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**Quarterly Monitoring Report for
October 1 through December 31, 1993
Former Bashland Property
Emeryville, California**

**January 31, 1994
1649.10**

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



LEVINE·FRICKE



LEVINE•FRICKE

ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS

LF 1649.10

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

Subject: Quarterly Monitoring Report for October 1 through
December 31, 1993, Former Bashland Property,
Emeryville, California

Dear Ms. Hugo:

Enclosed is the quarterly monitoring report for October 1
1993, for the former Bashland property,
located in Emeryville, California.

This report has been prepared on behalf of Catellus
Development Corporation for the redevelopment project at the
Yerba Buena/East Baybridge Center Project Site, in accordance
with Levine-Fricke's work plan dated December 15, 1992. The
enclosed report presents the results for ground-water
monitoring activities completed in December 1993.

The monitoring event completed one year of ground
water monitoring for well LF-31. Well LF-31 was
installed down gradient from and within 10 feet of the former
underground storage tanks (USTs) in February 1993 to assess
whether a possible release of petroleum hydrocarbons in the
vicinity of the former USTs has affected shallow ground water.
Analytical results reported for the recent quarter are similar
to previous results and do not indicate the presence of total
petroleum hydrocarbons (TPH) as gasoline, total recoverable
hydrocarbons (TRH) and grease (TRGH), or benzene, toluene,
ethylbenzene, and xylene. TPH as diesel was detected at low
concentrations ranging from 0.150 parts per million to
0.400 ppm during three of the four quarters of monitoring (see
Table 1 in the enclosed report).

Based on these results, it is recommended that well
monitored on an annual basis for one more year for the

1900 Powell Street, 12th Floor
Emeryville, California 94608
(510) 652-4500
Fax (510) 652-2246

LEVINE·FRICKE

As you are aware, samples from well LF-31 also were analyzed for volatile organic compounds (VOCs) to monitor possible migration of VOC-affected ground water from known off-site sources located north of Bashland (i.e., the Electro-Coatings, Inc., and/or Del Monte sites; Figure 1). Due to the low concentrations of VOCs detected in well LF-31 (see Table 1 in the enclosed report), it is recommended that well LF-31 be sampled annually for VOCs for one more year.

Please call me if you have any questions or comments regarding this report.

Sincerely,



Jenifer Beatty
Project Hydrogeologist

cc: Richard Hiatt, RWQCB
Kimberly Brandt, Catellus
Pat Cashman, Catellus

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CERTIFICATION

All hydrogeologic and geologic information, conclusions, and recommendations presented in this report have been prepared under the supervision of and reviewed by a Levine·Fricke California Registered Geologist.



Andrew L. Wright
Senior Associate Geologist
California Registered Geologist (4592)

1/31/94

Date

January 31, 1994

LF 1649.10

**QUARTERLY MONITORING REPORT FOR
OCTOBER 1 THROUGH DECEMBER 31, 1993
FORMER BASHLAND PROPERTY, EMERYVILLE, CALIFORNIA**

1.0 INTRODUCTION

This report presents results of quarterly ground-water monitoring activities conducted during the period October 1 to December 31, 1993, for the former Bashland property located at 4015 Hollis Street in Emeryville, California (Figure 1). Levine·Fricke, Inc. ("Levine·Fricke") conducted this work on behalf of Catellus Development Corporation ("Catellus") in accordance with the work plan dated December 15, 1992 (Levine·Fricke 1992), and verbally approved by Ms. Susan Hugo of the Alameda County Health Care Services Agency (ACHA) in January 1993.

2.0 BACKGROUND AND PREVIOUS INVESTIGATIONS

Between March 23 and May 7, 1992, Levine·Fricke supervised the removal of one 1,200-gallon oil and two 12,000-gallon fuel underground storage tanks (USTs) from the former Bashland property by Trumpp Brothers, Inc., of San Jose, California, under permits from the City of Emeryville (permit number B-4278-492), the Emeryville Fire Department (EFD), and the ACHA. Ms. Susan Hugo, Senior Hazardous Materials Specialist of the ACHA, Mr. Ron Owcarz, Hazardous Specialist of the ACHA, and a representative of the EFD were on site to observe tank removal and soil sampling activities. Several small holes were observed in two of the three USTs removed.

Chemical analysis results for soil samples collected from the excavation sidewalls indicated low concentrations (below detection limits to 2 parts per million [ppm]) of petroleum product or associated constituents. Total petroleum hydrocarbons (TPH) as oil were detected in one of the however, TPHo concentrations were below laboratory detection limits in the other samples. On the basis of these results, the excavation was backfilled using 3/4-inch drain rock and clean imported fill material on May 6 and 7, 1992, upon approval of the ACHA.

Following installation of monitoring wells showing a gradient from and within 10 feet of the former USTs (Figure 2) in February 1993 (Levine·Fricke 1992 and 1993), a quarterly ground-water monitoring program was implemented at the former Bashland property to assess whether a possible release of petroleum hydrocarbons has affected shallow ground water in the vicinity of the former UST locations. As part of this analysis program, samples collected from well LF-31 also were analyzed periodically for volatile organic compounds (VOCs) using EPA Method 8010 to monitor possible concentrations of VOCs in shallow ground water that may have migrated on site from known off-site VOC sources located north of the former Bashland property (i.e., the Electro-Coatings, Inc., and/or Del Monte sites; Figure 1).

3.0 QUARTERLY MONITORING ACTIVITIES CONDUCTED DURING THE PERIOD FROM OCTOBER 1 THROUGH DECEMBER 31, 1993

The activities conducted and the results obtained for October 1 through December 31, 1993, are presented below.

3.1 Water-Level Measurement

Depth to water was measured in well LF-31 on December 9, 1993 using an electric water-level sounding probe to the nearest 0.01 foot, relative to the top of the PVC well casing.

3.2 Sampling

Ground-water samples were collected for chemical analyses from well LF-31 on December 9, 1993. Before ground-water samples were collected from this well, approximately four casing volumes of water were purged from the well using a centrifugal pump. Parameters such as pH, temperature, specific conductance, quantity, and clarity of water withdrawn were measured and recorded on a water-quality sampling sheet. A copy of this sheet is included in Appendix A.

Ground-water samples were collected immediately following purging of the well using a clean Teflon bailer. Samples collected for analysis of VOCs were placed into laboratory-supplied, 40-milliliter glass vials preserved with hydrochloric acid. The glass vials were filled to capacity, capped, and checked for trapped air bubbles. Samples collected for TPH as diesel (TPHd) and total recoverable petroleum hydrocarbon (TRPH) analyses were poured into laboratory-supplied 1-liter amber bottles. Samples were

placed in an ice-chilled cooler immediately after collection for transportation under chain-of-custody protocols to a state-certified laboratory for chemical analysis.

For QA/QC purposes, a duplicate sample (LF-131) and bailer blank sample (LF-31-BB) were collected and submitted to the laboratory on a "hold basis," pending laboratory analysis of sample LF-31.

3.3 Laboratory Analysis

Ground-water samples were submitted to Anametrix, Inc., of San Jose, California, a state-certified laboratory, and analyzed using EPA Method 3510 GCFID for TPHd, Standard Method 5520BF for TRPH as oil and grease, and modified EPA Methods 8015/8020 for total petroleum hydrocarbons as gasoline (TPHg) and benzene, toluene, ethylbenzene, and xylenes (BTEX).

4.0 GROUND-WATER ELEVATIONS

The depth to water measured in well LF-31 on December 9, 1993, was 11.91 feet below ground surface, which corresponds to a ground-water elevation of 11.91 feet above mean sea level. This represents an increase in ground-water elevation of 1.51 foot relative to July 1993 data.

Ground-water flow direction beneath the Bashland site has historically been to the west-southwest. Monitoring wells formerly located at the Yerba Buena Project Site (which have historically been monitored in conjunction with well LF-31) were abandoned in July 1993 in preparation for site development. Therefore, a ground-water elevation contour map was not prepared for the recent quarter. However, the ground-water elevation measured

at well LF-31 on December 9, 1993, indicates that shallow ground water flow is generally to the west-southwest.

5.0 ANALYTICAL RESULTS

A historical summary of analytical results for well LF-31 is presented in Table 1. Analytical results for this quarter are consistent with previous results reported for well LF-31 and do not indicate the presence of TRPH, TPHg, or BTEX above

laboratory detection limits. TPHd was detected at concentrations of 0.20 ppm and TPH as motor oil was reported at a concentration of 0.10 ppm, the laboratory detection limit.

Laboratory certificates for ground-water samples are presented in Appendix B.

6.0 CONCLUSIONS AND RECOMMENDATIONS

Ground-water samples were collected in December 1993 from monitoring well LF-31 to monitor concentrations of TPH and VOCs in shallow ground water. This completes one year of quaterly monitoring of well LF-31.

6.1 ~~Metals and SVOCs~~

Ground-water samples collected from well LF-31 during the first quarter of monitoring were analyzed for cadmium, chromium, nickel, lead, and zinc and for semivolatile organic compounds (SVOCs). Analytical results did not indicate the presence of any of these compounds above laboratory detection limits (Table 1).

~~6.2~~ TPH

Analytical results for ground-water samples collected from well LF-31 indicate that shallow ground water has not been affected by a possible release of petroleum hydrocarbons, with the exception of ~~which~~ which have been detected at low concentrations of ~~and~~ less, respectively. For QA/QC purposes, duplicate samples were collected for chemical analysis during the May and July 1993 sampling events. As presented in Table 1, duplicate sample results are in general agreement with primary sample results.

6.3 VOCs

Analytical ~~results for~~ ~~the~~ ~~May~~ ~~and~~ ~~July~~ ~~1993~~ ~~investigation~~ ~~showed~~ concentrations of VOCs in shallow ground water up to ~~0.0039~~ ppm TCE and 0.0039 1,2-DCE) that likely have migrated on site from an off-site VOC source located north of the Bashland property boundary. It should be noted that 0.034 ppm of TCE was detected in ground-water samples collected from monitoring well LF-9, formerly located approximately 40 feet northeast (upgradient) of well LF-31, during the Phase I Investigation in February 1990. No on-site source for VOCs was identified

during the background and regulatory literature review conducted at the initiation of the Phase I investigation in 1989 or during removal of the USTs, oil/water separator, or hydraulic lifts formerly located at the former Bashland property.

Possible off-site sources for VOCs detected in shallow ground water in the vicinity of well LF-31 and other Area C wells (LF-10 and LF-11; Figure 3 of Levine·Fricke 1993) include the Electro-Coatings, Inc. (ECI), site, located at 1201 Park Avenue, and the Del Monte Plant Number 35 West Parcel site, located at 4202 Hollis Street in Emeryville, California. TCE has been detected in ground water at the ECI site since 1985. In November 1991, consultants working on behalf of ECI reported concentrations of TCE up to 19 ppm (American Environmental Management Corporation 1992). TCE was detected in monitoring wells located at the Del Monte site at concentrations up to 1.4 ppm in 1989 (CH2M Hill 1990). It is our understanding that a ground-water extraction system was installed at the Del Monte site in late 1992 or early 1993. Levine·Fricke will continue to monitor the progress of investigations conducted at these sites.

6.4 Proposed Monitoring Program

Based on the analytical results discussed above, it is recommended that the sampling schedule for well LF-31 be reduce to an annual basis for one more year for the presence of TPH as diesel and motor oil. Additionally, it is recommended that samples collected from well LF-31 be analyzed for VOCs to monitor the possible on-site migration of VOCs in ground water from known off-site sources north of the former Bashland property.

REFERENCES

American Environmental Management Corporation. 1992. Ground Water Monitoring Report for Electro-Coatings, Inc., Emeryville, California. January 27.

CH2M Hill. 1990. Quarterly Monitoring Data for Del Monte's Plant 35 West Parcel, Removed Fuel Tanks Area at 4202 Hollis Street, Emeryville, California.

Levine·Fricke, Inc. 1992. Work Plan to Install One Ground-Water Monitoring Well and Conduct Quarterly Monitoring, Bashland Property, Emeryville, California. December 15.

Levine·Fricke, Inc. 1993. Combined Soil and Ground-Water Investigation Report and Quarterly Monitoring Report for the Period from January 1 through March 31, 1993, Former Bashland Property, Emeryville, California. April 5.

TABLE 1

CHEMICAL ANALYSES RESULTS FOR MONITORING WELL LF-31
FORMER BASHLAND COMPANY PROPERTY
(results in parts per million [ppm])

Date Sampled	Lab		TPH		Benzene	Toluene	Ethylbenze	Total Xylenes	TCE	1,2-DCE	
			as TRPH	as Diesel							
12-Feb-93	ANA	(1)	<5	<0.05	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA
26-May-93 duplicate	ANA		<5	0.200	NA	NA	NA	NA	NA	0.020	0.0039
			<5	0.310	NA	NA	NA	NA	NA	0.020	0.0034
14-Jul-93 duplicate	ANA	(2)	<5	0.150	NA	NA	NA	NA	0.0073	0.0024	
	AEN		<1	0.400	NA	NA	NA	NA	0.010	0.002	
09-Dec-93	ANA	(3)	<5	0.200	<0.05	<0.0005	<0.0005	<0.0005	<0.0005	NA	NA

Data entered by NAS/11-Jan-94. Proofed by JJB.

TRPH - Total recoverable petroleum hydrocarbons as oil and grease (Standard Methods 55208F)

TCE - Trichloroethene (EPA Method 8010)

1,2-DCE - 1,2-dichloroethene (EPA Method 8010)

NA - Not analyzed

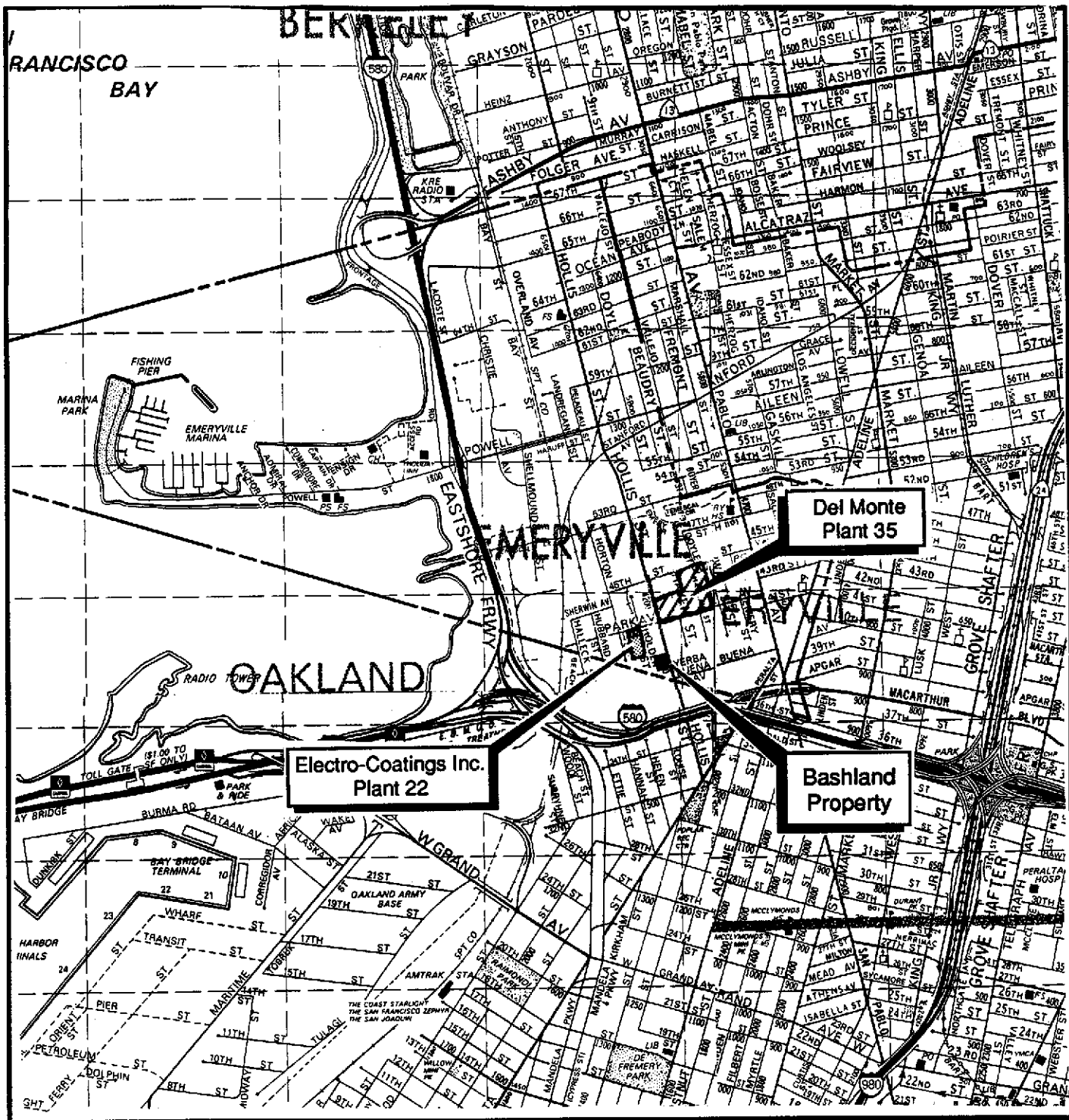
ANA - Anametrix, Inc., of San Jose, California

AEN - American Environmental Network of Pleasant Hill, California

(1) Ground-water samples also analyzed for cadmium, chromium, nickel, lead, and zinc, and semivolatile organic compounds using EPA Method 8270. None of these compounds were detected above laboratory detection limits.

(2) ~~_____~~

(3) TPH as motor oil was detected at 0.10 ppm using EPA Method 3510 GCFID.



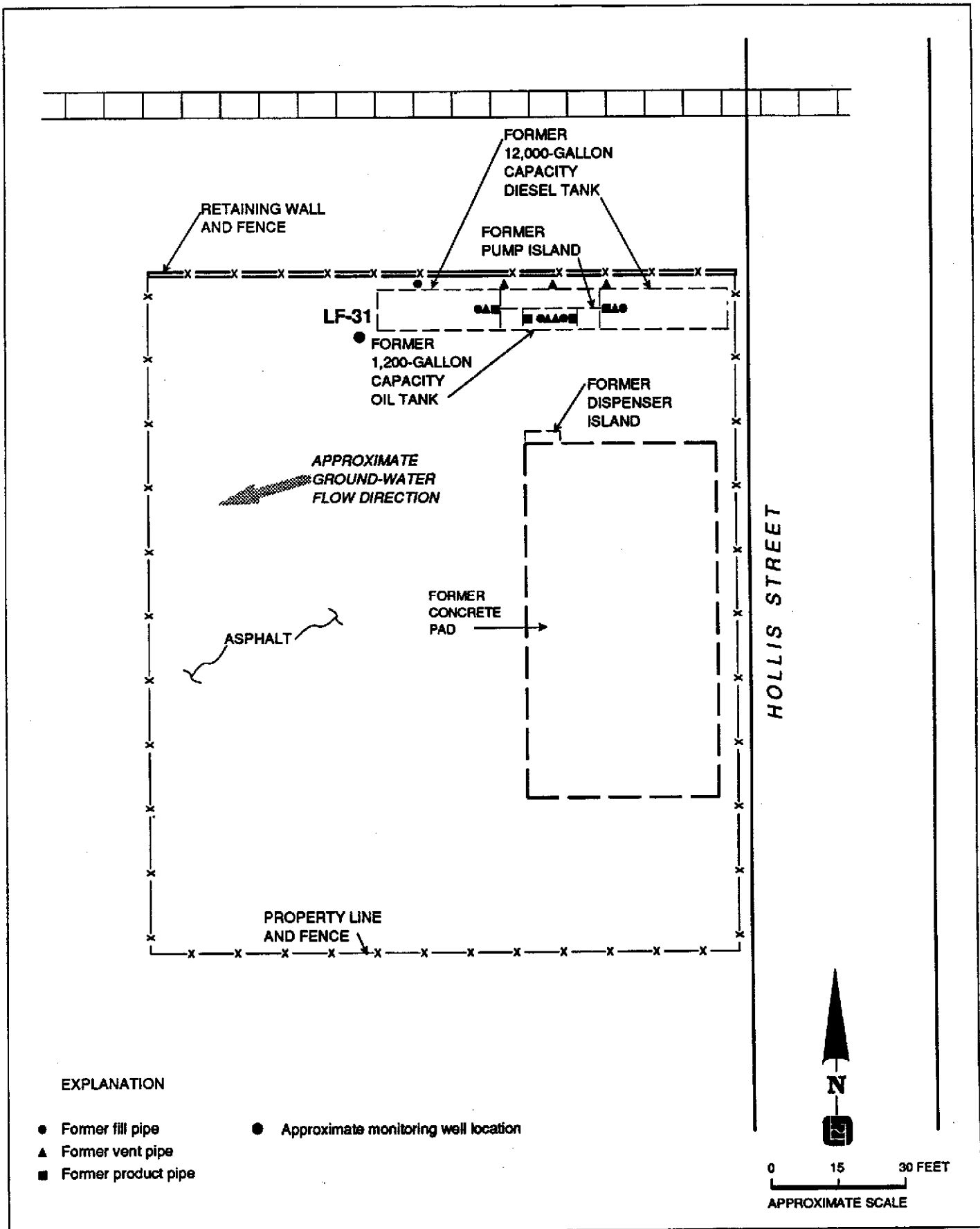
MAP SOURCE:
 Thomas Bros. Map
 Alameda and Contra Costa Counties
 EDITION 1992

Figure 1: SITE LOCATION MAP
BASHLAND PROPERTY SITE

Project No. 1649.10

JJB28JUL93#RYL

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 ENGINEERS, HYDROGEOLOGISTS & APPLIED SCIENTISTS



WATER-QUALITY SAMPLING INFORMATION

Project Name Yerba Buena / Backland Project No. 1649.10

Date 12-9-93 Sample No. LF-31

Samplers Name SCH LF-131

Sampling Location Emergville LF-31-BB

Sampling Method Cent. pump / Teflon bailer

Analyses Requested TPH_g - BTEX - TPH_d - O+G (SS20)

Number and Types of Sample Bottles used 6 UOA/HCl; 6 Amber L / Net 4 Amber L; 2 Amber / H₂O

Method of Shipment Courier

GROUND WATER		SURFACE WATER	
Well No. <u>LF-31</u>	Stream Width _____	Well Diameter (in.) <u>4</u>	Stream Depth _____
Depth to Water, Static (ft) <u>5.07</u>	Stream Velocity _____	Water in Well Box _____	Rained recently? <u>YES</u>
Well Depth (ft) <u>20.0</u>	Other _____	Well Depth (ft) <u>20.0</u>	
Height of Water Column in Well <u>14.93</u>	2-inch casing = 0.16 gal/ft	Water Volume in Well <u>9.70 ≈ 10</u>	4-inch casing = 0.65 gal/ft
	5-inch casing = 1.02 gal/ft		6-inch casing = 1.47 gal/ft

```

20.00
 5.07
-----
14.93
  65
-----
 7465
89580
-----
97045
    
```

LOCATION MAP

TIME	DEPTH TO WATER (feet)	VOLUME WITHDRAWN (gallons)	TEMP (deg. C)	pH (S.U.)	COND (mhos/cm)	OTHER		REMARKS
1119								Start
1121		10	19.4	6.78	1801			Clear
1122		20	19.4	6.80	1788			U.S.I. TWbid
1125		30	19.6	6.81	1622			" / off / DWARD
1137	10.80							Start
1139		40	19.7	6.86	1705			SI. TWbid / off
1145								LF-31-BB
1150								Sample LF-32
1200								LF-131

Suggested Method for Purging Well _____



Inchcape Testing Services

Anametrix Laboratories

1961 Concourse Drive
Suite E
San Jose, CA 95131
Tel: 408-432-8192
Fax: 408-432-8198

File 1649

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

Workorder # : 9312132
Date Received : 12/10/93
Project ID : 1649.10
Purchase Order: N/A

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

ANAMETRIX ID	CLIENT SAMPLE ID
9312132- 1	LF-31-BB
9312132- 2	LF-31
9312132- 3	LF-131

This report consists of 11 pages not including the cover letter, and is organized in sections according to the specific Anametrix 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 Anametrix 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.

Anametrix 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.

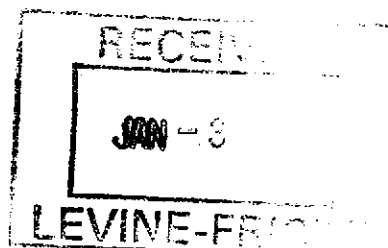
If you have any further questions or comments on this report, please give us a call as soon as possible. Thank you for using Anametrix.

Sarah Schoen

Sarah Schoen, Ph.D.
Laboratory Director

12-27-93

Date



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

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

Workorder # : 9312132
Date Received : 12/10/93
Project ID : 1649.10
Purchase Order: N/A
Department : GC
Sub-Department: TPH

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9312132- 2	LF-31	WATER	12/09/93	TPHd
9312132- 2	LF-31	WATER	12/09/93	TPHgBTEX

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

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

Workorder # : 9312132
Date Received : 12/10/93
Project ID : 1649.10
Purchase Order: N/A
Department : GC
Sub-Department: TPH

QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Jenna Shar 12/27/93
Department Supervisor Date

CR Patel 12/27/93
Chemist Date

Organic Analysis Data Sheet
Total Petroleum Hydrocarbons as Gasoline with BTEX
ITS - Anametrix Laboratories - (408)432-8192

Lab Workorder : 9312132
 Matrix : WATER

Client Project ID : 1649.1
 Units : ug/L

Compound Name	Method Reporting Limit*	Client ID	Client ID	Client ID	Client ID	Client ID
		LF-31				
		Lab ID	Lab ID	Lab ID	Lab ID	Lab ID
		9312132-02	BLANK			
Benzene	0.50	ND	ND			
Toluene	0.50	ND	ND			
Ethylbenzene	0.50	ND	ND			
Total Xylenes	0.50	ND	ND			
TPH as Gasoline	50	ND	ND			
Surrogate Recovery		95%	84%			
Instrument ID		HP4	HP4			
Date Sampled		12/09/93	N/A			
Date Analyzed		12/14/93	12/14/93			
RLMF		1	1			
Filename Reference		FPD13202.D	BD1401E1.D			

* The Method Reporting Limit must be multiplied by the Reporting Limit Multiplication Factor (RLMF) to achieve the compound's reporting limit in the analysis.

ND : Not detected at or above the reporting limit for the analysis as performed.

TPHg : Determined by GC/FID following sample purge & trap by EPA Method 5030.

BTEX : Determined by modified EPA Method 8020 following sample purge & trap by EPA Method 5030.

Lab Control Limits for surrogate compound p-Bromofluorobenzene are 61-139%.

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

OR Patel 12/27/93
 Analyst Date

Lucia Sher 12/27/93
 Supervisor Date

Laboratory Control Spike Report
Total Petroleum Hydrocarbons as BTEX
ITS - Anametrix Laboratories - (408)432-8192

Instrument ID : HP4

Analyst : ARP

Matrix : LIQUID

Supervisor : IS

Units : ug/L

COMPOUND NAME	SPIKE AMOUNT	LCS RECOVERY	RECOVERY LIMITS
Benzene	20	100%	52-133
Toluene	20	90%	57-136
Ethylbenzene	20	95%	56-139
Total Xylenes	20	95%	56-141
Surrogate Recovery		92%	61-139
Date Analyzed		12/14/93	
Multiplier		1	
Filename Reference		MD1402E1.D	

* Limits established by Inchcape Testing Services, Anametrix Laboratories.

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

Anamatrix W.O.: 9312132
Matrix : WATER
Date Sampled : 12/09/93
Date Extracted: 12/13/93

Project Number : 1649.10
Date Released : 12/27/93
Instrument I.D.: HP9

Anamatrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9312132-02	LF-31	12/23/93	50	200	84%
BD1311F1	METHOD BLANK	12/21/93	50	ND	94%

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.
The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.
TPHd - Total Petroleum Hydrocarbons as C12-C22 is determined by GCFID following sample extraction by EPA Method 3510.

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

CR Patel 12/27/93
Analyst Date

Lucia Sher 12/27/93
Supervisor Date

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

Anamatrix W.O.: 9312132
 Matrix : WATER
 Date Sampled : 12/09/93
 Date Extracted: 12/13/93

Project Number : 1649.10
 Date Released : 12/27/93
 Instrument I.D.: HP9

Anamatrix I.D.	Client I.D.	Date Analyzed	Reporting Limit (ug/L)	Amount Found (ug/L)	Surrogate %Rec
9312132-02	LF-31	12/23/93	100	100	84%
BD1311F1	METHOD BLANK	12/21/93	100	ND	94%

Note : Reporting limit is obtained by multiplying the dilution factor times 50 ug/L.
 The surrogate recovery limits for C25 are 30-130%.

ND - Not detected at or above the practical quantitation limit for the method.
 TPHd - Total Petroleum Hydrocarbons as C22-C36 is determined by GCFID following sample extraction by EPA Method 3510.

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

CPK
 Analyst 12/27/93
 Date

Lena Sues
 Supervisor 12/27/93
 Date

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: 12/13/93
 Date Analyzed : 12/14/93

Anamatrix I.D. : MD1311F1
 Analyst : ~~AP~~
 Supervisor : IS
 Date Released : 12/27/93
 Instrument I.D.: HP23

COMPOUND	SPIKE AMT (ug/L)	LCS REC (ug/L)	% REC LCS	LCS D REC (ug/L)	% REC LCS D	RPD	% REC LIMITS
DIESEL	1250	1210	97%	1240	99%	2%	47-130
SURROGATE			101%		96%		30-130

* Quality control limits 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 # : 9312132
Date Received : 12/10/93
Project ID : 1649.10
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

SAMPLE INFORMATION:

ANAMETRIX SAMPLE ID	CLIENT SAMPLE ID	MATRIX	DATE SAMPLED	METHOD
9312132- 2	LF-31	WATER	12/09/93	5520BF

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

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

Workorder # : 9312132
Date Received : 12/10/93
Project ID : 1649.10
Purchase Order: N/A
Department : PREP
Sub-Department: PREP

QA/QC SUMMARY :

- No QA/QC problems encountered for this sample.

Cathy Muller 12/17/93
Department Supervisor Date

M. Poschikoff 12.17.93
Chemist Date

ANALYSIS DATA SHEET - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
AS OIL AND GREASE
ANAMETRIX LABORATORY (408) 432-8192

Project I.D. : 1649.10 Anametrix I.D. : 9312132
Matrix : WATER Analyst : *M.P.*
Date sampled : 12/09/93 Supervisor : *cm*
Date extracted: 12/13/93 Date released : 12/15/93
Date analyzed : 12/14/93

Workorder #	Sample I.D.	Reporting Limit (mg/L)	Amount Found (mg/L)
9312132-02	LF-31	5	ND
BD1311W4	METHOD BLANK	5	ND

ND - Not detected above the reporting 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.

LAB CONTROL SAMPLE REPORT - TOTAL RECOVERABLE PETROLEUM HYDROCARBONS
AS OIL AND GREASE
STANDARD METHOD 5520BF
ANAMETRIX LABORATORIES (408) 432-8192

Sample I.D. : LAB CONTROL SAMPLE
Matrix : WATER
Date sampled : N/A
Date extracted : 12/13/93
Date analyzed : 12/14/93

Anamatrix I.D. : MD1311W4
Analyst : M.P.
Supervisor : *CW*
Date Released : 09/15/93

COMPOUND	SPIKE AMT. (mg/L)	LCS (mg/L)	%REC LCS	LCSD (mg/L)	%REC LCSD	%RPD	%REC LIMITS
Motor Oil	50	43	86	42	84	2	44-128

* Quality control limits established by Anamatrix Laboratories.

#485

CHAIN OF CUSTODY / ANALYSES REQUEST FORM

9512132 (18) (10/15)

18:52

Project No.: 1649.10 Field Logbook No.: Date: 12-9-93 Serial No.:

Project Name: Yerba Buena Project Location: Emeryville No. 12633

Sampler (Signature): [Signature] ANALYSES Hold Rush Samplers: SCH

SAMPLE NO.	DATE	TIME	LAB SAMPLE NO.	NO. OF CON-TAINERS	SAMPLE TYPE	ANALYSES						HOLD	RUSH	REMARKS
						EPA 601	EPA 624	TRV	TRV-BTEX	TRV-BCL	TRV-SIX			
① LF-31-B3	12/9/93	1145		2	H2O		2							Normal TAT
② LF-31	↓	1150		7	↓		3	2	2					
③ LF-31	↓	1200		5	↓		3	2						Invoice Callus. Fax/CC results to Levine-Fricke/Jenifer Beatty

RELINQUISHED BY: [Signature] DATE: 12-10-93 TIME: 1245 RECEIVED BY: [Signature] DATE: 12-10-93 TIME: 1245

RELINQUISHED BY: [Signature] DATE: 12-10-93 TIME: 1345 RECEIVED BY: [Signature] DATE: 12/10/93 TIME: 13:45

RELINQUISHED BY: (Signature) DATE TIME RECEIVED BY: (Signature) DATE TIME

METHOD OF SHIPMENT: Courier DATE TIME LAB COMMENTS:

Sample Collector: LEVINE-FRICKE 1900 Powell Street, 12th Floor Emeryville, California 94608 (510) 652-4500 Analytical Laboratory: Anametrix, San Jose, CA