

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

ENVIRONMENTAL
PROTECTION
98 APR 29 PM 12:54

Clayton
ENVIRONMENTAL
CONSULTANTS

April 29, 1998

Mr. Barney M. Chan
Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Suite 250
Alameda, California 94502-6577

Clayton Project No. 70-97066.00

Subject: Limited Subsurface Investigation Report for 630 29th Avenue, Oakland,
California

Dear Mr. Chan:

Please find enclosed the report documenting the limited subsurface investigation performed at the above-referenced property in August/September 1997. Based on the results of the limited investigation, we have recommended that additional borings be installed to further define the lateral extent of hydrocarbons in groundwater. It is anticipated that monitoring wells will be installed after results of the next round of borings have been evaluated.

Please contact me at (510) 426-2600 if you have any questions.

Sincerely,



Richard W. Day, RG, CEG, CHG
Manager, Environmental Risk Management and Remediation
San Francisco Regional Office

RWD/

c: Donna Proffitt, BofA Environmental Services (4 copies)

San Francisco Regional Office

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Limited Subsurface Investigation

**Former Lemoine Sausage Facility
630 29th Avenue
Oakland, California**

**Clayton Project No. 70-97066.00
April 1998**

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1.0 INTRODUCTION

Clayton Environmental Consultants, a division of Clayton Group Services, Inc. (Clayton), pursuant to its Indemnification Agreement with BA Properties of August 20, 1996, conducted a limited subsurface investigation in the vicinity of the former gasoline underground storage tank (UST) at the former Lemoine Sausage facility located at 630 - 29th Avenue in Oakland, California (Figure 1).

1.1 SITE DESCRIPTION

The subject site is located at the intersection of 29th Avenue and Seventh Street in Oakland, California and is currently occupied by ABI Industries for the import and manufacturing of bearings and seals. The limited subsurface investigation was conducted in the area of the former UST located on the eastern side of the property building.

1.2 SITE HISTORY

A fueling dispenser and one 1,000-gallon gasoline UST was formerly located east of the facility building. The UST was located beneath the sidewalk adjacent to 7th Street and supplied the dispenser located in a "cubby hole" near the building's roll-up door. The UST and associated piping was removed on November 21, 1996 and petroleum hydrocarbon impacted soil and groundwater was observed during removal activities.

Following UST removal, Clayton collected two soil confirmatory soil samples (S-1 and S-2) from under the product and fill ends of the UST at approximately 8.5 feet below ground surface (bgs) and one soil sample (S-3) at approximately 6 inches below the former dispenser. Clayton also collected an additional four wall samples (S-4, S-5, S-6, and S-7) at approximately 5 feet bgs. Total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, xylenes (BTEX) and lead were detected in the two confirmation soil samples and the four additional wall soil samples. Groundwater was present in the former UST excavation and a sheen was observed on the water surface. The UST removal and results of confirmation sampling are described in more detail in the "Underground Storage Tank Closure Report", dated September 24, 1997.

2.0 SCOPE OF WORK

The following scope of work was performed as part of the subsurface investigation:

- Prepare workplan
- Prepare a Health and Safety Plan
- Locate utilities
- Advance soil borings
- Analyze soil and grab-groundwater samples
- Prepare report

These tasks are described in the following sections.

2.1 PREPARE WORKPLAN

Clayton prepared a "Work Plan for the Limited Subsurface Investigation of One Underground Storage Tank at the former Lemoine Sausage Facility," (Clayton Project No. 70-97066.00.002, January 10, 1997). The workplan was submitted to the Alameda County Health Care Services Agency (ACHCSA) on January 10, 1997 for review and approval. Mr. Barney M. Chan, Hazardous Materials Specialist, subsequently approved the workplan on January 17, 1997.

2.2 PREPARE A HEALTH AND SAFETY PLAN

A health and safety plan was prepared for the work outlined in the workplan, in accordance with the requirements of the State of California General Industry Safety Order (GISO) 5192 and Title 29 of the Code of Federal Regulations, Section 1910.120 (29 CFR 1910.120). A copy of the health and safety plan was kept onsite during field activities.

2.3 LOCATE UTILITIES

Before the drilling event commenced, Underground Service Alert (USA) was contacted and a private utility locator was retained to identify the underground utilities in the vicinity of the planned soil boring locations. The identified utilities were clearly marked on the ground. Drilling activities did not take place within 3 feet of utilities.

2.4 ADVANCE SOIL BORINGS

The scope of work outlined in the workplan dated January 10, 1997 consisted of the advancement of eight soil borings (B-1 through B-8) to collect soil and grab groundwater samples. The purpose of this investigation was to determine the extent of impacted soil and groundwater in the vicinity of the former UST. Before beginning the drilling, Clayton obtained the appropriate permit from the City of Oakland for the scope of work described in the workplan. A copy of the permit is included as Appendix A.

A total of five borings were advanced on August 29, 1997 at the locations shown on Figure 2. The number of borings and boring locations were modified from those proposed in the workplan due to onsite and interior space constraints.

Soil borings were advanced to depths of 12 to 16 feet bgs using truck-mounted Geoprobe equipment. Boring termination depths were based on field conditions noted at the time of the investigation and the depth to groundwater in the former UST excavation at the time of UST removal. Soil samples were collected continuously using clear acetate liners.

Soil samples selected for analysis were sealed using Teflon® sheets and plastic end caps; labelled; and placed into a chilled cooler for transport to a State-certified laboratory for analysis. Appropriate chain-of-custody documentation were followed for the handling of the samples.

The soil samples not selected for analysis were inspected by the field geologist. Characteristics, such as soil type, color, relative moisture content, and odor were noted in the field using USCS soil classifications and Munsell soil color charts. To aid in determining the presence of volatile organic compounds, Clayton assessed the spent soil cores using a photo-ionization detector (PID). Copies of the boring logs with PID readings are included as Appendix B.

Temporary monitoring wells were constructed inside each borehole using one-inch PVC screen and casing. A grab-groundwater sample was collected from temporary well B-1 on August 29, 1997. The recharge rate of groundwater into the temporary wells B-2 through B-5 was very slow and grab-groundwater samples from these wells could not be obtained until September 3 and 10, 1997, when there was a sufficient volume of water present in each casing to allow for sample collection. The depth to water ranged from six to ten feet bgs in the boreholes.

Grab-groundwater samples were collected through the temporary well casing using pre-cleaned bailers and transferred into the appropriate laboratory-supplied containers. The containers were sealed, labelled and placed into a chilled cooler for transport to a State-certified laboratory for analysis. Appropriate chain-of-custody documentation was followed for the handling of the samples.

After borings were completed, the temporary well screen and casing were removed and the borings were backfilled with bentonite grout to approximately 4 inches below the ground surface. The remainder of each boring was sealed to the surface using concrete.

Soil cuttings and water generated by the drilling and decontamination procedures were placed into a United States Department of Transportation (USDOT)-approved 5-gallon drum. The drum was closed, labelled, and transported to an offsite disposal facility.

2.5 ANALYZE SOIL AND GRAB-GROUNDWATER SAMPLES

Selected soil and grab-groundwater samples were analyzed using the following methods:

- United States Environmental Protection Agency (USEPA) Method 8015 (modified) for TPH-G; and
- USEPA Method 8020 for benzene, toluene, ethylbenzene, and xylenes (BTEX) and a qualitative analysis for methyl tertiary butyl ether (MTBE).

3.0 FINDINGS

Table 1 presents the analytical results for the soil samples collected from borings B-1 through B-5; grab-groundwater sample results are summarized on Table 2. Figure 3 presents the distribution of TPH-G and benzene in soil samples. Figure 4 presents the TPH-G and benzene distribution in grab-groundwater samples. Copies of the laboratory analytical data sheets and chain-of-custody documents are included as Appendix C.

3.1 SOIL

The soil analytical data indicate that low levels of TPH-G and BTEX compounds are present in soil adjacent to the former UST excavation (Figure 3). TPH-G concentrations generally ranged from non-detect to 30 milligrams per kilogram (mg/kg). Two soil samples exhibited TPH-G concentrations greater than 100 mg/kg (Table 1).

BTEX compounds were detected in borings B-2 and B-5. A comparison of these detections with the USEPA Region IX Preliminary Remediation Goals (USEPA, 1996) is shown below:

Compound	Maximum Detection Concentration	USEPA Region IX Residential PRG	USEPA Region IX Industrial PRG
Benzene	0.009	0.63	1.4
Toluene	0.005	790	880
Ethylbenzene	5.9	230	230
Xylenes	9.6	320	320

Concentrations shown in mg/kg
TPH-G does not have an established PRG

As can be seen, the maximum detected BTEX concentrations in boring B-1 through B-5 are significantly less than the PRGs established for residential or industrial land use scenarios.

3.2 GRAB-GROUNDWATER

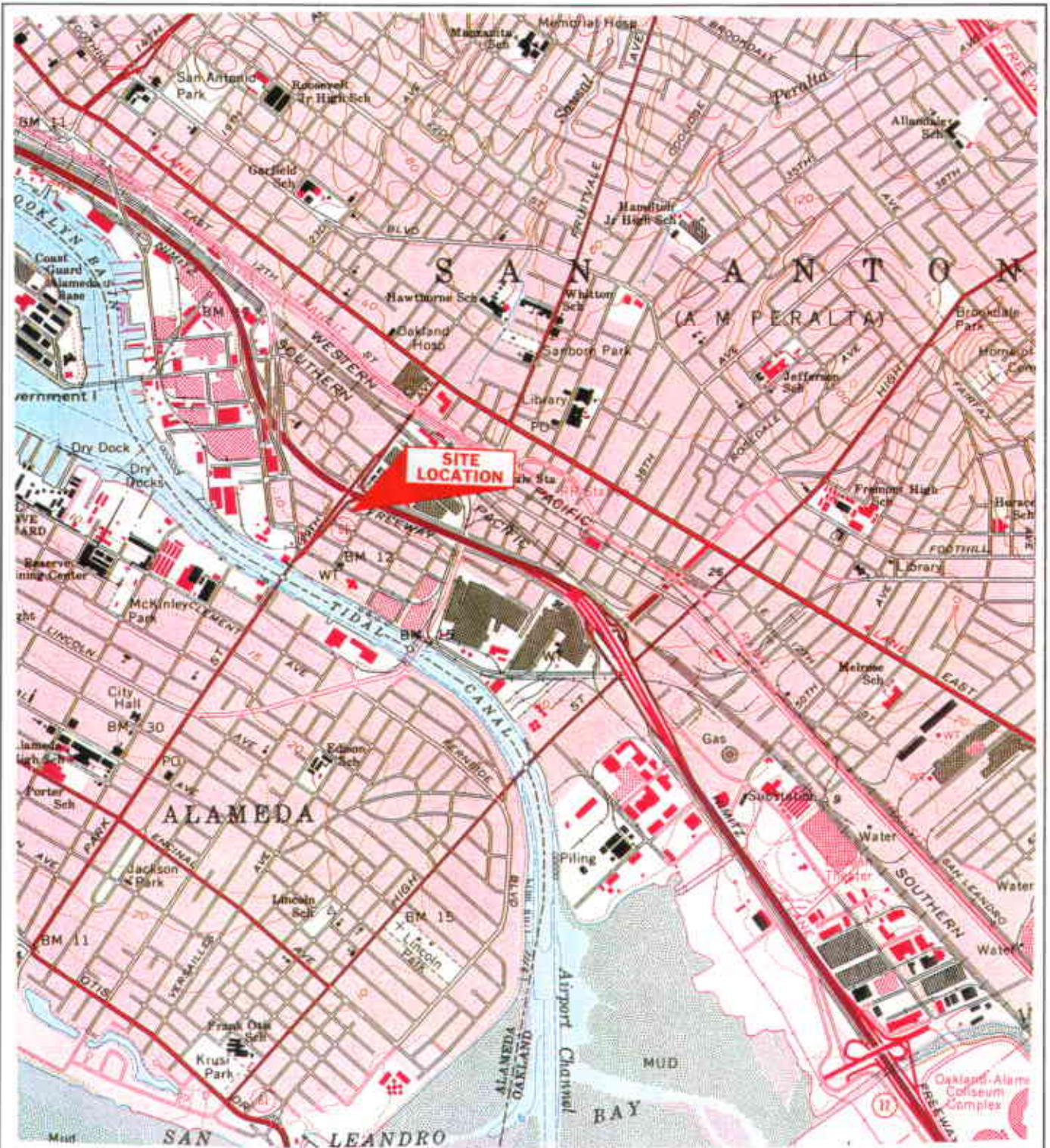
Based on the location of the site relative to the Oakland/Alameda Estuary (Figure 1), Clayton anticipates that the groundwater flow direction is to the west (towards San Francisco Bay). The grab-groundwater data support this anticipated flow direction as higher TPH-G and BTEX concentrations are present in grab-groundwater east of the former UST (Figure 4).

TPH-G concentrations in grab-groundwater samples ranged from 100 to 78,000 micrograms per liter (ug/L); benzene concentrations ranged from less than 0.4 ug/L to 16,000 ug/L (Table 2). It is noted that no MTBE was detected in the samples collected from borings B-3 and B-5, which had the highest TPH-G and benzene concentrations.

4.0 CONCLUSIONS AND RECOMMENDATIONS

The extent of TPH-G and BTEX impacted soil above the water table has been adequately defined. The extent of TPH-G and BTEX impacted groundwater was not defined based on the grab-groundwater data collected to date.

Based on the extremely slow recharge rates observed during the grab-groundwater sampling, it is anticipated that TPH-G and BTEX compounds have not migrated far from the former UST. Clayton recommends that an additional seven borings be advanced at the locations shown on Figure 5 to further define the extent of TPH-G and BTEX compounds in groundwater. It is recommended that once the extent of impacted groundwater has been defined, three groundwater monitoring wells be installed to establish and monitor the limited migration of contaminants in shallow groundwater.



Source: U.S.G.S. OAKLAND EAST, CALIF.,
7.5 Minute Quadrangle, 1959,
(photorevised 1980).

SITE LOCATION

FORMER LEMOINE SAUSAGE FACTORY
630 29th AVENUE
OAKLAND, CALIFORNIA
Clayton Project No. 70-97066.00.002

Figure

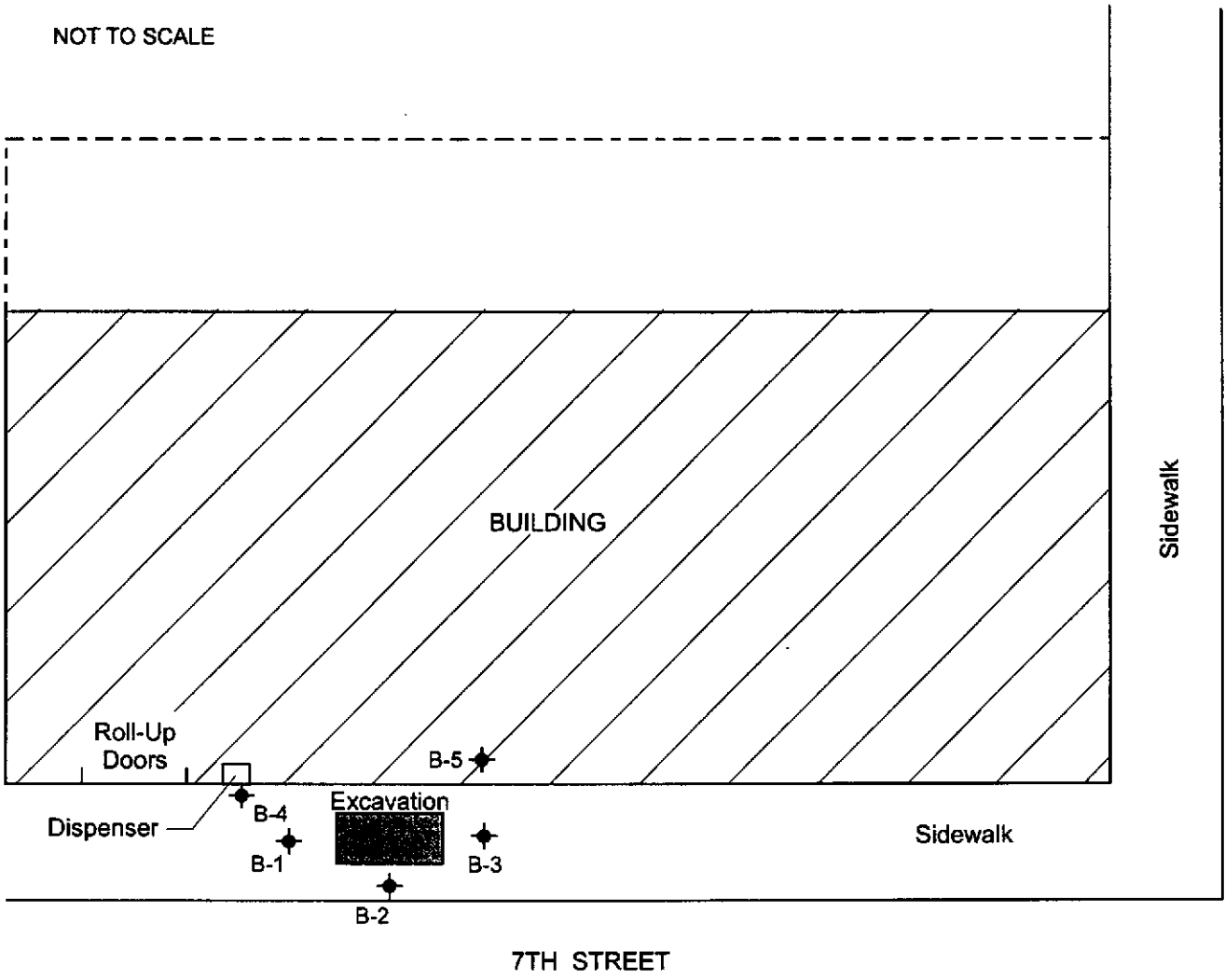
1

03/20/98
LSF-0398.CDR

Clayton
ENVIRONMENTAL
CONSULTANTS



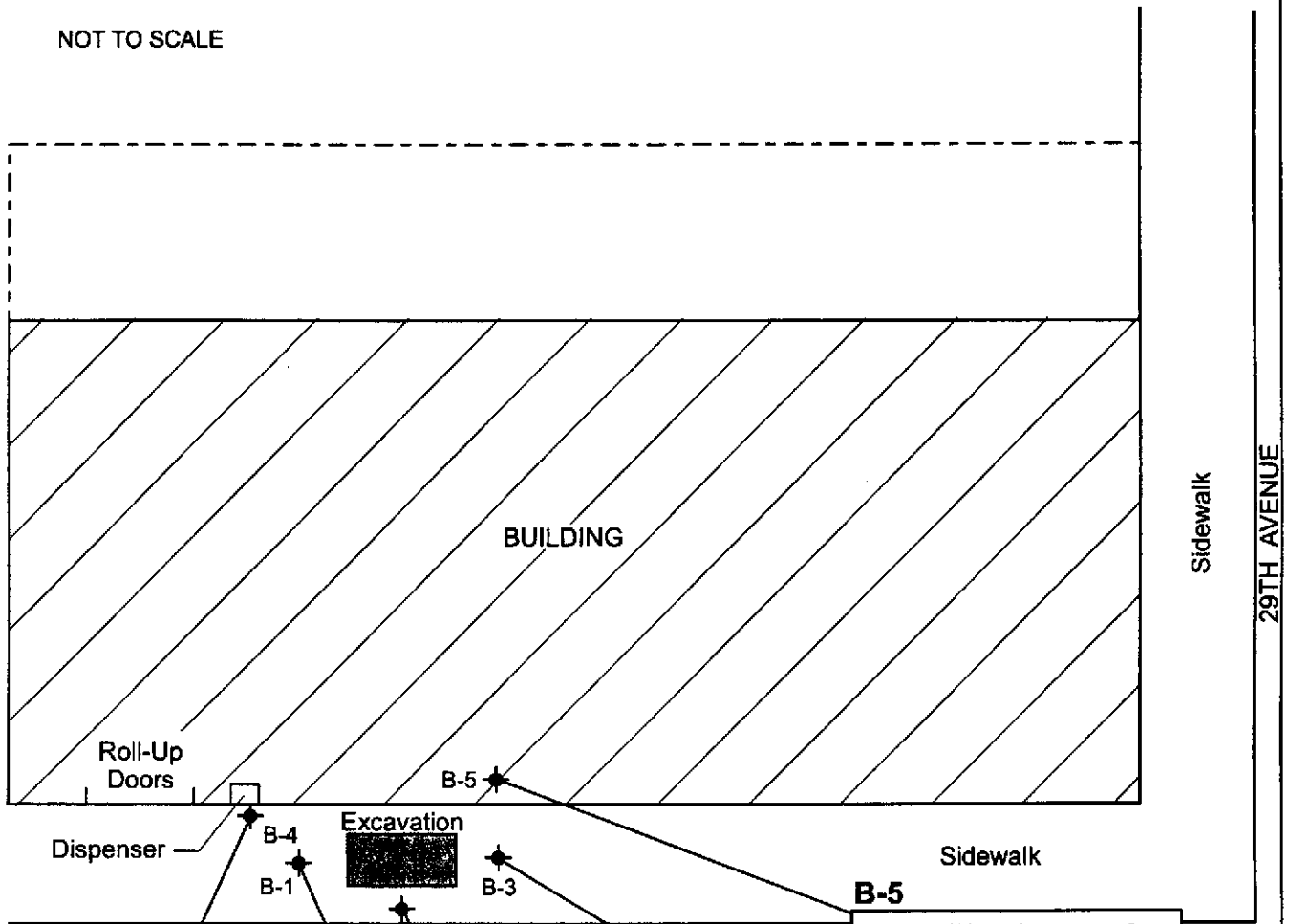
NOT TO SCALE



<p>LEGEND:</p> <p>◆ Soil Boring Location</p>	<p>SOIL BORING LOCATIONS</p> <p>FORMER LEMOINE SAUSAGE FACTORY 630 29th AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00.002</p>	<p>Figure 2 03/20/98 LSF-0398.CDR</p>	<p>Clayton ENVIRONMENTAL CONSULTANTS</p>
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NOT TO SCALE



B-4

Depth (ft)	2.5	6	9.5
TPH-G	<0.3	25	0.3
Benzene	<0.005	<0.1	<0.005

B-2

Depth (ft)	2.5	6
TPH-G	<0.3	660
Benzene	<0.005	<0.5

B-3

Depth (ft)	2.5	5
TPH-G	27	170
Benzene	<0.1	<0.1

B-5

Depth (ft)	2.5	6
TPH-G	1.6	<0.3
Benzene	0.009	<0.005



B-1

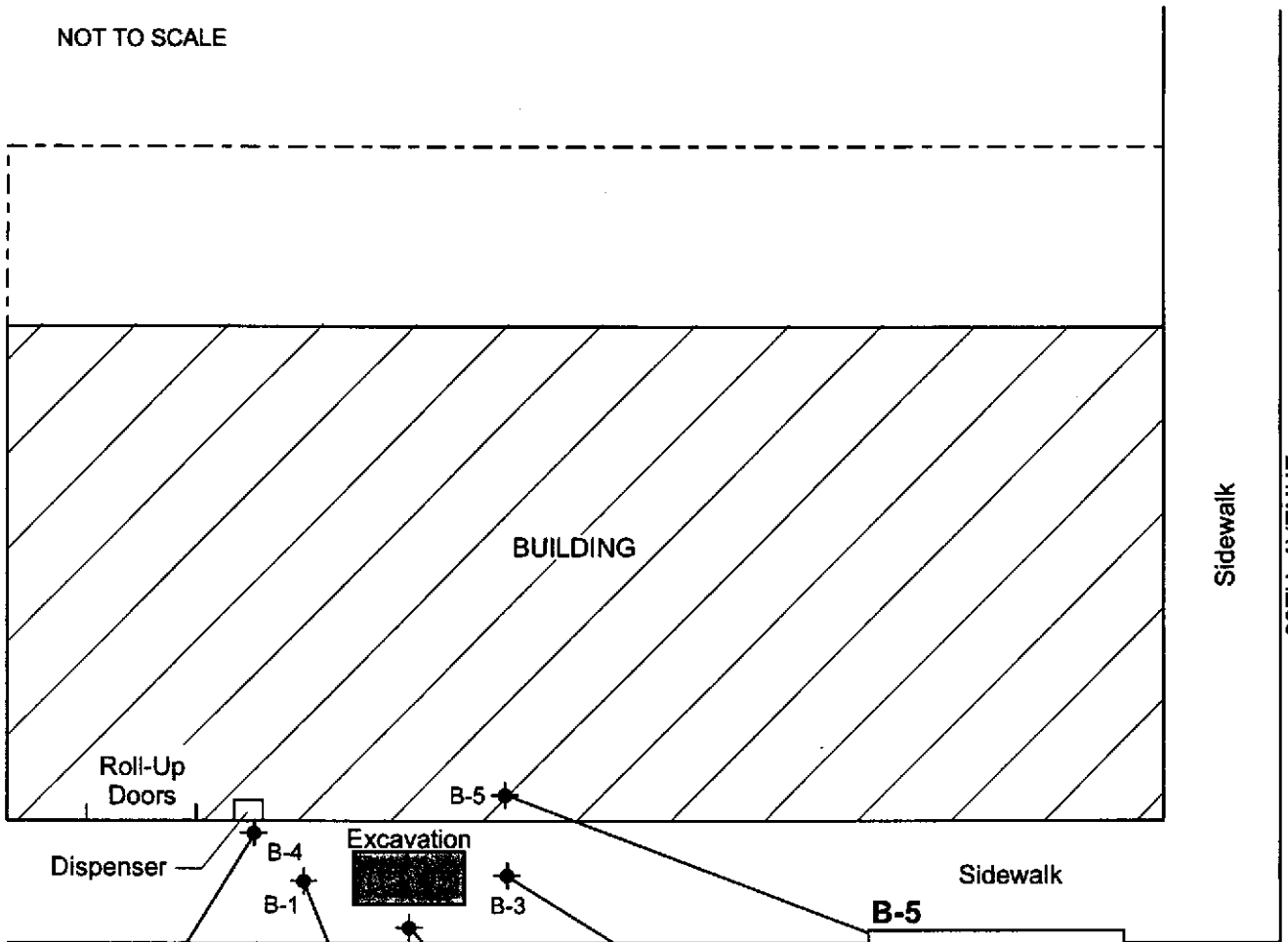
Depth (ft)	2.5	5.5
TPH-G	<0.3	30
Benzene	<0.005	<0.03

TPH-G Total Petroleum Hydrocarbons as Gasoline
 Note: All results in milligrams per kilogram (mg/kg)

LEGEND: Soil Boring Location	TPH-G AND BENZENE CONCENTRATIONS IN SOIL SAMPLES FORMER LEMOINE SAUSAGE FACTORY 630 29th AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00.002	Figure <h1>3</h1> 03/20/98 LSF-0398.CDR	Clayton ENVIRONMENTAL CONSULTANTS
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NOT TO SCALE



B-4

Date	09/03/97
TPH-G	100
Benzene	<0.4

B-1

Date	08/29/97
TPH-G	34,000
Benzene	430

B-2

Date	09/03/97
TPH-G	5,100
Benzene	2,800

B-3

Date	09/10/97
TPH-G	51,000
Benzene	13,000

B-5

Date	09/10/97
TPH-G	78,000
Benzene	16,000

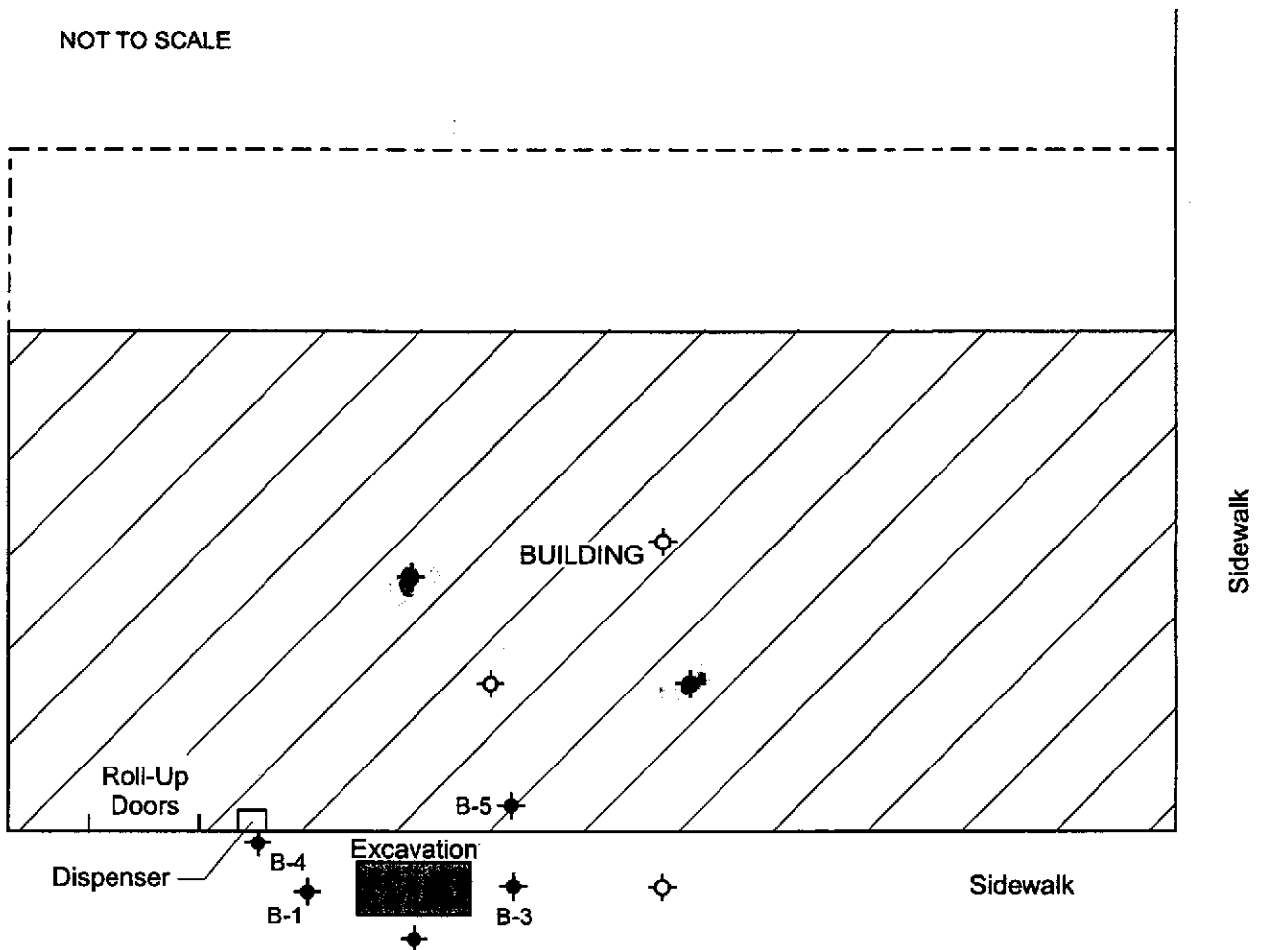


TPH-G Total Petroleum Hydrocarbons as Gasoline
 Note: All results in micrograms per liter (ug/L)

LEGEND: Soil Boring Location	TPH-G AND BENZENE CONCENTRATIONS IN GRAB GROUNDWATER SAMPLES FORMER LEMOINE SAUSAGE FACTORY 630 29th AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00.002	Figure <h1 style="font-size: 2em;">4</h1> 03/20/98 LSF-0398.CDR	



NOT TO SCALE



Sidewalk

29TH AVENUE

Roll-Up Doors

Dispenser

Excavation

Sidewalk

7TH STREET



LEGEND:	PROPOSED BORING LOCATIONS	Figure	Clayton
<ul style="list-style-type: none"> ◆ Soil Boring Location ◇ Proposed Boring Location 	FORMER LEMOINE SAUSAGE FACTORY 630 29th AVENUE OAKLAND, CALIFORNIA Clayton Project No. 70-97066.00.002	5 03/20/98 LSF-0398.CDR	ENVIRONMENTAL CONSULTANTS

TABLE 1
Summary of Soil Sample Results
Former Lemoine Cold Storage Facility
630 29th Avenue, Oakland, California
 (All results in milligrams per kilogram [mg/kg])

Sample Location	Sample Date	Sample Depth (ft)	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes
B-1	29-Aug-97	2.5	< 0.3	< 0.005	< 0.005	< 0.005	< 0.005
B-1	29-Aug-97	5.5	30	< 0.03	< 0.03	< 0.03	< 0.04
B-2	29-Aug-97	2.5	< 0.3	< 0.005	< 0.005	< 0.005	< 0.005
B-2	29-Aug-97	6	660	< 0.5	< 0.5	5.9	9.6
B-3	29-Aug-97	2.5	27	< 0.1	< 0.1	< 0.3	< 0.1
B-3	29-Aug-97	5	170	< 0.1	< 0.1	< 0.1	< 0.1
B-4	29-Aug-97	2.5	< 0.3	< 0.005	< 0.005	< 0.005	< 0.005
B-4	29-Aug-97	6	25	< 0.1	< 0.2	< 0.1	< 0.1
B-4	29-Aug-97	9.5	0.3	< 0.005	< 0.005	< 0.005	0.008
B-5	2-Sep-97	2.5	1.6	0.009	0.005	0.012	0.045
B-5	2-Sep-97	6	< 0.3	< 0.005	< 0.005	< 0.005	< 0.005

TABLE 2
Summary of Grab-Groundwater Sample Results
Former Lemoine Cold Storage Facility
630 29th Avenue, Oakland, California
 (All results in micrograms per liter [ug/L])

*Pl. Sample
aka ADC*

Need to analyze

Sample Location	Sample Date	TPH-G	Benzene	Toluene	Ethyl-benzene	Total Xylenes	MTBE	1,2-DCA
<u>B-1</u>	<u>29-Aug-97</u>	<u>34,000</u>	430	54	2,400	4,649		NA
B-2	3-Sep-97	5,100	2,800	120	43	140		NA
<u>B-3</u>	<u>10-Sep-97</u>	<u>51,000</u>	14,000	5,900	290	7,100	< 5	410
B-4	3-Sep-97	100	< 0.4	< 0.3	< 0.3	< 0.4		NA
<u>B-5</u>	<u>10-Sep-97</u>	<u>78,000</u>	16,000	22,000	1,100	6,000	< 5	910
	MCL:	NE	1	1,000	680	1,750		0.5

APPENDIX A

CITY OF OAKLAND EXCAVATION PERMIT

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL
ENGINEERING

PAGE 2 of 2

PERMIT NUMBER X 97-01048		SITE ADDRESS/LOCATION 630 29TH ave.
APPROX. START DATE	APPROX. END DATE	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number)
CONTRACTOR'S LICENSE # AND CLASS		CITY BUSINESS TAX #

ATTENTION:

- State law requires that the contractor/owner call Underground Service Alert (USA) two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: **233969**
8/26/97
- 48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.**

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than \$500):

I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

I, as owner of the property, am exclusively contracting with licensed contractors to construct the project. (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars (\$100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Chapter 6, Article 2 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements and that the above information is true and correct under penalty of law.

X Walter Mullauer **8/26/97**
Signature of Permittee Agent for Contractor Owner Date

DATE STREET LAST RESURFACED 1988	SPECIAL PAVING DETAIL REQUIRED? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO
ISSUED BY <u>W. Miller</u>		DATE ISSUED 8/26/97	

726269

APPENDIX B

BORING LOGS

LOG OF EXPLORATORY BORING

PROJECT NO. _____ DATE _____
 CLIENT _____
 LOCATION _____
 LOGGED BY: MBM DRILLER _____

BORING NO. B-1
 Sheet _____ of _____

Field location of boring: _____

Drilling method GEOPROBE
 Hole Dia. _____

Casing Installation Data _____

Ground Elev. _____ Datum _____

Drilling Rate FT/MIN	PID OVA	Depth	Soil Group Symbol (uscs)	Litho- graphic Symbol	Water Level				DESCRIPTION
					Time				
					Date				
<u>0913</u>	<u>348</u>	1							<u>6" CONC,</u>
		2							<u>N25/ SOFT ROCKY CLAY WET</u>
	<u>1211</u>	3							<u>MOTTLED SOFT PEBBLY SANDY SILTY CLAY</u>
		4							<u>DAMP SANDY SILTY GRAVEL</u>
	<u>32-18</u>	5							
		6							
		7							
		8							
		9							
		10							
		11							
		12							

SW

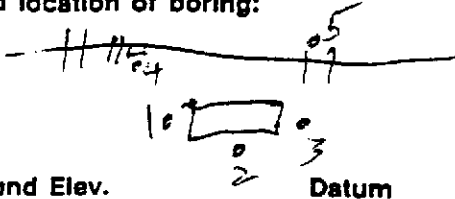
POOR SHEEN ON SAT. SOIL

LOG OF EXPLORATORY BORING

PROJECT NO. _____ DATE _____
 CLIENT _____
 LOCATION _____
 LOGGED BY _____ DRILLER _____

BORING NO. **B-2**
 Sheet: _____
 of _____

Field location of boring:



Ground Elev. _____

Datum _____

Drilling method _____
 Hole Dia. _____

Casing Installation Data _____

Drilling Rate FT/MIN	PID OVA	Depth	Sample	Soil Group Symbol (uscs)	Litho- graphic Symbol	Water Level				DESCRIPTION
						Time				
						Date				
		1								
15.6		2								
		3								
11.9		4								
26.2		5								
47.9		6								
		7								
32.6		8								
40.3		9								
		10								
92.6		11								
		12								
		13								
		14								
		15								
		16								

NO SAMPLE

LOG OF EXPLORATORY BORING

PROJECT NO. _____ DATE _____
 CLIENT _____
 LOCATION _____
 LOGGED BY _____ DRILLER _____

BORING NO. **B-3**
 Sheet _____ of _____

Field location of boring:

9/2/97 ~~WET~~ DRY
 9/3/97 DRY

Drilling method _____
 Hole Dia. _____

Casing Installation Data _____

Ground Elev. _____

Datum _____

Drilling Rate FT/MIN	PID OVA	Depth	Sample	Soil Group Symbol (uscs)	Litho- graphic Symbol	Water Level				DESCRIPTION
						Time				
						Date				
		1								
		2								
	361.9	3								
	451.9	4								
		5								
	166	6								
		7								
		8								
		9								
	761.2	10								
		11								
		12								
		13								
		14								
		15								
		16								

ON 9/2/97
NO SAMPLES

LOG OF EXPLORATORY BORING

PROJECT NO. _____ DATE _____
 CLIENT _____
 LOCATION _____
 LOGGED BY _____ DRILLER _____

BORING NO. B-5
 Sheet _____ of _____

Field location of boring:

Drilling method _____
 Hole Dia. _____

Casing Installation Data _____

Ground Elev. _____

Datum _____

Drilling Rate FT/MIN	PID OVA	Depth	Sample	Soil Group Symbol (uscs)	Litho- graphic Symbol	Water Level						DESCRIPTION	
						Time							
						Date							
		1											
	7.15	2											
		3											
	22.2	4											
	22.10												
		5											
		6											
	32.5	7											
		8											
		9											
	34.4	10											
		11											
		12											
		13											
	57.0	14											
		15											
		16											

GRN

APPENDIX C

**LABORATORY ANALYTICAL DATA SHEETS AND
CHAIN-OF-CUSTODY DOCUMENTS**

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

September 08, 1997

Mr. Marc Mullaney
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.
1252 Quarry Lane
Pleasanton, CA 94566

Client Reference: 97066
Clayton Project No.: SF9708560

Dear Mr. Mullaney:

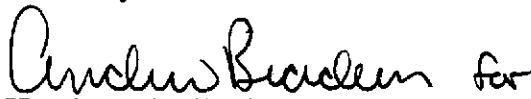
Attached is our analytical laboratory report for the samples received on August 29, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

Please note that the EPA Method 8015/8020 reporting limits are elevated for samples B-1 @2.5', B-2 @6', B-3 @2.5', B-3 @5, & B-4@6' due to matrix interference. The soil results are reported on a wet-weight basis, as received.

Please note that any unused portion of the samples will be discarded 30 days from the date of this letter, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have questions regarding this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,


Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/

Attachments

California DHS ELAP Certification Number 1196

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-1	Project ID:	SF9708560
Sample Number:	SF9708560-1	Date Sampled:	08/29/97
Sample Matrix:	Water	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/03/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	430	ug/L	0.4
Ethylbenzene	100-41-4	2400	ug/L	0.3
TPH Gasoline	--	34000	ug/L	50
Toluene	108-88-3	54.	ug/L	0.3
o-Xylene	95-47-6	49.	ug/L	0.4
m,p-Xylenes	108-38-3	4600	ug/L	0.4
Surrogates		Recovery		QC Limits
a, a, a-Trifluorotoluene	98-08-8	95	%	50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-1 @ 2.5'	Project ID:	SF9708560
Sample Number:	SF9708560-2	Date Sampled:	08/29/97
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/04/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.005
Ethylbenzene	100-41-4	ND	mg/kg	0.005
TPH Gasoline	--	ND	mg/kg	0.3
Toluene	108-88-3	ND	mg/kg	0.005
o-Xylene	95-47-6	ND	mg/kg	0.005
m,p-Xylenes	108-38-3	ND	mg/kg	0.005
Surrogates				
a,a,a-Trifluorotoluene	98-08-8	Recovery 84	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-1 @ 5.5'	Project ID:	SF9708560
Sample Number:	SF9708560-3	Date Sampled:	08/29/97
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/04/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.03
Ethylbenzene	100-41-4	ND	mg/kg	0.03
TPH Gasoline	--	30.	mg/kg	2
Toluene	108-88-3	ND	mg/kg	0.03
o-Xylene	95-47-6	ND	mg/kg	0.03
m,p-Xylenes	108-38-3	ND	mg/kg	0.04
Surrogates				
a,a,a-Trifluorotoluene	98-08-8	Recovery 54	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-2 @ 2.5'	Project ID:	SF9708560
Sample Number:	SF9708560-4	Date Sampled:	08/29/97
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/04/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.005
Ethylbenzene	100-41-4	ND	mg/kg	0.005
TPH Gasoline	--	ND	mg/kg	0.3
Toluene	108-88-3	ND	mg/kg	0.005
o-Xylene	95-47-6	ND	mg/kg	0.005
m,p-Xylenes	108-38-3	ND	mg/kg	0.005
Surrogates				
a,a,a-Trifluorotoluene	98-08-8	Recovery 74	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-2 @ 6'	Project ID:	SF9708560
Sample Number:	SF9708560-6	Date Sampled:	08/29/97
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/05/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.5
Ethylbenzene	100-41-4	5.9	mg/kg	0.5
TPH Gasoline	--	660	mg/kg	30
Toluene	108-88-3	ND	mg/kg	0.5
o-Xylene	95-47-6	ND	mg/kg	0.5
m,p-Xylenes	108-38-3	9.6	mg/kg	0.5
Surrogates				
a,a,a-Trifluorotoluene	98-08-8	Recovery 83	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-3 @ 2.5'	Project ID:	SF9708560
Sample Number:	SF9708560-7	Date Sampled:	08/29/97
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/05/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.1
Ethylbenzene	100-41-4	ND	mg/kg	0.3
TPH Gasoline	--	27.	mg/kg	6
Toluene	108-88-3	ND	mg/kg	0.1
o-Xylene	95-47-6	ND	mg/kg	0.1
m,p-Xylenes	108-38-3	ND	mg/kg	0.1
Surrogates		Recovery		QC Limits
a,a,a-Trifluorotoluene	98-08-8	70	%	50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-3 @ 5'	Project ID:	SF9708560
Sample Number:	SF9708560-8	Date Sampled:	08/29/97
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/05/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.1
Ethylbenzene	100-41-4	ND	mg/kg	0.1
TPH Gasoline	--	170	mg/kg	6
Toluene	108-88-3	ND	mg/kg	0.1
o-Xylene	95-47-6	ND	mg/kg	0.1
m,p-Xylenes	108-38-3	ND	mg/kg	0.1
Surrogates		Recovery		QC Limits
a,a,a-Trifluorotoluene	98-08-8	96	%	50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-4 @ 2.5'	Project ID:	SF9708560
Sample Number:	SF9708560-9	Date Sampled:	08/29/97
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/05/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.005
Ethylbenzene	100-41-4	ND	mg/kg	0.005
TPH Gasoline	--	ND	mg/kg	0.3
Toluene	108-88-3	ND	mg/kg	0.005
o-Xylene	95-47-6	ND	mg/kg	0.005
m,p-Xylenes	108-38-3	ND	mg/kg	0.005
Surrogates				
a,a,a-Trifluorotoluene	98-08-8	Recovery 71	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-4 @ 6'	Project ID:	SF9708560
Sample Number:	SF9708560-10	Date Sampled:	08/29/97
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/05/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.1
Ethylbenzene	100-41-4	ND	mg/kg	0.1
TPH Gasoline	--	25.	mg/kg	6
Toluene	108-88-3	ND	mg/kg	0.2
o-Xylene	95-47-6	ND	mg/kg	0.1
m,p-Xylenes	108-38-3	ND	mg/kg	0.1
Surrogates		Recovery		QC Limits
a,a,a-Trifluorotoluene	98-08-8	83	%	50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL: Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-4 @ 9.5'	Project ID:	SF9708560
Sample Number:	SF9708560-11	Date Sampled:	08/29/97
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/04/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.005
Ethylbenzene	100-41-4	ND	mg/kg	0.005
TPH Gasoline	--	0.3	mg/kg	0.3
Toluene	108-88-3	ND	mg/kg	0.005
o-Xylene	95-47-6	ND	mg/kg	0.005
m,p-Xylenes	108-38-3	0.008	mg/kg	0.005
Surrogates				
a,a,a-Trifluorotoluene	98-08-8	Recovery 83	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	METHOD BLANK	Project ID:	SF9708560
Sample Number:	SF9708560-12	Date Sampled:	
Sample Matrix:	Water	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/03/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	ug/L	0.4
Ethylbenzene	100-41-4	ND	ug/L	0.3
TPH Gasoline	--	ND	ug/L	50
Toluene	108-88-3	ND	ug/L	0.3
o-Xylene	95-47-6	ND	ug/L	0.4
m,p-Xylenes	108-38-3	ND	ug/L	0.4
Surrogates		Recovery		QC Limits
a,a,a-Trifluorotoluene	98-08-8	73	%	50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	METHOD BLANK	Project ID:	SF9708560
Sample Number:	SF9708560-13	Date Sampled:	
Sample Matrix:	Solid/Sludge	Date Received:	08/29/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/04/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.005
Ethylbenzene	100-41-4	ND	mg/kg	0.005
TPH Gasoline	--	ND	mg/kg	0.3
Toluene	108-88-3	ND	mg/kg	0.005
o-Xylene	95-47-6	ND	mg/kg	0.005
m,p-Xylenes	108-38-3	ND	mg/kg	0.005
Surrogates				
a, a, a-Trifluorotoluene	98-08-8	Recovery 96	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

Clayton

ENVIRONMENTAL CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

IMPORTANT

Date Results Requested: **5 DAY**
 Rush Charges Authorized? Yes No
 Phone or Fax Results

560
 Page 1 of 2

For Clayton Use Only
 Clayton Lab Project No.

REPORT RESULTS TO	Name: MARC MULLANEY	Client Job No.: 97066	Purchase Order No.
	Company	Dept.	Name
	Mailing Address		Company
	City, State, Zip		Dept.
Telephone No.	FAX No.	Address	City, State, Zip

Special Instructions and/or specific regulatory requirements: (method, limit of detection, etc.)
 Explanation of Preservative:

Samples are: (check if applicable)

- Drinking Water
- Groundwater
- Wastewater

SEND INVOICE TO

Number of Containers

ANALYSIS REQUESTED

(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	ANALYSIS REQUESTED										FOR LAB USE ONLY
B-1	8/29/97		GW		4	<div style="font-size: 2em; font-weight: bold; opacity: 0.5;">TIME/BTEX HOLD</div> <div style="font-size: 3em; font-weight: bold; opacity: 0.5;">TAKE OFF HOLD</div>										
B-1 @ 2.5'			SOIL		1											
B-1 @ 5.5'					1											
B-2 @ 2.5'					1											
B-2 @ 4.5'					1											
B-2 @ 6'					1											
B-3 @ 2.5'					1											
B-3 @ 5'					1											
B-4 @ 2.5'					1											
B-4 @ 6'					1											

CHAIN OF CUSTODY	Collected by: MARC MULLANEY (print)	Collector's Signature: <i>Marc Mullaney</i>
	Relinquished by: <i>Marc Mullaney</i>	Date/Time: 8/29/97 1545
	Relinquished by:	Date/Time:
	Method of Shipment:	Received at Lab by: <i>Clayton</i>
Authorized by:	Date:	Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

Detroit Regional Lab
 22345 Roethel Drive
 Novi, MI 48375
 (800) 806-5887
 (248) 344-1770
 FAX (248) 344-2655

Atlanta Regional Lab
 400 Chastain Center Blvd., N.W., Suite 490
 Kennesaw, GA 30144
 (800) 252-9919
 (770) 499-7500
 FAX (770) 423-4990

San Francisco Regional Lab
 1252 Quarry Lane
 Pleasanton, CA 94566
 (800) 294-1755
 (510) 428-2657
 FAX (510) 428-0106

Seattle Regional Lab
 4636 E. Marginal Way S., Suite 215
 Seattle, WA 98134
 (800) 588-7755
 (206) 783-7364
 FAX (206) 783-4189

DISTRIBUTION:

- White = Clayton Laboratory
- Yellow = Clayton Accounting
- Pink = Client Copy

REQUEST FOR LABORATORY ANALYTICAL SERVICES

IMPORTANT

Date Results Requested: 5 DAY

Rush Charges Authorized? Yes No

Phone or Fax Results

For Clayton Use Only
Clayton Lab Project No.

9703560

REPORT RESULTS TO	Name <u>MARC MULLANEY</u>		Client Job No. <u>97066</u>		Purchase Order No.	
	Company		Dept.		Name	
	Mailing Address				Company	
	City, State, Zip				Dept.	
Telephone No.		FAX No.		Address		
			City, State, Zip			

Special Instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)

* Explanation of Preservative:

Samples are:
(check if applicable)

Drinking Water
 Groundwater
 Wastewater

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	ANALYSIS REQUESTED										FOR LAB USE ONLY			
						1	2	3	4	5	6	7	8	9	10		11	12	
B-1	8/29/97		GW	4 x 40ml	4	X													01
B-1 @ 2.5'			SOIL	2 x 4gc	1		X												02
B-1 @ 5.5'					1		X												03
B-2 @ 2.5'					1		X												04
B-2 @ 4.5'					1		X												05
B-2 @ 6'					1		X												06
B-3 @ 2.5'					1		X												07
B-3 @ 5'					1		X												08
B-4 @ 2.5'					1		X												09
B-4 @ 6'					1		X												10

INHIBIT
HOLD

CHAIN OF CUSTODY	Collected by: <u>MARC MULLANEY</u> (print)	Collector's Signature: <u>Marc Mullaney</u>
	Relinquished by: <u>Marc Mullaney</u> Date/Time <u>8/29/97 15:45</u>	Received by: _____ Date/Time _____
	Relinquished by: _____ Date/Time _____	Received by: _____ Date/Time _____
	Method of Shipment: _____	Received at Lab by: <u>Cheryl Allen</u> Date/Time <u>8/29/97 15:45</u>
Authorized by: _____ Date _____ <small>(Client Signature MUST Accompany Request)</small>		Sample Condition Upon Receipt: <input type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain)

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

Detroit Regional Lab 400 Chastain Center Blvd. 45 Roethel Drive 48375 7-2655	Atlanta Regional Lab 400 Chastain Center Blvd., N.W., Suite 490 Kennesaw, GA 30144 (800) 252-9919 (770) 499-7500 FAX (770) 423-4990	San Francisco Regional Lab 1252 Quarry Lane Pleasanton, CA 94566 (800) 294-1755 (510) 426-2657 FAX (510) 426-0106	Seattle Regional Lab 4636 E. Marginal Way S., Suite 215 Seattle, WA 98134 (800) 568-7755 (206) 763-7364 FAX (206) 763-4189
---	---	---	--

DISTRIBUTION:

White = Clayton Laboratory
Yellow = Clayton Accounting
Pink = Client Copy

11/95 20K

San Francisco Regional Office

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

September 09, 1997

Mr. Marc Mullaney
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.
1252 Quarry Lane
Pleasanton, CA 94566

Client Reference: 97066
Clayton Project No.: SF9709504

Dear Mr. Mullaney:

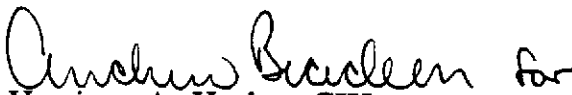
Attached is our analytical laboratory report for the samples received on September 02, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

The soil results are reported on a wet-weight basis, as received.

Please note that any unused portion of the samples will be discarded 30 days from the date of this letter, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have questions regarding this report, please contact Suzanne Haus, Client Services Supervisor, at (510) 426-2657.

Sincerely,


Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/las

Attachments

California DHS ELAP Certification Number 1196

CLAYTON ENVIRONMENTAL CONSULTANTS
 Analytical Report
 for
 Clayton Environmental Consultants, Inc.

Sample Name:	B-2	Project ID:	SF9709504
Sample Number:	SF9709504-1	Date Sampled:	09/03/97
Sample Matrix:	Water	Date Received:	09/02/97
Prep Method:	5030	Date Prepared:	09/08/97
Analytical Method:	8015/8020	Date Analyzed:	09/08/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	2800	ug/L	0.4
Ethylbenzene	100-41-4	43.	ug/L	0.3
TPH Gasoline	--	5100	ug/L	50
Toluene	108-88-3	120	ug/L	0.3
o-Xylene	95-47-6	30.	ug/L	0.4
m,p-Xylenes	108-38-3	110	ug/L	0.4
Surrogates		Recovery		QC Limits
a,a,a-Trifluorotoluene	98-08-8	119	%	50 - 150

ND: Not detected at or above reporting limit
 --: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-4	Project ID:	SF9709504
Sample Number:	SF9709504-2	Date Sampled:	09/03/97
Sample Matrix:	Water	Date Received:	09/02/97
Prep Method:	5030	Date Prepared:	09/08/97
Analytical Method:	8015/8020	Date Analyzed:	09/08/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	ug/L	0.4
Ethylbenzene	100-41-4	ND	ug/L	0.3
TPH Gasoline	--	100	ug/L	50
Toluene	108-88-3	ND	ug/L	0.3
o-Xylene	95-47-6	ND	ug/L	0.4
m,p-Xylenes	108-38-3	ND	ug/L	0.4
Surrogates				
a, a, a-Trifluorotoluene	98-08-8	Recovery 83	*	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-5@2.5'	Project ID:	SF9709504
Sample Number:	SF9709504-3	Date Sampled:	09/02/97
Sample Matrix:	Soil	Date Received:	09/02/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/04/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	0.009	mg/kg	0.005
Ethylbenzene	100-41-4	0.012	mg/kg	0.005
TPH Gasoline	--	1.6	mg/kg	0.3
Toluene	108-88-3	0.005	mg/kg	0.005
o-Xylene	95-47-6	0.014	mg/kg	0.005
m,p-Xylenes	108-38-3	0.031	mg/kg	0.005
Surrogates				
a,a,a-Trifluorotoluene	98-08-8	Recovery 84	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-5@6'	Project ID:	SF9709504
Sample Number:	SF9709504-5	Date Sampled:	09/02/97
Sample Matrix:	Soil	Date Received:	09/02/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/05/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.005
Ethylbenzene	100-41-4	ND	mg/kg	0.005
TPH Gasoline	--	ND	mg/kg	0.3
Toluene	108-88-3	ND	mg/kg	0.005
o-Xylene	95-47-6	ND	mg/kg	0.005
m,p-Xylenes	108-38-3	ND	mg/kg	0.005
Surrogates				
a,a,a-Trifluorotoluene	98-08-8	Recovery 98	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	METHOD BLANK	Project ID:	SF9709504
Sample Number:	SF9709504-8	Date Sampled:	
Sample Matrix:	Water	Date Received:	09/02/97
Prep Method:	5030	Date Prepared:	09/08/97
Analytical Method:	8015/8020	Date Analyzed:	09/08/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	ug/L	0.4
Ethylbenzene	100-41-4	ND	ug/L	0.3
TPH Gasoline	--	ND	ug/L	50
Toluene	108-88-3	ND	ug/L	0.3
o-Xylene	95-47-6	ND	ug/L	0.4
m,p-Xylenes	108-38-3	ND	ug/L	0.4
Surrogates		Recovery		QC Limits
a,a,a-Trifluorotoluene	98-08-8	85	%	50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	METHOD BLANK	Project ID:	SF9709504
Sample Number:	SF9709504-9	Date Sampled:	
Sample Matrix:	Soil	Date Received:	09/02/97
Prep Method:	5030	Date Prepared:	09/03/97
Analytical Method:	8015/8020	Date Analyzed:	09/04/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	mg/kg	0.005
Ethylbenzene	100-41-4	ND	mg/kg	0.005
TPH Gasoline	--	ND	mg/kg	0.3
Toluene	108-88-3	ND	mg/kg	0.005
o-Xylene	95-47-6	ND	mg/kg	0.005
m,p-Xylenes	108-38-3	ND	mg/kg	0.005
Surrogates		Recovery		QC Limits
a,a,a-Trifluorotoluene	98-08-8	96	%	50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

Clayton

ENVIRONMENTAL
CONSULTANTS

REQUEST FOR LABORATORY ANALYTICAL SERVICES

IMPORTANT

Page 1 of 1

For Clayton Use Only
Clayton Lab Project No.

9709504

Date Results Requested: 5 DAY
Rush Charges Authorized? Yes No
 Phone or Fax Results

REPORT RESULTS TO	Name <u>MARC MULLANEY</u>	Client Job No. <u>97066</u>	Purchase Order No.
	Company	Dept.	Name
	Mailing Address		Company
	City, State, Zip		Address
	Telephone No.	FAX No.	City, State, Zip

SEND INVOICE TO

Special instructions and/or specific regulatory requirements:
(method, limit of detection, etc.)
* 4, 6, & 7 put on Hold analysis not marked on C-O-C. 9/30a

* Explanation of Preservative:

Samples are:
(check if applicable)
 Drinking Water
 Groundwater
 Wastewater

ANALYSIS REQUESTED
(Enter an 'X' in the box below to indicate request; Enter a 'P' if Preservative added.)

CLIENT SAMPLE IDENTIFICATION	DATE SAMPLED	TIME SAMPLED	MATRIX/MEDIA	AIR VOLUME (specify units)	Number of Containers	ANALYSIS REQUESTED										FOR LAB USE ONLY
B-2	9/2/97		GW	VOA #13	1	TPHS/BTEX										01 X
B-4			GW	VOA #14	1											02 P
B-5 @ 2.5'			SOIL	SOBT	1											03
B-5 @ 4'					1											04 *
B-5 @ 6'					1											05 *
B-5 @ 10'					1											06 *
B-5 @ 14'					1											07 *

CHAIN OF CUSTODY	Collected by: <u>MARC MULLANEY</u> (print)	Collector's Signature: <u>Marc Mullaney</u>		
	Relinquished by: <u>Marc Mullaney</u>	Date/Time: <u>9/2/97</u>	Received by:	Date/Time:
	Relinquished by:	Date/Time:	Received by:	Date/Time:
	Method of Shipment:	Received at Lab by: <u>Caryl Allen</u>	Date/Time: <u>9/2/97</u>	
Authorized by: _____	Date: _____	Sample Condition Upon Receipt: <input checked="" type="checkbox"/> Acceptable <input type="checkbox"/> Other (explain) <u>3:30</u>		

Please return completed form and samples to one of the Clayton Environmental Consultants, Inc. labs listed below:

Detroit Regional Lab 22345 Roethel Drive Novi, MI 48375 (800) 806-5887 (248) 344-1770 FAX (248) 344-2855	Atlanta Regional Lab 400 Chestnut Center Blvd., N.W., Suite 490 Kennesaw, GA 30144 (800) 252-9919 (770) 499-7500 FAX (770) 423-4990	San Francisco Regional Lab 1252 Quarry Lane Pleasanton, CA 94566 (800) 294-1755 (510) 426-2657 FAX (510) 426-0106	Seattle Regional Lab 4636 E. Marginal Way S., Suite 215 Seattle, WA 98134 (800) 568-7755 (206) 763-7364 FAX (206) 763-4189
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DISTRIBUTION:
White = Clayton Laboratory
Yellow = Clayton Accounting
Pink = Client Copy

1252 Quarry Lane
P.O. Box 9019
Pleasanton, CA 94566
(510) 426-2600
Fax (510) 426-0106

Clayton
ENVIRONMENTAL
CONSULTANTS

September 24, 1997

Mr. Marc Mullaney
CLAYTON ENVIRONMENTAL CONSULTANTS, INC.
1252 Quarry Lane
Pleasanton, CA 94566

Client Reference: 97066
Clayton Project No.: SF9709522

Dear Mr. Mullaney:

Attached is our analytical laboratory report for the samples received on September 10, 1997. Also enclosed is a copy of the Chain-of-Custody record acknowledging receipt of these samples.

As requested, MTBE and EPA Method 8010 results have been added to your report. The EPA Method 8010 reporting limits are elevated for samples B-3 & B-5 due to matrix interference.

Please note that any unused portion of the samples will be discarded 30 days from the date of this letter, unless you have requested otherwise.

We appreciate the opportunity to assist you. If you have questions regarding this report, please contact Client Services at (510) 426-2657.

Sincerely,



Harriotte A. Hurley, CIH
Director, Laboratory Services
San Francisco Regional Office

HAH/las

Attachments

California DHS ELAP Certification Number 1196

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-3	Project ID:	SF9709522
Sample Number:	SF9709522-1	Date Sampled:	09/10/97
Sample Matrix:	Water	Date Received:	09/10/97
Prep Method:	5030	Date Prepared:	09/11/97
Analytical Method:	8015/8020	Date Analyzed:	09/11/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	14000	ug/L	0.4
Ethylbenzene	100-41-4	290	ug/L	0.3
MTBE	1634-04-4	ND	ug/L	5
TPH Gasoline	--	51000	ug/L	50
Toluene	108-88-3	5900	ug/L	0.3
o-Xylene	95-47-6	2300	ug/L	0.4
m,p-Xylenes	108-38-3	4800	ug/L	0.4
Surrogates		Recovery		QC Limits
a,a,a-Trifluorotoluene	98-08-8	78	%	50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name: B-3
Sample Number: SF9709522-1
Sample Matrix: Water
Prep Method: 5030
Analytical Method: 8010

Project ID: SF9709522
Date Sampled: 09/10/97
Date Received: 09/10/97
Date Prepared: 09/19/97
Date Analyzed: 09/19/97

8010, Purgeable Halocarbons

Analyte	CAS Number	Results	Units	RL
8010, Purgeable Halocarbons				
Bromodichloromethane	75-27-4	ND	ug/L	7
Bromoform	75-25-2	ND	ug/L	7
Bromomethane	74-83-9	ND	ug/L	7
Carbon tetrachloride	56-23-5	ND	ug/L	6
Chlorobenzene	108-90-7	ND	ug/L	7
Chloroethane	75-00-3	ND	ug/L	5
Chloroform	67-66-3	ND	ug/L	5
Chloromethane	74-87-3	ND	ug/L	6
Dibromochloromethane	124-48-1	ND	ug/L	6
1,2-Dichlorobenzene	95-50-1	ND	ug/L	5
1,4-Dichlorobenzene	106-46-7	ND	ug/L	5
1,3-Dichlorobenzene	541-73-1	ND	ug/L	5
Dichlorodifluoromethane	75-71-8	ND	ug/L	10
1,2-Dichloroethane <i>Pbscavenger</i>	107-06-2	410	ug/L	3
1,1-Dichloroethane	75-34-3	ND	ug/L	4
cis-1,2-Dichloroethene	156-59-2	ND	ug/L	4
trans-1,2-Dichloroethene	156-60-5	ND	ug/L	4
1,1-Dichloroethene	75-35-4	ND	ug/L	2
1,2-Dichloropropane	78-87-5	ND	ug/L	5
trans-1,3-Dichloropropene	10061-02-6	ND	ug/L	6
cis-1,3-Dichloropropene	10061-01-5	ND	ug/L	5
Freon 113	76-13-1	ND	ug/L	6
Methylene chloride	75-09-2	ND	ug/L	20
1,1,2,2-Tetrachloroethane	79-34-5	ND	ug/L	5
Tetrachloroethene	127-18-4	ND	ug/L	5
1,1,2-Trichloroethane	79-00-5	ND	ug/L	6
1,1,1-Trichloroethane	71-55-6	ND	ug/L	5
Trichloroethene	79-01-6	ND	ug/L	3
Trichlorofluoromethane	75-69-4	ND	ug/L	4
Vinyl chloride	75-01-4	ND	ug/L	5
Surrogates		Recovery		QC Limits
1-Chloro-2-methylpropene	513-37-1	103	%	70 - 130

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting Limit

CLAYTON ENVIRONMENTAL CONSULTANTS
 Analytical Report
 for
 Clayton Environmental Consultants, Inc.

Sample Name:	B-5	Project ID:	SF9709522
Sample Number:	SF9709522-2	Date Sampled:	09/10/97
Sample Matrix:	Water	Date Received:	09/10/97
Prep Method:	5030	Date Prepared:	09/11/97
Analytical Method:	8015/8020	Date Analyzed:	09/11/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	16000	ug/L	0.4
Ethylbenzene	100-41-4	1100	ug/L	0.3
MTBE	1634-04-4	ND	ug/L	5
TPH Gasoline	--	78000	ug/L	50
Toluene	108-88-3	22000	ug/L	0.3
o-Xylene	95-47-6	2000	ug/L	0.4
m,p-Xylenes	108-38-3	4000	ug/L	0.4
Surrogates		Recovery		QC Limits
a,a,a-Trifluorotoluene	98-08-8	96	%	50 - 150

ND: Not detected at or above reporting limit
 --: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	B-5	Project ID:	SF9709522
Sample Number:	SF9709522-2	Date Sampled:	09/10/97
Sample Matrix:	Water	Date Received:	09/10/97
Prep Method:	5030	Date Prepared:	09/19/97
Analytical Method:	8010	Date Analyzed:	09/23/97

8010, Purgeable Halocarbons

Analyte	CAS Number	Results	Units	RL
8010, Purgeable Halocarbons				
Bromodichloromethane	75-27-4	ND	ug/L	10
Bromoform	75-25-2	ND	ug/L	10
Bromomethane	74-83-9	ND	ug/L	10
Carbon tetrachloride	56-23-5	ND	ug/L	10
Chlorobenzene	108-90-7	ND	ug/L	10
Chloroethane	75-00-3	ND	ug/L	10
Chloroform	67-66-3	ND	ug/L	10
Chloromethane	74-87-3	ND	ug/L	10
Dibromochloromethane	124-48-1	ND	ug/L	10
1,2-Dichlorobenzene	95-50-1	ND	ug/L	10
1,4-Dichlorobenzene	106-46-7	ND	ug/L	10
1,3-Dichlorobenzene	541-73-1	ND	ug/L	10
Dichlorodifluoromethane	75-71-8	ND	ug/L	20
1,2-Dichloroethane	107-06-2	910	ug/L	6
1,1-Dichloroethane	75-34-3	ND	ug/L	8
cis-1,2-Dichloroethene	156-59-2	ND	ug/L	8
trans-1,2-Dichloroethene	156-60-5	ND	ug/L	8
1,1-Dichloroethene	75-35-4	ND	ug/L	4
1,2-Dichloropropane	78-87-5	ND	ug/L	10
trans-1,3-Dichloropropene	10061-02-6	ND	ug/L	10
cis-1,3-Dichloropropene	10061-01-5	ND	ug/L	10
Freon 113	76-13-1	ND	ug/L	10
Methylene chloride	75-09-2	ND	ug/L	40
1,1,2,2-Tetrachloroethane	79-34-5	ND	ug/L	10
Tetrachloroethene	127-18-4	ND	ug/L	10
1,1,2-Trichloroethane	79-00-5	ND	ug/L	10
1,1,1-Trichloroethane	71-55-6	ND	ug/L	10
Trichloroethene	79-01-6	ND	ug/L	6
Trichlorofluoromethane	75-69-4	ND	ug/L	8
Vinyl chloride	75-01-4	ND	ug/L	10
Surrogates		Recovery		QC Limits
1-Chloro-2-methylpropene	513-37-1	91	%	70 - 130

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	METHOD BLANK	Project ID:	SF9709522
Sample Number:	SF9709522-3	Date Sampled:	
Sample Matrix:	Water	Date Received:	09/10/97
Prep Method:	5030	Date Prepared:	09/11/97
Analytical Method:	8015/8020	Date Analyzed:	09/11/97

BTEX & TPH-Gasoline

Analyte	CAS Number	Results	Units	RL
BTEX & TPH-Gasoline				
Benzene	71-43-2	ND	ug/L	0.4
Ethylbenzene	100-41-4	ND	ug/L	0.3
MTBE	1634-04-4	ND	ug/L	5
TPH Gasoline	--	ND	ug/L	50
Toluene	108-88-3	ND	ug/L	0.3
o-Xylene	95-47-6	ND	ug/L	0.4
m,p-Xylenes	108-38-3	ND	ug/L	0.4
Surrogates				
a,a,a-Trifluorotoluene	98-08-8	Recovery 72	%	QC Limits 50 - 150

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

CLAYTON ENVIRONMENTAL CONSULTANTS
Analytical Report
for
Clayton Environmental Consultants, Inc.

Sample Name:	METHOD BLANK	Project ID:	SF9709522
Sample Number:	SF9709522-3	Date Sampled:	
Sample Matrix:	Water	Date Received:	09/10/97
Prep Method:	5030	Date Prepared:	09/19/97
Analytical Method:	8010	Date Analyzed:	09/19/97

8010, Purgeable Halocarbons

Analyte	CAS Number	Results	Units	RL
8010, Purgeable Halocarbons				
Bromodichloromethane	75-27-4	ND	ug/L	0.7
Bromoform	75-25-2	ND	ug/L	0.7
Bromomethane	74-83-9	ND	ug/L	0.7
Carbon tetrachloride	56-23-5	ND	ug/L	0.6
Chlorobenzene	108-90-7	ND	ug/L	0.7
Chloroethane	75-00-3	ND	ug/L	0.5
Chloroform	67-66-3	ND	ug/L	0.5
Chloromethane	74-87-3	ND	ug/L	0.6
Dibromochloromethane	124-48-1	ND	ug/L	0.6
1,2-Dichlorobenzene	95-50-1	ND	ug/L	0.5
1,4-Dichlorobenzene	106-46-7	ND	ug/L	0.5
1,3-Dichlorobenzene	541-73-1	ND	ug/L	0.5
Dichlorodifluoromethane	75-71-8	ND	ug/L	1
1,2-Dichloroethane	107-06-2	ND	ug/L	0.3
1,1-Dichloroethane	75-34-3	ND	ug/L	0.4
cis-1,2-Dichloroethene	156-59-2	ND	ug/L	0.4
trans-1,2-Dichloroethene	156-60-5	ND	ug/L	0.4
1,1-Dichloroethene	75-35-4	ND	ug/L	0.2
1,2-Dichloropropane	78-87-5	ND	ug/L	0.5
trans-1,3-Dichloropropene	10061-02-6	ND	ug/L	0.6
cis-1,3-Dichloropropene	10061-01-5	ND	ug/L	0.5
Freon 113	76-13-1	ND	ug/L	0.6
Methylene chloride	75-09-2	ND	ug/L	2
1,1,2,2-Tetrachloroethane	79-34-5	ND	ug/L	0.5
Tetrachloroethene	127-18-4	ND	ug/L	0.5
1,1,2-Trichloroethane	79-00-5	ND	ug/L	0.6
1,1,1-Trichloroethane	71-55-6	ND	ug/L	0.5
Trichloroethene	79-01-6	ND	ug/L	0.3
Trichlorofluoromethane	75-69-4	ND	ug/L	0.4
Vinyl chloride	75-01-4	ND	ug/L	0.5
Surrogates		Recovery		QC Limits
1-Chloro-2-methylpropene	513-37-1	108	%	70 - 130

ND: Not detected at or above reporting limit
--: Information not available or not applicable

RL : Reporting limit

ADDITIONAL REQUEST FOR ANALYTICAL SERVICES

Date Requested: 9/19/97

Due Date: 9/22/97

Request Taken By: POUS

Requested by: R. DAT

Company: CEC-EEP
9709522

Clayton Sample ID

9709522-01

02

Client Sample ID

B-3

B-5

Analysis Requested

FOID, MTBE

↓ ↓

From original
Rem!

Comments:

POUS 9/22/97

cc: