FILE

REPORT OF
ADDITIONAL SOIL INVESTIGATION
SAN FRANCISCO FRENCH BREAD COMPANY
580 JULIE ANN WAY
OAKLAND, CALIFORNIA

Job No. 70007-001-01

Submitted by
Science & Engineering Analysis Corporation

for
Mr. Pete Sher
Vice President, General Counsel
San Francisco French Bread Company
7801 Edgewater Drive
Oakland, CA 94621

January 17, 1994

Prepared by:

Daniel E. Madsen
Staff Geologist

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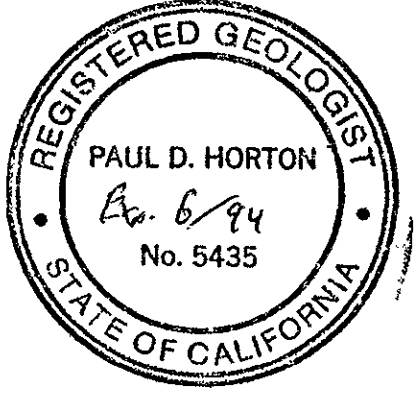
Paul D. Horton, R.G.
Principal Hydrogeologist



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1.0 INTRODUCTION

This report presents the results of an additional subsurface soil investigation conducted by Science & Engineering Analysis Corporation (*SEACOR®*) at San Francisco French Bread Company's facility located at 580 Julie Ann Way in Oakland, California (Figure 1). The purpose of this investigation is to further define the extent of petroleum hydrocarbons in the soil surrounding the two 10,000-gallon underground storage tanks (USTs) which contain gasoline and diesel fuels. The data will be used to direct remediation, if required, and to preliminarily define the potential limits of excavation when the USTs are removed.

2.0 BACKGROUND

The San Francisco French Bread Company facility is located in a mixed commercial/industrial area in Oakland, California. The facility is used to prepare and distribute baked goods. The site has an underground fuel storage and distribution system consisting of two 10,000-gallon tanks. One tank contains gasoline and the other is used for storage and distribution of diesel fuel. In June of 1991, an initial investigation of the soils in the vicinity of the fuel tanks detected elevated concentrations of petroleum hydrocarbons at depths ranging from 5 feet below grade to groundwater at 7 feet below grade. Results of this investigation are presented in a Groundwater Technology, Inc., report dated July 11, 1991.

3.0 SCOPE OF WORK

To further delineate the area of the hydrocarbon impacted soils prior to removal of the underground fuel tanks, *SEACOR®* drilled seven exploratory soil borings. The scope of work performed during this investigation was conducted as described in a *SEACOR®* proposal dated May 14, 1993. The work conducted involved the following specific tasks:

3.1 PRELIMINARY WORK

Prior to conducting any field work, *SEACOR®* prepared a site-specific Health and Safety Plan as required by Code of Federal Regulations (CFR) 1910.120. The site-specific health and safety plan (HSP) was prepared detailing field procedures regarding various potential safety hazards and potential chemical hazards that may be encountered during site activities. Copies of the HSP were present on site during the field investigation. SEACOR personnel conducted a HSP briefing with the subcontractors prior to beginning field work.

3.2 UTILITY CLEARANCE

An underground utility clearance survey was conducted around the marked borehole locations prior to the initiation of any intrusive subsurface activities. Additionally, Underground Service Alert (USA) was notified and representatives of concerned utilities were met to locate acceptable boring locations.

3.3 SOIL BORING AND SOIL SAMPLING

On November 12, 1993, seven soil borings were cored at the locations shown on Figure 2 using a vehicle mounted drill rig equipped with 2.5-inch outside diameter core barrels. The seven soil borings were drilled to approximately 6 to 9-feet below grade.

During drilling, continuous cores were collected from each boring. The cores were logged in the field by a *SEACOR®* geologist in accordance with the Unified Soil Classification System (USCS), and common geologic principles. This detailed description was used to produce an accurate lithologic and stratigraphic profile.

The cores were field screened for organic vapors using a photo-ionization detector (PID) equipped with a 10.2 eV lamp. Soil samples were collected from the cores in 6-inch long brass tubes sealed with teflon squares and plastic end caps. The soil samples were labeled with the appropriate borehole information, time and date of collection, and placed on ice for subsequent transport and analysis at a State of California certified analytical laboratory. Chain-of-custody documentation accompanied the samples at all times. Selected soil samples from each boring (nine total) were analyzed using U.S. Environmental Protection Agency (EPA) Methods 5030/8015/8020 for total petroleum hydrocarbons calculated as gasoline (TPHg) and for benzene, toluene, ethylbenzene, xylenes (BTEX compounds). In addition, soil samples from each boring were analyzed for total petroleum hydrocarbons as diesel (TPHd) by modified EPA Method 5030/8015. Soil samples were also analyzed for total recoverable petroleum hydrocarbons (TRPH) by ALPHA Method 503B,D,E. Additionally, two soil samples were analyzed for Reactivity, Corrosivity and Ignitability (RCI), for Toxicity Characteristic Leaching Potential (TCLP) as BTEX and diesel, and for Soluble Threshold Limit Concentration (STLC) for lead.

During drilling operations, only decontaminated augers, sampling tools, and down hole equipment were used. All equipment was decontaminated by steam cleaning prior to the next drilling event. All soil cuttings generated during the drilling operations were contained in 5-gallon drums. All drums were stored on-site and were properly labeled pending laboratory analysis for a determination of proper disposal.

4.0 RESULTS OF INVESTIGATION

4.1 GEOLOGY/HYDROGEOLOGY

Sediments discovered during the investigation were primarily variations of clays, sands, and gravels. Boring locations SB-G through SB-M consisted of approximately one-foot of asphaltic concrete cap and base gravel. Below the one-foot of base fill, the alluvium encountered in all borings consisted of alternating deposits of black clays and clayey sands with varying amounts of clay, silt, sand and gravel, with some wood debris to the maximum depth explored of 9 feet. Lithologies of the native sediments can be found on the boring logs presented in Appendix A of this report. Depth-to-groundwater occurred at approximately 6-to-7 feet bgs.

4.2 LABORATORY ANALYSES RESULTS - SOIL

Laboratory analysis of soil samples collected on November 12, 1993 detected the presence of petroleum hydrocarbons in the soil (Table 1). TPHg was detected in five samples analyzed. TPHg concentrations ranged from 2 parts per million (ppm) to 2,700 ppm in sample SB-G (5.5) at 5.5 feet bgs. TPHd was detected in five samples analyzed and ranged in concentration from 21 ppm to 1,400 ppm in sample SB-G (5.5). BTEX compounds were detected in all samples analyzed and benzene ranged in concentration from none detected to 24 ppm in sample SB-G (5.5).

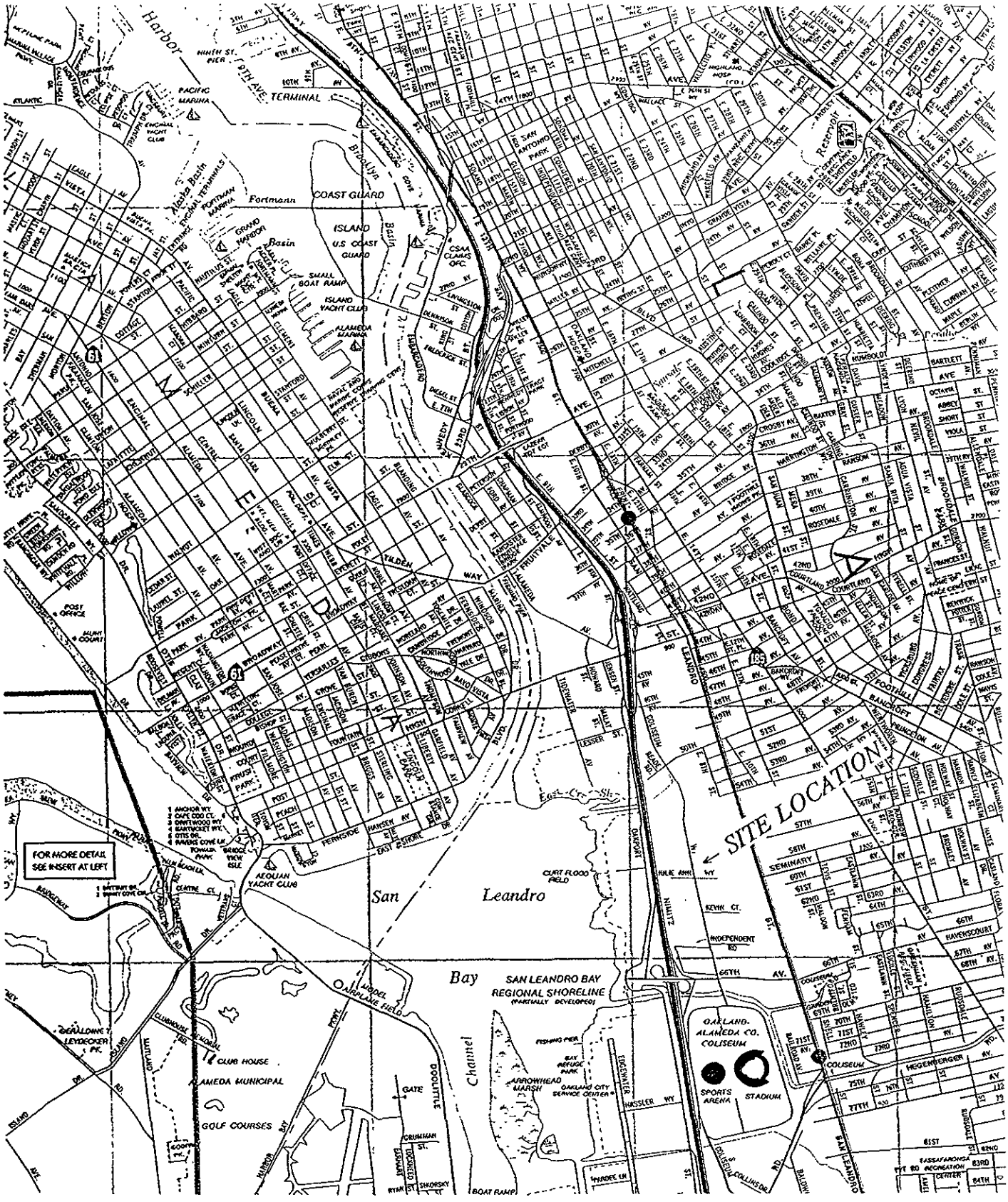
Oil and grease, and TRPH were detected in every sample analyzed. Oil and grease ranged from 73 ppm to 4,100 ppm, and TRPH ranged from 44 ppm to 5,100 ppm in sample SB-I (4). The detection of oil and grease in all samples analyzed, including the only sample analyzed for oil and grease during the June 19, 1991 investigation (SB-A), indicates the presence of oil and grease hydrocarbons to the east and south of the USTs. In addition, oil and grease detections above 1,300 ppm in samples SB-A, SB-G, and SB-I indicate substantial oil and grease in the soil surrounding the USTs in the same direction. Figure 3 shows the aerial extent of total petroleum hydrocarbons and benzene, and includes an approximate TPHg distribution contour.

RCI analyses results indicated a Ph of 7.8, a negative ignitability, and a non-reactivity in the soil sample analyzed. TCLP results detected benzene at 0.032 ppm, toluene at 0.0081 ppm, ethylbenzene at 0.010 ppm, and xylenes at 0.040 ppm. The analysis for soluble lead detected 5.7 ppm in the sample analyzed.

5.0 SUMMARY/CONCLUSIONS

The additional soil investigation performed by *SEACOR®* on November 12, 1993, included the coring of seven exploratory soil borings and collection of soil samples. Soils encountered consisted of alternating deposits of clays and clayey sands to a depth of 9 feet, the maximum depth explored. The soils encountered were consistent with those anticipated. Groundwater was encountered at an approximate depth of 6 to 7 feet below ground surface (bgs).

Analytical results of soil samples analyzed indicated that there appears to be oil and grease range hydrocarbons in substantial concentrations across the area explored. TPHg, TPHd, oil and grease, and TRPH, were encountered at maximum concentrations in borings SB-G at 5.5 feet bgs and SB-I at 4 feet bgs (see Figure 3). Samples SB-H, SB-L, and SB-M detected TRPH, oil and grease, TPHg and TPHd in lower concentrations indicating an attenuation of impact in an easterly direction. The only detections in samples SB-K and SB-J were low concentrations of toluene, and lower concentrations of TRPH, and oil and grease.



DRAFTED BY:	CHECKED BY:	PROJECT NO. 70007-001-01	FIGURE 1	*SEACOR*
DK	DEM			1390 Willow Pass Road Suite 360 Concord, CA 94520
DWG. DATE:	REV. DATE:	San Francisco French Bread 580 Julie Ann Way Oakland, California	Site Location Map	
11/09/93	11/09/93			
FILE NAME:				
SFFB.F01				

Julie Anne Way

Sample Depth	5'
TPHg	210
TPHd	<10
Benzene	3
TOG	1,300

SB-A

Sample Depth	5'	10'
TPHg	4800	66
TPHd	600	<10
Benzene	3	1

SB-B

Fence

SB-G

Sample Depth	2.5'	5.5
TPHg	<1	2,700
TPHd	<10	1,400
Benzene	0.098	24
TOG	77	1,500
TRPH	44	3,900

SB-L

Sample Depth	4'
TPHg	2
TPHd	<10
Benzene	<0.005
TOG	920
TRPH	1,000

Concrete Pad

U/G Tank

Pump Island

U/G Tank

SB-E

Sample Depth	5'
TPHg	<1
TPHd	<10
Benzene	.02

SB-F

Sample Depth	7'
TPHg	2,800
TPHd	<10
Benzene	28

SB-H

Sample Depth	2.5'	4'
TPHg	13	30
TPHd	21	31
Benzene	0.006	0.20
TOG	73	460
TRPH	130	530

SB-C

Sample Depth	8'
TPHg	500
TPHd	<10
Benzene	1

SB-D

Sample Depth	7'
TPHd	2,300

SB-M

Sample Depth	4'
TPHg	2
TPHd	270
Benzene	<0.005
TOG	470
TRPH	1,700

SB-K

Sample Depth	4.5'
TPHg	<1
TPHd	<10
Benzene	<0.005
TOG	880
TRPH	1,300

SB-I

Sample Depth	4'
TPHg	<1
TPHd	1,600
Benzene	<0.005
TOG	4,100
TRPH	5,100

SB-J

Sample Depth	4'
TPHg	<1
TPHd	<10
Benzene	<0.005
TOG	630
TRPH	270

LEGEND

GTI Soil Boring, June 19, 1991

SEACOR Soil Boring, Nov. 19, 1993

Approximate TPH as Gasoline Distribution Contour

Chemical Analytical Results

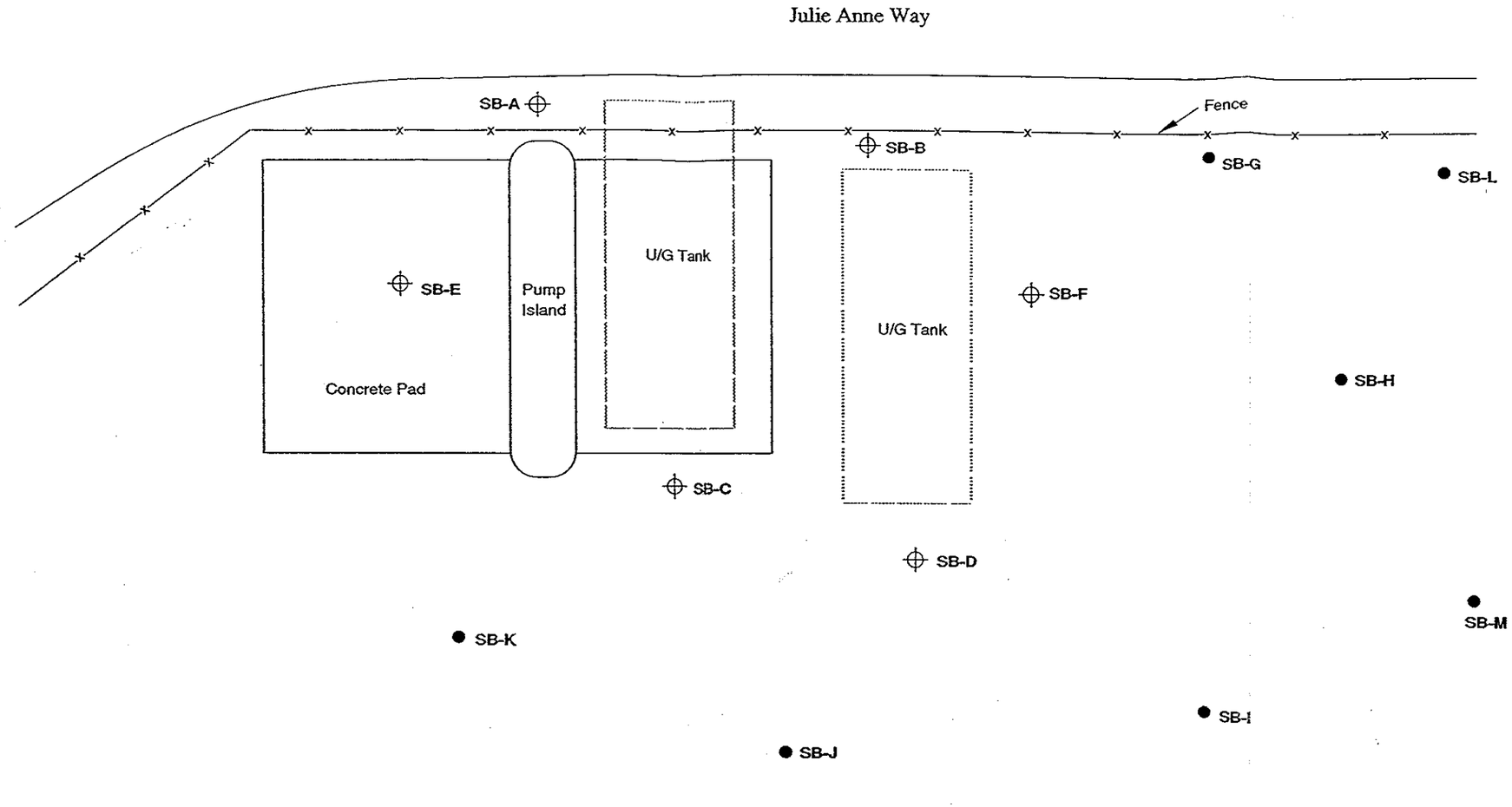
Sample Depth	5'
TPHg (Total Petroleum Hydrocarbons as Gasoline)	<0.3
TPHd (Total Petroleum Hydrocarbons as Diesel)	4
Benzene	<0.05
TOG (Total Oil and Grease)	100
TRPH (Total Recoverable Petroleum Hydrocarbons)	1,000

Concentrations in ppm

N

0 20 Feet

DRAFTED BY: DH	CHECKED BY:	PROJECT NO. 70007-001-01	FIGURE 3	SEACOR 1390 Willow Pass Road Suite 360 Concord, CA 94520
DRWG. DATE:	REV. DATE:	San Francisco French Bread 580 Julie Anne Way Oakland, California	CHEMICAL CONCENTRATION IN SOIL	
FILE NAME:				



LEGEND

- GTI Soil Boring, June 19, 1991
- SEACOR Soil Boring, Nov. 19, 1993

DRAFTED BY: DH	CHECKED BY:	PROJECT NO. 70007-001-01	FIGURE 2	*SEACOR* 1390 Willow Pass Road Suite 360 Concord, CA 94520
DRWG. DATE:	REV. DATE:	San Francisco French Bread 580 Julie Anne Way Oakland, California	SITE PLAN	
FILE NAME:				

TABLE 1
SOIL ANALYTICAL RESULTS
San Francisco French Bread
580 Julie Anne Way
Oakland, California
mg/kg (parts per million)

Sample I.D.	*Sample Depth*	*Sample Date*	*TPHg*	*TPHd*	*Benzene*	*Toluene*	*Ethylbenzene*	*Xylenes*	*Oil & Grease*	*TRPH*
SB-G	2.5	11/12/93	<1	<10	0.098	0.031	<0.005	<0.005	77	44
SB-G	5.5	11/12/93	2700	1400	24	4.9	58	230	1500	3900
SB-H	2.5	11/12/93	13	21	0.006	0.099	0.14	0.17	73	130
SB-H	4	11/12/93	30	31	0.20	0.072	0.11	0.45	460	530
SB-I	4	11/12/93	<1	1600	<0.005	0.14	<0.005	<0.005	4100	5100
SB-J	4	11/12/93	<1	<10	<0.005	0.049	<0.005	<0.005	630	270
SB-K	4.5	11/12/93	<1	<10	<0.005	0.065	<0.005	<0.005	880	1300
SB-L	4	11/12/93	2	<10	<0.005	0.24	<0.005	0.010	920	1000
SB-M	4	11/12/93	2	270	<0.005	1.3	<0.005	0.008	470	1700

TPHg = total petroleum hydrocarbons as gasoline
TPHd = total petroleum hydrocarbons as diesel
TRPH = total recoverable petroleum hydrocarbons

APPENDIX A

BORING LOGS

APPENDIX B

CERTIFIED ANALYTICAL **REPORTS**

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

RECEIVED
DEC 6 1993

SEACOR
Attn: PAUL HORTON

Project 70007-001-01
Reported 11/30/93

TOTAL PETROLEUM HYDROCARBONS

Lab #	Sample Identification	Sampled	Analyzed	Matrix
90549- 1	SB-G(2.5)	11/12/93	11/18/93	Soil
90549- 2	SB-G(5.5)	11/12/93	11/18/93	Soil
90549- 4	SB-H(2.5)	11/12/93	11/18/93	Soil
90549- 5	SB-H(4)	11/12/93	11/22/93	Soil
90549- 8	SB-I(4)	11/12/93	11/18/93	Soil
90549-10	SB-J(4)	11/12/93	11/18/93	Soil
90549-12	SB-K(4.5)	11/12/93	11/18/93	Soil
90549-14	SB-L(4)	11/12/93	11/18/93	Soil
90549-16	SB-M(4)	11/12/93	11/18/93	Soil

RESULTS OF ANALYSIS

Laboratory Number:	90549- 1	90549- 2	90549- 4	90549- 5	90549- 8
Gasoline:	ND<1	2700	13	30	ND<1
Benzene:	0.098	24	0.006	0.20	ND<.005
Toluene:	0.031	4.9	0.099	0.072	0.14
Ethyl Benzene:	ND<.005	58	0.14	0.11	ND<.005
Total Xylenes:	ND<.005	230	0.17	0.45	ND<.005
Diesel Range:	ND<10	1400	21	31	1600
Oil and Grease:	77	1500	73	460	4100
Concentration:	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg

Laboratory Number:	90549-10	90549-12	90549-14	90549-16
Gasoline:	ND<1	ND<1	2	2
Benzene:	ND<.005	ND<.005	ND<.005	ND<.005
Toluene:	0.049	0.065	0.24	1.3
Ethyl Benzene:	ND<.005	ND<.005	ND<.005	ND<.005
Total Xylenes:	ND<.005	ND<.005	0.010	0.008
Diesel Range:	ND<10	ND<10	ND<10	270
Oil and Grease:	630	880	920	470
Concentration:	mg/Kg	mg/Kg	mg/Kg	mg/Kg

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS

QA/QC INFORMATION
SET: 90549

NA = ANALYSIS NOT REQUESTED
ND = ANALYSIS NOT DETECTED ABOVE QUANTITATION LIMIT
mg/kg = parts per million (ppm)

OIL AND GREASE ANALYSIS By Standard Methods Method 5520F:
Minimum Detection Limit in Soil: 50mg/kg

Modified EPA SW-846 Method 8015 for Extractable Hydrocarbons:
Minimum Quantitation Limit for Diesel in Soil: 1mg/kg

EPA SW-846 Method 8015/5030 Total Purgable Petroleum Hydrocarbons:
Minimum Quantitation Limit for Gasoline in Soil: 1mg/kg

EPA SW-846 Method 8020/BTXE
Minimum Quantitation Limit in Soil: 0.005mg/kg

ANALYTE	MS/MSD RECOVERY	RPD	CONTROL LIMIT
Gasoline:	100/99	1%	70-130
Benzene:	95/103	8%	70-130
Toluene:	87/95	9%	70-130
Ethyl Benzene:	90/93	3%	70-130
Total Xylenes:	84/84	0%	70-130
Diesel Range:	103/104	1%	75-125
Oil and Grease:	87/88	1%	55-120

12/1/93
Senior Chemist

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SEACOR
Attn: PAUL HORTON

Project 70007-001-01
Reported 22-November-1993

TOTAL RECOVERABLE HYDROCARBONS by EPA Method 418.1

Chronology

Laboratory Number 90549

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
SB-G(2.5)	11/12/93	11/15/93	11/22/93	11/22/93		1
SB-G(5.5)	11/12/93	11/15/93	11/22/93	11/22/93		2
SB-H(2.5)	11/12/93	11/15/93	11/22/93	11/22/93		4
SB-H(4)	11/12/93	11/15/93	11/22/93	11/22/93		5
SB-I(4)	11/12/93	11/15/93	11/22/93	11/22/93		8
SB-J(4)	11/12/93	11/15/93	11/22/93	11/22/93		10
SB-K(4.5)	11/12/93	11/15/93	11/22/93	11/22/93		12
SB-L(4)	11/12/93	11/15/93	11/22/93	11/22/93		14
SB-M(4)	11/12/93	11/15/93	11/22/93	11/22/93		16

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SEACOR
Attn: PAUL HORTON

Project 70007-001-01
Reported 22-November-1993

TOTAL RECOVERABLE HYDROCARBONS by EPA Method 418.1

Laboratory Number	Sample Identification	Matrix
90549- 1	SB-G(2.5)	Soil
90549- 2	SB-G(5.5)	Soil
90549- 4	SB-H(2.5)	Soil
90549- 5	SB-H(4)	Soil
90549- 8	SB-I(4)	Soil
90549-10	SB-J(4)	Soil
90549-12	SB-K(4.5)	Soil
90549-14	SB-L(4)	Soil
90549-16	SB-M(4)	Soil

RESULTS OF ANALYSIS

Laboratory Number:	90549- 1	90549- 2	90549- 4	90549- 5	90549- 8
PETROLEUM HYDROCARBONS:	44	3900	130	530	5100
Concentration:	mg/Kg	mg/Kg	mg/Kg	mg/Kg	mg/Kg

Laboratory Number:	90549-10	90549-12	90549-14	90549-16
PETROLEUM HYDROCARBONS:	270	1300	1000	1700
Concentration:	mg/Kg	mg/Kg	mg/Kg	mg/Kg

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

TOTAL RECOVERABLE HYDROCARBONS by EPA Method 418.1
Quality Assurance and Control Data - Soil

Laboratory Number 90549

Compound	Method Blank (mg/Kg)	RL (mg/Kg)	Spike Recovery (%)	Limits (%)	RPD (%)
PETROLEUM HYDROCARBONS:	ND<10	10	97/100	75-125	3%

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/Kg = Parts per million (ppm)
QC File No. 90549

12/1/93
Senior Chemist
Account Manager

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 90549
CLIENT: SEACOR
CLIENT JOB NO.: 70007-001-01

DATE RECEIVED: 11/15/93
DATE REPORTED: 11/30/93
DATE SAMPLED : 11/12/93

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES
by EPA SW-846 METHODS 5030 and 8020
TOXICITY CHARACTERISTIC LEACHATE PROCEDURE
ZERO HEAD SPACE EXTRACTION

LAB #	Sample Identification	Concentration (ug/L) Benzene	Toluene	Ethyl Benzene	Xylenes
5	SB-H(4)	32	8.1	10	40

µg/L - parts per billion (ppb)

Method Detection Limit in Extract : 2.5 µg/L

QAQC Summary:

Daily Standard run at 20 µg/L: RPD = <15%
MS/MSD Average Recovery = 92% : Duplicate RPD = <3%

Richard Srna, Ph.D.
Laboratory Director
12/1/93

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

C E R T I F I C A T E O F A N A L Y S I S

LABORATORY NO.: 90549
CLIENT: SEACOR
CLIENT JOB NO.: 70007-001-01

DATE RECEIVED: 11/15/93
DATE REPORTED: 11/30/93
DATE SAMPLED: 11/12/93

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by Modified EPA SW-846 Method 8015
TOXICITY CHARACTERISTIC LEACHATE PROCEDURE
ZERO HEAD SPACE EXTRACTION

LAB #	Sample Identification	Concentration (ug/L) Diesel Range
5	SB-H(4)	ND

ug/L - parts per billion (ppb)
Minimum Detection Limit for Diesel in Extract: 1000ug/L

QAQC Summary:

Daily Standard run at 200mg/L: %DIFF Diesel = <10%
MS/MSD Average Recovery = 112/113 Duplicate RPD = 1%

Richard Srna, Ph.D.
for 12/1/93
Laboratory Director

Superior Precision Analytical, Inc
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SEACOR
Attn: PAUL HORTON

Project 70007-001-01
Reported 30-November-1993

ANALYSIS FOR SOLUBLE LEAD
by California Administrative Code Title 22 & SW-846 Method 6010

Chronology

Laboratory Number 90549

Identification	Sampled	Received	Extracted	Analyzed	Run #	Lab #
SB-H(4)	11/12/93	11/15/93	11/16/93	11/19/93		5

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

SEACOR
Attn: PAUL HORTON

Project 70007-001-01
Reported 30-November-1993

ANALYSIS FOR SOLUBLE LEAD

Laboratory Number	Sample Identification	Matrix
90549- 5	SB-H(4)	Soil

RESULTS OF ANALYSIS

Laboratory Number: 90549- 5

Soluble Lead (Pb): 5.7

Concentration: mg/L

Superior Precision Analytical, Inc.
825 Arnold Drive, Suite 114 • Martinez, California 94553 • (510) 229-1512 / fax (510) 229-1526

ANALYSIS FOR SOLUBLE LEAD
Quality Assurance and Control Data - Extract

Laboratory Number 90549

Compound	Method Blank (mg/L)	RL (mg/L)	Spike Recovery (%)	Limits (%)	RPD (%)
Soluble Lead (Pb):	ND<0.5	0.5	97/112	75-125	14%

Definitions:
ND = Not Detected
RPD = Relative Percent Difference
RL = Reporting Limit
mg/L = Parts per million (ppm)
QC File No. 90549

12/1/93
Senior Chemist
Account Manager

Precision Analytical Laboratory, Inc.
4136 LAKESIDE DRIVE, RICHMOND, CA 94806 PHONE (510) 222-3002 FAX (510) 222-1251

CERTIFICATE OF ANALYSIS

STATE LICENSE NO. 1150

Date Received: 11/16/93
Date Reported: 11/18/93
Job #: 75236

Attn: Nancy Pettitt
Superior Precision Analytical Inc.
825 Arnold Drive, Suite 114
Martinez, CA 94553

Project: #90549
Matrix: Soil

Corrosivity Criteria
Title 22, 66708

Lab I.D.	Client I.D.	pH
75236-1	SB-H(4)	7.8

Ignitability Criteria
Title 22, 66702

Lab I.D.	Client I.D.	Ignitable
75236-1	SB-H(4)	Negative

Reactivity Criteria
Title 22, 66705

Lab I.D.	Client I.D.	Cyanide	Sulfide	MDL
75236-1	SB-H(4)	ND<1.0	90	1.0

QA/QC: Spike Recovery for Cyanide: 99%

Jaime Chow
Laboratory Director

JC/dwc

90549 Chain-of-Custody Number: A

SEACOR Chain-of-Custody Record

Address: 1390 Willow Pass Rd., Ste. 360
Concord, CA 94520-~~5~~5250
(510) 686-9780

Project # 70007-001-01 Task # FR01
Project Manager Horton
Laboratory Superior
Turn-around time: Standard

Sampler's Name: Dan Madsen
Sampler's Signature: Dan Madsen

Analysis Request

Sample ID		Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHd 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)	TCLP BTEX and diesel	RCI	STLC Lead	TRPH Alpha (SM) Meth. 503B, D,E	Comments/ Instructions	Number of Containers
SB-G (2.5)	1		9:17		X	X												X		
SB-G (5.5)	2		9:20		X	X												X		
SB-G (6.5)	3		9:37																hold	
SB-H (2.5)	4		9:54		X	X												X		
SB-H (4)	5		10:02		X	X									X	X	X	X		
SB-H (7)	6		10:14																hold	
SB-I (2)	7		10:46																hold	
SB-I (4)	8		10:49		X	X												X		
SB-J (2.5)	9		11:10																hold	
SB-J (4)	10		11:55		X	X												X		

Special Instructions/Comments:
Please Initial:
Samples Stored in ice. yes
Appropriate containers
Samples preserved
VOA's without headspace
Comments:

Relinquished by:
Sign Dan Madsen
Print Dan Madsen
Company SEACOR
Time 12:00 Date 11/15/93

Received by:
Sign Sean Vinson
Print SEAN VINSON
Company HERO
Time 12:43 Date 11/93

Relinquished by:
Sign Sean Vinson
Print SEAN VINSON
Company HERO
Time 1:50 Date 11/15

Received by:
Sign
Print Vanegas
Company Superior
Time 1:50 pm Date 11/15/93

Sample Receipt

Total no. of containers
Chain of custody seals:
Rec'd good condition/cold:
Conforms to record:

SFFB
Client:
Pete Sher
Client Contact:
Client Phone Number:

Date 11/12/93 Page 1 of 2

Chain-of-Custody Number: A

SEACOR Chain-of-Custody Record

Address: 1390 Willow Pass Rd., Suite 360
Concord, CA 94520-5250
510-686-9780

Project # 20007-001-01 Task # FR01
Project Manager Horton
Laboratory Superior
Turn-around time: Standard

Sampler's Name: Dan Madsen
Sampler's Signature: Dan Madsen

Analysis Request

Sample ID		Date	Time	Matrix	TPHg/BTEX 8015 (modified)/8020	TPHd 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)	TCLP Metals	TRPH Alpha Meth 503 B, D, E			Comments/ Instructions	Number of Containers
SB-K (2.5)	11		12:08																hold	
SB-K (4.5)	12		12:16		X	X										X				
SB-L (2)	13		12:55																hold	
SB-L (4)	14		13:02		X	X										X				
SB-M (2)	15		13:21																hold	
SB-M (4)	16		13:23		X	X										X				

Special Instructions/Comments:
Please Initial: DW
Samples Stored in ice. yes 4°
Appropriate containers
Samples preserved
VOA's without headspace
Comments:

Relinquished by:
Sign Dan Madsen
Print Dan Madsen
Company SEACOR
Time 12:00 Date 11/15/93

Received by:
Sign Sean Vinson
Print Sean Vinson
Company Hero
Time 12:43 Date 11/93

Relinquished by:
Sign Sean Vinson
Print Sean Vinson
Company Hero
Time 1:50 Date 11/15

Received by:
Sign
Print Don Vegas
Company Superior
Time 1:50 pm Date 11/15/93

Sample Receipt
Total no. of containers
Chain of custody seals:
Rec'd good condition/cold:
Conforms to record:

SFFB
Client:
Pete Sher
Client Contact:
Client Phone Number:

Date 11/12/93 Page 2 of 2

Chain of Custody and Analysis Request

page 1 of 1

From: Superior Precision Analytical, Inc.
825 Arnold Drive Suite 114
Martinez, CA 94553
Phone No. (415) 229-1512 Fax No. (415) 229-1526
Contact: Nancy
P.O. No. 905249

Turn Around Time (circle one)
Same Day 72 Hrs
24 Hrs 5 Day
48 Hrs 10 Day

Superior Precision Analytical, Inc.
P.O. Box 1545
Martinez, California 94553

Work Subcontracted to: Precision

Section II: Analysis Request

Laboratory Sample Identification	S = Soil A = Air W = Water Matrix	8240	8270	8010	8080	RCI					Client Sample Identification	Number of Containers	Preservative (yes or no)	DATE SAMPLED		Sampling Remarks
1 905249-5	S					X					SB-H(4)	1	N			Chevron ☐ Non-Chevron ☒ ** Please Fax Results ** due 11/22/93
2																
3																
4																
5																
6																
7																
8																
9																
10																
11																
12																

Relinquished by [signature]	Date/Time 11/15/93 1800	Received by	Date/Time	Lab please initial the following:
Organization SUPERIOR		Organization		Samples Stored in Ice
Relinquished by	Date/Time	Received by	Date/Time	Appropriate Containers
Organization		Organization		Samples Preserved
Relinquished by	Date/Time	Received by	Date/Time	VOAs without Headspace
Organization		Organization		Comments

Project: San Francisco French Bread

Log of Boring/ Monitoring Well: SB-G

Boring Location: 580 Julie Ann Way

Project No.: 70007-001-01

Subcontractor and Equipment:: PSI, MD-1

Logged By : D.E.M.

Sampling Method: Continuous

Monitoring Device: OVM

Comments :

Start Date/ Time: 11/12/93 // 9:00

Finish Date/ Time: 11/12/93 // 9:38

First Water (BGS) : 7'

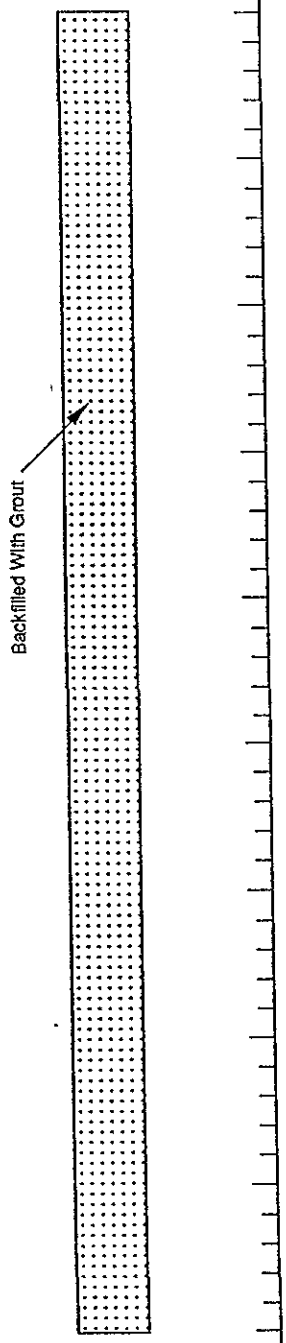
Stabilized Water Level (BGS): NA

Surface Elevation: NA

Casing Top Elevation: NA

Sample Interval Recovery (feet)	Blows/foot	PID (ppm)	Depth (feet)	USCS Symbol	LITHOLOGIC DESCRIPTION
Hand Augered			0		Fill: AC Cap
			1		GREY-BLACK CLAY (CL), <5% medium to coarse subangular sand, trace fine subangular gravel, soft to firm, moist, no product odor to faint product odor
1.5/1			2		GREY GRAVELLY CLAYEY SAND (SC), ~30-40% clay, fine to medium sand, ~5-15% fine subangular gravel, loose to medium dense, moist, faint to moderate product odor
		35			GREY CLAY (CL), <5% medium to coarse subangular sand, ~5-15% fine to medium subangular gravel, soft to firm, moist, moderate product odor
3/2.5			3		GREY GRAVELLY CLAYEY SAND (SC), ~30-40% clay, fine to medium sand, ~5-15% fine subangular gravel, loose to medium dense, moist, moderate product odor
			4		BLACK CLAY (CL), trace sand, trace gravel, moist, moderate product odor to strong product odor
			5		trace brick debris
		206	6		
3/2					GRAVELLY CLAYEY SAND (SC), ~35-45% clay, fine to medium sand, ~5-15% fine subangular gravel, wood products, plant material, saturated, strong product odor
			7		▽ Encountered water
		262	8		GREY CLAY (CL), trace plant material, saturated
			9		END OF BORING
			10		

Boring Abandonment/ Well Construction Details



SEACOR

Reviewed by: _____ Date: _____

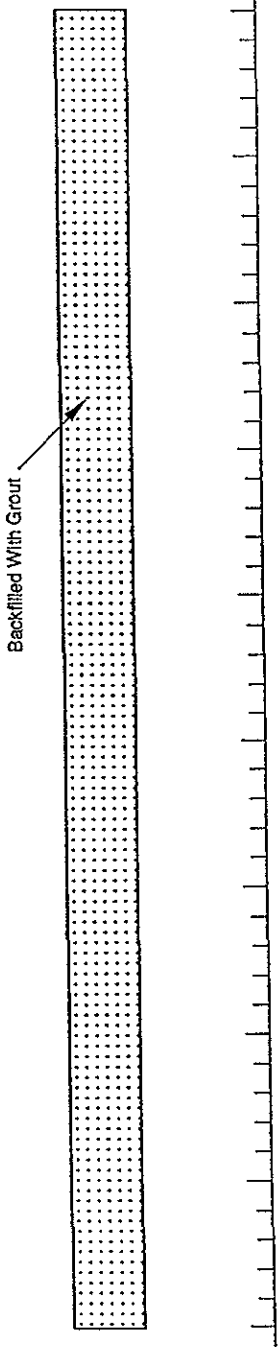
Revised by: _____ Date: _____

Project: San Francisco French Bread			Log of Boring/ Monitoring Well: Page 1 of 1
Boring Location: 580 Julie Ann Way		Project No.: 70007-001-01	SB-H
Subcontractor and Equipment:: PSI, MD-1		Logged By : D.E.M.	
Sampling Method: Continuous	Monitoring Device: OVM		Comments :
Start Date/ Time: 11/12/93 // 9:40	Finish Date/ Time: 11/12/93 // 10:20		
First Water (BGS) : 6'	Stabilized Water Level (BGS): NA		

Surface Elevation: NA Casing Top Elevation: NA

Sample Interval/ Recovery (feet)	Blows/foot	PID (ppm)	Depth (feet)	USCS Symbol	LITHOLOGIC DESCRIPTION
Hand Augered			0		Fill: AC Cap
1.5/1		10	2		GRAY-BLACK GRAVELLY SANDY CLAY (CL), fine sand, ~ 15-25% medium to coarse subangular sand, ~10-20% fine to medium subangular gravel, soft to firm, moist, no product odor Increasing in sand and gravel and odor
3/1.5		220	4		GREY SAND (SP), fine sand, ~45-55% medium to coarse sand, <15% fine to medium gravel, very loose, moist, moderate to strong product odor
			5		BLACK-GREY CLAY (CL), <10% fine to coarse sand, <10% fine to medium gravel, soft to firm, moist, strong product odor
3/1.5		4.5	7		GRAVELLY CLAYEY SAND (SC), ~35-40% clay, ~30-40% fine to medium subrounded sand, ~5-15% coarse subangular sand, <10% fine to medium subangular gravel, saturated, strong product odor decreasing in clay content to <20%
			9		END OF BORING
			10		

Boring Abandonment/ Well Construction Details



SEACOR

Reviewed by:_____ Date:_____

Revised by:_____ Date:_____

Project: San Francisco French Bread

Log of Boring/ Monitoring Well: SB-I

Boring Location: 580 Julie Ann Way

Project No.: 70007-001-01

Subcontractor and Equipment:: PSI, MD-1

Logged By : D.E.M.

Sampling Method: Continuous

Monitoring Device: OVM

Comments :

Start Date/ Time: 11/12/93 // 10:25

Finish Date/ Time: 11/12/93 // 10:50

First Water (BGS) : NA

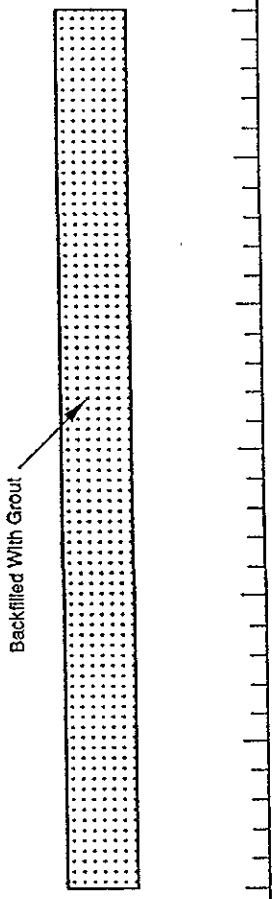
Stabilized Water Level (BGS): NA

Surface Elevation: NA

Casing Top Elevation: NA

Sample Interval Recovery (feet)	Blows/foot	PID (ppm)	Depth (feet)	USCS Symbol	LITHOLOGIC DESCRIPTION
Hand Augered			0		Fill: AC Cap
1.5/1			2		LIGHT BROWN SAND (SP), fine sand, ~20-30% medium to coarse sand, trace fine gravel, dry to moist, no product odor
		1.4			GREY CLAY (CL), soft, moist, no product odor to faint product odor
3/1.5			3		BROWN CLAY (CL), <10% fine sand, trace medium sand to fine gravel, firm, moist, no product odor to faint product odor
		2.9	4		GREY GRAVEL (GP), trace clay, trace fine sand, ~30-40% medium to coarse sand, ~50-60% fine to medium subangular gravel, moist to wet, no product odor to faint product odor
			6		END OF BORING
			7		
			8		
			9		
			10		

Boring Abandonment/ Well Construction Details



SEACOR

Reviewed by:_____ Date:_____

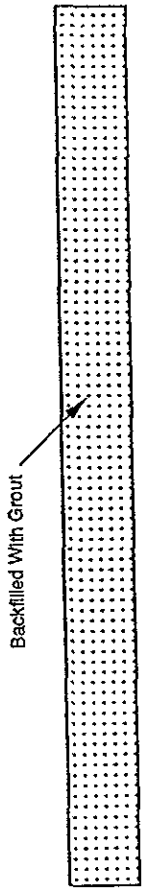
Revised by: _____ Date:_____

Project: San Francisco French Bread			Log of Boring/ Monitoring Well: Page 1 of 1
Boring Location: 580 Julie Ann Way		Project No.: 70007-001-01	SB-J
Subcontractor and Equipment:: PSI, MD-1		Logged By : D.E.M.	
Sampling Method: Continuous	Monitoring Device: OVM		Comments :
Start Date/ Time: 11/12/93 // 10:55	Finish Date/ Time: 11/12/93 // 11:55		
First Water (BGS) : NA	Stabilized Water Level (BGS): NA		

Surface Elevation: NA Casing Top Elevation: NA

Sample Interval Recovery (feet)	Blows/foot	PID (ppm)	Depth (feet)	USCS Symbol	LITHOLOGIC DESCRIPTION
Hand Augered			0		Fill: AC Cap
			1		
1.5/1.5			2		BLACK GRAVELLY SANDY CLAY (CL), fine sand, ~5-15% medium to coarse subangular sand, ~5-15% fine to medium subangular gravel, wet, no product odor
		2.9	3		
3/2			4		decreasing in sand and gravel to ~5%, moist to wet, faint product odor
		0.9	5		
			6		END OF BORING
			7		
			8		
			9		
			10		

Boring Abandonment/ Well Construction Details



SEACOR

Reviewed by:_____ Date:_____

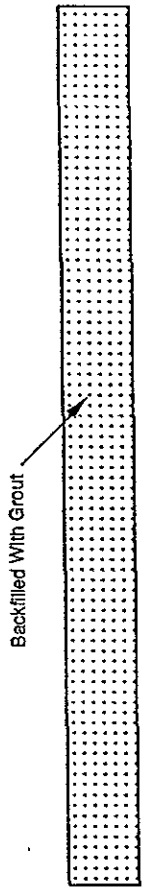
Revised by:_____ Date:_____

Project: San Francisco French Bread			Log of Boring/ Monitoring Well: SB-K
Boring Location: 580 Julie Ann Way		Project No.: 70007-001-01	Page 1 of 1
Subcontractor and Equipment:: PSI, MD-1		Logged By : D.E.M.	
Sampling Method: Continuous	Monitoring Device: OVM		Comments :
Start Date/ Time: 11/12/93 // 12:00	Finish Date/ Time: 11/12/93 // 12:18		
First Water (BGS) : NA	Stabilized Water Level (BGS): NA		

Surface Elevation: NA Casing Top Elevation: NA

Sample Interval Recovery, Feet	Blows/foot	PID (ppm)	Depth (feet)	USCS Symbol	LITHOLOGIC DESCRIPTION
Hand Augered			0–1		Fill: AC Cap
1.5/1.5		1.0	1–3		BROWN GRAVELLY CLAYEY SAND (SC), ~35-45% clay, fine sand, ~30-40% medium to coarse subangular sand, ~5-15% fine to coarse subangular sand, dry to moist, no product odor
3/2		142	3–6		DARK BROWN SANDY CLAY (CL), ~ 5-15% medium to coarse sand, <5% fine gravel, moist to wet, no product odor to faint product odor wood and plant products, saturated, organic odor
			6		END OF BORING

Boring Abandonment/ Well Construction Details



SEACOR

Reviewed by:_____ Date:_____

Revised by:_____ Date:_____

Project: San Francisco French Bread

Boring Location: 580 Julie Ann Way

Project No.: 70007-001-01

Subcontractor and Equipment:: PSI, MD-1

Logged By: D.E.M.

Log of Boring/ Monitoring Well: SB-L

Page 1 of 1

Sampling Method: Continuous

Monitoring Device: OVM

Comments :

Start Date/ Time: 11/12/93 // 12:45

Finish Date/ Time: 11/12/93 // 13:03

First Water (BGS) : NA

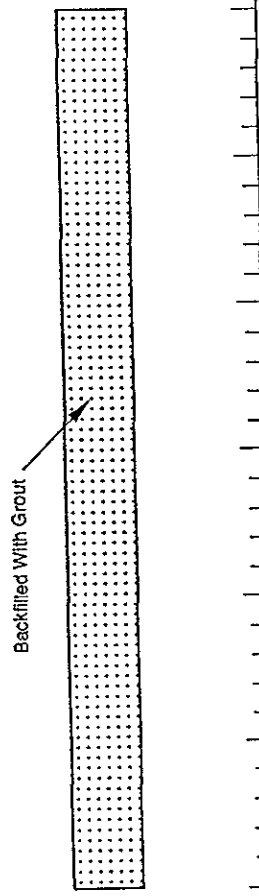
Stabilized Water Level (BGS): NA

Surface Elevation: NA

Casing Top Elevation: NA

Sample Interval Recovery, Feet	Blows/foot	PID (ppm)	Depth (feet)	USCS Symbol	LITHOLOGIC DESCRIPTION
Hand Augered			0–1		Fill: AC Cap
1.5/0.5		1	2		GREY SANDY CLAY (CL), ~ 10-20% medium to coarse subangular sand, trace coarse gravel, soft, moist, no product odor
3/1		10	3–5		BLACK SANDY GRAVELLY CLAY, fine sand, ~ 10-20% medium subangular sand, ~10-20% fine to medium gravel, soft, moist, no product odor, organic odor
			6		END OF BORING
			7–10		

Boring Abandonment/ Well Construction Details



SEACOR

Reviewed by: _____ Date: _____

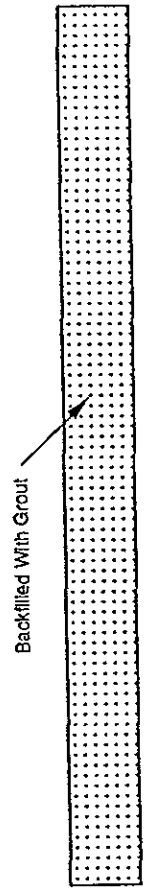
Revised by: _____ Date: _____

Project: San Francisco French Bread			Log of Boring/ Monitoring Well: SB-M
Boring Location: 580 Julie Ann Way		Project No.: 70007-001-01	Page 1 of 1
Subcontractor and Equipment:: PSI, MD-1		Logged By: D.E.M.	
Sampling Method: Continuous	Monitoring Device: OVM		Comments :
Start Date/ Time: 11/12/93 // 13:05	Finish Date/ Time: 11/12/93 // 13:35		
First Water (BGS) : NA	Stabilized Water Level (BGS): NA		

Surface Elevation: NA Casing Top Elevation: NA

Sample Interval/ Recovery, Feet	Blows/foot	PID (ppm)	Depth (feet)	USCS Symbol	LITHOLOGIC DESCRIPTION
Hand Augered			0–1		Fill: AC Cap
1.5/0.5		3	2		DARK BROWN GRAVELLY SANDY CLAY (CL), ~10-25% medium to coarse subangular sand, ~5-15% fine to medium subangular gravel, moist, no product odor
3/1		4	3–5		Increasing in sand and gravel with depth
			6		END OF BORING

Boring Abandonment/ Well Construction Details



SEACOR

Reviewed by: _____ Date: _____

Revised by: _____ Date: _____