

RECEIVED
2:27 pm, Apr 07, 2008
Alameda County
Environmental Health



FILE

Ms. Maia Baker
Museum of Children's Art
560 Second Street
Oakland, CA 94607

October 18, 1996

Re: 625 Third Street, Oakland, CA

Dear Maia,

This letter presents the results of Clearwater Group, Inc.'s (Clearwater's) preliminary soil and groundwater sampling at the referenced site. The scope of work performed was previously agreed upon verbally by the Museum of Children's Art (MOCHA) and Clearwater, and consisted of drilling of two soil borings and chemical analysis of one soil and water sample from each borehole.

Background

The site is located on the south side of Third Street, between Martin Luther King Jr. Boulevard and Jefferson Street (Figure 1), and is owned by Terranomics. The site is paved and is currently used for vehicle parking. A hardware store and furniture store border the site on each side (Figure 2). Clearwater understands there are no underground storage tanks (USTs) immediately below the paved portion of the site. However, two USTs currently exist approximately 200 feet south of the site, beneath the sidewalk area in front of 626 Second Street. Clearwater understands these USTs have been out of service for approximately 60 years.

The use of area adjacent to the site ranges from light industrial and commercial to a utility station. Pacific Gas and Electric operates an electric sub-station on the south side of Second Street. The nearest body of water, the Oakland Inner Harbor, is located approximately 900 feet south of the site.

Purpose of Investigation

The purpose of this investigation was to determine if the site subsurface has been impacted by fuel hydrocarbons. This work was performed to document subsurface conditions prior to a possible property transaction.

Soil Borehole Drilling, and Soil and Water Sampling

Soil boring locations were selected to assess general conditions beneath the site. The first boring, B-1, was located on the southern portion of the site and the second boring, B-2, was located on the northern portion of the site (Figure 2).

Drilling was performed by Soils Exploration Services, Inc. using a CME 55 drill rig, equipped with four-inch diameter cutting-less hollow-stem augers. Each soil boring was hand excavated to 4.5 feet to ensure the drilling location was free of underground structures. During drilling, soil samples were collected using a 1.5-inch diameter split-spoon sampler lined with brass tubes. Soil samples identified for laboratory analysis were covered with teflon lined plastic end caps, labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

Portions of soil samples were retained for classification according to the Unified Soil Classification System by a Clearwater geologist and screening of with an organic vapor meter (OVM) (Borings logs with OVM readings attached).

Grab groundwater samples were also collected from each boring. This was accomplished by advancing the augers approximately 10 feet into the water table, and then pulling the augers back several feet to allow groundwater to more freely enter the borehole. A clean disposable polyethylene bailer was then lowered through the augers to collect the water sample. Each sample was transferred to laboratory supplied containers, labeled, documented on a chain-of-custody form, and placed on ice in a cooler for transport to the project laboratory.

Soil and Water Sample Analysis

Soil and water samples were analyzed for total petroleum hydrocarbons as diesel (TPHd) and gasoline (TPHg) by EPA method 8015 (modified), and for benzene, toluene, ethylbenzene, and xylene isomers (BTEX) by EPA method 8020 (modified). Sample analyses were performed by American Environmental Network, a state DHS-certified laboratory located in Pleasant Hill, California.

Results

The site is underlain by relatively coarse-grained deposits, ranging mostly from silty sands to sands to a depth of 20 feet below grade (the maximum depth explored). During drilling, first encountered groundwater was observed at a depth of approximately 15 feet below grade, and stabilized at a depth of approximately 10 feet below grade. Soil borings logs are attached.

Results of chemical analyses indicate the subsurface is relatively free of petroleum fuel constituents; however, some groundwater contamination was detected (Table 1). Vadose zone (i.e. shallower than 10 feet below grade) soil samples from both borings did not contain TPHd, TPHg, or BTEX constituents. Grab groundwater samples from both borings did not contain TPHg or BTEX constituents exceeding the method detection limit. However, TPHd was detected at concentrations of 210 and 170 micrograms per liter ($\mu\text{g}/\text{L}$) in the water samples collected from B-1 and B-2, respectively.

These concentrations of TPHd are relatively low and their source appears to have originated off-site, as the vadose zone soil is free of petroleum fuel hydrocarbons. The hydrocarbons quantified as TPHd could have resulted from the presence of diesel or weathered gasoline. This type of analytical result is possible due to the fact that fresh gasoline and diesel fuels have overlapping carbon chain ranges from approximately C10 to C12 and that as gasoline ages, it loses shorter chain hydrocarbons and the remaining gasoline compounds are closer to the aforementioned overlapping range of TPHg and TPHd.

It should be noted that contamination detected proximal to the USTs at 626 Second Street (200 feet south of the site) was characterized as extremely weathered gasoline.

Conclusions

Results of initial soil and water sampling indicate that the subsurface is free of fuel hydrocarbon contamination, save low levels of dissolved hydrocarbons quantified as TPHd. Although the source of this contamination remains unclear, it may be associated with past gasoline release from the USTs located approximately 200 feet south of the site.

If you have any questions regarding this project, please feel free to contact the undersigned.

Sincerely,
CLEARWATER GROUP, INC.



Brian Gwinn, R.G.
Project Geologist



Juniper Neill, R.E.A.
Project Manager

Attachments

Table 1: Summary of Analytical Results
Figure 1: Site Location Map
Figure 2: Site Plan
Boring Logs and Boring Log Legend
Laboratory Analytical Reports and Chain-of-Custody Form

Table 1
SUMMARY OF ANALYTICAL RESULTS

625 Third Street
Oakland, California

Soil Sample Analytical Results

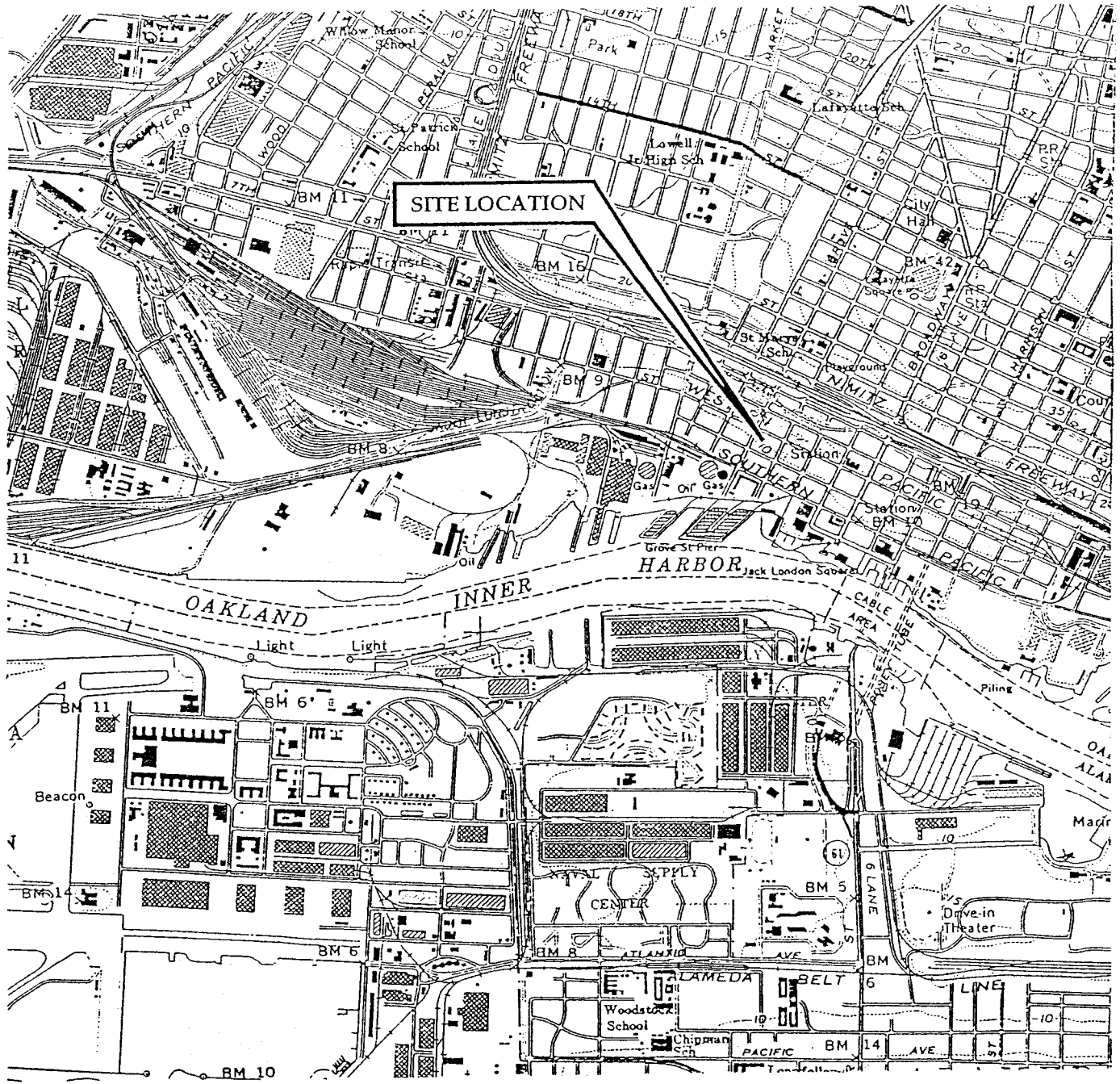
Sample No.	Date	TPHd (mg/kg)	TPHg (mg/kg)	B (mg/kg)	T (mg/kg)	E (mg/kg)	X (mg/kg)
B-1-7'	9/13/96	<1	<0.2	<0.005	<0.005	<0.005	<0.005
B-2-5'	9/13/96	<1	<0.2	<0.005	<0.005	<0.005	<0.005

Water Sample Analytical Results

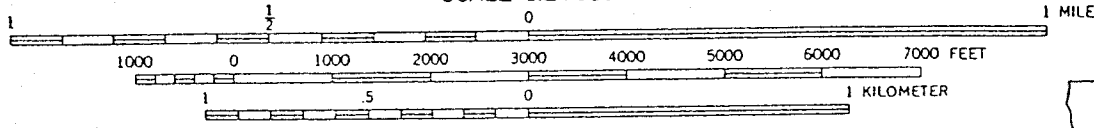
Sample No.	Date	TPHd (µg/L)	TPHg (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)
B-1-H2O	9/13/96	210	<50	<0.5	<0.5	<0.5	<2
B-2-H2O	9/13/96	17	<50	<0.5	<0.5	<0.5	<2

Notes:

- Sample No.: Sample designation and collection depth in feet
- Date: Sample collection date
- TPHd: Total petroleum hydrocarbons as diesel using EPA extraction 3550 and GC-FID analysis
- TPHg: Total petroleum hydrocarbons as gasoline using EPA extraction 5330 and GC-FID analysis
- BTEX: Benzene, Toluene, Ethylbenzene, total Xylenes using EPA Method 8020 (modified)
- mg/kg: milligrams per kilogram (often referred to as "parts per million")
- µg/L: micrograms per liter (often referred to as "parts per billion")
- <###: Not detected in exceeding indicated concentrations



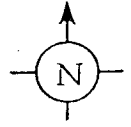
SCALE 1:24 000



CONTOUR INTERVAL 20 FEET



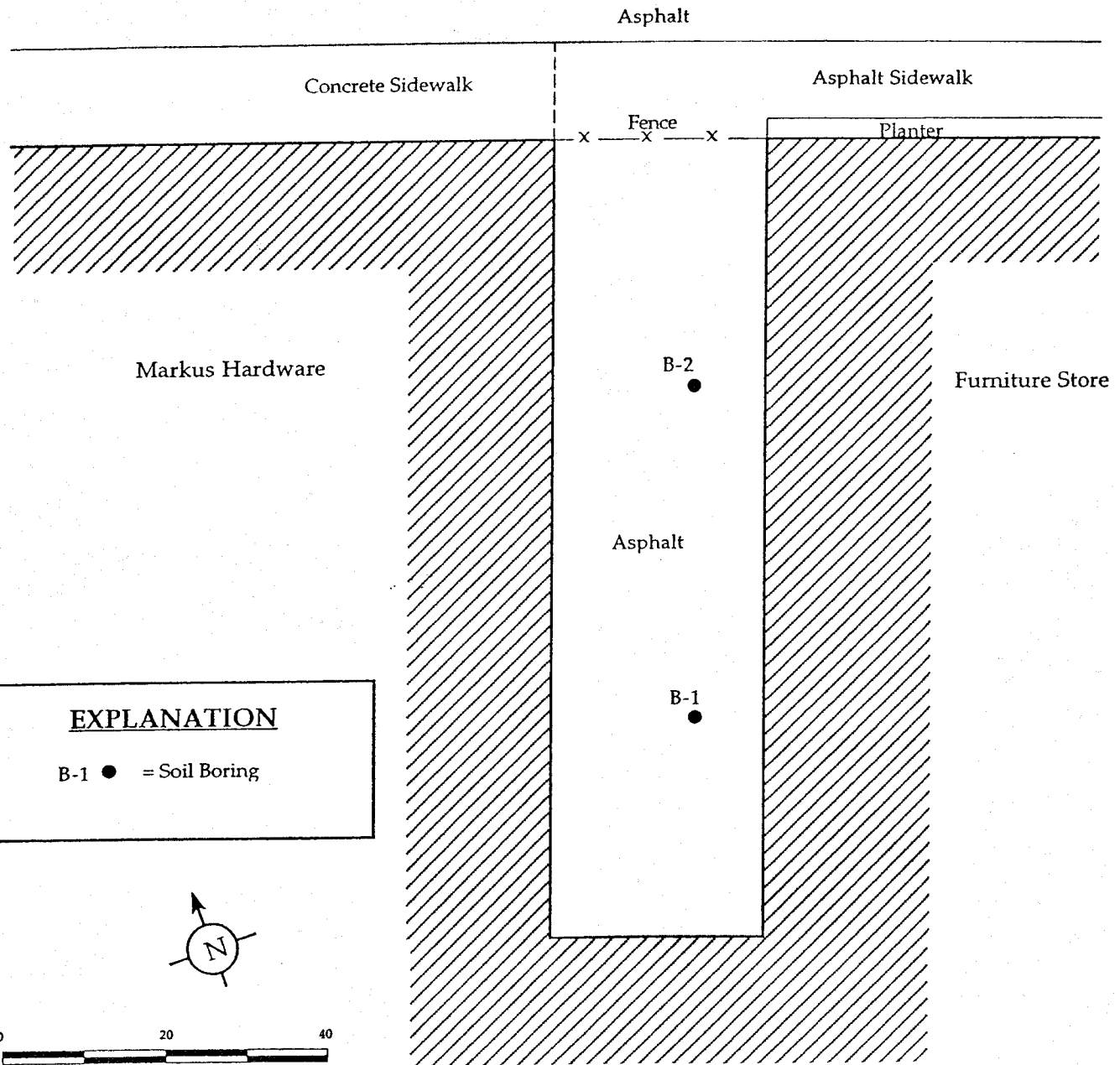
QUADRANGLE LOCATION



Source:
USGS 7.5' topographic series
entitled "Oakland West, CA"

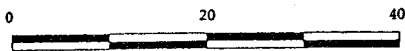
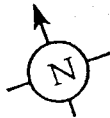
<p>SITE LOCATION MAP</p> <p>625 Third Street Oakland, California</p>	<p>CLEARWATER GROUP, INC.</p>	
	<p>Project No. C-154</p>	<p>Date 9/96</p>

Third Street



EXPLANATION

B-1 ● = Soil Boring



APPROXIMATE SCALE IN FEET

SITE PLAN

625 Third Street
Oakland, California



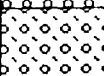
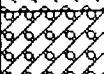
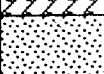

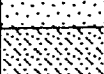





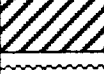
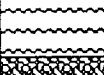
CLEARWATER GROUP, INC.

Project No.
C-154

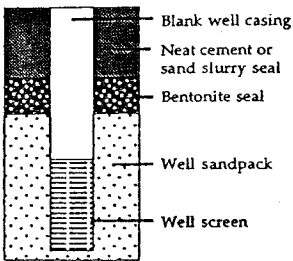
Report Date
9/96

Figure
2

UNIFIED SOIL CLASSIFICATION SYSTEM - VISUAL CLASSIFICATION OF SOILS (ASTM D-2488)

MAJOR DIVISIONS		GROUP SYMBOL	GROUP NAME	DESCRIPTION		
COARSE GRAINED SOILS	GRAVEL AND GRAVELLY SOILS		GW	Well-graded gravel Well-graded gravel with sand	Well-graded gravels or gravel-sand mixtures, little or no fines.	
			GP	Poorly-graded gravel Poorly-graded gravel with sand	Poorly-graded gravels or gravel sand mixture, little or no fines.	
			GM	Silty gravel Silty gravel with sand	Silty gravels, gravel-sand-silt mixtures.	
			GC	Clayey gravel Clayey gravel with sand	Clayey gravels, gravel-sand-clay mixtures.	
	SAND AND SANDY SOILS		SW	Well-graded sand Well-graded sand with gravel	Well-graded sands or gravelly sands, little or no fines.	
			SP	Poorly-graded sand Poorly-graded sand with gravel	Poorly-graded sands or gravelly sands, little or no fines.	
			SM	Silty sand Silty sand with gravel	Silty sands, sand-silt mixtures.	
			SC	Clayey sand Clayey sand with gravel	Clayey sands, sand-clay mixtures.	
	FINE GRAINED SOILS	SILTS AND CLAYS		ML	Silt; Silt with sand; Silt with gravel Sandy silt; Sandy silt with gravel Gravelly silt; Gravelly silt with sand	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity.
				CL	Lean clay; Lean clay with sand; Lean clay with gravel Sandy lean clay; Sandy lean clay with gravel Gravelly lean clay; Gravelly lean clay with sand	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays.
ELASTIC SILTS AND CLAYS			MH	Elastic silt; Elastic silt with sand; Elastic silt with gravel Sandy elastic silt; Sandy elastic silt with gravel Gravelly elastic silt; Gravelly elastic silt with sand	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts.	
			CH	Fat clay; Fat clay with sand; Fat clay with gravel Sandy fat clay; Sandy fat clay with gravel Gravelly fat clay; Gravelly fat clay with sand	Inorganic clays of high plasticity, fat clays.	
HIGHLY ORGANIC SOILS			OL/OH	Organic soil; Organic soil with sand; Organic soil with gravel Sandy organic soil; Sandy organic soil with gravel Gravelly organic soil; Gravelly organic soil with sand	Organic silts and organic silt-clays of low plasticity. Organic clays of medium to high plasticity.	
			Pt	Peat	Peat and other highly organic soils.	

WELL CONSTRUCTION EXPLANATION



SOIL BORING NOTES:



Blow count represents the number of blows of a 140-lb hammer falling 30 inches per blow required to drive a sampler through the last 12 inches of an 18-inch penetration.

No warranty is provided as to the continuity of soil strata between borings. Logs represent the soil section observed at the boring location on the date of drilling only.

S = Sampler sank into medium under the weight of the hammer (no blow count)
P = Sampler was pushed into medium by drilling rig (no blow count)
NR = No Recovery

SANDS & GRAVELS	BLOWS/FT
VERY LOOSE	0 - 5
LOOSE	5 - 12
MED. DENSE	12 - 37
DENSE	37 - 62
VERY DENSE	OVER 62

SILTS & CLAYS	BLOWS/FT
SOFT	0 - 5
FIRM	5 - 10
STIFF	10 - 20
VERY STIFF	20 - 40
HARD	OVER 40

 Approximate stabilized water level
 Approximate first encountered water level

NOTE: all percentages of lithological composition presented on the soil boring logs are approximate. They represent the best estimates of a CGI geologist based on visual inspection in the field.

CLEARWATER

Group, Inc.

SOIL BORING LOG
AND
WELL CONSTRUCTION DIAGRAM
LEGEND

FIELD EXPLORATORY SOIL BORING LOG: B-1

LOGGED BY: Brian Gwinn, R.G. APPROVE _____
 FINISH: 9/13/96 START: _____
 9/13/96

FIELD LOCATION OF BORING: 					CLIENT/LOCATION: MOCHA/625 3rd, Oakland			BORING NO.: B-1	BORING DEPTH: 20 feet	BORING DIAMETER: 4 Inches						
					DRILLING CONTRACTOR: SES, Inc.			WELL NO.: NA	WELL DEPTH: NA	PLANNED USE: NA						
					DRILL RIG TYPE: CME 55			WELL MATERIAL: NA	SCREEN SLOT SIZE: NA	FILTER PACK: NA						
					DRILL RIG OPERATOR: Kevin Cross			WELL SEAL: Cement								
WELL CONSTRUCTION DETAIL	SAMPLING				DEPTH (FEET)	OVM READING (PPM)	ESTIMATED PERCENT			GRAPHIC LOG	SAMPLING METHOD: 1.5" O.D. split-spoon sampler					
	BLOWS/6" INTERVAL	INTERVAL	RECOVERY	ANALYTICAL			WATER LEVEL	GRAVEL	SAND		FINES	MONITORING INSTRUMENT: Sensidyne FID				
												FIRST ENCOUNTERED WATER DEPTH: ~15 feet				
												STATIC WATER DEPTH - DATE: ~10.5 feet - 9/13/96				
												NO WELL INSTALLED				
					1				Asphalt and baserock							
					2											
					3											
					4				Silty SAND to SAND (SM to SP); yellow-brown; poorly graded; sub-rounded, very fine to fine sand; loose; damp.							
					5	1	0	85						15		
					6											
					7				Silty SAND (SM); as above, with orange and brown mottles ~0.25" in diameter; moist.							
					8											
					9	2	0	80						20		
					10				Silty SAND (SM); as above, no brown mottles, orange mottles vertically oriented with sharp color boundary; medium dense; moist-wet.							
					11	1	0	80						20		
					12											
					13											
					14											
					15	1	0	85						15		
					16											
					17											
					18											
					19											
					20	0										

FIELD EXPLORATORY SOIL BORING LOG: B-2

CLEARWATER GROUP, INC.

Sheet 1 of 1

LOGGED BY: Brian Gwint, R.G. APPROVI _____
 LING./WELL CONSTRUCTION: START 9/13/96 FINISH 9/13/96

FIELD LOCATION OF BORING:				CLIENT/LOCATION:		BORING NO.:	BORING DEPTH:	BORING DIAMETER:				
Third Street				MOCHA/625 3rd, Oakland		B-2	20 feet	4 Inches				
				DRILLING CONTRACTOR:		WELL NO.:	WELL DEPTH:	PLANNED USE:				
				SES, Inc.		NA	NA	NA				
				DRILL RIG TYPE:		WELL MATERIAL:	SCREEN SLOT SIZE:	FILTER PACK:				
CME 55				NA		NA	NA	NA				
DRILL RIG OPERATOR:				WELL SEAL:								
Kevin Cross				Cement								
WELL CONSTRUCTION DETAIL	SAMPLING				DEPTH (FEET)	OVM READING (PPM)	ESTIMATED PERCENT			GRAPHIC LOG	SAMPLING METHOD: 1.5" O.D. split-spoon sampler	
	BLOWS/6" INTERVAL	INTERVAL	RECOVERY	ANALYTICAL			WATER LEVEL	GRAVEL	SAND		FINES	MONITORING INSTRUMENT: Sensidyne FID
NO WELL INSTALLED											FIRST ENCOUNTERED WATER DEPTH: ~15-16 feet	
											STATIC WATER DEPTH - DATE: ~9.5 feet - 9/13/96	
					1						Asphalt and baserock	
					2							
					3							
					4							
		2	/		5							
		3	/		6							
		3	/		7	0	0	90	10		SAND (SP); yellow-brown; poorly graded; sub-rounded, very fine to fine sand; loose; damp.	
		4	/		8							
					9							
		5	/		10							
		5	/		11	1	0	75	25		Silty SAND (SM); yellow-brown with orange and gray mottling; poorly graded; sub-rounded, very fine to fine sand; loose; damp.	
		7	/		12							
		10	/		13							
					14							
		6	/		15	0	0	90	10		Silty SAND to SAND (SM to SP); yellow-brown; poorly graded; sub-sounded, very fine to fine sand; medium dense; saturated.	
		7	/		16							
		11	/		17							
		11	/		18							
				19								
				20								

American Environmental Network

Certificate of Analysis

DHS Certification: 1172

AIHA Accreditation: 11134

PAGE 1

RECEIVED SEP 27 1996

CLEARWATER GROUP, INC.
520 THIRD ST., STE. 104
OAKLAND, CA 94607

ATTN: BRIAN GWINN
CLIENT PROJ. ID: 625 3RD ST.

REPORT DATE: 09/25/96

DATE(S) SAMPLED: 09/13/96

DATE RECEIVED: 09/13/96

AEN WORK ORDER: 9609163

P.O. NUMBER: MOCHA

PROJECT SUMMARY:

On September 13, 1996, this laboratory received 4 (2 soil & 2 water) sample(s).

Client requested sample(s) be analyzed for chemical parameters. Results of analysis are summarized on the following page(s). Please see quality control report for a summary of QC data pertaining to this project.

Samples will be stored for 30 days after completion of analysis, then disposed of in accordance with State and Federal regulations. Samples may be archived by prior arrangement.

If you have any questions, please contact Client Services at (510) 930-9090.


Larry Klein
Laboratory Director

CLEARWATER GROUP, INC.

SAMPLE ID: B-1-7'
 AEN LAB NO: 9609163-01
 AEN WORK ORDER: 9609163
 CLIENT PROJ. ID: 625 3RD ST.

DATE SAMPLED: 09/13/96
 DATE RECEIVED: 09/13/96
 REPORT DATE: 09/25/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	5 ug/kg		09/23/96
Toluene	108-88-3	ND	5 ug/kg		09/23/96
Ethylbenzene	100-41-4	ND	5 ug/kg		09/23/96
Xylenes, Total	1330-20-7	ND	5 ug/kg		09/23/96
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2 mg/kg		09/23/96
#Extraction for TPH	EPA 3550	-		Extrn Date	09/22/96
TPH as Diesel	GC-FID	ND	1 mg/kg		09/23/96

D = Not detected at or above the reporting limit
 * = Value at or above reporting limit

CLEARWATER GROUP, INC.

SAMPLE ID: B-2-5'
 AEN LAB NO: 9609163-02
 AEN WORK ORDER: 9609163
 CLIENT PROJ. ID: 625 3RD ST.

DATE SAMPLED: 09/13/96
 DATE RECEIVED: 09/13/96
 REPORT DATE: 09/25/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	5 ug/kg		09/23/96
Toluene	108-88-3	ND	5 ug/kg		09/23/96
Ethylbenzene	100-41-4	ND	5 ug/kg		09/23/96
Xylenes, Total	1330-20-7	ND	5 ug/kg		09/23/96
Purgeable HCs as Gasoline	5030/GCFID	ND	0.2 mg/kg		09/23/96
#Extraction for TPH	EPA 3550	-		Extrn Date	09/22/96
TPH as Diesel	GC-FID	ND	1 mg/kg		09/23/96

ND = Not detected at or above the reporting limit
 * = Value at or above reporting limit

CLEARWATER GROUP, INC.

SAMPLE ID: B-1-H20
 AEN LAB NO: 9609163-03
 AEN WORK ORDER: 9609163
 CLIENT PROJ. ID: 625 3RD ST.

DATE SAMPLED: 09/13/96
 DATE RECEIVED: 09/13/96
 REPORT DATE: 09/25/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	09/23/96
Toluene	108-88-3	ND	0.5	ug/L	09/23/96
Ethylbenzene	100-41-4	ND	0.5	ug/L	09/23/96
Xylenes, Total	1330-20-7	ND	2	ug/L	09/23/96
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	09/23/96
#Extraction for TPH	EPA 3510	-		Extrn Date	09/23/96
TPH as Diesel	GC-FID	0.21 *	0.05	mg/L	09/24/96

∅ = Not detected at or above the reporting limit
 * = Value at or above reporting limit

CLEARWATER GROUP, INC.

SAMPLE ID: B-2-H20
 AEN LAB NO: 9609163-04
 AEN WORK ORDER: 9609163
 CLIENT PROJ. ID: 625 3RD ST.

DATE SAMPLED: 09/13/96
 DATE RECEIVED: 09/13/96
 REPORT DATE: 09/25/96

ANALYTE	METHOD/ CAS#	RESULT	REPORTING LIMIT	UNITS	DATE ANALYZED
BTEX & Gasoline HCs	EPA 8020				
Benzene	71-43-2	ND	0.5	ug/L	09/23/96
Toluene	108-88-3	ND	0.5	ug/L	09/23/96
Ethylbenzene	100-41-4	ND	0.5	ug/L	09/23/96
Xylenes, Total	1330-20-7	ND	2	ug/L	09/23/96
Purgeable HCs as Gasoline	5030/GCFID	ND	0.05	mg/L	09/23/96
#Extraction for TPH	EPA 3510	-		Extrn Date	09/23/96
TPH as Diesel	GC-FID	0.17 *	0.05	mg/L	09/24/96

D = Not detected at or above the reporting limit

* = Value at or above reporting limit

AEN (CALIFORNIA)
QUALITY CONTROL REPORT

AEN JOB NUMBER: 9609163

CLIENT PROJECT ID: 625 3RD ST.

Quality Control and Project Summary

All laboratory quality control parameters were found to be within established limits.

Definitions

Laboratory Control Sample (LCS)/Method Spike(s): Control samples of known composition. LCS and Method Spike data are used to validate batch analytical results.

Matrix Spike(s): Aliquot of a sample (aqueous or solid) with added quantities of specific compounds and subjected to the entire analytical procedure. Matrix spike and matrix spike duplicate QC data are advisory.

Method Blank: An analytical control consisting of all reagents, internal standards, and surrogate standards carried through the entire analytical process. Used to monitor laboratory background and reagent contamination.

Not Detected (ND): Not detected at or above the reporting limit.

Relative Percent Difference (RPD): An indication of method precision based on duplicate analysis.

Reporting Limit (RL): The lowest concentration routinely determined during laboratory operations. The RL is generally 1 to 10 times the Method Detection Limit (MDL). Reporting limits are matrix, method, and analyte dependent and take into account any dilutions performed as part of the analysis.

Surrogates: Organic compounds which are similar to analytes of interest in chemical behavior, but are not found in environmental samples. Surrogates are added to all blanks, calibration and check standards, samples, and spiked samples. Surrogate recovery is monitored as an indication of acceptable sample preparation and instrumental performance.

D: Surrogates diluted out.

#: Indicates result outside of established laboratory QC limits.

QUALITY CONTROL DATA
 METHOD: EPA 3510 GCFID

AEN JOB NO: 9609163
 DATE EXTRACTED: 09/23/96
 INSTRUMENT: C
 MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			n-Pentacosane	
09/24/96	B-1-H2O	03	94	
09/24/96	B-2-H2O	04	91	
QC Limits:			65-125	

DATE EXTRACTED: 09/18/96
 DATE ANALYZED: 09/18/96
 SAMPLE SPIKED: 9608341-15
 INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/L)	Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Diesel	4.00	81	3	60-110	15

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

QUALITY CONTROL DATA
METHOD: EPA 3550 GCFID

AEN JOB NO: 9609163
DATE EXTRACTED: 09/22/96
INSTRUMENT: C
MATRIX: SOIL

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery n-Pentacosane
09/23/96	B-1-7'	01	99
09/23/96	B-2-5'	02	90
QC Limits:			55-115

DATE EXTRACTED: 09/22/96
DATE ANALYZED: 09/23/96
SAMPLE SPIKED: 9609158-01
INSTRUMENT: C

Matrix Spike Recovery Summary

Analyte	Spike Added (mg/kg)	Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Diesel	40.0	82	2	50-115	20

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

QUALITY CONTROL DATA
METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9609163
INSTRUMENT: F
MATRIX: WATER

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			Fluorobenzene	
09/23/96	B-1-H20	03	82	
09/23/96	B-2-H20	04	80	
QC Limits:			70-130	

DATE ANALYZED: 09/23/96
SAMPLE SPIKED: 9609287-02
INSTRUMENT: F

Matrix Spike Recovery Summary

Analyte	Spike Added (ug/L)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Benzene	18.6	94	10	85-109	17
Toluene	61.4	105	1	87-111	16
Hydrocarbons as Gasoline	500	99	15	66-117	19

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

QUALITY CONTROL DATA

METHOD: EPA 8020, 5030 GCFID

AEN JOB NO: 9609163
 INSTRUMENT: E
 MATRIX: SOIL

Surrogate Standard Recovery Summary

Date Analyzed	Client Id.	Lab Id.	Percent Recovery	
			Fluorobenzene	
09/23/96	B-1-7'	01	104	
09/23/96	B-2-5'	02	102	
QC Limits:			70-130	

DATE ANALYZED: 09/23/96
 SAMPLE SPIKED: LCS
 INSTRUMENT: E

Laboratory Control Sample Recovery

Analyte	Spike Added (ug/kg)	Average Percent Recovery	RPD	QC Limits	
				Percent Recovery	RPD
Benzene	34.0	106	2	60-120	20
Toluene	108	101	1	60-120	20
Hydrocarbons as Gasoline	1000	113	4	60-120	20

Daily method blanks for all associated analytical runs showed no contamination at or above the reporting limit.

*** END OF REPORT ***

Reporting Information:

1. Client: Cleaver Group, Inc.
 Address: 220 Thruway St. #104
Oakland CA 94607
 Contact: Brian Guino
 Alt. Contact: Lynne Bell

American Environmental Network

3440 Vincent Road, Pleasant Hill, CA 94523
 Phone (510) 930-9090
 FAX (510) 930-0256

AEN

REQUEST FOR ANALYSIS / CHAIN OF CUSTODY

Lab Job Number: _____
 Lab Destination: _____
 Date Samples Shipped: _____
 Lab Contact: _____
 Date Results Required: _____
 Date Report Required: _____
 Client Phone No.: _____
 Client FAX No.: _____

Address Report To:

2. Above

Send Invoice To:

3. Above

Send Report To: 1 or 2 (Circle one)

Client P.O. No.: MOCHA Client Project I.D. No.: 625 3rd St, Oakland, CA

Sample Team Member (s) Brian Guino

Lab Number	Client Sample Identification	Air Volume	Date/Time Collected	Sample Type*	Pres.	No. of Cont.	Type of Cont.	ANALYSIS										Comments / Hazards						
								1	2	3	4	5	6	7	8	9	10		11	12				
11A	B-1-1'	---	9/13/96 0930	8	-0-	1	silica	X	X															
11A	B-2-5'	---	↓ 1000	↓	-0-	1	↓	↓	↓															STAINLESS
11A	B-1-10'	---	9/13/96 0930	8	1000	5	Water/Silica	X	X															FOR ANALYSIS
11A	B-2-10'	---	↓ 1005	↓	↓	5	↓	↓	↓															

Relinquished by: (Signature) <u>Brian Guino</u>	DATE <u>9/13/96</u> TIME <u>15:10</u>	Received by: (Signature) <u>[Signature]</u>	DATE <u>9/13/96</u> TIME <u>15:10</u>
Relinquished by: (Signature) <u>[Signature]</u>	DATE <u>9/13/96</u> TIME <u>16:30</u>	Received by: (Signature) <u>Brian Guino</u>	DATE <u>9/13/96</u> TIME <u>16:30</u>
Relinquished by: (Signature) _____	DATE _____ TIME _____	Received by: (Signature) _____	DATE _____ TIME _____
Method of Shipment _____		Lab Comments _____	

*Sample type (Specify): 1) 37mm 0.8 µm MCEF 2) 25mm 0.8 µm MCEF 3) 25mm 0.4 µm polycarb. filter
 4) PVC filter, diam. _____ pore size _____ 5) Charcoal _____ 6) Silica gel tube 7) Water 8) Soil 9) Bulk Sample
 10) Other _____ 11) Other _____