WATER MS 11-1ml W085

File ID : \$\$1329.D

\$\$1330.D

BLANK WATER MSD 11-1ml WO85

Acq Time: 30 Aug 95 12:33 pm

30 Aug 95 1:15 pm

Compound	Sample Conc	Spike Added	Spike Res	Dup Res	Spike %Rec	Dup %Rec	RPD	QC RPD	Limits Rec
Phenol	ND	200	71	66	35	33	8	42	12-110
2-Chlorophenol	ND	200	131	118	66	59	10	40	27-123
1,4-Dichlorobenzene	0.0	100	47	48	47	48	2	28	36- 97
n-Nitroso-di-n-propy	0.0	100	4.5	41	45	41	9	38	41-116
1,2,4-Trichlorobenze	0.0	100	59	60	59	60]]	28	39- 98
4-Chloro-3-methylphs		200	163	155	81	77	5	42	23- 97
Acenaphthene	ND	100	77	73	77	73	5	31	46-118
4-Nitrophenol	0.0	200	90	91	4.5	45	1	50	10- 80
2,4-Dinitrotoluene	0.0	100	88	81	88	81	8	38	24 - 94
Pentachlorophenol	0.0	200	164	149	82	75	9	50	9-103
Pyrene	0.0	100	87	83	87	83	4	31	26-127

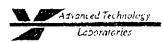
QC Batch #: 958270W085

Reviewed/Approved By:

Yun Pan

Organics Supervisor

Date: 9/7/25



Hull Development Labs, Inc.

CA ELAP# \$365

575 Del Rey Avenue, Suite E • Sunnyvale, CA 94086 • (408) 735-1550 • Fax (400) 735-1554

Subcontract Chain of Custody

Advanced Techni	ology	8/31/95	Picfeit Nava: PIERS	سند تعاور و پېښېدو و ووو	9/8/95	·············
Beriek David Source	Mulrix	Required Analysis	Date Taken	Time Taken	Contripers	Pry
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89598	300	8240,8270	8/29/95	A	Brass tube	
B9599	Water	8240,8270	8/29/98	*	2X1LAmber 2 x 40ml VOA	· ,
B9600	Water	8240,8270	8/29/95		2XILAmber 2 x 40ml VOA	
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Fax results to (408) 735-1554

Environmental Analysis Since 1983

QUALITY CONTROL RESULTS SUMMARY FOR GASOLINE ANALYSIS

GASOLINE

QC sample No.: BLANK SPIKE & DUP Date analyzed: 08-31-95

Matrix: WATER

Dilution factor: Units: ug/L

COMPOUND			MS ug/L		MSD ug/L		-	QC LIMITS (ADVISORY) RPD PR
GASOLINE	====== 226 	0	220	97	197	87	11	25 50-150

= Spike sample

MSD = Spike sample duplicate

SR = Sample result

SA = Spike added

= Not calculated NC

= Out of limits

 $RPD = 100 \times (MS-MSD)/((MS+MSD)/2)$

 $PR = 100 \times ((MS \text{ or } MSD) - SR)/SA$

QUALITY CONTROL RESULTS SUMMARY FOR DIESEL ANALYSIS

DIESEL

QC sample No.: BLANK SPIKE & DUP

Date analyzed: '09-08-95

Date extracted:

08-08-95

QC batch:

DW099501

Matrix: WATER

Units: ug/L

Dilution factor:

1

COMPOUND	; SA ; SR ug/L ug/L			QC LIMITS (ADVISORY) RPD PR
DIESEL	950 0	967 102	959 101 1	25 50-150

MS = Spike sample

· MSD = Spike sample duplicate

SR = Sample result

SA = Spike added

NC = Not calculated

** = Out of limits

 $RPD = 100 \times (MS-MSD)/((MS+MSD)/2)$

 $PR = 100 \times ((MS \text{ or } MSD) - SR)/SA$

QUALITY CONTROL RESULTS SUMMARY BTEX

BLANK SPIKE & DUP Date analyzed: QC sample No.:

> Matrix: WATER

Dilution factor: Units: ug/L

COMPOUND	¦ ¦ SA ¦ug/L	SR ug/L	MS ug/L	MS PR	MSD ug/L	MSD PR	RPD		IMITS ISORY) PR
BENZENE	20	0	19	95	1.9	95	0	25	. 50–150
TOLUENE	20	0	20	100	.19	95	5	25	50-150

MS = Spike sample

MSD = Spike sample duplicate

SR = Sample result SA = Spike added

NC = Not calculated

= Out of limits

 $RPD = 100 \times (MS-MSD)/((MS+MSD)/2)$

 $PR = 100 \times ((MS \text{ or } MSD) - SR)/SA$

QUALITY CONTROL RESULTS SUMMARY

METHOD: Flame Atomic Absorption

QC Batch #: WM-9538

Matrix: Water

Units: mg/l

Date Analyzed:

8/31/95

Units	: mg/i					 ,			;
PARAMETER	Method #	SA mg/l	SR mg/l	MS mg/l	MS %R	MSD mg/l	MSD %	QC LIMI %R	TS RPD
Antimony	204.1	na!	na!	na	na	na	na	70- 130	20.00
Barium	208.1	ı naı	nai	nai	nai	nai	nai	70- 130	20.00
Beryllium	210.1	na¦	ла¦	na	na¦	na¦	ла,	70- 130	20.00
Cadmium	213.1	1.00	0.04	1.04	101	1.03	99	70- 130	20.00
Chromium	218.1	1.00	0.08¦	1.10	102	1.09	101 j	70- 130	i 20.00 i
Cobalt	1 219.1	na _l	na]	na	na	na¦	na	70- 130	20.00
Copper	220.1	1.00	0.09	1.07	99¦	1.08¦	99¦	70- 130	20.00
Lead	239.1	1.00	0.14	1.12	98	1.12	98	70- 130	20.00
Molybdenum	246.1	na i	na _l	na¦	na i	na i	na¦	70- 130	20.00
Nickel	249.1	1.00	0.03	1.04	101¦	1.04	101	70- 130	20.00
Silver	270.1	1.00i	0.02	1.01	99	1.02	100	70- 130	20.00
.īhallium	279.1	ı l naı	na _l	na]	nai	na¦	na	70- 130	20.00
Vanadium	286.1	na!	па¦	na!	na¦	na¦	ла¦	70- 130	20.00
1Zinc	289.1	1.00	0.23	1.21	98	1.22	99 į	70- 130	20.00
Ilron	236.1	1.00	0.00	0.89	89¦	0.92	92	70- 130	20.00
Magnesium	242.1	1.00¦	0.00	0.94	94¦	0.93	93¦	70- 130	20.00

Definition of Terms:

na: Not analyzed in QC batch

SA: Spike Added

SR: Sample Result

MS: Matrix Spike Result

MS (%R) Matrix Spike % Recovery

MSD Matrix Spike Duplicate Result

MSD (%R) Matrix Spike % Recovery

LAB DIRECTOR

M. Golden

Hull Development Labs, Inc.

525 Del Rey Avenue, Suite E Sunnyvale, CA 94086

QUALITY CONTROL RESULTS SUMMARY

METHOD: SM5520F/EPA 418.1

QC Batch: 95091

Date Analyzed:

9/6/95

Matrix: Water

Units: mg/l

PARAMETER	SA mg/l	SR mg/l	MS mg/l	MS PR	MSD mg/l	MSD PR	RPD	OC LIMITS RPD	PR
TRPH	80	0	76	95	73	91	4%	25	50-150

Definition of Terms:

SA: Spike Added

SR: Sample Result

MS: Matrix Spike Result

MSD (PR): Matrix Spike % Recovery

MSD: Matrix Spike Duplicate Result

MSD (PR): Matrix Spike Duplicate % Recovery

RPD: Matrix Spike Recovery % Variance

LAB DIRECTOR:

/M. Golden

APPENDIX 2 PIERS SOIL SAMPLING PROTOCOL

3131 S. Bascom Avenue, #5 Campbell, CA 95008

Tel. (408) 559-1248 Fax (408) 559-1224

PIERS ENVIRONMENTAL SERVICES, INC.

DRILLING, SEALING, WELL CONSTRUCTION AND SAMPLING PROTOCOL Last Rev. 7/95

Exploratory Boring Drilling and Sealing

Exploratory boring and well construction, and borehole sealing procedures follow guidelines recommended by the USEPA, California Regional Water Quality Control Board, and modified as required by City, local or water district agencies. Drilling is performed only under approved permits and boreholes are sealed upon completion. Hand augured bore holes are installed using a 3 ½ inch diameter stainless steel hollow core hand auger which has been steam-cleaned or cleaned in detergent and water, rinsed with clean tap water and finally rinsed with or distilled water, and air-dried prior to use.

Soil Sampling Procedures

- Driven (or hydraulically pushed) soil sampling will commence at a depth of 5 feet below surface grade. The samples will be taken at 5 foot increments and at intervals of geologic interest or obvious contamination. Additional sampling and/or continuous coring may be done at the discretion of the supervising geologist. All logging will be done using the Unified Soil Classification System, together with pertinent geologic observations.
- 2. Soil sampling tools (split spoons, cores, etc.) will be disassembled, steam-cleaned or cleaned in detergent and water, rinsed with clean tap water and finally rinsed with distilled water, and air-dried prior to taking each sample. The cleaned tools will then be reassembled with similarly cleaned, dry brass sample liners and carefully lowered into the hollow stem augers for the collection of the next sample. The drill rig will be decontaminated as needed and at the discretion of the field personnel.
- 3. When sampling stockpile soils or during excavations, the soil sample will be collected by the following procedure; a clean brass liner will be pushed into the stockpile or soil in the excavator bucket. About two inches of soil will be brushed away and the liner pushed into the soil. The liner is then removed, sealed, labeled and logged onto chain-of-custody forms and packed in a chilled ice chest.
- 4. The soil samples from the bottom portion of the sampling tool (if in good condition) will be retained for chemical testing. The samples will be labeled and sealed in the field in their original liners. Sample liner ends will be sealed with Teflon sheeting, and capped with clean plastic Capplugs.

PIERS Protocol Page 2

5. The remaining soil sample will be extruded from the other rings in the field and lithologically logged. Sampler shoe cuttings, drill rig response and bit penetration rate will also be logged, when appropriate. The cuttings and the soils samples not retained for chemical analysis will be placed in 55-gallon drums or covered on plastic sheeting until their chemical disposition is determined, and then properly disposed.

6. All samples retained for chemical analysis will be stored on ice in a clean, covered cooler-box for transport to the Laboratory.

Reconnaissance Groundwater Sampling Procedures

- 1. Reconnaissance groundwater sample, handling, and storage will follow applicable guidance documents of the Environmental Protection Agency and Regional Water Quality Control Board and local agency guidelines for the investigation.
- 2. Reconnaissance groundwater samples will be collected in the field in temporarily cased exploratory boreholes using clean Teflon or disposal bailers. The samples will be collected from temporarily cased exploratory boreholes. All sample containers will be properly prepared, sealed, labeled, and identified. Label information will include the date, sampler name, sampling time, and identification number, and the project name and number.
- 3. The sample will be delivered to a State Certified Laboratory within two days of collection. Samples will be kept on ice and/or refrigerated continuously for shipment to the Laboratory.
- 4. The sealed sample will only be opened by Laboratory personnel who will perform the chemical analysis.
- 5. The samples will be analyzed according to the approved EPA Method and storage for the requested analysis.
- 6. Groundwater sampling will begin 24 hours following well development, following the procedures detailed below for monitoring well sampling. Depth to water measurements are made to the nearest 0.01 foot with respect to a surveyed datum (project or known) and wells are checked for separate phase product. Boreholes are sealed following water sampling.

Well Construction

- 1. The proper permits will be obtained from the appropriate agency or Water District, using a Well Inspector as required to be present to witness the installation of the annular seal. The soils borings will be drilled with a continuous-flight hollow-stem auger of at least 3 inches Inside Diameter (ID) and 6 to 8 inches Outside Diameter (OD). All augers will be thoroughly steam-cleaned prior to visiting the site. The augers will be steamed cleaned between borings at a location well away from the proposed borings or adequate clean auger will be available to complete all of the wells without reusing auger sections.
- A geologic drilling log will be made of the materials encountered and sample depth for each boring. The soils/sediment lithology will be logged using the Unified Soil Classification System. The log will include field descriptions of the soil lithologic variations, moisture conditions, geologic data, and any unusual characteristics which may indicate the presence of chemical contamination.
- 3. The borings will be advanced to a depth of 45 feet if a saturated zone is not encountered (in absence of other depth specifications). If a saturated zone is encountered, the boring will advance no further than 15 feet below first encountered groundwater or 5 feet into the underlying clay aquitard. A seal will be placed in the over drilled portion of the aquitard.
- **4.** During the drilling operations, California DOT approved 55-gallon drums will be on site to contain potentially contaminated soils and rinse water.
- Where borings are completed as groundwater monitoring wells, 2-inch ID schedule 40 PVC blank pipe will be used. Usual well screen selection will be 2 inch ID Schedule 40 PVC pipe with 0.020 inch machine slot. Sections will be threaded and screwed together; glues will not be used. Screens will extend 3-5 feet above first encountered groundwater. The annulus of the perforated section will be packed with clean #3 or #4 Monterey Sand, or equivalent, to a point about 2-feet above the screen interval. Final well design will be adjusted in the field to site specific subsurface conditions, and will be placed so as not to interconnect two possible aquifers. Screens will extend a nominal length above first encountered groundwater for floating product detection. A 1-2 foot thick bentonite seal will be placed on top of the sandpack. A cement annular seal which extends to the surface will be placed by tremie line from the bottom to top of the remaining annular space above the bentonite.

PIERS Protocol Page 4

6. The top of the well casing will be locked to prevent contamination and tampering. Above-grade or at-grade well completion will depend upon the final well location. Above-grade completion will require a 6 inch diameter locking, steel protective casing and a Christy, or equivalent, traffic box and concrete pad.

Well Development

- 1. Wells will be developed until the water is free of fine-grained sediments and/or until field measurements of pH, and electrical conductivity have stabilized. Approximately 4 to 10 well volumes of water will be removed during development of the well. Duration of development will be specific for each well and continue until the water clears and sand content is minimal or ceases.
- 2. Equipment inserted into the well during development will be decontaminated by washing or steam cleaning prior to and after its use. Development water will be collected in California DOT approved 55-gallon drums.

Ground Water Monitoring Well Sampling

- Depth to groundwater will be measured to the nearest 0.01 foot, and the well checked for presence of separate phase product. If present, the apparent thickness of the product will be measured. The well will not be sampled if separate phase product is present.
- 2. The standing well volume calculated, and 4 to 10 well volumes will be purged from the well prior to sampling. Measurements of conductivity, temperature and the pH of the water will be taken until parameters have stabilized to indicate that aquifer water is entering the well.
- The groundwater samples will be collected using a new disposable bailer or clean Teflon Bailer. A field log will record sampling measurements and observations.
- 4. The Teflon Bailer (if selected) will be thoroughly steam-cleaned or cleaned with detergent and water, rinsed with tap water, and finally rinsed with de-ionized or distilled water prior to the collection of each sample. A separate clean bailer will be used to sample each individual well.

PIERS Protocol Page 5

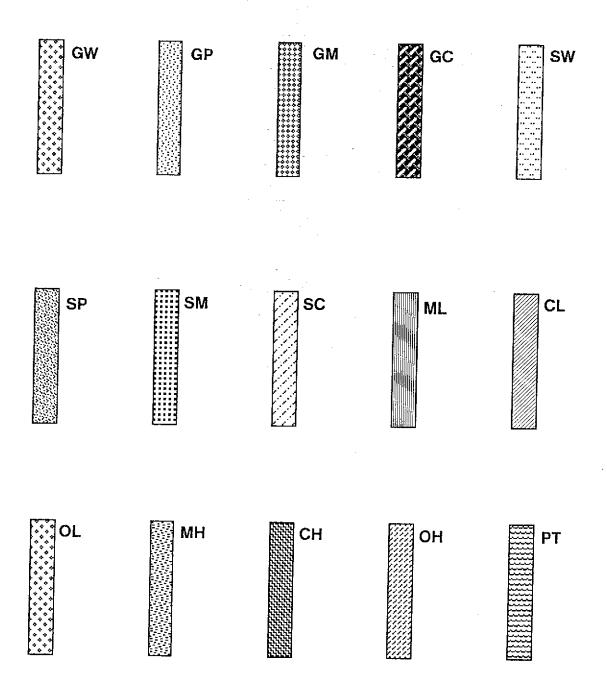
All water retained for chemical analysis will be placed in clean, borosilicate, 40ml VOA vial with a Teflon septum cap, or clean amber glass one-liter bottles and other sample containers as appropriate for water sampling purposes and test parameters. Each sample vial or bottle is topped-off to avoid air space, and will be inverted to check for air bubbles, and filled to minimum headspace. Samples will be placed on ice, blue ice, or refrigerated at 4 degrees Centigrade at all times.

- 6. Water samples blanks of distilled water will be poured through the sampling bailer (if a disposable bailer is not used) and placed in clean sample collection bottles or vials. One water sample blank will be taken for each set of water samples collected from each boring or well when using Teflon Bailers..
- 7. All sampling equipment will be decontaminated following each sampling event, prior to use the next monitoring well.

Sample Records and Chain of Custody

- 1. Sample records for each sample will contain information on sample type and source; PIERS Environmental Services project number, sampler name, sampling date, location, Laboratory name, sampling method, and any significant conditions that may affect the sampling.
- 2. A signature Chain-of-custody and transference documentation will be strictly maintained at all times.
- 3. A copy of the Laboratory sample results and the completed Chain-of-Custody will be provided with the technical report.

PIERS Environmental USCS Soil Classification Symbols



Exploratory Boring Log

Project No. 95253

Client: Lotz and Associates

Boring # Gas-NW

Date: 6-1-95

Location: 3744 Depot Rd., Hayward, CA

Logged By:

B. Halsted

Drilling Method: 3.5 inch Hand Auger Permit: Amy Leech - ACDEH

Sample No.	Blow Count	Sample Type	Lithology Description	Mark	Well Cor	st. Detai
Gas- NW@ 7' Gas- GWS		Soil Water	Concrete - 5" to 6", Baserock to appx. 1' CH Dark Olive-Gray inorganic clay, high plasticity, medium stiff, damp. OH Dark-brown silty organic clay, medium plasticity, damp to wet. BOH @ 9'	Mark		Neat Cement Slurry
			20'			
			30'			
	The state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the state of the s		35' 40'			

Exploratory Boring Log

Project No. 95253

Client: Lotz and Associates

Boring # Gas &W

Date: 6-1-95

Location: 3744 Depot Rd., Hayward, CA

Logged By:

B. Halsted

Drilling Method: 3.5 inch Hand Auger Permit: Amy Leech - ACDEH

Sample No.	Blow Count	Sample Type	Control of Lithology Descri	iption H20 Well Const.	L Deta
			Concrete - 5" to 6", B CH Dark Olive-Gray in plasticity, medium	Baserock to appx. 1'	ent Slurry
Gas- SW@ 7'		Soil	5'OH Dark-brown silty plasticity, damp.	organic clay, medium	Neat Cement Slurry
			10' BOH @ 7' 6"		_
			15'		
:					
			20'		
			25'		
			30'		
			35'		
:			40'		

Exploratory Boring Log

Project No. 95253

Client: Lotz and Associates

Boring # WO-NW ->

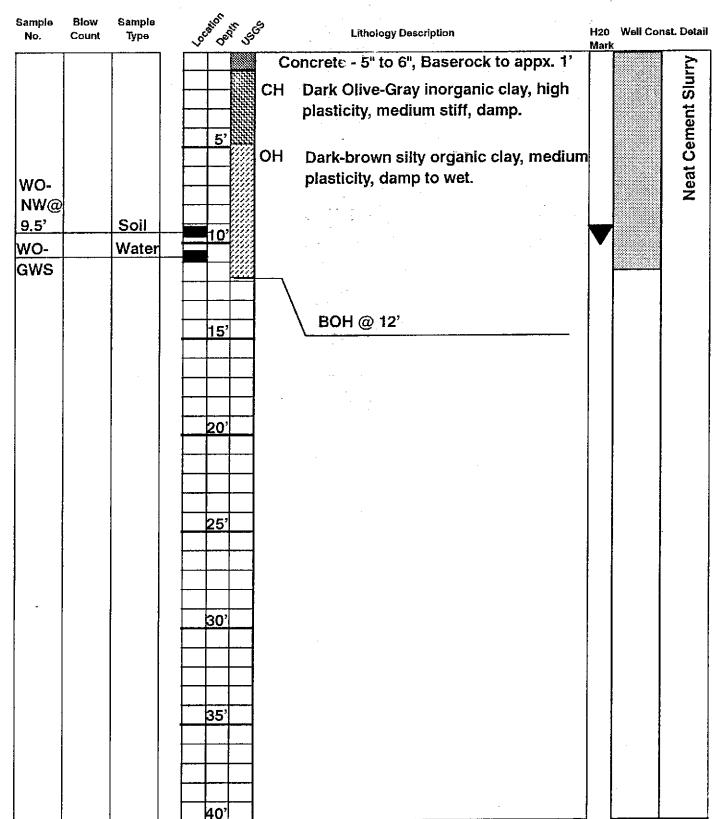
Date: 6-1-95

Location: 3744 Depot Rd., Hayward, CA

Logged By:

B. Halsted

Drilling Method: 3.5 inch Hand Auger Permit: Amy Leech - ACDEH



Exploratory Boring Log

Project No. 95253 Client: Lotz and Associates

Boring # Disp.

Date: 6-1-95

Location: 3744 Depot Rd., Hayward, CA

Logged By:

B. Halsted

Drilling Method: 3.5 inch Hand Auger Permit: Amy Leech - ACDEH

Sample No.	Blow Count	Sample Type	John Lag Res	Lithology Description	H20 Mark	Well Con	st. Detail
Disp @2 '		Soil		Concrete - 5" to 6", Baserock to appx. 1' CH Dark Olive-Gray inorganic clay, high plasticity, medium stiff, damp.			ent Slurry
			5'	BOH @ 2' 6"			Neat Cement Slurry
			10'			·	
			15'				
			20'				
			25'				
			30'				
			35'				
			40'				

Exploratory Boring Log

Project No. 95253

Client: Lotz and Associates

Boring # WO-SW

Date: 6-1-95

Location: 3744 Depot Rd., Hayward, CA

Logged By:

B. Halsted

Drilling Method: 3.5 inch Hand Auger Permit: Amy Leech - ACDEH

Sample No.	Blow Count	Sample Type	Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Control of the Contro	H20 Well Co Mark	nst. Detai
			Concrete - 5" to 6", Baserock to appx. 1' CH Dark Olive-Gray inorganic clay, high plasticity, medium stiff, damp.		Neat Cement Slurry
WO- SW@ 7'		Soil	OH Dark-brown silty organic clay, medium plasticity, damp.		Neat Cen
			10' BOH @ 7' 6"		
			15'		
			20'		
			25'		
			30'		
:			35'		
			40'		