



Quarterly Monitoring Report for the
Period from January 1 through March 31, 1993
Former Ransome Property
Yerba Buena Project Site
Emeryville, California

April 12, 1993
1649.09

Prepared for
Catellus Development Corporation
201 Mission Street
San Francisco, California 94105



LEVINE·FRICKE



LEVINE•FRICKE

ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

April 12, 1993

LF 1649.09

Ms. Susan Hugo
Alameda County Health Care Services Agency
80 Swan Way, Room 200
Oakland, California 94621

Subject: Quarterly Monitoring Report for the Period from
January 1 through March 31, 1993, Former Ransome
Property, Yerba Buena Project Site, Emeryville,
California

Dear Ms. Hugo:

The enclosed report presents results of quarterly ground-water monitoring conducted during the period from January 1 through March 31, 1993, at the Former Ransome Property on the Yerba Buena Project Site in Emeryville, California. The monitoring was conducted and this report is submitted in accordance with Levine•Fricke's September 15, 1992 "Work Plan to Install One Monitoring Well and Conduct Quarterly Monitoring for the Former Ransome Property, Yerba Buena Project Site, Emeryville, California" prepared by Levine•Fricke, Inc., and submitted to and approved by the Alameda County Health Care Services Agency.

If you have any questions or comments concerning this report, please call me or Cindy Barclay, Senior Project Geologist.

Sincerely,

Jenifer Beatty
Project Hydrogeologist

Enclosure

cc: Pat Cashman, Catellus
Kimberly Brandt, Catellus
Lester Feldman, RWQCB

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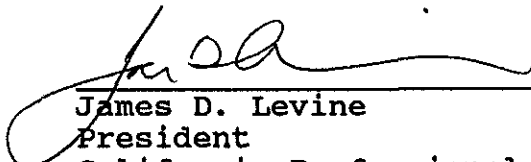
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CERTIFICATION

All engineering information, conclusions, and recommendations presented in this report have been prepared under the supervision of and reviewed by a Levine•Fricke California Professional Engineer.



James D. Levine
President
California Professional Engineer (33428)

4/12/93

Date

April 12, 1993

LF 1649.09

**QUARTERLY MONITORING REPORT FOR
THE PERIOD FROM JANUARY 1 THROUGH MARCH 31, 1993
FORMER RANSOME PROPERTY
YERBA BUENA PROJECT SITE
EMERYVILLE, CALIFORNIA**

1.0 INTRODUCTION

This report presents ground-water monitoring results for the period from January 1 through March 31, 1993, for the former Ransome Property, located at 4030 Hollis Street in Emeryville, California ("the Property"; Figure 1). Levine·Fricke, Inc. ("Levine·Fricke") conducted this work on behalf of Catellus Development Corporation ("Catellus") in accordance with Levine·Fricke's September 15, 1992 work plan (Levine·Fricke 1992c) submitted to and approved by the Alameda County Health Care Services Agency (ACHA).

Background

In May 1992, Levine·Fricke conducted a ground-water investigation of the Property, which included installation of five shallow ground-water monitoring wells in accordance with Levine·Fricke's April 15, 1992 work plan (Levine·Fricke 1992a). Results of the investigation indicated that ground water had not been significantly affected by petroleum compounds identified in soil at the Property and subsequently removed (Levine·Fricke 1992b). However, to complete the investigation, a sixth well (LF-29) was installed in October 1992, as recommended by Mr. Lester Feldman of the Regional Water Quality Control Board during a meeting on June 22, 1992, among representatives of Catellus and Levine·Fricke, Mr. Feldman, and Mr. Dennis Byrne of the ACHA.

A quarterly monitoring program was implemented at the Property in October 1992 to monitor the possible future effects to shallow ground water from petroleum-affected soils previously located on the Property. This quarterly monitoring report presents the results of recent quarterly ground-water monitoring activities.

2.0 ACTIVITIES CONDUCTED DURING THE QUARTERLY MONITORING PERIOD

The following activities were conducted for the Property during the period from January 1 through March 31, 1993:

- Water levels were measured on February 9, 1993, in wells LF-8, LF-16, LF-24, LF-25, LF-26, LF-27, LF-28, and LF-29 to the nearest 0.10 foot using an electric water-level sounding probe and recorded in the field.
- Ground-water samples were collected from well LF-16 and wells LF-24 through LF-29 on February 11 and 12, 1993, in accordance with the procedures described in Appendix A. Water-quality sampling sheets are included in Appendix B.
- Ground-water samples were submitted to Anametrix, Inc., a California state-certified laboratory located in San Jose, California, for analyses of total petroleum hydrocarbons (TPH) as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Method 8020, 5030 GCFID; TPH as diesel (TPHd) using EPA Method 3510 GCFID; and oil and grease (O&G) using Standard Method 5520BF. Results of chemical analyses are discussed in Section 4.0.

3.0 GROUND-WATER ELEVATIONS AND FLOW DIRECTION

Table 1 presents a historical summary of depth-to-water measurements and ground-water elevation data collected at the Property. Depth to ground water measured on February 9, 1993, ranged from 3.13 feet below ground surface (bgs) in well LF-25 to 10.31 feet bgs in wells LF-27. Shallow ground-water elevation contours are presented on Figure 2. These data generally indicate a southwesterly ground-water flow direction, with a gradient that ranges from 0.01 ft/ft as measured between wells LF-25 and LF-8 to 0.02 ft/ft as measured between wells LF-24 and LF-29. The February 1993 results are consistent with the general ground-water flow direction previously reported for the Property.

4.0 GROUND-WATER QUALITY RESULTS

Analytical results for ground-water samples collected in February 1993 are presented on Figure 3. Historical ground-water quality data collected at the Site are summarized in Table 2. Laboratory data sheets and chain-of-custody forms are presented in Appendix C.

Chemical analytical results were generally consistent with results reported for the Property in October 1992 (Levine·Fricke 1993), which indicated that shallow ground water has not been significantly affected by residual concentrations of petroleum in soils that were removed from the Property by ARI and Levine·Fricke between June 1991 and September 1992 (Levine·Fricke 1992d). With the exception of well LF-25, no O&G, TPHg, or BTEX compounds were detected in any of the wells sampled. Analytical results for samples collected from well LF-25 indicated very low concentrations of benzene and TPHg at concentrations of 0.0006 ppm and 0.054 ppm, respectively. TPHd was only detected in a ground-water sample collected from well LF-24 at a concentration of 0.076 ppm or less.

The original laboratory report for samples collected from well LF-16 and analyzed for diesel identified a compound not indicative of diesel at a concentration of 0.33 ppm. After Levine·Fricke contacted the laboratory concerning these results, the sample extract was analyzed using EPA Method 8270 to characterize the compound detected. No compounds were detected using this analysis and the laboratory reported that concentrations originally reported for well LF-16 likely were caused by instrument contamination. Concentrations of diesel detected in this well historically have been at the detection limit (0.050 ppm).

5.0 PROJECT ACTIVITIES PROPOSED FOR THE PERIOD FROM APRIL THROUGH JUNE 1993

The following activities are proposed for the second quarter 1993 (April 1 through June 30):

- collection of depth-to-water measurements from wells LF-8, LF-16, and LF-24 through LF-29.
- collection of ground-water samples from wells LF-16 and LF-24 through LF-29 for analysis of TPHg, TPHd, BTEX, and O&G.

REFERENCES

- . 1992a. Work plan for ground-water investigations, former Ransome property, Yerba Buena project site, Emeryville, California. Report. Emeryville, California. April 15.
- . 1992b. Ground-water investigations, Former Ransome Property, Yerba Buena Project Site, 4030 Hollis Street, Emeryville, California. August 4.
- . 1992c. Work plan to install one monitoring well and conduct quarterly monitoring, Former Ransome Property, Yerba Buena Project Site, Emeryville, California. September 15.
- . 1992d. Soil remediation activities report, Former Ransome Property, Yerba Buena Project Site, Emeryville, California. December 2.
- . 1993. Quarterly monitoring report for the period from October 1 through December 31, 1992, Former Ransome Property, Yerba Buena Project Site, Emeryville, California. January 29.

TABLE 1
WELL CONSTRUCTION AND GROUND-WATER ELEVATION DATA
FORMER RANSOME PROPERTY, EMERYVILLE, CALIFORNIA
(all elevations in feet above mean sea level)

Well Number	Well Elevation	Well Depth (feet)	Screened Interval (feet)	Date Measured	Depth to Water	Ground-Water Elevation
LF-8	29.63	18	7.5-17.5	23-Feb-90	6.05	23.58
				06-Jan-92	5.04	24.59
				15-Apr-92	6.51	23.12
				14-May-92	8.54	21.09
				22-Jul-92	10.19	19.44
				20-Oct-92	11.24	18.39
				09-Feb-93	3.59	26.04
LF-16	17.47	20	5-20	23-Feb-90	5.98	11.49
				06-Jan-92	6.04	11.43
				15-Apr-92	6.40	11.07
				14-May-92	6.46	11.01
				22-Jul-92	6.68	10.79
				20-Oct-92	7.43	10.04
				09-Feb-93	5.65	11.82
LF-24	21.97	20	7-20	14-May-92	9.75	12.22
				28-May-92	9.86	12.11
				22-Jul-92	10.13	11.84
				20-Oct-92	10.91	11.06
				09-Feb-93	8.90	13.07
LF-25	23.00	15	5-15	14-May-92	7.02	15.98
				28-May-92	7.34	15.66
				22-Jul-92	8.38	14.62
				20-Oct-92	9.11	13.89
				09-Feb-93	3.13	19.87
LF-26	26.82	20	8-20	14-May-92	10.55	16.27
				28-May-92	10.87	15.95
				22-Jul-92	11.70	15.12
				20-Oct-92	12.67	14.15
				09-Feb-93	6.87	19.95
LF-27	22.76	20	8-20	14-May-92	12.87	9.89
				28-May-92	13.10	9.66
				22-Jul-92	13.55	9.21
				20-Oct-92	14.40	8.36
				09-Feb-93	10.31	12.45
LF-28	20.54	20	7-20	14-May-92	9.00	11.54
				28-May-92	9.02	11.52
				22-Jul-92	9.41	11.13
				20-Oct-92	10.04	10.50
				09-Feb-93	8.34	12.20
LF-29	29.82	20	8-20	20-Oct-92	14.40	15.42
				09-Feb-93	8.48	21.34

Data entered by NEK/23-Mar-93

Data proofed by

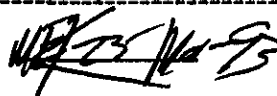


TABLE 2
GROUND-WATER QUALITY DATA
FORMER RANSOME PROPERTY
YERBA BUENA PROJECT SITE
EMERYVILLE, CALIFORNIA

(concentrations expressed in milligrams per liter [mg/L])

Well Number	Date	Lab	TPHg	Benzene	Toluene	Ethyl-benzene	Total Xylenes	Oil and Grease	Hydrocarbons	Diesel
LF-16	14-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	6.6	6.3	NA
	28-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	<0.5	0.05
	22-Oct-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	NA	0.05
	12-Feb-93	ANA	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	<5	<0.05*
LF-24	14-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	<0.5	NA
	28-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	<0.5	0.98
	22-Oct-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	NA	0.3
	12-Feb-93	ANA	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	<5	0.076
LF-25	14-May-92	QUA	<0.05	0.0004	0.0004	<0.0003	<0.001	4	2	NA
	duplicate	QUA	<0.05	0.0004	0.0004	<0.0003	<0.001	5.6	3	NA
	28-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	2	1	0.2
	duplicate	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	NA	NA	NA
	22-Oct-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	0.6	NA	0.4
	11-Feb-93	ANA	0.054	0.0006	<0.0005	<0.0005	<0.0005	NA	<5	<0.05
LF-26	14-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	<0.5	NA
	28-May-92	QUA	<0.05	<0.0003	0.002	<0.0003	<0.001	<0.5	<0.5	0.1
	22-Oct-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	NA	<0.05
	11-Feb-93	ANA	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	<5	<0.05
LF-27	14-May-92	QUA	<0.05	0.0004	0.002	<0.0003	0.002	<0.5	<0.5	NA
	28-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	<0.5	0.1
	22-Oct-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	NA	<0.05
	11-Feb-93	ANA	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	<5	<0.05
LF-28	14-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	<0.5	NA
	28-May-92	QUA	<0.05	<0.0003	0.001	<0.0003	<0.001	<0.5	<0.5	0.3
	22-Oct-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	<0.5	NA	<0.05
	12-Feb-93	ANA	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	<5	<0.05
LF-29	22-Oct-92	QUA	0.09	0.001	<0.0003	0.0004	0.001	<0.5	NA	<0.05
	11-Feb-93	ANA	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	<5	<0.05
LF-25-FB	14-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	NA	NA	NA
	28-May-92	QUA	<0.05	<0.0003	<0.0003	<0.0003	<0.001	NA	NA	NA

Data entered by MEK/23-Mar-93. Data proofed by MEK/23-Mar-93. QA/QC by _____.

Notes:

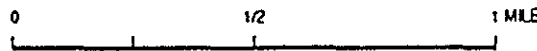
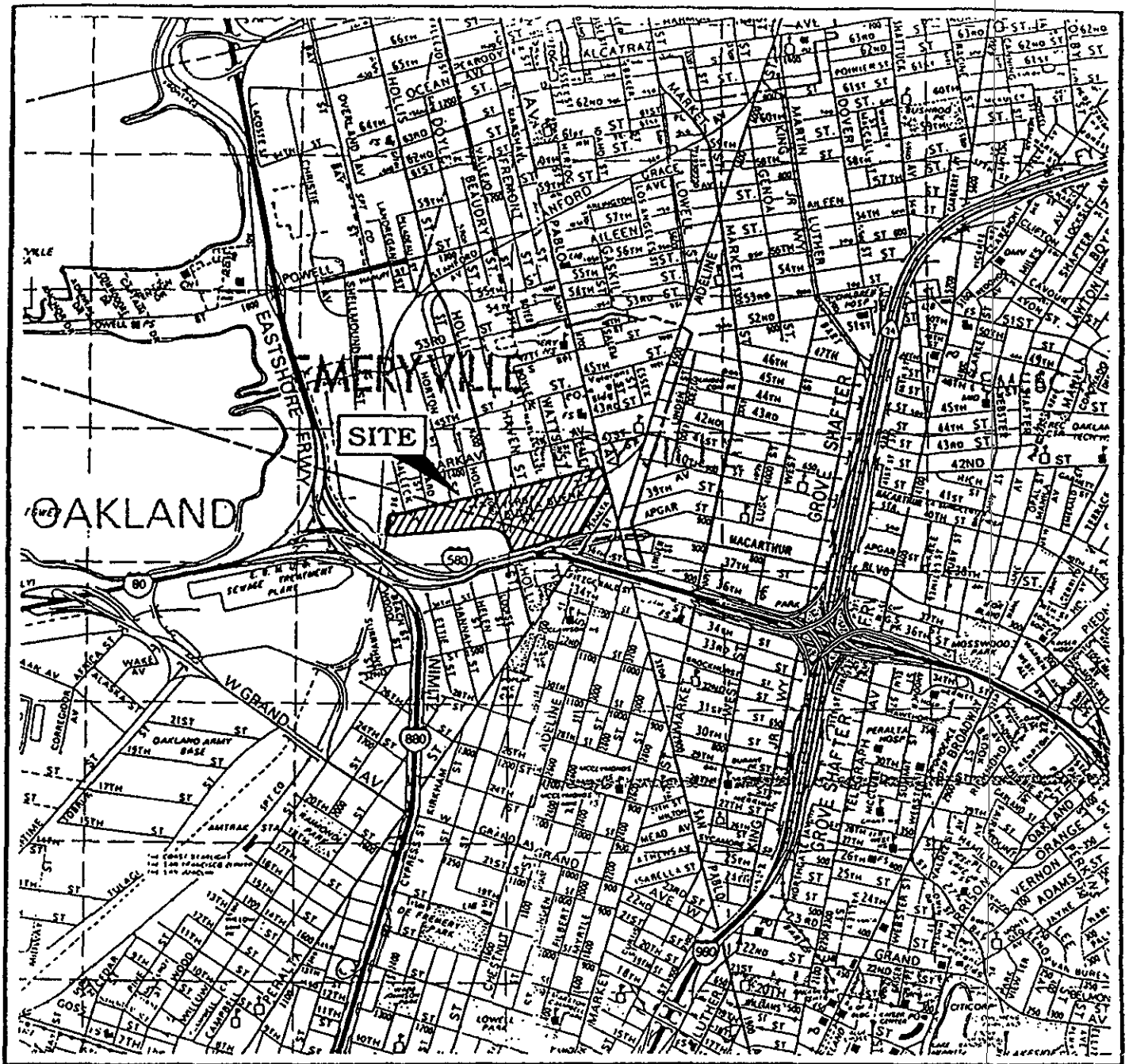
Milligrams per liter is equivalent to parts per million.
TPHg - Total petroleum hydrocarbons as gasoline.
Diesel - Extractable hydrocarbons as diesel
NA - not analyzed
FB - field blank

ANA - Anametrix, Inc., of San Jose, California.
QUA - Quantec Laboratories of Pleasant Hill, California.

Oil and grease (analyzed using Standard Method 5520c) is all oil and grease compounds, including animal, vegetable, and petroleum hydrocarbon oil and grease compounds.

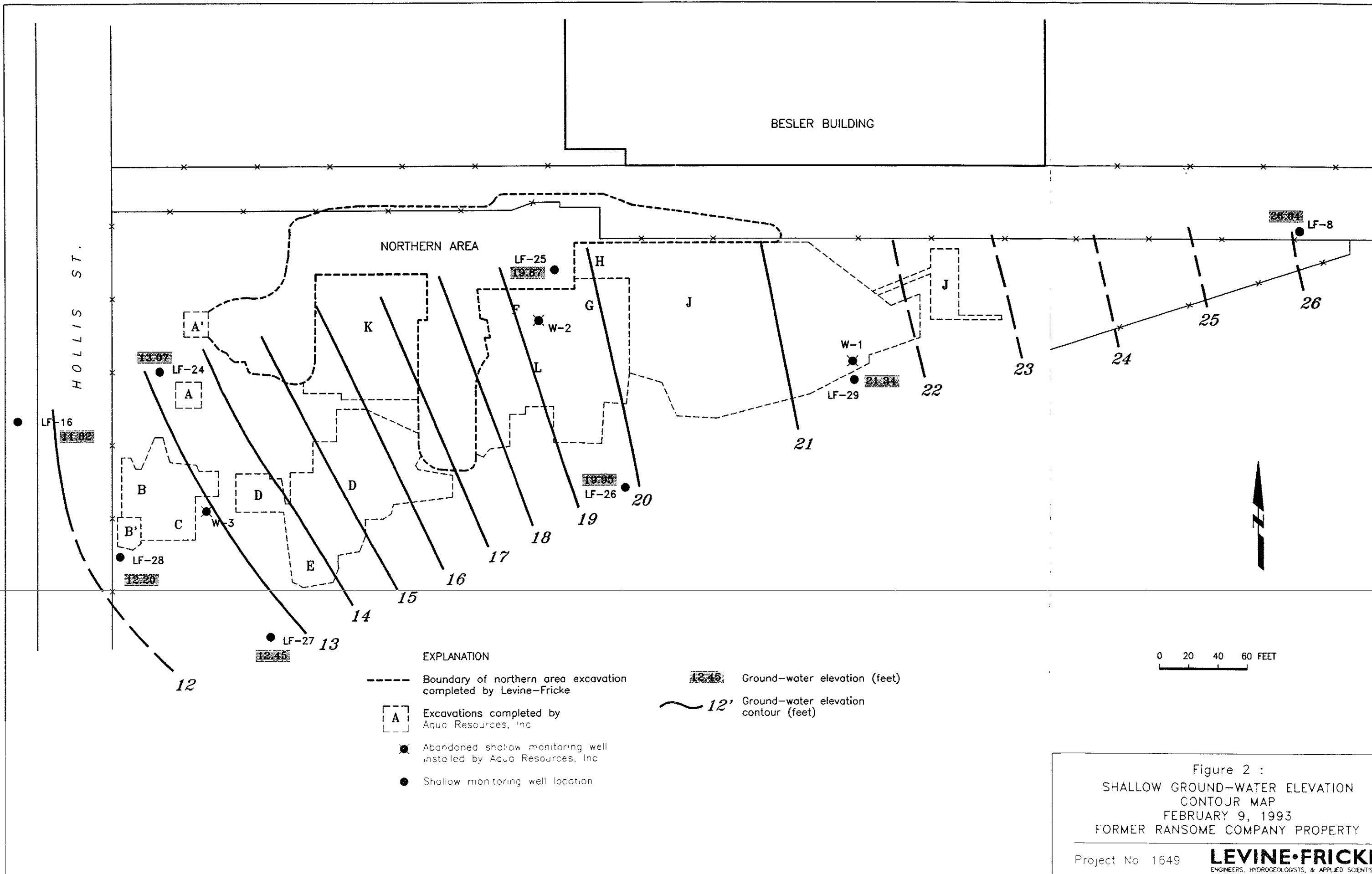
Hydrocarbons (analyzed using Standard Methods 5520 B+F and C+F) is only the petroleum hydrocarbon fraction of the oil and grease compounds.

* 0.33 ppm of an unknown compound was detected during analysis of sample LF-16 for TPHd. The laboratory confirmed that its detection most likely is the result of instrument contamination.



MAP SOURCE:
Alameda & Contra Costa Counties,
Thomas Bros. map, 1990 Edition

Figure 1: SITE LOCATION MAP
YERBA BUENA PROJECT SITE



EXPLANATION

----- Boundary of northern area excavation completed by Levine-Fricke

[A] Excavations completed by Aqua Resources, Inc

● Abandoned shallow monitoring well installed by Aqua Resources, Inc

● Shallow monitoring well location

12.46 Ground-water elevation (feet)

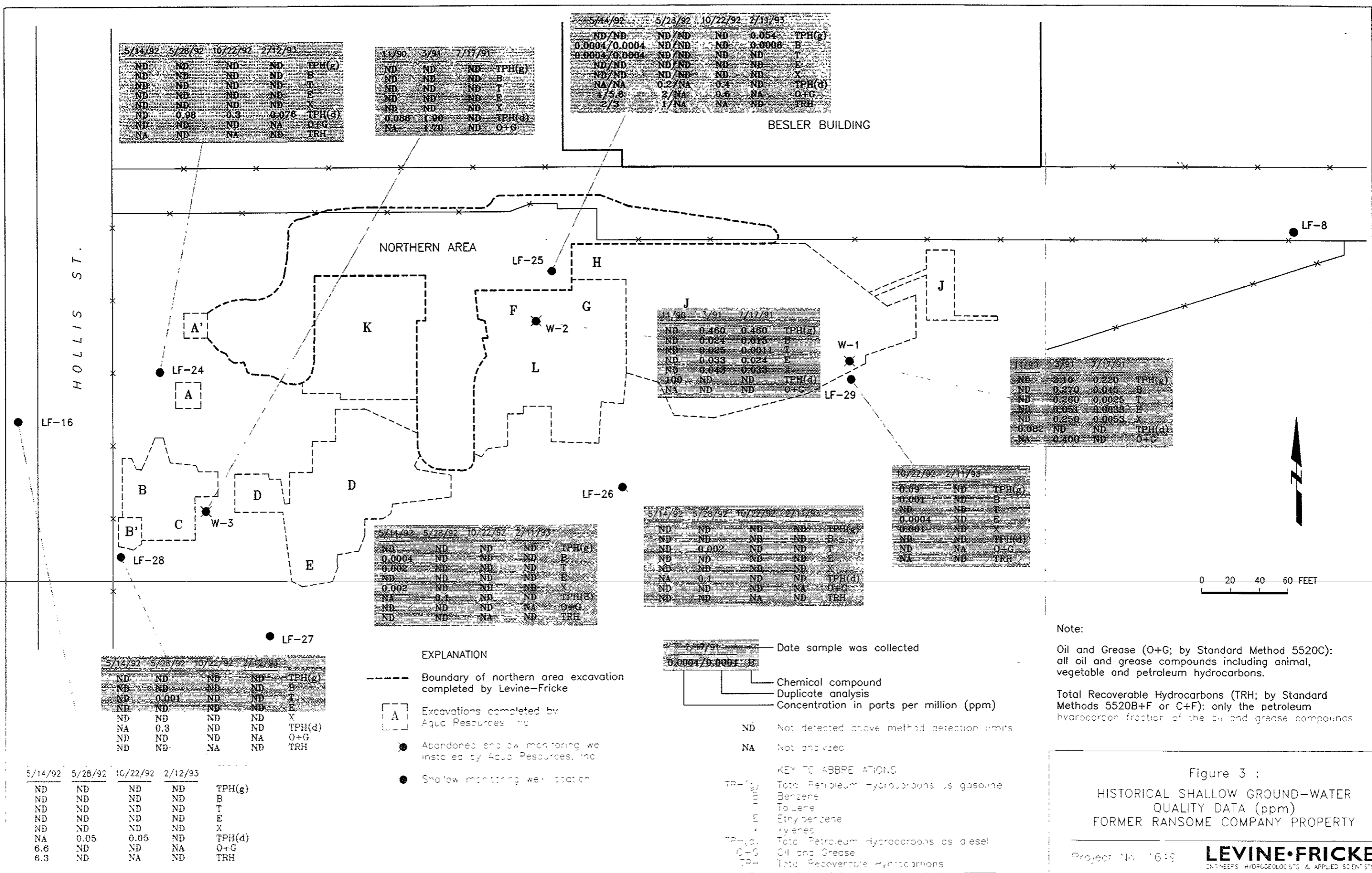
~ 12' Ground-water elevation contour (feet)

0 20 40 60 FEET

Figure 2 :
 SHALLOW GROUND-WATER ELEVATION
 CONTOUR MAP
 FEBRUARY 9, 1993
 FORMER RANSOME COMPANY PROPERTY

Project No 1649

LEVINE-FRICKE
 ENGINEERS, HYDROGEOLOGISTS, & APPLIED SCIENTISTS



5/14/92	5/28/92	10/22/92	2/12/93	
ND	ND	ND	ND	TPH(g)
ND	ND	ND	ND	B
ND	ND	ND	ND	T
ND	ND	ND	ND	E
ND	ND	ND	ND	X
ND	0.98	0.3	0.076	TPH(d)
ND	ND	ND	NA	O+G
NA	ND	NA	ND	TRH

11/90	3/91	7/17/91	
ND	ND	ND	TPH(g)
ND	ND	ND	B
ND	ND	ND	T
ND	ND	ND	E
ND	ND	ND	X
0.058	1.90	ND	TPH(d)
NA	1.70	ND	O+G

5/14/92	5/28/92	10/22/92	2/11/93	
ND/ND	ND/ND	ND	0.054	TPH(g)
0.0004/0.0004	ND/ND	ND	0.0008	B
0.0004/0.0004	ND/ND	ND	ND	T
ND/ND	ND/ND	ND	ND	E
ND/ND	ND/ND	ND	ND	X
NA/NA	0.2/NA	0.4	ND	TPH(d)
1/5.8	2/NA	0.6	NA	O+G
2/3	1/NA	NA	ND	TRH

11/90	3/91	7/17/91	
ND	0.460	0.460	TPH(g)
ND	0.024	0.015	B
ND	0.025	0.0011	T
ND	0.033	0.024	E
ND	0.043	0.035	X
100	ND	ND	TPH(d)
NA	ND	ND	O+G

11/90	3/91	7/17/91	
ND	2.10	0.220	TPH(g)
ND	0.270	0.045	B
ND	0.280	0.0025	T
ND	0.051	0.0033	E
ND	0.250	0.0053	X
0.082	ND	ND	TPH(d)
NA	0.400	ND	O+G

10/22/92	2/11/93	
0.09	ND	TPH(g)
0.001	ND	B
ND	ND	T
0.0004	ND	E
0.001	ND	X
ND	NA	TPH(d)
NA	ND	O+G
NA	ND	TRH

5/14/92	5/28/92	10/22/92	2/11/93	
ND	ND	ND	ND	TPH(g)
0.0004	ND	ND	ND	B
0.002	ND	ND	ND	T
ND	ND	ND	ND	E
0.002	ND	ND	ND	X
NA	0.1	ND	ND	TPH(d)
ND	ND	ND	NA	O+G
ND	ND	NA	ND	TRH

5/14/92	5/28/92	10/22/92	2/11/93	
ND	ND	ND	ND	TPH(g)
ND	ND	ND	ND	B
ND	0.002	ND	ND	T
ND	ND	ND	ND	E
NA	0.1	ND	ND	X
ND	ND	ND	NA	TPH(d)
ND	ND	NA	ND	O+G
ND	ND	NA	ND	TRH

5/14/92	5/28/92	10/22/92	2/11/93	
ND	ND	ND	ND	TPH(g)
ND	ND	ND	ND	B
ND	0.001	ND	ND	T
ND	ND	ND	ND	E
ND	ND	ND	ND	X
NA	0.3	ND	ND	TPH(d)
ND	ND	ND	NA	O+G
ND	ND	NA	ND	TRH

5/14/92	5/28/92	10/22/92	2/11/93	
ND	ND	ND	ND	TPH(g)
ND	ND	ND	ND	B
ND	ND	ND	ND	T
ND	ND	ND	ND	E
ND	ND	ND	ND	X
NA	0.05	0.05	ND	TPH(d)
6.6	ND	ND	NA	O+G
6.3	ND	NA	ND	TRH

- EXPLANATION**
- Boundary of northern area excavation completed by Levine-Fricke
 - [A] Excavations completed by Aqua Resources, Inc.
 - Abandoned endow monitoring well installed by Aqua Resources, Inc.
 - Shallow monitoring well location

- 7/17/91 Date sample was collected
- 0.0004/0.0004 B Chemical compound Duplicate analysis Concentration in parts per million (ppm)
- ND Not detected above method detection limits
- NA Not analyzed

- KEY TO ABBREVIATIONS**
- TPH(g) Total Petroleum Hydrocarbons as gasoline
 - B Benzene
 - T Toluene
 - E Ethylbenzene
 - X Xylenes
 - TPH(d) Total Petroleum Hydrocarbons as diesel
 - O+G Oil and Grease
 - TRH Total Recoverable Hydrocarbons

Note:
 Oil and Grease (O+G; by Standard Method 5520C): all oil and grease compounds including animal, vegetable and petroleum hydrocarbons.
 Total Recoverable Hydrocarbons (TRH; by Standard Methods 5520B+F or C+F): only the petroleum hydrocarbon fraction of the oil and grease compounds

Figure 3 :
 HISTORICAL SHALLOW GROUND-WATER QUALITY DATA (ppm)
 FORMER RANSOME COMPANY PROPERTY

APPENDIX A
GROUND-WATER SAMPLING PROCEDURES

GROUND-WATER SAMPLING PROCEDURES

Ground-water samples were collected from wells LF-16, LF-24, LF-25, LF-26, LF-27, LF-28, and LF-29 on February 11 and 12, 1993. Before ground-water samples were collected, wells were purged by removing three to five well casing volumes of water from each well using a clean Teflon bailer or a centrifugal pump and clean hose. Wells were purged until indicator readings had stabilized.

After purging, ground-water samples were collected using a clean Teflon bailer and poured directly into three 40-milliliter, HCl-preserved, glass volatile organic analysis (VOA) vials, and into four 1-liter amber bottles preserved with HCl. Before the ground-water sample was collected from well LF-26, one field blank (LF-26-FB) was collected for quality control/quality assurance (QA/QC) purposes by pouring laboratory-supplied distilled water into a clean Teflon bailer and filling three 40-milliliter VOA bottles with the water from the bailer. Additionally, a duplicate sample was collected for chemical analysis from well LF-25 (labeled LF-125) for QA/QC purposes. The field blank and duplicate samples were submitted to the laboratory on a hold basis, pending analytical results of the primary samples.

Immediately after collection, samples were labeled and placed in an ice-chilled cooler. Ground-water samples were delivered under strict chain-of-custody protocol to Anametrix, Inc., of San Jose, California. Ground-water samples were analyzed for total petroleum hydrocarbons (TPH) as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX) using EPA Methods 8020 and 5030 GCFID; for TPH as diesel (TPHd) using EPA Method 3510 GCFID; and for oil and grease (O&G) using Standard Method 5520BF. Copies of the laboratory certificates are presented in Appendix C.

The Teflon bailers were washed with Alconox, a laboratory-grade detergent, and water, rinsed, and steam cleaned before use in each well. Centrifugal pump hoses were also steam cleaned before use in each well.

Purged water (generated during well development and sample collection) was temporarily stored on site in labeled, 55-gallon drums.

APPENDIX B
WATER-QUALITY SAMPLING SHEETS

WATER-QUALITY SAMPLING INFORMATION

Project Name YERBA BUENA Project No. 1649.09

Date 2/12/95 Sample No. LF-16

Samplers Name JCK

Sampling Location EMERYVILLE / RANSOME

Sampling Method CENT. PUMP (TEFLON BAILER)

Analyses Requested EPA 8010 TPH-G, D, BTEX, O+G

Number and Types of Sample Bottles used 3 VOAS w/HCL + 4 G.L.

Method of Shipment COURIER

19.40
5.58

13.82
.65

6910
8292

89830

GROUND WATER

SURFACE WATER

Well No. LF-16

Stream Width _____

Well Diameter (in.) 4 in

Stream Depth X

Depth to Water, Static (ft) 5.58

Stream Velocity _____

Water in Well Box NO

Rained recently? _____

Well Depth (ft) 19.40

Other _____

Height of Water Column in Well 13.82

2-inch casing = 0.16 gal/ft

4-inch casing = 0.65 gal/ft

5-inch casing = 1.02 gal/ft

Water Volume in Well 8.98

6-inch casing = 1.47 gal/ft

LOCATION MAP

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (deg. C)	pH (S.U.)	COND (mhos/cm)	OTHER		REMARKS
12:19								START
12:20		9	17.8	7.02	730			CLEAR
12:24	DEWATERE	18	18.6	6.90	694			SL TURBID / OFF
12:30								ON
12:31		23						OFF
12:45								
12:46		30	17.5	6.86	681			SL. TURBID / OFF
12:50								SAMPLE

Suggested Method for Purging Well _____

WATER-QUALITY SAMPLING INFORMATION

Project Name VERBA BUENA Project No. 1649.09

Date 2/2/93 Sample No. LF-24

Samplers Name JCK

Sampling Location EMERYVILLE/RANSOME

Sampling Method HAND BAIL/TEFLON BAILER

Analyses Requested ~~TPH-G, D, BTEX O+G~~

Number and Types of Sample Bottles used 3 VOAS w/ HCL + 1/2 GL.

Method of Shipment COURIER

22.00
8.82
13.18
.16
7908
1318
21088

GROUND WATER

SURFACE WATER

Well No. LF-24

Stream Width _____

Well Diameter (in.) 2 in

Stream Depth _____

Depth to Water, Static (ft) 8.82

Stream Velocity _____

Water in Well Box NO

Rained recently? _____

Well Depth (ft) 22.00

Other _____

Height of Water Column in Well 13.18

2-inch casing = 0.16 gal/ft

4-inch casing = 0.65 gal/ft

Water Volume in Well 2.11

5-inch casing = 1.02 gal/ft

6-inch casing = 1.47 gal/ft

LOCATION MAP

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (deg. C)	pH (S.U.)	COND (mhos/cm)	OTHER		REMARKS
8:15								START
8:18		2.5	16.0	7.19	889			TURBID
8:22		2.550	16.2	7.17	887			"
8:26		7.5	16.7	7.07	884			TURBID
8:29		10.0	16.6	7.09	882			"
8:35								SAMPLE

Suggested Method for Purging Well _____

WATER-QUALITY SAMPLING INFORMATION

Project Name YERBA BUENA
 Date 2/11/93
 Samplers Name JCL
 Sampling Location EMERYVILLE/RANSOME
 Sampling Method HAND BAIL/TEFLON BAILER
 Analyses Requested EPA 8010
 Number and Types of Sample Bottles used 3 VOAS^W/HCL
 Method of Shipment COURIER

Project No. 1649.09
 Sample No. LF.25
LF.125

~~HANDS-ON~~

17.10
 3.15

 13.95
 .16

 8370
 1395

 2.2320

GROUND WATER	SURFACE WATER
Well No. <u>LF.25</u>	Stream Width _____
Well Diameter (in.) <u>2 in</u>	Stream Depth _____
Depth to Water, Static (ft) <u>3.15</u>	Stream Velocity _____
Water in Well Box <u>NO</u>	Rained recently? _____
Well Depth (ft) <u>17.10</u>	Other _____
Height of Water Column in Well <u>13.95</u>	<u>2-inch casing = 0.16 gal/ft</u>
Water Volume in Well <u>2.23</u>	4-inch casing = 0.65 gal/ft
	5-inch casing = 1.02 gal/ft
	6-inch casing = 1.47 gal/ft

LOCATION MAP

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (deg. C)	pH (S.U.)	COND (mhos/cm)	OTHER		REMARKS
13:43								START
13:46		2.5	14.3	12.12	2740			SLIGHTLY TURBID
13:49		5.0	13.8	12.32	2800			SLIGHTLY TURBID
13:57		7.5	13.6	12.46	2890			" "
14:15		10.0	14.0	12.45	2880			MODERATELY TURBID
14:30								SAMPLE
15:40								125

Suggested Method for Purging Well _____

WATER-QUALITY SAMPLING INFORMATION

Project Name YERBA BUENA Project No. 1649.09

Date 2/11/93 Sample No. LF-26

Samplers Name JCK LF-26.FB

Sampling Location EMERYVILLE / RANSOME

Sampling Method HAND BAIL / TEFLON BAILER

Analyses Requested TPH-G, D, BTEX O+G

Number and Types of Sample Bottles used 68 UOA 4 GL. L.

Method of Shipment COURIER

21.80
6.82

15.18
.16

9.108
1.518

2.4288

GROUND WATER

Well No. LF-26

Well Diameter (in.) 2 in

Depth to Water, Static (ft) 6.82

Water in Well Box _____

Well Depth (ft) 21.80

Height of Water Column in Well 15.18

Water Volume in Well 2.43

SURFACE WATER

Stream Width _____

Stream Depth _____

Stream Velocity X

Rained recently? _____

Other _____

2-inch casing = 0.16 gal/ft

4-inch casing = 0.65 gal/ft

5-inch casing = 1.02 gal/ft

6-inch casing = 1.47 gal/ft

LOCATION MAP

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (deg. C)	pH (S.U.)	COND (mhos/cm)	OTHER		REMARKS
15:15								START FIELD BLANK
15:16								START
15:18		2.5	16.9	6.87	827			TURBID
15:20		5.0	17.0	6.86	815			"
15:24		7.5	17.2	6.76	810			TURBID
15:30								SAMPLE

Suggested Method for Purging Well _____

WATER-QUALITY SAMPLING INFORMATION

Project Name YERBA BUENA Project No. 1049.09
 Date 2/11/93 Sample No. LF-27
 Samplers Name JCK
 Sampling Location EMERYVILLE / RANSOME
 Sampling Method HAND BAIL / TEFLON BAILER
 Analyses Requested TPH-G, D, BTEX O+G
 Number and Types of Sample Bottles used 3 30A 4 G.L.
 Method of Shipment COURIER

21.92
 9.96

 11.96
 .16

 7176
 1196

 1.9136

<p>GROUND WATER</p> Well No. <u>LF-27</u> Well Diameter (in.) <u>2 in</u> Depth to Water, Static (ft) <u>9.96</u> Water in Well Box <u>NO</u> Well Depth (ft) <u>21.92</u> Height of Water Column in Well <u>11.96</u> Water Volume in Well <u>1.91</u>	<p>SURFACE WATER</p> Stream Width _____ Stream Depth _____ Stream Velocity <u>X</u> Rained recently? _____ Other _____ 2-inch casing = 0.16 gal/ft 4-inch casing = 0.65 gal/ft 5-inch casing = 1.02 gal/ft 6-inch casing = 1.47 gal/ft
--	---

LOCATION MAP

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (deg. C)	pH (S.U.)	COND (mhos/cm)	OTHER		REMARKS
16:07								START
16:09		2	17.4	7.01	871			TURBID
16:12		4	17.8	6.93	863			"
16:15		6	18.1	6.93	874			TURBID
16:20								SAMPLE

Suggested Method for Purging Well _____

WATER-QUALITY SAMPLING INFORMATION

Project Name YERBA BUENA Project No. 1649.09

Date 2/12/93 Sample No. LF-28

Samplers Name JCK

Sampling Location EMERYVILLE / RANSOME LF-28

Sampling Method HAND BAIL / TEFLON BAILER

Analyses Requested TPH-G, D, BTEX O+G

Number and Types of Sample Bottles used 3 GL. VOA 4 GL.

Method of Shipment COURIER

21.70
8.31

13.39
.16

8034
1339

21424

GROUND WATER

SURFACE WATER

Well No. LF-28

Stream Width _____

Well Diameter (in.) 2 in

Stream Depth _____

Depth to Water, Static (ft) ~~8.31~~ 8.31

Stream Velocity ~~_____~~

Water in Well Box NO

Rained recently? _____

Well Depth (ft) 21.70

Other _____

Height of Water Column in Well 13.39

2-inch casing = 0.16 gal/ft

4-inch casing = 0.65 gal/ft

Water Volume in Well 2.14

5-inch casing = 1.02 gal/ft

6-inch casing = 1.47 gal/ft

LOCATION MAP

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (deg. C)	pH (S.U.)	COND (mhos/cm)	OTHER		REMARKS
8:56								
8:59		2.5	16.9	6.72	881			TURBID
8:59.03		5.0	17.0	6.82	871			"
9:07		7.5	17.5	6.77	864			TURBID
9:15								SAMPLE

Suggested Method for Purging Well _____

WATER-QUALITY SAMPLING INFORMATION

Project Name YERBA BUENA Project No. 1649.09

Date 2/11/93 Sample No. LF-29

Samplers Name JCK

Sampling Location EMERYVILLE / RANSOME

Sampling Method HAND BAR ~~WELL PUMP~~ TEFLON BAILER

Analyses Requested SPS TPH-G, BTEX, DIESEL, O+G

Number and Types of Sample Bottles used 3 VOA + 4 GL. L.

Method of Shipment COURIER

GROUND WATER

SURFACE WATER

Well No. LF-29

Stream Width _____

Well Diameter (in.) 2 in

Stream Depth _____

Depth to Water, Static (ft) 8.28

Stream Velocity X

Water in Well Box NO

Rained recently? _____

Well Depth (ft) 22.10

Other _____

Height of Water Column in Well 13.82

2-inch casing = 0.16 gal/ft

4-inch casing = 0.65 gal/ft

5-inch casing = 1.02 gal/ft

6-inch casing = 1.47 gal/ft

Water Volume in Well 2.21

22.10
8.28

13.82
.16

8292
1382

2.2112

LOCATION MAP

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (deg. C)	pH (S.U.)	COND (mhos/cm)	OTHER		REMARKS
13:03								START
13:07		2.5	18.0	6.99	874			DISC. TURBID
13:09		5.0	17.9	6.92	859			TURBID
13:12		7.5	17.8	6.90	855			TURBID
13:15								SAMPLE

Suggested Method for Purging Well HAND BAIL

APPENDIX C

**LABORATORY DATA SHEETS AND CHAIN-OF-CUSTODY FORM
FOR GROUND-WATER SAMPLE ANALYSES**



MS. JENIFER BEATTY
LEVINE-FRICKE
1900 POWELL STREET 12TH FLOOR
EMERYVILLE, CA 94608

Workorder # : 9302189
Date Received : 02/12/93
Project ID : 1649.09
Purchase Order: N/A

The following samples were received at Anamatrix, Inc. for analysis :

ANAMETRIX ID	CLIENT SAMPLE ID
9302189- 1	LF-16
9302189- 2	LF-24
9302189- 3	LF-28
9302189- 4	LF-29
9302189- 5	LF-27
9302189- 6	LF-26-FB
9302189- 7	LF-26
9302189- 8	LF-25
9302189- 9	LF-125
9302189-10	TRIP212

This report consists of 11 pages not including the cover letter, and is organized in sections according to the specific Anamatrix laboratory group or section which performed the analysis(es) and generated the data. The Report Summary that precedes each section will help you determine which Anamatrix group is responsible for those test results, and will bear the signatures of the department supervisor and the chemist who have reviewed the analytical data. Please refer all questions to the department supervisor who signed the form.

Anamatrix is certified by the California Department of Health Services (DHS) to perform environmental testing under Certificate Number 1234. A detailed list of the approved fields of testing can be obtained by calling our office, or the DHS Environmental Laboratory Accreditation Program at (415)540-2800.

If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anamatrix.

Sarah Schoen, Ph.D.
Laboratory Director

02-27-93

Date

COPY

RECEIVED	
MAR 1 -	
LEVINE-FRICKE	

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY
LEVINE-FRICKE
1900 POWELL STREET 12TH FLOOR
EMERYVILLE, CA 94608

Workorder # : 9302189
Date Received : 02/12/93
Project ID : 1649.09
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9302189- 1	LF-16	WATER	02/12/93	TPHd
9302189- 2	LF-24	WATER	02/12/93	TPHd
9302189- 3	LF-28	WATER	02/12/93	TPHd
9302189- 4	LF-29	WATER	02/11/93	TPHd
9302189- 5	LF-27	WATER	02/11/93	TPHd
9302189- 7	LF-26	WATER	02/11/93	TPHd
9302189- 8	LF-25	WATER	02/11/93	TPHd
9302189- 1	LF-16	WATER	02/12/93	TPHg/BTEX
9302189- 2	LF-24	WATER	02/12/93	TPHg/BTEX
9302189- 3	LF-28	WATER	02/12/93	TPHg/BTEX
9302189- 4	LF-29	WATER	02/11/93	TPHg/BTEX
9302189- 5	LF-27	WATER	02/11/93	TPHg/BTEX
9302189- 7	LF-26	WATER	02/11/93	TPHg/BTEX
9302189- 8	LF-25	WATER	02/11/93	TPHg/BTEX
9302189-10	TRIP212	WATER	02/11/93	TPHg/BTEX

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY
LEVINE-FRICKE
1900 POWELL STREET 12TH FLOOR
EMERYVILLE, CA 94608

Workorder # : 9302189
Date Received : 02/12/93
Project ID : 1649.09
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- The concentration reported as TPHd for sample LF-16 is due to the presence of discrete hydrocarbon peaks, not indicative of diesel.

Cheryl Bealman 2/27/93
Department Supervisor Date

Marchetti 2.27.93
Chemist Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9302189
Matrix : WATER
Date Sampled : 02/11-12/93

Project Number : 1649.09
Date Released : 02/27/93

Reporting Limit	Sample I.D.# LF-16	Sample I.D.# LF-24	Sample I.D.# LF-28	Sample I.D.# LF-29	Sample I.D.# LF-27
COMPOUNDS (ug/L)	-01	-02	-03	-04	-05
Benzene	0.5	ND	ND	ND	ND
Toluene	0.5	ND	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND	ND
TPH as Gasoline	50	ND	ND	ND	ND
% Surrogate Recovery	92%	101%	107%	98%	89%
Instrument I.D.	HP12	HP12	HP12	HP12	HP12
Date Analyzed	02/18/93	02/18/93	02/18/93	02/18/93	02/18/93
RLMF	1	1	1	1	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GC/FID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
- RLMF - Reporting Limit Multiplication Factor.

Anamatrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

W. J. ... 2-27-93
Analyst Date

Cheryl Balmer 2/27/93
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS
(GASOLINE WITH BTEX)
ANAMETRIX, INC. - (408) 432-8192

Anamatrix W.O.: 9302189
Matrix : WATER
Date Sampled : 02/11/93

Project Number : 1649.09
Date Released : 02/27/93

Reporting Limit	Sample I.D.#	Sample I.D.#	Sample I.D.#	Sample I.D.#
	LF-26	LF-25	TRIP212	BF1802E3
COMPOUNDS (ug/L)	-07	-08	-10	BLANK
Benzene	0.5	ND	0.6	ND
Toluene	0.5	ND	ND	ND
Ethylbenzene	0.5	ND	ND	ND
Total Xylenes	0.5	ND	ND	ND
TPH as Gasoline	50	ND	54	ND
% Surrogate Recovery	104%	95%	98%	88%
Instrument I.D.	HP12	HP12	HP12	HP12
Date Analyzed	02/18/93	02/18/93	02/18/93	02/18/93
RLMF	1	1	1	1

- ND - Not detected at or above the practical quantitation limit for the method.
- TPHg - Total Petroleum Hydrocarbons as gasoline is determined by GC/FID using modified EPA Method 8015 following sample purge and trap by EPA Method 5030.
- BTEX - Benzene, Toluene, Ethylbenzene, and Total Xylenes are determined by modified EPA Method 8020 following sample purge and trap by EPA Method 5030.
- RLMF - Reporting Limit Multiplication Factor.

Anamatrix control limits for surrogate p-Bromofluorobenzene recovery are 61-139%.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Maichelle 2/27/93
Analyst Date

Cheryl Bulmer 2/27/93
Supervisor Date

ANALYSIS DATA SHEET - TOTAL PETROLEUM HYDROCARBONS AS DIESEL
ANAMETRIX, INC. (408) 432-8192

Anametrix W.O.: 9302189
Matrix : WATER
Date Sampled : 02/11-12/93
Date Extracted: 02/17/93

Project Number : 1649.09
Date Released : 02/27/93
Instrument I.D.: HP23

Anametrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)
9302189-01	LF-16	02/18/93	50	330
9302189-02	LF-24	02/19/93	50	76
9302189-03	LF-28	02/19/93	50	ND
9302189-04	LF-29	02/19/93	50	ND
9302189-05	LF-27	02/19/93	50	ND
9302189-07	LF-26	02/19/93	50	ND
9302189-08	LF-25	02/19/93	50	ND
DWBL021793	METHOD BLANK	02/18/93	50	ND

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.

ND - Not detected at or above the practical quantitation limit for the method.

TPHd - Total Petroleum Hydrocarbons as diesel is determined by GCFID following sample extraction by EPA Method 3510.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

Manchillo 2/27/93
Analyst Date

Cheryl Balma 2/27/93
Supervisor Date

TOTAL VOLATILE HYDROCARBON MATRIX SPIKE REPORT
 EPA METHOD 5030 WITH GC/FID
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : 1649.09 LF-29
 Matrix : WATER
 Date Sampled : 02/11/93
 Date Analyzed : 02/18/93

Anamatrix I.D. : 02189-04
 Analyst : *MCJ*
 Supervisor : *CS*
 Date Released : 02/27/93
 Instrument ID : HP12

COMPOUND	SPIKE AMT (ug/L)	SAMPLE AMT (ug/L)	REC MS (ug/L)	% REC MS	REC MD (ug/L)	% REC MD	RPD	% REC LIMITS
GASOLINE	250	0	250	100%	250	100%	0%	48-149
P-BFB				92%		92%		61-139

* Limits established by Anamatrix, Inc.

TOTAL VOLATILE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
 EPA METHOD 5030 WITH GC/FID
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
 Matrix : WATER
 Date Sampled : N/A
 Date Analyzed : 02/18/93

Anamatrix I.D. : LCSW0218
 Analyst : *WCT*
 Supervisor : *CS*
 Date Released : 02/27/93
 Instrument I.D.: HP12

COMPOUND	SPIKE AMT. (ug/L)	REC LCS (ug/L)	%REC LCS	% REC LIMITS
GASOLINE	250	250	100%	67-127
SURROGATE			92%	61-139

* Quality control established by Anamatrix, Inc.

TOTAL EXTRACTABLE HYDROCARBON LABORATORY CONTROL SAMPLE REPORT
 EPA METHOD 3510 WITH GC/FID
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
 Matrix : WATER
 Date Sampled : N/A
 Date Extracted: 02/17/93
 Date Analyzed : 02/18/93

Anamatrix I.D. : LCSW0218
 Analyst : MCT
 Supervisor : CS
 Date Released : 02/27/93
 Instrument I.D.: HP23

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCSD REC (ug/L)	% REC LCSD	RPD	% REC LIMITS
DIESEL	1250	600	48%	620	50%	3%	47-130

*Quality control established by Anamatrix, Inc.

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY
LEVINE-FRICKE
1900 POWELL STREET 12TH FLOOR
EMERYVILLE, CA 94608

Workorder # : 9302189
Date Received : 02/12/93
Project ID : 1649.09
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9302189- 1	LF-16	WATER	02/12/93	5520BF
9302189- 2	LF-24	WATER	02/12/93	5520BF
9302189- 3	LF-28	WATER	02/12/93	5520BF
9302189- 4	LF-29	WATER	02/11/93	5520BF
9302189- 5	LF-27	WATER	02/11/93	5520BF
9302189- 7	LF-26	WATER	02/11/93	5520BF
9302189- 8	LF-25	WATER	02/11/93	5520BF

REPORT SUMMARY
ANAMETRIX, INC. (408)432-8192

MS. JENIFER BEATTY
LEVINE-FRICKE
1900 POWELL STREET 12TH FLOOR
EMERYVILLE, CA 94608

Workorder # : 9302189
Date Received : 02/12/93
Project ID : 1649.09
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for these samples.

Paul F. Johnson

Department Supervisor 2-27-93 Date

P. P. Desai

Chemist 02-27-93 Date

**ANALYSIS DATA SHEET - OIL AND GREASE AS TOTAL RECOVERABLE
PETROLEUM HYDROCARBONS
ANAMETRIX, INC. (408) 432-8192**

Project I.D. : 1649.09
 Matrix : WATER
 Date sampled : 02/11-12/93
 Date extracted: 02/18/93
 Date analyzed : 02/19/93

Anametrix I.D. : 9302189
 Analyst : *[Signature]*
 Supervisor : *[Signature]*
 Date released : 03/30/93

Workorder #	Sample I.D.	Reporting Limit (mg/L)	Amount Found (mg/L)
9302189-01	LF-16	5	ND
9302189-02	LF-24	5	ND
9302189-03	LF-28	5	ND
9302189-04	LF-29	5	ND
9302189-05	LF-27	5	ND
9302189-07	LF-26	5	ND
9302189-08	LF-25	5	ND
GWBL0218	METHOD BLANK	5	ND

ND - Not detected at or above the practical quantitation limit for the method.

TRPH - Total Recoverable Petroleum Hydrocarbons are determined by Standard Method 5520BF.

All testing procedures follow California Department of Health Services (Cal-DHS) approved methods.

TOTAL RECOVERABLE PETROLEUM HYDROCARBONS LAB CONTROL SAMPLE REPORT
 STANDARD METHOD 5520BF
 ANAMETRIX, INC. (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE	Anamatrix I.D. : LCSW021893
Matrix : WATER	Analyst : PD
Date sampled : N/A	Supervisor : RJ
Date extracted : 02/18/93	Date Released : 02/23/93
Date analyzed : 02/19/93	

COMPOUND	SPIKE AMT. (mg/L)	LCS (mg/L)	%REC LCS	LCSD (mg/L)	%REC LCSD	%RPD	%REC LIMITS
Motor Oil	50	42	84%	45	90%	7%	54-106%

* Quality control limits established by Anamatrix, Inc.

Q302189 10/34 (18) 20:10

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

Project No.: 1649.09 Field Logbook No.: _____ Date: 2/12/93 Serial No.: 9858
 Project Name: LEVIN-FRICKE RANSOME Project Location: EMERYVILLE CA

Sampler (Signature): Jul C. Levine ANALYSES: _____ Samplers: JCL

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES					HOLD	RUSH	REMARKS
						EPA 601	EPA 624	TPH & BEX	TPH-D	D+G			
① LF-16	2/12	12:50		7	H ₂ O			X	X	X			NORMAL TAT
② LF-24	2/12	8:35	sample #2 over vcc broken by receiving 2/14/93	7	H ₂ O			X	X	X			RESULTS TO
③ LF-28	2/12	9:15		7	H ₂ O			X	X	X			KIMBERLY BRANDT,
④ LF-29	2/12	13:15		7	H ₂ O			X	X	X			CATELLUS
⑤ LF-27	2/12	16:20		7	H ₂ O			X	X	X			
⑥ LF-26-FB	2/12	15:15		3	H ₂ O			X			X		
⑦ LF-26	2/12	15:30		7	H ₂ O			X	X	X			
⑧ LF-25	2/12	14:30		7				X	X	X			
⑨ LF-125	2/12	15:30		3				X			X		
⑩ TRIP212	2/11	08:00		3				X					
													ANALYTIX REF# 2031J

RELINQUISHED BY: <u>Jul C. Levine</u>	DATE: <u>2/12/93</u>	TIME: <u>18:00</u>	RECEIVED BY: <u>[Signature]</u>	DATE: <u>2/12/93</u>	TIME: <u>18:00</u>
RELINQUISHED BY: <u>[Signature]</u>	DATE: <u>2/12/93</u>	TIME: <u>20:10</u>	RECEIVED BY: <u>Michelle D. Aquilar</u>	DATE: <u>2/12/93</u>	TIME: <u>20:10</u>
RELINQUISHED BY: _____	DATE: _____	TIME: _____	RECEIVED BY: _____	DATE: _____	TIME: _____

METHOD OF SHIPMENT: _____ DATE: _____ TIME: _____ LAB COMMENTS: _____

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 Emeryville, Ca 94608
 (415) 652-4500

Analytical Laboratory: ANALYTIX
SAN JOSE, CA