

December 28, 1993

ALCO  
HAZMAT

93 DEC 34 AM 9:11

**SEACOR**  
Science & Engineering  
Analysis Corporation

Mr. Thomas Peacock  
Hazardous Materials Division  
Alameda County Department of  
Environmental Health  
80 Swan Way, Room 200  
Oakland, California 94621

**QUARTERLY GROUNDWATER MONITORING REPORT, 4070 SAN PABLO AVENUE,  
EMERYVILLE, CALIFORNIA**

Dear Mr. Peacock:

On behalf of San Francisco French Bread Company (SFFBC), Science & Engineering Analysis Corporation (*SEACOR*) has prepared this quarterly groundwater monitoring report for 4070 San Pablo Avenue in Emeryville, California ("the site", see Figure 1). The site is improved with two warehouse-type buildings. The southern building is currently occupied by Anderson Carpeting and the northern building by Tire Center Inc. A site plan showing the existing site configuration, including the location of the former underground storage tanks (USTs) is attached as Figure 2.

**SITE BACKGROUND**

In September 1992, *SEACOR* installed monitoring well MW-1 slightly west, and down-gradient of the former UST locations. This well was completed to a depth of 25 feet below ground surface with the screened interval extending from 25 to 15 feet below ground surface. The groundwater sample collected from this well in September 1992 was reported to contain total petroleum hydrocarbons as gasoline (TPHg) and TPH as diesel (TPHd) at concentrations of 1.4 and 0.2 milligrams per liter (mg/l), respectively. The laboratory reported that the positive result for TPHd appears to have been due to the presence of a lighter fuel (e.g. gasoline) rather than diesel. Benzene, toluene, ethylbenzene, and xylenes (BTEX) were also detected in the water sample at concentrations of 0.47, 0.043, 0.045, and 0.10 mg/l, respectively. Based on the findings of this initial investigation, SFFBC initiated a quarterly groundwater monitoring program at the site, with monitoring events occurring in December 1992, March, June, September and December 1993. This report presents the findings of the December 1993 monitoring event which is the sixth sampling event since installation of well MW-1 in September 1992.

**DEPTH TO GROUNDWATER**

Prior to purging and sampling monitoring well MW-1, the depth to groundwater and well depth were measured by *SEACOR* on December 1, 1993 using an electronic water-level indicator. Groundwater was measured at a depth of 11.82 feet below the top of the PVC casing. This represents a 3.82 foot decrease in water level since the September 2, 1993 monitoring event. Historic depth to groundwater measurements are included on Table 1.

SFFBQ4E.RP2  
50090-002-01

### MONITORING WELL PURGING AND SAMPLING

Monitoring well purging and sampling was performed by *SEACOR* on December 1, 1993. Well purging was accomplished by bailing with a clean stainless steel bailer. During purging the pH, temperature, and electrical conductivity of the discharge water was measured and the color and turbidity were visually inspected. Stabilization of these parameters was used as an indicator that fresh formation water was entering the well casing. Approximately three casing volumes of water were removed from the well. A copy of the Water Sample Data Sheet is included as an Attachment. Water removed from the well during purging activities was placed in a DOT-approved 55-gallon drum and stored onsite.

Following completion of well purging, a water sample was collected by lowering a clean stainless-steel bailer into the well casing. The water sample was transferred directly from the bailer into laboratory supplied sample containers and labeled. Sample containers were stored in a cooler containing ice for shipment to the analytical laboratory. The groundwater sample was submitted to NET Pacific Analytical Laboratory for analysis of TPHg and BTEX according to EPA Methods 8015 modified, and 8020, respectively.

### CHEMICAL TESTING RESULTS

The groundwater sample analyzed from monitoring well MW-1 was reported to contain TPHg at a concentration of 0.81 mg/l and BTEX at concentrations of 170 micrograms per liter (ug/l), 23 µg/l, 22 µg/l and 39 µg/l respectively. When compared to water quality data from September 1993, TPHg, benzene, and xylene concentrations have decreased, while concentrations toluene of ethylbenzene have increased from below the reporting limit. Table 1 summarizes the chemical analytical results for this quarterly groundwater monitoring event as well as the previous sampling events. Laboratory analytical data sheets and chain-of-custody documentation are included as an Attachment.

### RECOMMENDATIONS

*SEACOR*, on behalf of SFFBC, plans to continue quarterly groundwater monitoring and reporting to provide additional water quality data for the site.

Mr. Thomas Peacock  
December 28, 1993  
Page 3

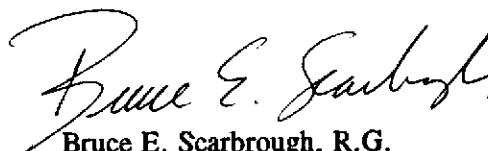
If you have any questions or comments regarding this report, please do not hesitate to call us at (415) 882-1548.

Sincerely yours,

**Science & Engineering Analysis Corporation**



Donald W. Moore  
Project Geologist



Bruce E. Scarbrough, R.G.  
Principal Geologist

DWM/lk

cc: Mr. Peter Sher, San Francisco French Bread Company

Attachments:

Figure 1 - Site Location Map

Figure 2 - Site Plan

Table 1 - Groundwater Measurements and Chemical Analytical Results

Groundwater Sample Data Sheet, Laboratory Analytical Reports and Chain-of-Custody Records

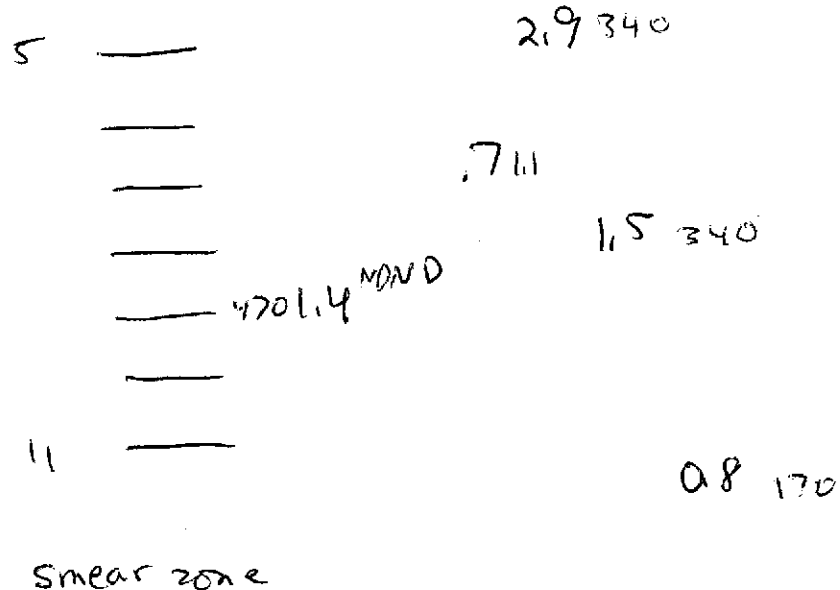
**TABLE 1**  
**GROUNDWATER MEASUREMENTS AND CHEMICAL**  
**ANALYTICAL RESULTS**  
 4070 San Pablo Avenue  
 Emeryville, California

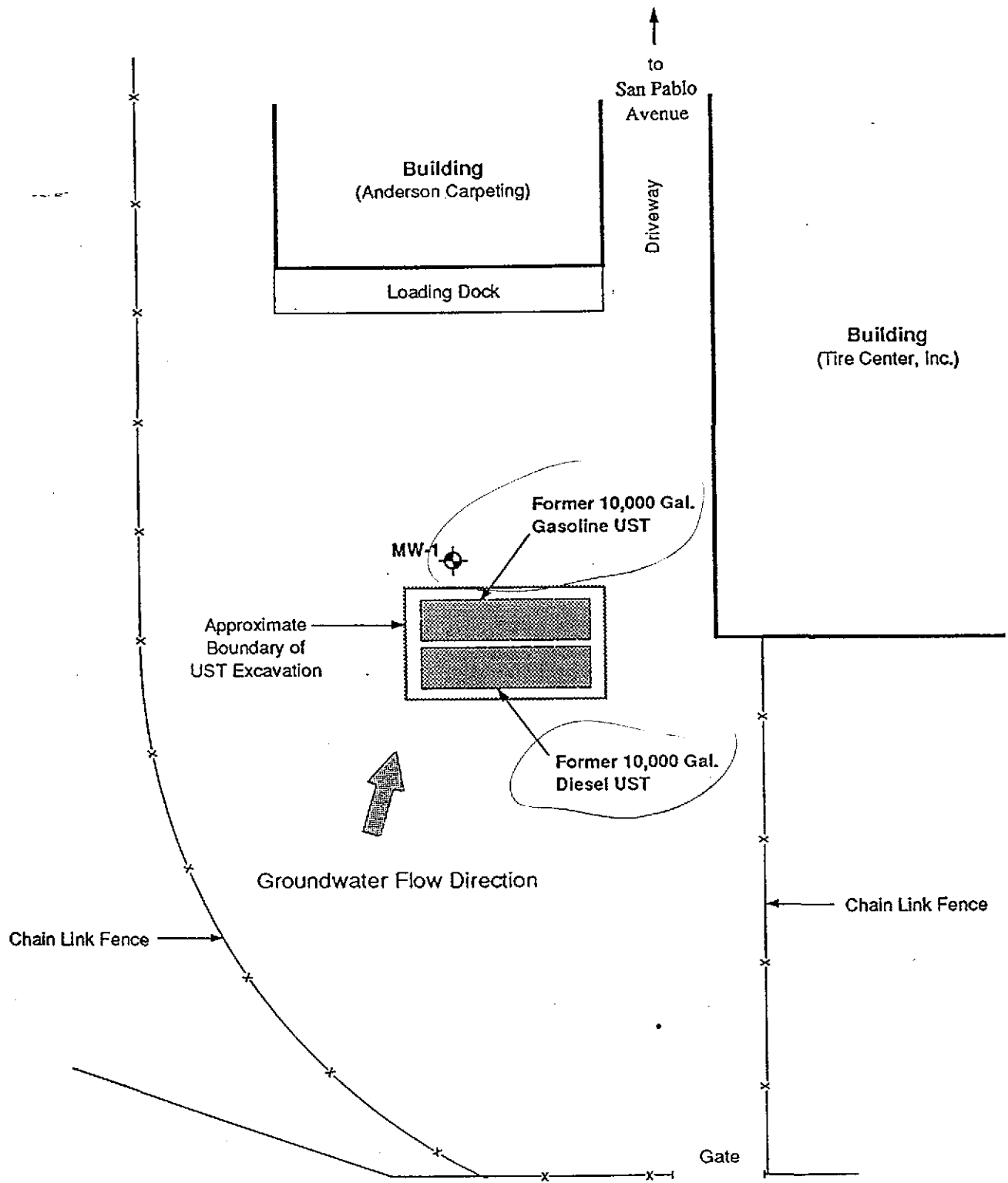
WELL	DATE	DEPTH TO GROUNDWATER <sup>(1)</sup>	TPH <sub>g</sub> <sup>(2)</sup> (mg/l) <sup>(3)</sup>	BENZENE (μg/l) <sup>(4)</sup>	TOLUENE (μg/l)	ETHYLBENZENE (μg/l)	XYLENES (μg/l)
MW-1	9/11/92	9.10	1.4	470	45	43	100
	12/3/92	9.55 ↓	ND < 0.05	ND < 0.5	ND < 0.5	1.6	ND < 0.5
	3/4/93	7.82 ↑	0.70	1.1	ND < 0.5	ND < 0.5	1.1
	6/4/93	5.15 ↑	2.9	340	58	50	140
	9/2/93	8.00 ↓	1.5	340	ND < 0.5	ND < 0.5	140
	12/1/93	11.82 ↓	0.81	170	23	22	39

810

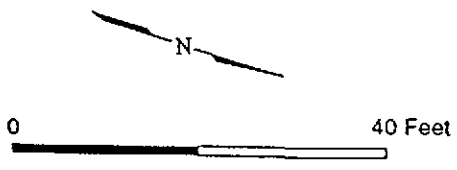
**NOTES:**

- (1) Feet below top of PVC casing.
- (2) Total petroleum hydrocarbons as gasoline.
- (3) Milligrams per liter.
- (4) Micrograms per liter.





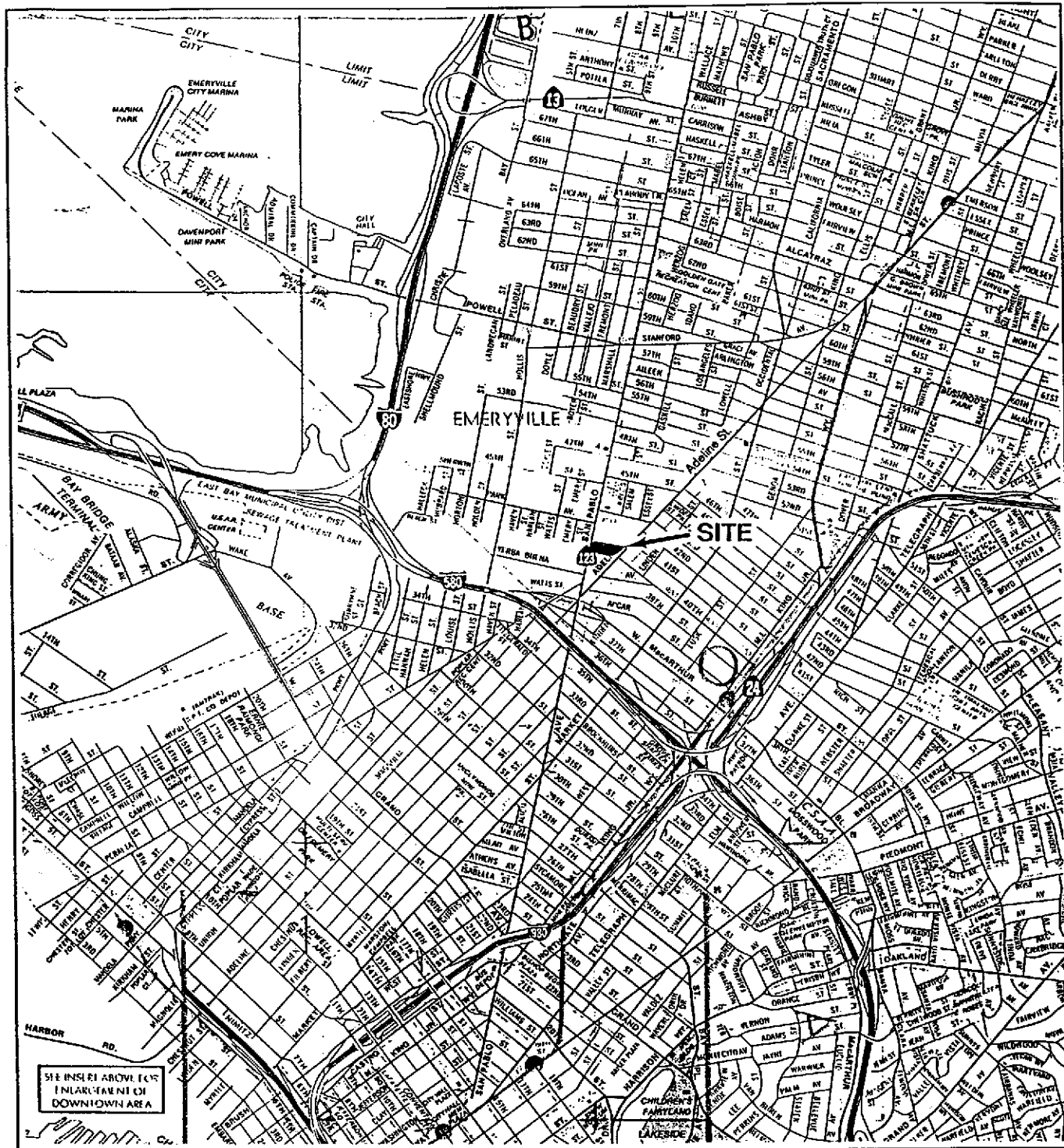
SOURCE:  
Modified from Clayton Environmental Consultants



**LEGEND**

⊕ Monitoring Well Location

**SITE PLAN**  
4070 San Pablo Avenue  
Emeryville, California  
Figure 2



SOURCE:  
 California State Automobile Association  
 Oakland, Berkeley, Alameda, 2/91

0 4000 Feet

N

SITE LOCATION MAP  
 4070 San Pablo Avenue  
 Emeryville, California  
 Figure 1

SEACOR  
 SJN 70007-004-01

# SEACOR WATER SAMPLE FIELD DATA SHEET

PROJECT NO: 50090-002-C1  
 ORDERED BY: Kurt Heiss  
 SAMPLED BY: Kurt Heiss

WELL ID: MW-1  
 SAMPLE ID: MW-1  
 CLIENT NAME: S.F. French Bread  
 LOCATION: Emeryville, La

TYPE: Groundwater  Surface Water \_\_\_\_\_ Treatment Effluent \_\_\_\_\_ Other \_\_\_\_\_

CASING DIAMETER (inches): 2  3 \_\_\_\_\_ 4 \_\_\_\_\_ 4.5 \_\_\_\_\_ 6 \_\_\_\_\_ Other \_\_\_\_\_

CASING ELEVATION: (feet/MSL): _____	VOLUME IN CASING (gal.) <u>216</u>
DEPTH TO WATER (feet): <u>11.82</u>	CALCULATED PURGE (gal.) <u>648</u>
DEPTH OF WELL (feet): <u>25.30</u>	ACTUAL PURGE VOL (gal.) <u>650</u>

DATE PURGED: 12/1/93 Start (2400 Hr) 1005 End (2400 Hr.) 1015  
 DATE SAMPLED: 12/1/93 Start (2400 Hr) 1045 End (2400 Hr.) 1045

FIELD QC SAMPLES COLLECTED AT THIS WELL (i.e. FB-1, X-DUP-1): None

### FIELD MEASUREMENTS

TIME (24 Hr)	VOLUME (gal)	pH (units)	E.C. (umhos/cm @ 25°C)	TEMPERATURE (°F)	COLOR (visual)	TURBIDITY (NTU) (N/A)
<u>1011</u>	<u>5</u>	<u>7.2</u>	<u>1707</u>	<u>65.5</u>	<u>Tan</u>	<u>Very</u>
<u>1014</u>	<u>6</u>	<u>7.1</u>	<u>1722</u>	<u>67.6</u>	<u>"</u>	<u>"</u>
<u>1015</u>	<u>6.5</u>	<u>7.2</u>	<u>1792</u>	<u>67.2</u>	<u>"</u>	<u>"</u>

DO (ppm): N.M. COLOR, COBALT (0-100): Tan

ODOR: None

Clear \_\_\_\_\_  
 Cloudy \_\_\_\_\_  
 Yellow \_\_\_\_\_  
 Brown (2)

#### PURGING EQUIPMENT

#### SAMPLING EQUIPMENT

2" Bladder Pump \_\_\_\_\_ Bailer (Teflon®) \_\_\_\_\_  
 Centrifugal Pump \_\_\_\_\_ Bailer (PVC) \_\_\_\_\_  
 Submersible Pump  Bailer (Stainless Steel) \_\_\_\_\_  
 Well Wizard™ \_\_\_\_\_ Dedicated \_\_\_\_\_

2" Bladder Pump \_\_\_\_\_ Bailer (Teflon®) \_\_\_\_\_  
 DDL Sampler \_\_\_\_\_ Bailer (PVC/disposable) \_\_\_\_\_  
 Submersible Pump  Bailer (Stainless Steel) \_\_\_\_\_  
 Well Wizard™ \_\_\_\_\_ Dedicated \_\_\_\_\_

Other: \_\_\_\_\_

WELL INTEGRITY: Smashed expansion cap due to well construction  
 MARKS: Slight de-watering during purging LOCK #: Master - 2356

NATURE: DM WA 26



®

NATIONAL  
ENVIRONMENTAL  
TESTING, INC.

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

Donald Moore  
Seacor  
90 New Montgomery  
Suite 620  
San Francisco, CA 94105

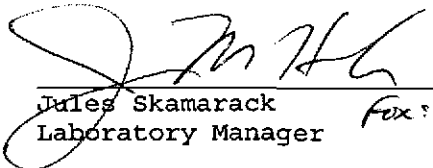
Date: 12/10/1993  
NET Client Acct. No: 74000  
NET Pacific Job No: 93.05245  
Received: 12/02/1993

Client Reference Information

Project No: 50090-002-01

Sample analysis in support of the project referenced above has been completed and results are presented on following pages. Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety. Please refer to the enclosed "Key to Abbreviations" for definition of terms. Should you have questions regarding procedures or results, please feel welcome to contact Client Services.

Approved by:

  
Jules Skamarack  
Laboratory Manager *fox*

Enclosure(s)





Client Acct: 74000  
Client Name: Seacor  
NET Job No: 93.05245

Date: 12/10/1993  
ELAP Certificate: 1386  
Page: 2

Ref: Project No: 50090-002-01

SAMPLE DESCRIPTION: MW-1

Date Taken: 12/01/1993

Time Taken: 10:45

NET Sample No: 179890

Parameter	Results	Flags	Reporting Limit	Units	Method	Date Extracted	Date Analyzed
TPH (Gas/BTEX, Liquid)							
METHOD 5030/M8015	--						12/07/1993
DILUTION FACTOR*	1						12/07/1993
as Gasoline	0.81		0.05	mg/L	5030		12/07/1993
METHOD 8020 (GC, Liquid)	--						12/08/1993
Benzene	170		0.5	ug/L	8020		12/08/1993
Toluene	23		0.5	ug/L	8020		12/07/1993
Ethylbenzene	22		0.5	ug/L	8020		12/07/1993
Xylenes (Total)	39		0.5	ug/L	8020		12/07/1993
SURROGATE RESULTS	--						12/07/1993
Bromofluorobenzene (SURR)	104			% Rec.	5030		12/07/1993

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Acct: 74000  
Client Name: Seacor  
NET Job No: 93.05245

Date: 12/10/1993  
ELAP Certificate: 1386  
Page: 3

Ref: Project No: 50090-002-01

## CONTINUING CALIBRATION VERIFICATION STANDARD REPORT

Parameter	CCV	CCV	CCV	Units	Date Analyzed	Analyst Initials
	Standard % Recovery	Standard Amount Found	Standard Amount Expected			
TPH (Gas/BTXE,Liquid)						
as Gasoline	96.7	0.967	1.00	mg/L	12/08/1993	vin
Benzene	91.2	4.56	5.00	ug/L	12/08/1993	vin
Toluene	93.2	4.66	5.00	ug/L	12/08/1993	vin
Ethylbenzene	94.8	4.74	5.00	ug/L	12/08/1993	vin
Xylenes (Total)	96.7	14.50	15.0	ug/L	12/08/1993	vin
Bromofluorobenzene (SURR)	91.0	91	100	% Rec.	12/08/1993	vin

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Acct: 74000  
Client Name: Seacor  
NET Job No: 93.05245

Date: 12/10/1993  
ELAP Certificate: 1386  
Page: 4

Ref: Project No: 50090-002-01

## METHOD BLANK REPORT

Parameter	Method	Reporting	Units	Date	Analyst
	Blank				
	Amount	Limit		Analyzed	Initials
	Found				
TPH (Gas/BTXE, Liquid)					
as Gasoline	ND	0.05	mg/L	12/08/1993	vin
Benzene	ND	0.5	ug/L	12/08/1993	vin
Toluene	ND	0.5	ug/L	12/08/1993	vin
Ethylbenzene	ND	0.5	ug/L	12/08/1993	vin
Xylenes (Total)	ND	0.5	ug/L	12/08/1993	vin
Bromofluorobenzene (SURR)	96		† Rec.	12/08/1993	vin

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



Client Acct: 74000  
 Client Name: Seacor  
 NET Job No: 93.05245

Date: 12/10/1993  
 ELAP Certificate: 1386  
 Page: 5

Ref: Project No: 50090-002-01

## MATRIX SPIKE / MATRIX SPIKE DUPLICATE

Parameter	Matrix Spike			Spike Amount	Sample Conc.	Matrix Spike		Units	Date Analyzed	Analyst Initials
	Spike % Rec.	Dup % Rec.	RPD			Spike Conc.	Dup. Conc.			
TPH (Gas/BTXE,Liquid)										
as Gasoline	99.7	82.4	19.0	1.00	0.10	1.097	0.924	mg/L	12/08/1993	vin
Benzene	101.8	95.5	6.3	39.8	ND	40.5	38.0	ug/L	12/08/1993	vin
Toluene	101.4	96.0	5.4	97.8	ND	99.2	93.9	ug/L	12/08/1993	vin
Bromofluorobenzene (SURR)	101	100		100	79			% Rec.	12/08/1993	vin

NOTE: Results apply only to the samples analyzed. Reproduction of this report is permitted only in its entirety.



## KEY TO ABBREVIATIONS and METHOD REFERENCES

- < : Less than; When appearing in results column indicates analyte not detected at the value following. This datum supercedes the listed Reporting Limit.
- \* : Reporting Limits are a function of the dilution factor for any given sample. Actual reporting limits and results have been multiplied by the listed dilution factor. Do not multiply the reporting limits or reported values by the dilution factor.
- dw : Result expressed as dry weight.
- mean : Average; sum of measurements divided by number of measurements.
- 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.
- mL/L/hr : Milliliters per liter per hour.
- MPN/100 mL : Most probable number of bacteria per one hundred milliliters of sample.
- N/A : Not applicable.
- NA : Not analyzed.
- ND : Not detected; the analyte concentration is less than the applicable listed reporting limit.
- NTU : Nephelometric turbidity units.
- RPD : Relative percent difference,  $100 \text{ [Value 1 - Value 2] / mean value}$ .
- 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.
- umhos/cm : Micromhos per centimeter.

### Method References

Methods 100 through 493: see "Methods for Chemical Analysis of Water & Wastes", U.S. EPA, 600/4-79-020, Rev. 1983.

Methods 601 through 625: see "Guidelines Establishing Test Procedures for the Analysis of Pollutants" U.S. EPA, 40 CFR, Part 136, Rev. 1988.

Methods 1000 through 9999: see "Test Methods for Evaluating Solid Waste", U.S. EPA SW-846, 3rd edition, 1986., Rev. 1, December 1987.

SM: see "Standard Methods for the Examination of Water & Wastewater, 17th Edition, APHA, 1989.

# SEACOR Chain-of-Custody Record

Address: 90 New Montgomery, #620  
San Francisco, CA  
94105

6857

Project # <u>50090-002-01</u> Task# _____				Analysis Request											Number of Containers			
Project Manager <u>Donald Moore</u>				TPHg/BTEX 8015 (modified)/8020	TPHg 8015 (modified)	TPH 418.1	Aromatic Volatiles 602/8020	Volatile Organics 624/8240 (GC/MS)	Halogenated Volatiles 601/8010	Semi-volatile Organics 625/8270 (GC/MS)	Pesticides/PCB's 608/8080	Total Lead 7421	Priority Pollutant Metals (13)	TCPLP Metals		Comments/ Instructions		
Laboratory <u>NET Pacific</u>															Sample ID		Date	Time
Turn-around time: <u>Standard</u>																		
Sampler's Name: <u>Kurt Heiss</u>																		
Sampler's Signature: <u>[Signature]</u>																		
				<u>MW-1</u>	<u>12/1/93</u>	<u>10:45</u>	<u>H<sub>2</sub>O</u>	<input checked="" type="checkbox"/>									<u>3x VOC w/ HCl</u>	<u>3</u>

Special Instructions/Comments:

**(CUSTODY SEALED)**  
12/1/93  
[Signature]  
 Seal intact ✓

Temp: 1°C

Relinquished by:

Sign [Signature]  
 Print Kurt Heiss  
 Company SEACOR  
 Time 14:50 Date 12/1/93

Relinquished by:

Sign [Signature]  
 Print GP LUMBLE  
 Company NET  
 Time 16:30 Date 12/1/93

Received by:

Sign [Signature]  
 Print GP LUMBLE  
 Company NET  
 Time 14:50 Date 12/1/93

Received by:

Sign [Signature]  
 Print IC Temple  
 Company NET  
 Time 12/2/93 Date 0800

Sample Receipt

Total no. of containers	<u>3</u>
Chain of custody seals:	<u>Y</u>
Rec'd good condition/cold:	<u>Y</u>
Conforms to record:	<u>Y</u>
Client:	_____
Client Contact:	_____
Client Phone Number:	_____