



# LEVINE·FRICKE

CONSULTING ENGINEERS AND HYDROGEOLOGISTS

May 15, 1989

LF 1596

Mr. Ariu Levi  
Alameda County Health Agency  
Department of Environmental Health  
470 27<sup>th</sup> Street, Room 322  
Oakland, California 94612

5/17/89

ALAMEDA COUNTY  
DEPT. OF ENVIRONMENTAL HEALTH  
HAZARDOUS MATERIALS

Subject: Enclosed Report on Environmental Site Characterization  
of Property Located at 14500 East 14<sup>th</sup> Street  
San Leandro, California

Dear Mr. Levi:

Enclosed is a report presenting the results of an environmental site characterization of property located at 14500 East 14<sup>th</sup> Street, San Leandro, California completed by Hageman-Schank, Inc. for a potential purchaser of the property. The subject property is owned by Ms. Coramarie Allenbaugh and Ms. Theadate Phillips. The work completed by Hageman-Schank, Inc. included the drilling and collection of soil samples from five soil borings in the vicinity of four above-ground fuel storage tanks, one underground fuel storage tank and one underground waste oil tank. In addition, ground-water samples also were collected from two of the borings. Analytical results for selected soil and ground-water samples revealed elevated concentrations (ranging from 27 to 2,700 ppm) of total petroleum hydrocarbons as both diesel and gasoline. Lower concentrations (less than 0.36 ppm) of benzene, toluene, xylene and ethylbenzene also were noted in selected soil and ground-water samples.

In light of these results, Ms. Allenbaugh and Ms. Phillips requested Levine·Fricke, Inc. to review the Hageman-Schank, Inc. report and prepare a proposal to complete additional soil and ground-water investigations at the subject property. Ms. Allenbaugh and Ms. Phillips have retained Levine·Fricke to complete the site investigation described in that proposal. The Levine·Fricke proposal dated February 23, 1989 for additional soil and ground-water investigations is attached. Levine·Fricke completed the proposed field activities during April 1989 and anticipates completion of a report presenting the results by early June 1989, which we will provide to you when completed.

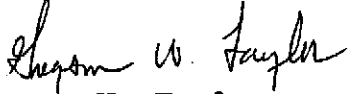
1900 Powell Street, 12th Floor  
Emeryville, California 94608  
(415) 652-4500

Other offices in NEWPORT BEACH and OAKLAND, CA

## LEVINE·FRICKE

Please give me or Tom Johnson a call at (415) 652-4500 if you have any questions concerning this matter.

Sincerely,



Gregson W. Taylor  
Project Hydrogeologist

enclosures

cc: Ms. Coramarie Allenbaugh  
Mr. John Lyons, Landels, Ripley and Diamond  
Mr. Howard Hatayama, Department of Health Services  
Mr. Steve R. Ritchie, Regional Water Quality Control Board

# HAGEMAN-SCHANK, INC.

2723 Crow Canyon Rd., Suite 210

San Ramon, CA 94583

(415) 837-2926

December 23, 1988

REF: P8802-30

TRI-VEST EQUITIES  
317 Juana Avenue  
San Leandro, California

Subject: 14530 East 14th Street  
San Leandro, California  
Environmental Site Characterization

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The following report summarizes the results of an initial investigation of underground contamination at this site. The sampling project took place December 12, 1988.

## SCOPE OF WORK

A series of five soil borings were taken where possible contamination might exist. Two borings, boring #1 & #5 are located by the above ground fuel storage tanks. Boring #2 is located next to an underground waste oil tank. Boring #3 is placed by the remote pump fueling island. And boring #4 is placed in an area of suspected removed coal oil tanks.

## SAMPLING

Of the five borings two were drilled to ground water and three were taken to a fifteen foot depth. From each soil boring samples were obtained at five (5) foot intervals using a california split spoon sampler. Borings 2, 4, & 5 terminated at a depth of 15'. Borings #1 & #3 ended at a 35' depth, with groundwater at 28'.

Groundwater samples were collected from borings #1 & #3. Samples were obtained by placing a slotted 2" PVC casing down hole and collecting a sample from inside the casing using a clear teflon bailer. The water sample results are a rough indication of possible groundwater contamination levels. Accurate water sample results must be obtained from groundwater monitoring wells.

One soil sample from each boring was selected for laboratory analysis. These selections were based on proximity to ground water and worst probable sample.

### SAMPLE RESULTS

Soil samples from all borings, except #2, as well as the water samples from #1 labeled WS-1 and from #3 labeled WS-3 were analyzed for Total Petroleum Hydrocarbons as gasoline and diesel and Benzene, Toluene, Xylene and Ethyl Benzene. Boring #2 analysis, looking for waste oil contamination, was tested for Oil & Grease & Extractables. Laboratory results are as follows:

SAMPLE ID	TPH AS DIESEL	TPH AS GAS	BENZENE	TOLUENE	XYLENE	ETHYL BENZENE
#1-25'	68.0	120.0	ND	.076	ND	.071
#3-30'	650.0	60.0	ND	ND	ND	ND
#4-15'	700.0 160-AS MOTOR OIL	60.0	ND	ND	ND	ND
#5-15'	ND	ND	ND	ND	ND	ND
WS-1	900.0	150.0	.0065	ND	ND	.24
WS-3	2,700.0	27.0	.19	.19	.36	.083

Boring #2 was non detected for Oil & Grease and Diesel. All samples are expressed in parts per million PPM.

### CONCLUSIONS AND RECOMENDATION

Sample results indicate the prescne of both gasoline & diesel fuel contamination. Borings 1,3,4,&5 all show some levels of contamination. The analysis report of water samples from borings #1 & #3 identified as WS-1 & WS-3 indicate the prescne of both soluble gasoline and diesel. Sample WS-3 is of concern because it contains significant levels of diesel fuel, possibly indicating the presence of free floating product.

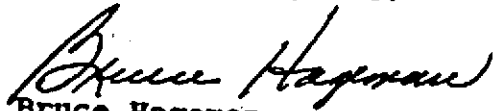
Further investigation of this site would be needed to adequately assess the full extent of contamination.

Page 3  
Ref: P8802-30  
Tri-Vest Equities

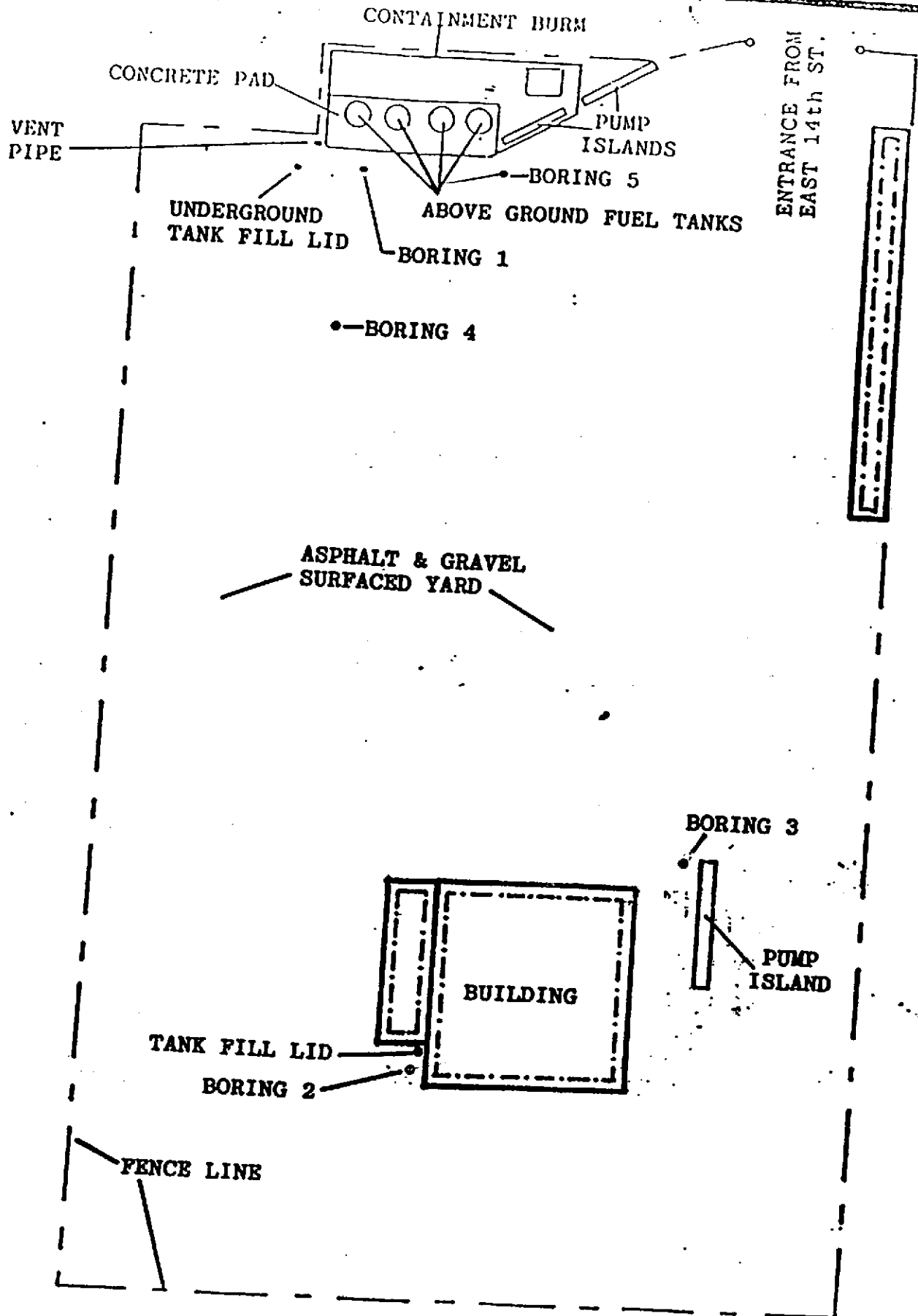
My suggestion for further investigation of this site would involve six or seven groundwater monitoring wells. This would enable an engineered water gradient and allow a much better definition of the areas that have been impacted by petroleum hydrocarbons. The work that was just completed was preliminary and should not be considered a complete and comprehensive site assessment. A cost estimate of the suggested work would be in the range of \$50,000.00.

Should you have any questions regarding this report please feel free to call our office and we will be happy to discuss it with you.

Sincerely,  
HAGEMAN-SCHANK, INC.



Bruce Hageman  
Robert M. Weber - Geologist  
Gary H. Aguiar - Registered P. E.



SCALE 1"=40'

BANCROFT STREET

LOCATION OF BORING

SEE SITE MAP

JOB NO.	CLIENT	LOCATION
	14530 E. 14th	SAN LEANDRO
DRILLING METHOD:		BORING NO.
6" SOLID STEM AUGER		# 1
SAMPLING METHOD:		SHEET
2" SPLIT BARREL SAMPLER WITH BRASS LINERS		1 of 2
WATER LEVEL		DRILLING
TIME		START TIME
DATE		0850
CASING DEPTH		FINISH TIME
		1045
		DATE
		12/12/88
		12/12/88

DATUM		ELEVATION	
SAMPLER TYPE	MOSES DATA MOSES DEPTH MOSES DEPTH	DEPTH OF CASING	BLOWS/FT. SAMPLER
2" SPLIT	18/18		11/17/23 0917
2" SPLIT	18/18		11/15/15 0930
2" SPLIT	18/18		11/17/19 0940

SURFACE CONDITIONS:

BORING ADJACENT TO UNDERGROUND GASOLINE TANK

ASPHALT (1-2")  
CONCRETE

BLACK SILTY CLAY (CL), SLIGHTLY MOIST, OCCASIONAL COARSE SAND (STRONG DIESEL ODOR)

DK BRN CLAY (CL), SLIGHTLY MOIST, SILTY, LIGHT BROWN STREAKS (ORGANIC MATTER) (NO ODOR)

GREY CLAYEY SILTY SAND (SM), SLIGHTLY MOIST, SAND FINE GRAIN, STIFF, CRUMBLY, OCCASIONAL ANGULAR GRAVEL TO 1/4" (SLIGHT GASOLINE ODOR)

GREY SAND & GRAVEL (GW), SLIGHTLY MOIST, SAND FINE TO MEDIUM GRAIN, LOOSE, RIVER RUN GRAVEL TO 1", SLIGHTLY CLAYEY (NO ODOR)

LOCATION OF BORING

JOB NO.		CUENT		LOCATION	
14530		E. 14th		SAN LEANDRO	
DRILLING METHOD:				BORING NO.	
				#1	
SAMPLING METHOD:				SHEET	
				2 of 2	
				DRILLING	
WATER LEVEL				START TIME	FINISH TIME
TIME					
DATE				DATE	DATE
CASING DEPTH				12/12/88	

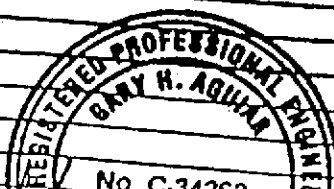
DRILLING CORRECTION

DATUM

ELEVATION

SURFACE CONDITIONS:

SAMPLER TYPE	INCHES DOWN RECORDS	DEPTH OF CASING	INCHES DOWN PIPE	BLOWS/FT. SAMPLER	DEPTH IN FEET	SOIL GRAITH	DESCRIPTION
2" SPIT	18/18			5 1/4	1000	20	DK GREY SILTY CLAY (CL), MOIST, SOFT, LOW PLASTICITY, CRUMBLY (SLIGHT GASOLINE ODOR)
2" SPIT	18/18			4 1/8	1020	5	GREY-BRN SILTY CLAY (CL), MOIST, SOFT, CRUMBLY, LOW PLASTICITY
2" SPIT	18/0			4 1/8	1045	8	GREY SAND & GRAVEL (GW), MOIST, SAND FINE TO COARSE GRAIN, RIVER RUN GRAVEL TO 1/2"
LOST SAMPLE						30	GREY-BRN SANDY CLAY (CL), SATURATED, SAND FINE GRAIN, SOFT (NO ODOR)
							TOTAL DEPTH = 35' BLS





LOCATION OF BORING

SEE SITE MAP

JOB NO.	CUSTOMER	LOCATION
	14530 E. 14th	SAN LEANDRO
DRILLING METHOD:		BORING NO.
6" SOLID STEM AUGER		#2
SAMPLING METHOD:		SHEET
2" SPLIT BARREL SAMPLER WITH BRASS LINERS		1 of 1
WATER LEVEL		DRILLING
TIME		START TIME
DATE		FINISH TIME
CASING DEPTH		DATE
		12/12/88
		12/12/88

DATUM		ELEVATION	
SAMPLER TYPE	INCHES DEPTH RECORDED	DEPTH OF CASING	SAMPLE NO. SAMPLE DEPTH
2" SPLIT	18	18	7/19/17 1155
2" SPLIT	18	16	7/10/15 1205
2" SPLIT	18	16	4/6/9 1218

**SURFACE CONDITIONS:**

BORING ADJACENT TO WASTE OIL TANK

CONCRETE

BLACK SANDY, GRAVELLY CLAY (CL), SLIGHTLY MOIST, SAND FINE GRAIN, ROUNDED GRAVEL TO 3" (STRONG OIL ODOR)

DK BRN CLAY (CL), SLIGHTLY MOIST, SILTY, CRUMBLY, LIGHT BROWN STREAKS, (ORGANIC MATTER) (NO ODOR)

BRN SILTY CLAY (CL), SLIGHTLY MOIST, STIFF, OCCASIONAL SUB-ANGULAR GRAVEL TO 1/4" (NO ODOR)

SAME, MOIST, SOFTER (NO ODOR)

TOTAL DEPTH = 16' BLS



LOCATION OF BORING

SEE SITE MAP

JOBL NO.	CLIENT	LOCATION
	14530 E. 14th	SAN LEANDRO
DRILLING METHOD:		BORING NO.
6" SOLID STEM AUGER		#3
SAMPLING METHOD:		SHEET
2" SPLIT BARREL SAMPLER WITH BRASS LINERS		1 of 2
WATER LEVEL		DRILLING
TIME		START TIME
DATE		FINISH TIME
CASING DEPTH		DATE
		DATE
		12/2/88
		12/12/88

DATUM		ELEVATION	
SAMPLER TYPE	INCHES FEET RECOVERED	DEPTH OF CASING	SAMPLE NO.
1" SPLIT	18/16		8/4/9 1252
2" SPLIT	18/18		8/4/13 1300
2" SPLIT	18/18		10/1/16 1315

**SURFACE CONDITIONS:**

BORING ADJACENT TO REMOTE DISPENSERS

ASPHALT

BLACK SILTY CLAY (CL), SATURATED WITH OIL

DK GREY SILTY CLAY (CL), SLIGHTLY MOIST, CRUMBLY, DENSE  
(DIESEL ODOR)

DK BRN CLAYEY SAND (SM), SLIGHTLY MOIST, OCCASIONAL COARSE SAND TO 1/4", SAND VERY FINE GRAIN  
(DIESEL ODOR)

SAME

GREY SAND & GRAVEL (GW), MOIST, LOOSE, RIVER RUN SAND & GRAVEL MEDIUM GRAIN TO 1/2"

GREY CLAYEY SAND (SM), MOIST, SAND VERY FINE GRAIN

DRILLING CONTRACTOR

CHECKED BY

DATE

LOCATION OF BORING

JOB NO.		CLIENT		LOCATION	
		14530 E. 14th		SAN LEANDRO	
DRILLING METHOD:				BORING NO.	
				#3	
SAMPLING METHOD:				SHEET	
				2 of 2	
				DRILLING	
WATER LEVEL				START	FINISH
TIME				TIME	TIME
DATE				DATE	DATE
CASING DEPTH				12/12/88	

DATUM

ELEVATION

SURFACE CONDITIONS:

BORING CONT.

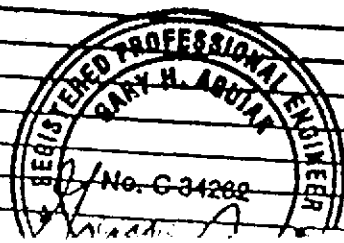
SAMPLER TYPE	INCHES OPEN DOWN	INCHES STROKED	DEPTH OF CASING	SAMPLE NO.	BLOW/FT. SAMPLER	ELEVATION	DEPTH IN FEET	SOIL GRAPH
2" SPLIT	18	18		5/12	1330	20	1	
							2	
							3	
							4	
2" SPLIT	18	18		5/17	1347	5	5	
							6	
							7	
							8	
							9	
2" SPLIT	18	12		4/6/7	1408	30	10	
							11	
							12	
							13	
							14	
							15	
							16	
							17	

SAME, SATURATED WITH DIESEL

DK GREY SILTY CLAY (CL), SATURATED WITH DIESEL  
SLIGHTLY STIFF, SLIGHT PLASTICITY,  
OCCASIONAL STREAKS OF SAND & GRAVEL

SAME, SATURATED, SOFT, CRUMBLY  
(DIESEL ODOR)

TOTAL DEPTH = 15' BLS 7 35



LOCATION OF BORING

SEE SITE MAP

JOB NO.	CLIENT	LOCATION
	14530 E. 14th ST.	SAN LEANDRO
DRILLING METHOD:		BORING NO.
6" SOLID STEM AUGER		# 4
SAMPLING METHOD:		SHEET
2" SPLIT BARREL SAMPLER WITH BRASS LINERS		1 of 1
WATER LEVEL		DRILLING
TIME		START TIME
DATE		FINISH TIME
CASING DEPTH		DATE
		12/12/88
		12/12/88

DATUM		ELEVATION	
SAMPLER TYPE	INCHES RECORDED	DEPTH OF CASING	BLOWFT. SAMPLER
2" SPLIT	18/18		7 1/4 / 1455
2" SPLIT	18/18		8 1/3 / 1505
2" SPLIT	18/18		9 7/8 / 1515

SURFACE CONDITIONS:

BORING IN MIDDLE OF PROPERTY

CONCRETE

BLACK SILTY SAND (SM), SATURATED WITH OIL

DK GREY SILTY SAND (SM), SLIGHTLY MOIST, SLIGHTLY STIFF, CRUMBLY, CHERTY GRAVEL TO 2" (LARGE PIECE @ SAMPLER END)

(NO ODOR)

SAME, SLIGHTLY MOIST, OCCASIONAL COARSE SAND, STIFF, SLIGHTLY CRUMBLY

(NO ODOR)

GREY SAND (SP), SLIGHTLY MOIST, FINE GRAIN, LOOSE

(SLIGHT GASOLINE ODOR)

TOTAL DEPTH = 10.0

PROFESSIONAL

LOCATION OF BORING

SEE SITE MAP

JOE NO.	CUSTOMER	LOCATION
	14530 E. 14th	SAN LEANDRO
DRILLING METHOD:		BORING NO.
6" SOLID STEM AUGER		# 5
SAMPLING METHOD:		SHEET
2" SPLIT BARREL SAMPLER WITH BRASS LINERS		1 of 1
WATER LEVEL		START TIME
TIME		1525
DATE		12/12/88
CASING DEPTH		FINISH TIME
		1600
		DATE
		12/12/88

DRILLING CONTR.

DATUM ELEVATION

SAMPLER TYPE	INCHES RECORDED	DEPTH OF CASING	DATE	ELEVATION
2" SPLIT	18	18	12/19/88	1533
2" SPLIT	18	18	4/7/11	1545
2" SPLIT	18	18	4/4/11	1600

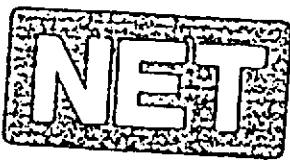
DEPTH IN FEET	SOIL GRADE	SURFACE CONDITIONS:
0		BORING ADJACENT TO MAIN DISPENSERS
1		ASPHALT
2		BLACK SILTY CLAY (CL), SATURATED WITH OIL
3		
4		
5		DK BRN SILTY CLAY (CL), SLIGHTLY MOIST, STIFF, SLIGHTLY CRUMBLY
6		(NO ODOR)
7		
8		
9		
10		BRN SILTY CLAY (CL), SLIGHTLY MOIST, STIFF, LIGHT BROWN STREAKS (ORGANIC MATTER)
11		(NO ODOR)
12		
13		
14		
15		GREY SAND (SP), SLIGHTLY MOIST, FINE GRAIN, LOOSE
16		(GASOLINE ODOR)
17		
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97		
98		
99		
100		

TOTAL DEPTH = 16' PLS



CHKD BY

DATE



NATIONAL  
ENVIRONMENTAL  
TESTING, INC.

NET Pacific, Inc.  
435 Tesconi Circle  
Santa Rosa, CA 95401  
Tel: (707) 526-7200  
Fax: (707) 526-9623

Bruce Hageman  
Hageman-Schank, Inc.  
2723 Crow Canyon Rd., #210  
San Ramon, CA 94583

12-22-88  
NET Pacific Log No: 5030 (-1,2)  
Series No: 341  
Client Ref: Project# P8802-30

Formerly: ANATEC Labs, Inc.

Subject: Analytical Results for Two Water Samples Received 12-14-88.

Dear Mr. Hageman:

Analysis of the samples referenced above has been completed. Results are presented on the following pages.

Samples were delivered to the laboratory under documented chain-of-custody. On receipt, sample custody was transferred to NET Pacific sample control personnel who subsequently documented receipt and condition of the samples and placed them in secured storage at 4°C until analysis commenced.

In preparation for volatile hydrocarbons measurements, aliquots of samples were transferred and sealed in septum-capped vials. Additionally, vials were prepared in essentially the same fashion to represent method blanks, commercial gasoline standards, gasoline-fortified sample spikes and sample replicates. Each vial was heated for a period of one hour at 90°C during which time light hydrocarbons (such as gasoline) were expected to equilibrate in distribution between sample and headspace. Headspace gases were subsequently analyzed by gas chromatography to measure total light hydrocarbons. Response of the chromatographic system to samples was compared with response to standards prepared with gasoline for purposes of qualitative and quantitative interpretation.

The samples were prepared for extractable hydrocarbons measurements by extraction with methylene chloride; extraction was performed three successive times for each sample. Extracts were then combined, dried over sodium sulfate and concentrated in Kuderna-Danish apparatus.

Extracts were then analyzed by capillary column gas chromatography with flame ionization detection. Preparation and analysis of the sample was accompanied by similar treatment of a method blank and a diesel-fortified sample. Response of the chromatographic system to calibration standards prepared with diesel and motor oil was compared with system response to samples for purposes of qualitative and quantitative interpretation.



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December 22, 1988

Details of the analytical methodologies are consistent with requirements specified in Methods "I" and "II" ("Total Fuel Hydrocarbons, Low-to-medium Boiling Point Hydrocarbons" and "Total Fuel Hydrocarbons, Medium-to-high Boiling Point Hydrocarbons," respectively) in "Guidelines for Addressing Fuel Leaks," Regional Water Quality Control Board, San Francisco Bay Region, revised 1986; the preparation procedures used are described in detail in "Headspace Method," Method 5020 for gasoline, and "Liquid-Liquid Extraction," Method 3510 for diesel, in "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods," U.S. EPA, SW-846, 2nd edition, revised 1984.

Water samples were tested in accord with U.S. EPA Method 624 "Guidelines Establishing Test Procedures for the Analysis of Pollutants Under the Clean Water Act," U.S. EPA, 40 CFR 136, 1984 to measure contents of 31 volatile organic priority pollutants. Briefly, the method involves bubbling inert gas through a sorbent trap. After purging is complete, the trap is heated and backflushed with inert gas to desorb the compounds onto a gas chromatographic column. The column is then temperature programmed, and the compounds detected with a mass spectrometer. The following instrument parameters were used:

Purge and Trap Device:  
Trap packing

Tekmar Model LSC-2  
1 cm methyl silicone  
15 cm 2,6-diphenylene oxide polymer  
(TENAX)  
8 cm silica gel

Purge gas  
Purge time  
Desorb temp  
Desorb time

Helium at 30 mL/min  
11 min  
180°C  
4 min

GC/MS Unit:

Column dimensions  
Coating  
Head pressure  
Temperature program

HP 5970 MSD  
6' x 0.1" stainless steel  
1% SP-1000 on 60/80 mesh Carbopak B  
50 psi helium  
40°C for 4 min, 6°C/min to 220°C,  
hold 15 min

Mass spectrometer mode  
Electron energy  
Mass range  
Scan time  
Calibration gas  
Data system

Electron Impact  
70 eV  
35 - 260 amu  
2.5 seconds  
Perfluorotributylamine (PFTBA)  
HP-1000

**NET**

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December 22, 1988

Please feel welcome to contact us should you have questions regarding procedures or results.

Submitted by:

*Kenneth A. Crawford /sm*  
Kenneth A. Crawford  
Project Chemist

Approved by:

*Kim L. Hansard*  
Kim L. Hansard  
Project Manager

/sm

Enc: Sample Custody Document





341 LOG NO 5030

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December 22, 1988

KEY TO ABBREVIATIONS

- mg/Kg (ppm) : Concentration in units of milligrams of analyte per kilogram of sample, wet-weight basis (parts per million).
- mg/L : Concentration in units of milligrams of analyte per liter of sample, unless noted otherwise.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- NA : Not analyzed; see cover letter for details.
- ND : Not detected; the analyte concentration is less than the listed reporting limit.
- NR : Not requested.
- NTU : Nephelometric turbidity units.
- RL : Reporting limit.
- RPD : Relative percent deviation.
- SNA : Standard not available.
- ug/Kg (ppb) : Concentration in units of micrograms of analyte per kilogram of sample, wet-weight basis (parts per billion).
- ug/L : Concentration in units of micrograms of analyte per liter of sample.
- ug/filter : Concentration in units of micrograms of analyte per filter.
- umhos/cm : Micromhos per centimeter.
- \* : See cover letter for details.



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December 22, 1988

Parameter	Reporting Limit (mg/L)	Descriptor, Lab No. and Results (mg/L)	
		WS #1 12-12-88 (-19912) <sup>a</sup>	WS #3 12-12-88 (-19913) <sup>b</sup>
PETROLEUM HYDROCARBONS Volatile, as Gasoline Extractable,	0.05	150	27
as Motor Oil	0.05	ND	ND
as Diesel Fuel	0.05	900	2,700

Parameter	Reporting Limit (mg/L)	Descriptor, Lab No. and Results (mg/L)	
		WS #1 12-12-88 (-19912)	WS #3 12-12-88 (-19913)
Benzene	0.0044	0.065	0.190
Ethylbenzene	0.0072	0.240	0.083
Toluene	0.006	ND	0.190
Xylenes, total	0.015	ND	0.360

<sup>a</sup>The reporting limits for this sample is 100 times the listed reporting limits.

<sup>b</sup>The reporting limits for extractable hydrocarbons for this sample is 100 times the listed reporting limits.

HAGEMAN-SCHANK, INCORPORATED  
2723 CROW CANYON ROAD, SUITE 210  
SAN RAMON, CALIFORNIA 94583  
415/837-2926

ANALYSIS TPH'S BTRE AS  
GASOLINE, TPH AS DIESEL  
PROJECT NO. P880

TURN AROUND 5 DAY  
CHAIN OF CUSTODY RECORD

5030

Field Record  
Sample Type WATER  
Container Type UBA 1 LITER

Laboratory Record  
Lab No. \_\_\_\_\_

Contract Laboratory Re  
Laboratory Name ANK

Sample ID	Sampled By	Date	Received By	Date	Condition
WS #1	RMW	12-12-88			
WS #3	RMW	12-12-88			
<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>
<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>
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<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>	<i>[scribble]</i>

Received By \_\_\_\_\_ Date \_\_\_\_\_ Co \_\_\_\_\_  
\* make out a separate  
report for this water  
\* the soils in project  
are to be put on one

Released to Courier By Field Personnel

Released To Lab by Courier

Released to Lab by Courier

Received by Courier B. C.  
12/17/88  
11:30 am

Received by Bob Tom Hodge  
Courier 0209 12/14/88

(V.A.N.C.S)  
Received by Lab K. Tom  
12/14/88



341 LOG NO 5031

- 5 -

December 22, 1988

Parameter	Reporting Limit (mg/Kg)	Descriptor, Lab No. and Results (mg/Kg)				
		#1-25ft 12-13-88 (-19914)	#3-30ft 12-13-88 (-19915)	#4-15ft 12-13-88 (-19916)	#5-15ft 12-13-88 (-19917)	#2-15ft 12-12-88 (-19918)
Oil & Grease (Grav)	50	NR	NR	NR	NR	ND
PETROLEUM HYDROCARBONS Volatile, as Gasoline Extractable,	10	120	60	60	ND	NR
as Motor Oil	10	ND	ND	160	ND	ND
as Diesel Fuel	10	68	650	700	ND	ND

Parameter	Reporting Limit (mg/Kg)	Descriptor, Lab No. and Results (mg/Kg)				
		#1-25ft 12-13-88 (-19914)	#3-30ft 12-13-88 (-19915)	#4-15ft 12-13-88 (-19916)	#5-15ft 12-13-88 (-19917)	#2-15ft 12-12-88 (-19918)
Benzene	0.025	ND	ND	ND	ND	NR
Ethylbenzene	0.030	0.071	ND	ND	ND	NR
Toluene	0.025	0.076	ND	ND	ND	NR
Xylenes, total	0.075	ND	ND	ND	ND	NR

THE COVER LETTER AND KEY TO ABBREVIATIONS ARE AN INTEGRAL PART OF THIS REPORT

HAGEMAN-SCHANK, INCORPORATED  
2723 CROW CANYON ROAD, SUITE 210  
SAN RAMON, CALIFORNIA 94583  
415/837-2926

ANALYSIS TPH & BTXE AS  
GASOLINE, TPH AS DIESEL  
PROJECT NO. P880

TURN AROUND 5-DAY

CHAIN OF CUSTODY RECORD

Field Record  
Sample Type

Container Type Soil  
BRASS LINER

Laboratory Record  
Lab No. \_\_\_\_\_

Contract Laboratory Re:  
Laboratory Name ANAL

503

Sample ID	Sampled By	Date	Received By	Date	Condition	Received By	Date	Co
# 1-25'	GA/RMW	12-13-88						
# 3-30'	GA/RMW	12-13-88						
# 4-15'	GA/RMW	12-13-88						
# 5-15'	GA/RMW	12-13-88						

Released to Courier By Field Personnel  
Robert A. Ukba 12-13-88

Released To Lab by Courier  
B. Cur

Released to Lab by Cour:  
W & NCS

Received by Courier B. Cur  
12/13/88  
11:30am

Received by Lab Tom Hodge  
Courier 6208 12/14/88

Received by Lab B. Cur

HAGEMAN-SCHANK, INCORPORATED  
 2723 CROW CANYON ROAD, SUITE 210  
 SAN RAMON, CALIFORNIA 94583  
 415/837-2926

ANALYSIS OIL & GREASE (SOB)  
TPH AS DIESEL

PROJECT NO. P8802

TURN AROUND 5 DAY  
 CHAIN OF CUSTODY RECORD

Field Record  
 Sample Type SOIL  
 Container Type BRASS LINER

Laboratory Record  
 Lab No. \_\_\_\_\_

Contract Laboratory Reco  
 Laboratory Name ANATE

(503)

Sample ID	Sampled By	Date	Received By	Date	Condition	Received By	Date	Con
<u>42-15'</u>	<u>LMW</u>	<u>12-17-88</u>						

Released to Courier By Field Personnel

Robert M. Wilson 12-13-88  
 Received by Courier B. Cunningham  
12/13/88  
11:30am

Released To Lab by Courier

B. Cunningham  
 Received by Lab Don Hodge  
 Courier 0208 12/14/88

Released to Lab by Cour

(VIA NC)  
 Received by Lab K. J. ...