ALAMEDA COUNTY
HEALTH CARE SERVICES
AGENCY
DAVID J. KEARS, Agency Director

ENVIRONMENTAL HEALTH SERVICES
ENVIRONMENTAL PROTECTION
1131 Harbor Bay Parkway, Suite 250
Alameda, CA 94502-6577
(510) 567-6700
FAX (510) 337-9335

March 26, 2003

Lynn Nightingale
102 Flying Circle Isle
Foster City, CA 94404

Mr. Augustine Chukuma
745 47th Street
Oakland, CA 94609

Dear Ms. Nightingale and Mr. Chukuma:

Subject: Fuel Leak Site Case Closure for Nightingale Property at 4629 Martin Luther King Jr Way, Oakland, CA; Case No. RO0000424; Underground Storage Tank Cleanup Fund No. 470

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Protection Division is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- Up to 500 ppm TPHg and 1,700 ppm TPHd and exists in soil at 21 feet bgs
- Up to 4,000 ppm TOG exists in soil at 8 feet bgs
- Up to 2,100 ppb TPHg, 920 ppb TPHd, 3,800 ppb TOG and 3.4 ppb benzene exists in groundwater beneath the site.

If you have any questions, please call Eva Chu at (510) 567-6762. Thank you.

Sincerely,

Donna L. Drogos, P.E.
Supervising Hazardous Materials Specialist
Underground Storage Tank Local Oversight Program

Enclosures.
1 Case Closure Letter
2. Case Closure Summary

cc: Ms. Betty Graham (w/enc)
Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, CA 94612

Mr. Toru Okamoto (w/enc)
Division of Clean Water Programs
Underground Storage Tank Cleanup Fund
State Water Resources Control Board
P.O. Box 944212
Sacramento, CA 94244-2120

Leroy Griffin (w/enc)
Oakland, Fire Department-OES
1605 MLK Jr Way
Oakland, CA 94612

D. Drogos (w/ enc), E. Chu (w/ orig enc), Database (w/enc)

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March 26, 2003

Lynn Nightingale
102 Flying Circle Isle
Foster City, CA 94404

Mr. Augustine Chukuma
745 47th Street
Oakland, CA 94609

Dear Ms. Nightingale and Mr. Chukuma:

Subject: Fuel Leak Site Case Closure for Nightingale Property at 4629 Martin Luther King Jr Way, Oakland, CA; Case No. RO0000424; Underground Storage Tank Cleanup Fund No. 470

This letter confirms the completion of a site investigation and remedial action for the underground storage tank(s) formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tank(s) are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank(s) site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code.

Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

Alameda County Environmental Health

CASE CLOSURE SUMMARY
LEAKING UNDERGROUND FUEL STORAGE TANK - LOCAL OVERSIGHT PROGRAM

MAR 20 2003
6G

I. AGENCY INFORMATION

Date: March 11, 2003

Agency Name: Alameda County Environmental Health	Address: 1131 Harbor Bay Parkway
City/State/Zip: Alameda, CA 94502-6577	Phone: (510) 567-6762
Responsible Staff Person: Eva Chu	Title: Hazardous Materials Specialist

Alameda County
MAR 26 2003
Environmental Health

II. CASE INFORMATION

Site Facility Name: Nightingale Property		
Site Facility Address: 4629 Martin Luther King Jr Way, Oakland, CA 94609		
RB Case No.: --- 01 1489	Local Case No.: StID 1489	LOP Case No.: RO0000424
URF Filing Date: 04/01/93	SWEEPS No.: ---	APN: 013-1164-029-00

Responsible Parties	Addresses	Phone Numbers
Lynn Nightingale	102 Flying Circle Isle Foster City, CA ~~94609~~ 94404	415/554-0200
Augustine Chukuma	745 47th Street Oakland, CA 94609-1806	510/654-9545

Tank I.D. No	Size in Gallons	Contents	Closed In Place/Removed?	Date
1	10,000	Heating Oil	Removed	7/15/92
2	2,000	"	"	"
3	2,000	"	"	"
4	1,000	Gasoline	"	"
5	250	"	"	"
		Piping	Assumed removed with USTs	7/15/92

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and Type of Release: Unknown cause for release of gasoline and diesel		
Site characterization complete? Yes	Date Approved By Oversight Agency: -----	
Monitoring wells installed? Yes	Number 4	Proper screened interval? Yes
Highest GW Depth Below Ground Surface 18.22'	Lowest Depth 22.69'	Flow Direction Southwest
Most Sensitive Current Use Potential drinking water source		

Summary of Production Wells in Vicinity: Per Alameda Co. Public Works staff, there are no water supply wells within 2000 feet of the site.	
Are drinking water wells affected? No	Aquifer Name: East Bay Plain
Is surface water affected? No	Nearest SW Name: Temescal Creek is approximately 130 feet north, northwest of the site
Off-Site Beneficial Use Impacts (Addresses/Locations): None	
Reports on file? Yes	Where are reports filed? Alameda County Environmental Health and Oakland Fire Department-OES

TREATMENT AND DISPOSAL OF AFFECTED MATERIAL

Material	Amount (Include Units)	Action (Treatment or Disposal w/Destination)	Date
Tank	5-USTs	Disposed by Erickson in Richmond, CA	7/15/92
Piping	unknown length	Assumed disposed with USTs	"
Free Product	---	---	---
Soil	113 tons	Disposed at Vasco Rd LF in Livermore, CA	6/18/99
Groundwater	---	---	---

MAXIMUM DOCUMENTED CONTAMINANT CONCENTRATIONSCBEFORE AND AFTER CLEANUP
(Please see Attachments 1-3 for additional information on contaminant locations and concentrations)

	Soil (ppm)		Water (ppb)	
Contaminant	Before[1]	After[2]	Before[3]	After[4]
TPH (Gas)	500	500	4,000	2,100
TPH (Diesel)	1,700	1,700	20,000	920
Oil & Grease	4,000	4000	9,900	3,800
Benzene	<.003	<0.003	11	3.4
Toluene	0.23	0.23	3.7	2.2
Ethyl Benzene	.062	.062	10	8.9
Xylene	.39	.39	31	29
Heavy Metals Pb	30	30	11,000	ND
MTBE (if not analyzed, explain below)*	NA	NA	< 5	< 5
Other (8240 8270) HVOC	NA	NA	ND	ND

* MTBE analysis not required when UST were removed

Notes. 1 Soil sample collected from UST pits or soil borings advanced at the site TPHg and TPHd concentrations from 21 feet bgs, TOG from 8 feet bgs
2 No overexcavation conducted
3. Groundwater from monitoring wells installed in 11 95 or 12 98 Groundwater was not filtered prior to Pb analysis
4 Most recent groundwater sampling event, 2 00 Dissolved Pb from 12 98
5 Background soil sample #1 contained 450ppm Pb

Site History and Description of Corrective Actions:

The site is currently unoccupied and consists of a one-story warehouse structure with a concrete slab on grade floor. A steam laundry facility operated at the site from approximately 1932 to the late 1960's. From approximately 1971 to 1991, a sheet metal fabricator used the site. The site has been vacant since 1991.

In July 1992 five USTs were removed (1-10K and 2-2K gallon fuel oil, 1-1K and 1-250 gallon gasoline tanks). Hydrocarbon odor and stained soil was noted below the fuel oil tanks and under the 1K gasoline UST. Soil samples (#2 through #11 and #14 and #15) were collected and analyzed for TPHg, TPHd, TOG, BTEX and lead. Elevated TPHd and TOG were identified in soil below the fuel oil tanks. Contamination was not identified from the gasoline tank excavations.

In March and May 1993 a total of nine test borings (Boring 1 through 9) were drilled around the former fuel oil tanks to depths ranging from 23 to 32 feet bgs to collect soil samples. Hydrocarbon odors were noted in soil samples obtained from Borings 1 through 5. Groundwater was encountered between 17 to 27 feet bgs but groundwater samples were not collected. Soil samples were analyzed for TPHd and TOG. Up to 1,700 and 760 ppm TPHd and TOG, respectively, were identified. The approximate lateral extent of soil contamination is as shown on Fig 2. The vertical extent of contamination appears to be limited to depths less than 25 feet bgs.

In November 1995 three soil borings were drilled. One of the borings was converted into a groundwater monitoring well (MW-1). The other two were converted into temporary wells (TW-1 and TW-2). Soil samples were collected from the capillary fringe at approximately 21 feet bgs. Water samples were also collected. Soil and groundwater samples were analyzed for TPHg, TPHd, TOG, and BTEX. In addition, groundwater was analyzed for soluble lead. Strong hydrocarbon odor was noted in soil samples collected from boring MW-1 and TW-1. Up to 500 ppm TPHg, 200 ppm TPHd, and 500 ppm TOG were identified in soil at 21 feet bgs, and up to 580 ppb TPHg, 20,000ppb TPHd, 9,900ppb TOG, and 12ppb benzene were detected in the groundwater samples. Up to 11 mg/L lead was identified in water from boring TW-1. The lead sample was not filtered prior to analysis.

During this phase of the investigation a possible underground storage tank was encountered approximately 20 feet east of Well MW-1. Its prior use and/or storage content are unknown. To date, the suspect UST has not been removed or properly closed in compliance with Title 23 of the California Code of Regulations. The City of Oakland Fire Department (lead CUPA agency for Oakland) was informed of the UST remaining at the site in August 1998.

In December 1998 five additional borings (TW-3 through TW-5 and MW-2 and MW-3) were drilled. Three of the borings were converted in groundwater monitoring wells (MW-2, MW-3 and MW-4 (TW-5). Groundwater was encountered at approximately 20 feet bgs. Sediments consisted mostly of stiff clay, silty clay and clayey sand with fine gravel to the maximum explored depth of 30 feet. Soil samples collected at 18 feet bgs did not contain remarkable levels of petroleum hydrocarbon. Groundwater samples contained a maximum of 4,000 ppb TPHg, 12ppb benzene, and 4,300 ppb TPHd. Dissolved lead was not detected in any of the water samples.

Quarterly groundwater monitoring commenced in December 1998. After four consecutive sampling quarters, petroleum hydrocarbon concentrations appear to be decreasing or have stabilized. BTEX and MTBE concentrations are very low or not detectable above laboratory detection limits. The highest detected TPHg concentrations are in Well MW4, located cross-gradient of the former gasoline UST. It is suspected that gasoline contaminants are coming from an off-site, upgradient source. A subsurface investigation was conducted at 4701 Martin Luther King Jr Way (across 47th Street and upgradient of the subject site) in June 2000. Elevated TPHg, TPHd, and TPHmo were detected in groundwater from the site. It appears that the hydrocarbon plume from the upgradient site may have impacted, though minimally, the subject site.

Residual hydrocarbons in the vadose zone do not exceed the residential RBSLs established by the RWQCB, with the exception of residual TOG (4000 ppm) which is located under the sidewalk. Current levels of BTEX constituents in groundwater do not pose a risk to human health or the environment. Current TPH levels in groundwater (2,100 ppb TPHg) exceed the RWQCB's RBSL (640ppm to be protective of aquatic life) by a factor of 2 to 3 times in wells MW-3 and MW-4, respectively. Temescal Creek is located 130 feet north of the site, flowing from northeast to southwest. Petroleum hydrocarbon constituents in groundwater should naturally attenuate and is not likely to intersect and impact the creek that is an underground culvert at this part of town.

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? Yes No		
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? Yes No		
Does corrective action protect public health for current land use? Alameda County Environmental Health staff does not make specific determinations concerning public health risk. However, based upon the information available in our files to date, it does not appear that the release would present a risk to human health based upon current land use and conditions.		
Site Management Requirements: Site is to be listed in City of Oakland Permit Tracking System		
Should corrective action be reviewed if land use changes? No		
Monitoring Wells Decommissioned: Yes	Number Decommissioned: 4	Number Retained: 0
List Enforcement Actions Taken: None		
List Enforcement Actions Rescinded: None		

V. ADDITIONAL COMMENTS, DATA, ETC.

Considerations and/or Variances:

No analysis for MTBE performed in soil samples collected. But based on the age and last use of the USTs, it is unlikely that MTBE is present in soil. MTBE was not detected in groundwater. Site is likely being impacted by TPHg and TPHd from an upgradient source which is currently an active LOP site (at 4701 MLK Jr Way). Residual soil contamination (up to 1,700 ppm TPHd, 500 ppm TPHg, and 4,000 ppm O&G) remains under the sidewalk, beneath the former fuel oil USTs, or at a depth of 21 feet bgs.

Conclusion:

Alameda County Environmental Health staff believes that the levels of residual contamination do not pose a significant threat to water resources, public health and safety, and the environment. ACEH staff recommends closure for this site.

VI. LOCAL AGENCY REPRESENTATIVE DATA

Prepared by: Eva Chu	Title: Hazardous Materials Specialist
Signature: [signature]	Date: 3/12/03
Reviewed by: Barney Chan	Title: Hazardous Materials Specialist
Signature: [signature]	Date: 3/14/03
Approved by: Donna L. Drogos, P.E.	Title: Supervising Hazardous Materials Specialist
Signature: [signature]	Date: 03/19/03

This closure approval is based upon the available information and with the provision that the information provided to this agency was accurate and representative of site conditions

VII. REGIONAL BOARD NOTIFICATION

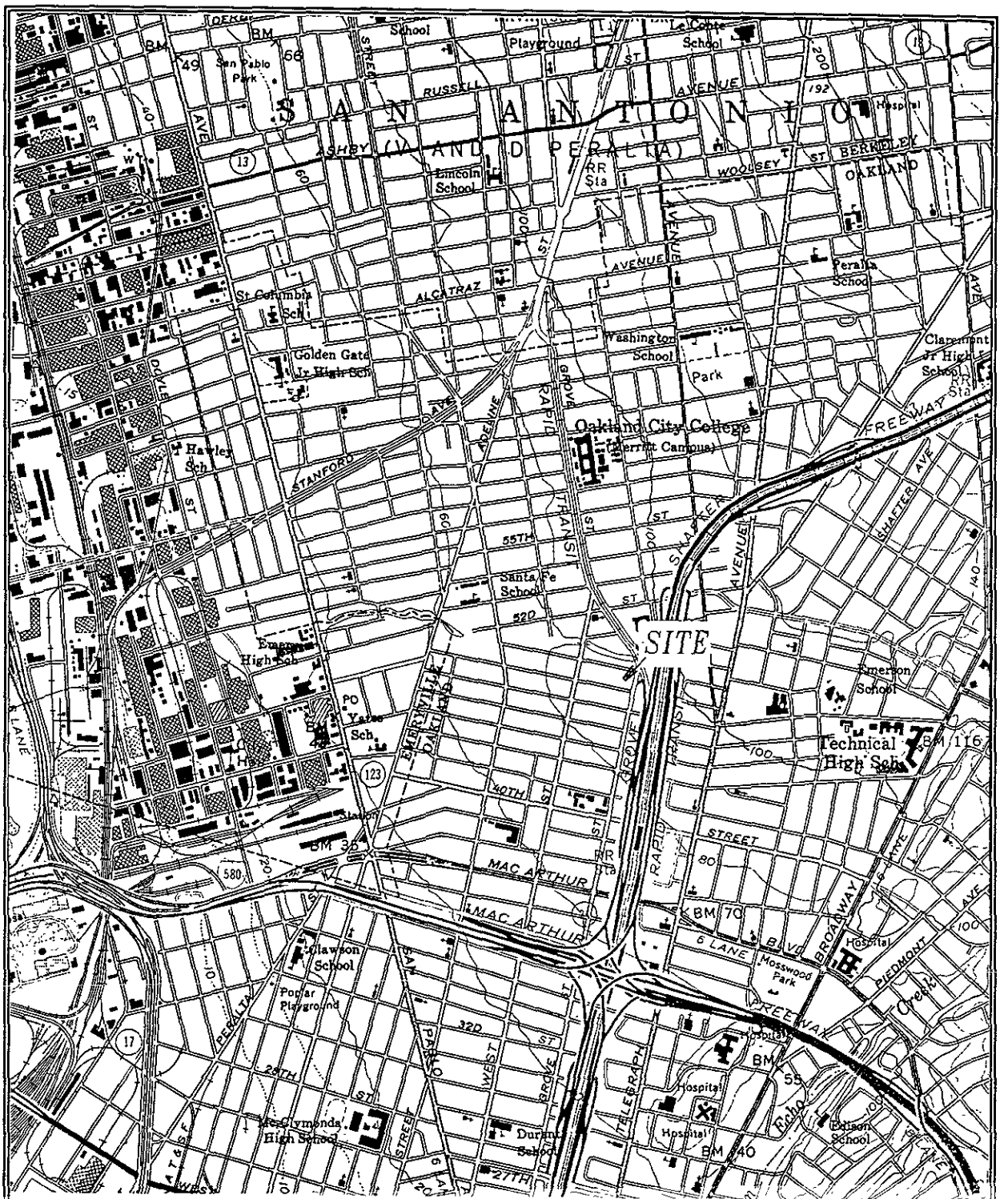
Regional Board Staff Name: Betty Graham	Title: Associate Water Resources Control Engineer
RB Response: Concur, based solely upon information contained in this case closure summary.	Date Submitted to RB: 3/19/03
Signature: Betty Graham	Date: 3/24/03

Attachments:

1. Site Vicinity Map
2. Site Plan with Analytical Results
3. Soil Analytical Data from UST Removal (6pp)
4. Site Plan with Test Borings
5. Analytical Results from Test Borings
6. Site Plan with Monitoring Wells
7. Summary of Analytical Results of Soil Sampling
8. Summary of Analytical Results of Groundwater Sampling (4pp)
9. Site Plan of Adjacent Property (4701 MLK) w/ Petroleum Hydrocarbon Concentrations in Groundwater
10. Boring Logs (13pp)

This document and the related CASE CLOSURE LETTER, shall be retained by the lead agency as part of the official site file.

ntngale-closure



Source: U.S.G.S. Map Oakland West Quadrangle, California
7.5 Minute Series (Topographic)
Photographed 1959
Photorevised 1980

MAP 1

FIGURE 1: SITE VICINITY MAP
4629 Martin Luther King Jr. Way
Oakland, California

Advanced Assessment and Remediation Services
2380 Salvio Street, Suite 202
Concord, California 94520

Environmental & General Engineering Contractors

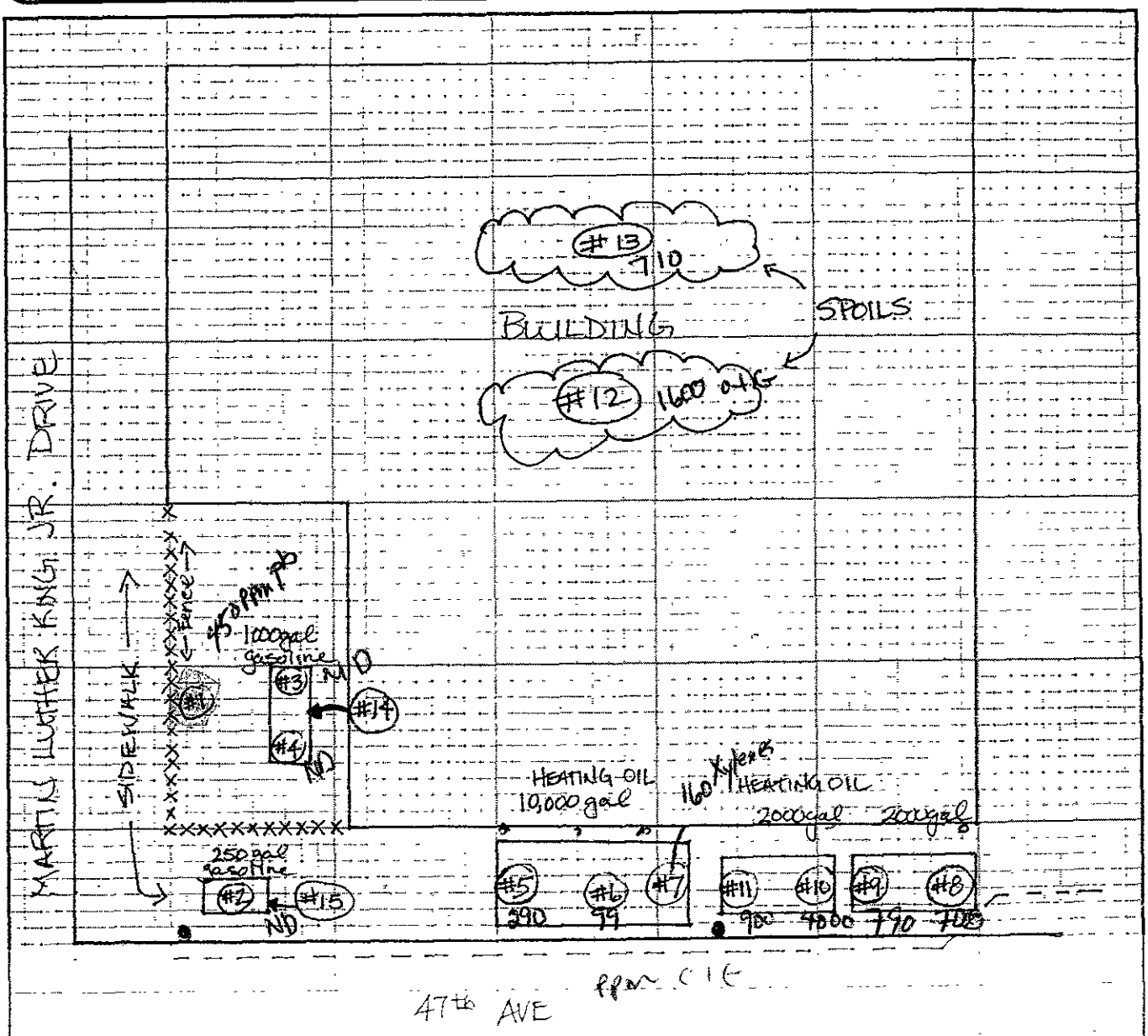
SEMCO
1741 Leslie Street
San Mateo, Calif. 94402
(415) 572-8033

License No. 449864
A, B, & C-61/D40
Hazardous Substance Certificate

SITE PLAN

SEMCO
431 W. Hatch Rd.
Modesto, Calif. 95351
(209) 524-9653

SUBMITTED TO:	DESCRIPTION OF JOB:
	Job
	Address 4629 MARTIN LUTHER KING JR. DR.
	City OAKLAND State CA
	Phone Date 9-1-92



SITE PLAN W/ ANLYTICAL RESULTS

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

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

LABORATORY NO.: 86242
CLIENT: SEMCO
CLIENT JOB NO.: MILLER & MILLER

DATE RECEIVED: 07/16/92
DATE REPORTED: 07/23/92
DATE SAMPLED : 07/15/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by MODIFIED EPA SW-846 METHOD 5030 and 8015

LAB #	Sample Identification	Concentration (mg/kg) Gasoline Range
2	#2 250-8'	ND<1
3	#3-1K-S-10'	ND<1
4	#4-1K-N-8.5'	ND<1

mg/kg - parts per million (ppm)

Method Detection Limit for Gasoline in Soil: 1 mg/kg

QAQC Summary:

Daily Standard run at 2mg/L: RPD Gasoline = <15
MS/MSD Average Recovery = 90 %: Duplicate RPD = 0

Richard Srna, Ph.D.

Laboratory Director

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

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

LABORATORY NO.: 86242
CLIENT: SEMCO
CLIENT JOB NO.: MILLER & MILLER

DATE RECEIVED: 07/16/92
DATE REPORTED: 07/23/92
DATE SAMPLED : 07/15/92

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES
by EPA SW-846 Methods 5030 and 8020

LAB #	Sample Identification	Concentration(ug/kg) Benzene	Toluene	Ethyl Benzene	Xylenes
2	#2 250-8'	ND<3	ND<3	ND<3	ND<3
3	#3-1K-S-10'	ND<3	ND<3	ND<3	ND<3
4	#4-1K-N-8.5'	ND<3	ND<3	ND<3	ND<3

ug/kg - parts per billion (ppb)

Method Detection Limit in Soil: 3 ug/kg

QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%
MS/MSD Average Recovery = 103 %: Duplicate RPD = <2

Richard Srna, Ph.D.

Laboratory Director

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

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

LABORATORY NO.: 86242
CLIENT: SEMCO
CLIENT JOB NO.: MILLER & MILLER

DATE RECEIVED:07/16/92
DATE REPORTED:07/22/92
DATE SAMPLED :07/15/92

ANALYSIS FOR TOTAL LEAD
by SW-846 Method 6010

LAB #	Sample Identification	Concentration(mg/kg) Total Lead
1	#1 BACKGROUND	450
2	#2 250-8'	30
3	#3-1K-S-10'	7
4	#4-1K-N-8.5'	10

mg/kg - parts per million (ppm)

Method Detection Limit for Lead in Soil: 5 mg/kg

QAQC Summary: MS/MSD Average Recovery : 97 %
Duplicate RPD : 0

Richard Srna, Ph.D.

Laboratory Manager

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

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

LABORATORY NO.: 86256
CLIENT: SEMCO
CLIENT JOB NO.: NIGHTINGALE

DATE RECEIVED: 07/16/92
DATE REPORTED: 07/24/92
DATE SAMPLED : 07/16/92

ANALYSIS FOR TOTAL PETROLEUM HYDROCARBONS
by Modified EPA SW-846 Method 8015

LAB #	Sample Identification	Concentration (mg/kg) Diesel Range
1	#5-10K-E-11'4"	100 *
2	#6-10K-C-14'	ND<10
3	#7-10K-W-13'	500 *
4	#8-2KW-W-8'6"	28 *
5	#9-2KW-E-7'6"	61 *
6	#10-2KE-W-8'	ND<10
7	#11-2KE-E7'6"	130 *
8	#12-COMP-W	1000 *
9	#13-COMP-W	500 *

mg/kg - parts per million (ppm)

* Diesel range concentration. The pattern observed in the chromatogram was not typical of diesel and suggested the presence of hydrocarbons heavier than diesel #2.

Method Detection Limit for Diesel in Soil: 10 mg/kg

QAQC Summary:

Daily Standard run at 200mg/L: RPD Gasoline = N/A
RPD Diesel = 1
MS/MSD Average Recovery = 104%: Duplicate RPD = 1

Richard Srna, Ph.D.

Laboratory Director

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229-0916

CERTIFICATE OF ANALYSIS

LABORATORY NO.: 86256
CLIENT: SEMCO
CLIENT JOB NO.: NIGHTINGALE

DATE RECEIVED:07/16/92
DATE REPORTED:07/24/92
DATE SAMPLED :07/16/92

ANALYSIS FOR TOTAL OIL AND GREASE
by STANDARD METHODS 5520F

LAB #	Sample Identification	Concentration(mg/kg) Oil & Grease
1	#5-10K-E-11'4"	290
2	#6-10K-C-14'	99
3	#7-10K-W-13'	240
4	#8-2KW-W-8'6"	700
5	#9-2KW-E-7'6"	790
6	#10-2KE-W-8'	4000
7	#11-2KE-E7'6"	900
8	#12-COMP-W	1600
9	#13-COMP-W	710

mg/kg - parts per million (ppm)

Method Detection Limit for Oil and Grease in Soil: 50 mg/kg

QAQC Summary: MS/MSD Average Recovery: 74%
Duplicate RPD : 9

Richard Srna, Ph.D.

Laboratory Director

Superior Precision Analytical, Inc.
835 Arnold Drive, Suite 106 • Martinez, California 94553 • (510) 229-0166 / fax (510) 229 0916

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

LABORATORY NO.: 86256
CLIENT: SEMCO
CLIENT JOB NO.: NIGHTINGALE

DATE RECEIVED:07/16/92
DATE REPORTED:07/24/92
DATE SAMPLED : 07/16/92

ANALYSIS FOR BENZENE, TOLUENE, ETHYL BENZENE & XYLENES by EPA SW-846 METHODS 5030 and 8020

LAB #	Sample Identification	Concentration(ug/kg) Benzene	Toluene	Ethyl Benzene	Xylenes
1	#5-10K-E-11'4"	ND<8	ND<8	13	32
2	#6-10K-C-14'	ND<3	ND<3	ND<3	ND<3
3	#7-10K-W-13'	ND<15	ND<15	62	160
4	#8-2KW-W-8'6"	ND<3	ND<3	ND<3	ND<3
5	#9-2KW-E-7'6"	ND<3	ND<3	ND<3	ND<3
6	#10-2KE-W-8'	ND<3	ND<3	ND<3	ND<3
7	#11-2KE-E7'6"	ND<3	5	ND<3	ND<3
8	#12-COMP-W	ND<8	8	32	91
9	#13-COMP-W	ND<8	ND<8	14	18

ug/kg - parts per billion (ppb)

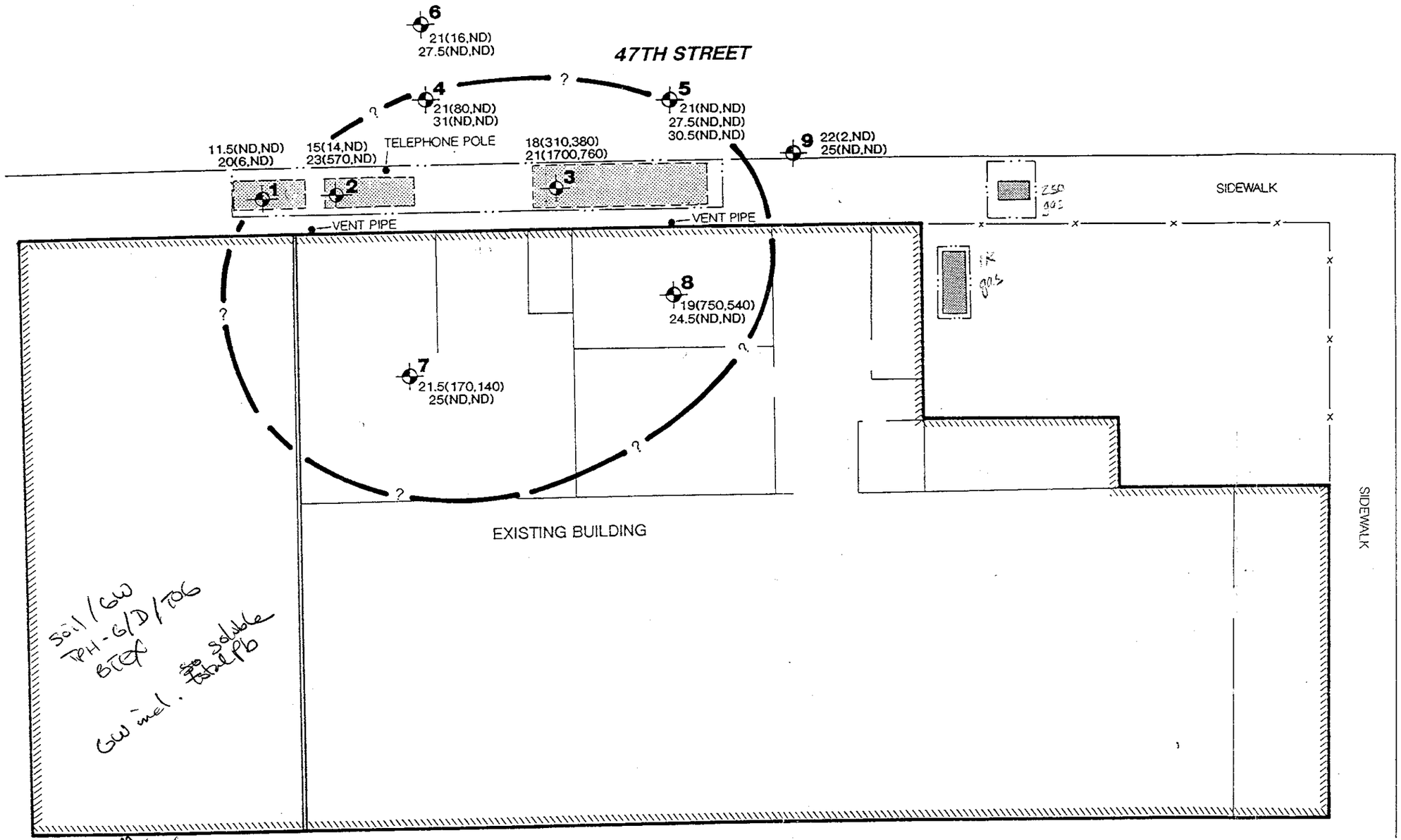
Method Detection Limit in Soil: 3 ug/kg

QAQC Summary:

Daily Standard run at 20ug/L: RPD = <15%
MS/MSD Average Recovery = 103%: Duplicate RPD = < 2

Richard Srna, Ph.D.

Laboratory Director



SITE PLAN W/ TEST BORINGS

Subsurface Consultants

4629 MARTIN LUTHER KING JR. WAY – OAKLAND

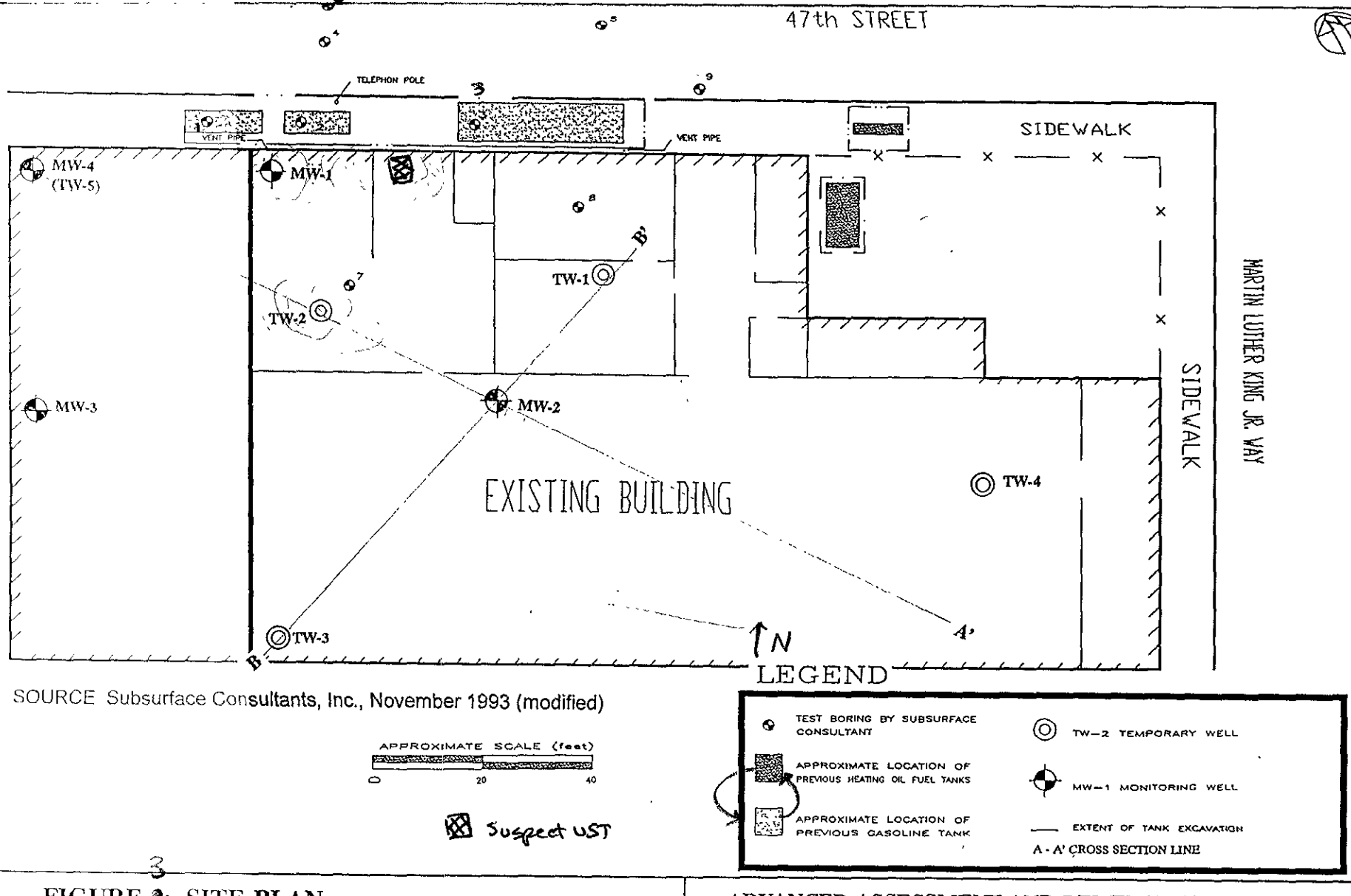
JOB NUMBER	DATE	APPROVED	PLATE
827.001	5/19/93		1

Table 2
Petroleum Hydrocarbon Concentrations in Soil

Boring	Depth (feet)	O&G[1] (mg/kg)[3]	TEH[2] (mg/kg)
1	11.5	<50	<1
	20	<50	6
2	15	<50	14
	23	<50	570
3	18	380	310
	21	760	1700
	25	--[4]	190
4	21	<50	80
	31	<50	<1
5	21	<50	<1
	27.5	<50	<1
	30.5	<50	<1
6	21	<50	16
	27.5	<50	<1
7	21.5	140	170
	25	<50	<1
8	19	540	750
	24.5	<50	<1
9	22	<50	2
	25	<50	<1

---

1 Oil and grease
2 Total extractable hydrocarbons, as diesel
3 Milligrams per kilogram
4 Test not requested



SOURCE Subsurface Consultants, Inc., November 1993 (modified)

FIGURE 2: SITE PLAN
MLK PROPERTY
4629 Martin Luther King Jr. Way
Oakland, California

ADVANCED ASSESSMENT AND REMEDIATION SERVICES
2380 Salvio Street, Suite 202
Concord, California 94520

SITE PLAN W/ MONITORING WELLS

TABLE 3 SUMMARY OF ANALYTICAL RESULTS OF SOIL SAMPLING
MLK Property
4629 Martin Luther King Jr. Way
Oakland, California

Sample ID	Date of Sampling	TPHg (mg/kg)	MTBE (mg/kg)	Benzene (mg/kg)	Toluene (mg/kg)	Ethylbenzene (mg/kg)	Xylenes (mg/kg)	TPHd (mg/kg)	TPHmo (mg/kg)	TRPH as TOG (mg/kg)
MLK MW1-S21	11/14/95	350	NA	ND<0.02	0.23	ND<0.02	0.39	180	NA	380
MLK TW1-S21	11/15/95	500	NA	ND<0.02	ND<0.02	ND<0.02	ND<0.02	200	NA	500
MLK TW2-S21	11/15/95	38	NA	ND	ND	ND	0.029	33	NA	100
MW2-18S	12/17/98	ND	ND	ND	ND	ND	ND	ND	ND	-
MW3-19S	12/16/98	ND	ND	ND	ND	ND	ND	ND	ND	-
TW3-18S	12/17/98	ND	ND	ND	ND	ND	ND	ND	ND	-
TW4-18S	12/17/98	ND	ND	ND	ND	ND	ND	ND	ND	-
TW5-18S	12/16/98	43	ND	ND	0.016	0.054	ND	20	ND	-
RL	12/17-12/23/98	1	0.05	0.005	0.005	0.005	0.005	1	5	1

Notes
ND- Not Detected NA- Not Analyzed RL- Reporting Limit
mg/kg- Milligram per kilogram (parts per million)
TPHg- Total petroleum hydrocarbon as gasoline (EPA method modified 8015)
TPHd- Total petroleum hydrocarbon as diesel (EPA method modified 8015)
TPHmo- Total petroleum hydrocarbon as motor oil (EPA method modified 8015)
TPRH as TOG- Total recoverable petroleum hydrocarbon as oil and grease (EPA method 418.1)
MTBE- Methyl Tertiary Butyl Ether (EPA method 8020)
Benzene, toluene, ethylbenzene, and total xylenes (EPA method 8020)

Table 4A

~~TABLE 3:~~ SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLING
MLK Property
4629 Martin Luther King Jr. Way
Oakland, California

Sample ID	Date of Sampling	TPHg (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPHd µg/L	TPHmo µg/L	TRPH as TOG (mg/L)	Lead (mg/L)
MLK MW1-W	11/15/95	220	NA	2.3	ND	ND	0.68	20,000	NA	9.9	0.021
MW1-GW	12/17/98	480	ND	12	1.9	ND	2.9	590	ND	-	ND
MLK TW1-W	11/15/95	580	NA	ND	ND	ND	ND	12,000	NA	7.7	11
MLK TW2-W	11/15/95	190	NA	ND	ND	ND	ND	1,600	NA	3.7	1
MW2-GW	12/18/98	ND	ND	ND	ND	ND	ND	730	ND	-	ND
MW3-GW	12/17/98	840	ND	3.6	1.1	1.0	2.2	720	ND	-	ND
MW4-GW	12/17/98	4,000	ND	11	3.7	10	2.9	4,300	ND	-	ND
TW3-GW	12/17/98	ND	ND	ND	ND	ND	ND	140	430	-	ND
TW4-GW	12/17/98	ND	ND	0.85	0.86	ND	ND	ND	ND	-	ND
RL	12/17-12/23/98	50	5	0.5	0.5	0.5	0.5	50	250	1.0	0.005

Notes
ND- Not Detected RL- Reporting Limit NA- Not Analyzed
mg/L- Milligram per liter (parts per million)
µg/L- Microgram per liter (parts per billion)
TPHg- Total petroleum hydrocarbon as gasoline (EPA method modified 8015)
TPHd- Total petroleum hydrocarbon as diesel (EPA method modified 8015)
TPHmo- Total petroleum hydrocarbon as motor oil (EPA method modified 8015)
MTBE- Methyl Tertiary Butyl Ether (EPA method 8020)
Benzene, toluene, ethylbenzene, and total xylenes (EPA method 8020)
Lead- (EPA method 6010)

4B

TABLE 1: SUMMARY OF ANALYTICAL RESULTS OF GROUNDWATER SAMPLING
MLK PROPERTY, 4629 Martin Luther King Jr. Way, Oakland, California

Sample ID	Date of Sampling	TPHg (µg/L)	MTBE (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Xylenes (µg/L)	TPHd µg/L	TPHmo µg/L
MW1-GW	11/15/95	220	NA	2.3	ND	ND	0.68	20,000	NA
	12/17/98	480	ND	12	1.9	ND	2.9	590	ND
	04/23/99	390	ND	6.2	1.6	ND	2.0	670	360
	07/23/99	260/270*	ND/ND*	ND/ND*	ND/ND*	ND/ND*	0.6/ND*	ND	ND
	10/19/99	92	ND	ND	ND	0.7	2.2	56	600
	02/07/00	89	ND	ND	ND	0.9	2.8	76	900
MW2-GW	12/18/98	ND	ND	ND	ND	ND	ND	730	ND
	04/23/99	55	ND	ND	ND	ND	ND	240	ND
	07/23/99	ND/ND*	ND/ND*	ND/ND*	ND/ND*	ND/ND*	ND/ND*	ND	ND
	10/19/99	ND	ND	ND	ND	ND	ND	ND	ND
	02/07/00	ND	ND	ND	ND	ND	ND	ND	ND
MW3-GW	12/17/98	840	ND	3.6	1.1	1.0	2.2	720	ND
	04/23/99	1,800	8.23	54	4.7	1.7	5.8	980	ND
	07/23/99	1,800/1,600*	ND/ND*	ND/ND*	ND/ND*	0.7/ND*	1.8/ND*	240	1,800
	10/19/99	1,100	ND	2.8	1.9	6.1	18	190	1,400
	02/07/00	910	ND	2.6	1.4	5.5	14	180	1,400
MW4-GW	12/17/98	4,000	ND	11	3.7	10	2.9	4,300	ND
	04/23/99	5,100	24	160	11	31	10	2,900	ND
	07/23/99	3,100/2,900*	ND/ND*	ND/ND*	ND/ND*	1.2/ND*	3.8/ND*	1,600	5,900
	10/19/99	2,300	ND	3.9	2.6	11	31	890	4,200
	02/07/00	2,100	ND	3.4	2.2	8.9	29	920	3,800
RL	02/10-15/00	50	0.5	0.5	0.5	0.5	0.5	50	500

Notes ND- Not Detected RL- Reporting Limit NA- Not Analyzed
* Confirmed (also quantified) by EPA Method 8260 for oxygenated volatile organic compounds(OVOCs); all other OVOCs were nondetect above the detection limit
µg/L- Microgram per liter (parts per billion)
TPHg- Total petroleum hydrocarbon as gasoline (EPA method modified 8015)
TPHd TPHmo Total petroleum hydrocarbon as diesel/motor oil (EPA method modified 8015)
MTBE- Methyl Tertiary Butyl Ether (EPA method 602)
Benzene, toluene, ethylbenzene, and total xylenes (EPA method 602)

Table #5

McCAMPBELL ANALYTICAL INC.
110 2nd Avenue South, #D7, Pacheco, CA 94553
Tele: 510-798-1620 Fax: 510-798-1622

Advanced Assessment & Remediation Services	Client Project ID: MLK Property	Date Sampled: 11/14-11/15/95
		Date Received: 11/15/95
5016 Gloucester Lane	Client Contact: Tridib Guha	Date Extracted: 11/16/95
Martinez, Ca. 94553	Client P.O:	Date Analyzed: 11/20-11/21/95

Lead*

EPA analytical methods 6010/200.7, 239.2+

Lab ID	Client ID	Matrix	Extraction°	Lead*	% Recovery Surrogate
58721	MLK MW1-W	W	TTLC	0.021	NA
58722	MLK TW2-W	W	TTLC	1.0,i	NA
58723	MLK TW1-W	W	TTLC	11,i	NA
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		S	TTLC	3.0 mg/kg	
		W	TTLC	0.005 mg/L	
		---	STLC,TCLP	0.2 mg/L	

* soil samples are reported in mg/kg, and water samples and all STLC & TCLP extracts in mg/L

+ Lead is analysed using EPA method 6010 (ICP)for soils, STLC & TCLP extracts and method 239.2 (AA Furnace) for water samples

o EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC), 3050(solids,TTLC), STLC from CA Title 22

surrogate diluted out of range, N/A means surrogate not applicable to this analysis

i) liquid sample that contains greater than ~ 2 vol. % sediment, this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations

DHS Certification No. 1644

Edward Hamilton, Lab Director

Table 6

McCAMPBELL ANALYTICAL INC.
110 Second Avenue South, #D7, Pacheco, CA 94553-5560
Telephone : 925-798-1620 Fax : 925-798-1622
http://www.mccampbell.com E-mail: main@mccampbell.com

Advanced Assessment & Remediation Services	Client Project ID: 4629 MLK Jr. Way, Oakland	Date Sampled: 12/16-12/18/98
		Date Received: 12/17-12/18/98
2380 Salvio St. Suite 202	Client Contact: Tridib Guha	Date Extracted: 12/18/98
Concord, CA 94520	Client P.O:	Date Analyzed: 12/21/98

Lead*

EPA analytical methods 6010/200.7, 239.2*

Lab ID	Client ID	Matrix	Extraction °	Lead*	% Recovery Surrogate
00396	MW1-GW	W	Dissolved	ND	NA
00397	MW3-GW	W	Dissolved	ND	NA
00398	MW4-GW	W	Dissolved	ND	NA
00399	TW3-GW	W	Dissolved	ND	NA
00400	TW4-GW	W	Dissolved	ND	NA
00516	MW2-GW	W	Dissolved	ND	NA
Reporting Limit unless otherwise stated; ND means not detected above the reporting limit		S	TTLC	3.0 mg/kg	
		W	TTLC	0.005 mg/L	
		—	STLC,TCLP	0.2 mg/L	

* soil and sludge samples are reported in mg/kg, wipe samples in ug/wipe, and water samples and all STLC, SPLP, TCLP extracts in mg/L

*Lead is analysed using EPA method 6010 (ICP)for soils, sludges, STLC & TCLP extracts and method 239.2 (AA Furnace) for wate samples

° EPA extraction methods 1311(TCLP), 3010/3020(water,TTLC), 3040(organic matrices,TTLC) 3050(solids,TTLC) STLC - CA Title 22

surrogate diluted out of range, N/A means surrogate not applicable to this analysis

& reporting limit raised due matrix interference

~) liquid sample that contains greater than ~2 vol % sediment, this sediment is extracted with the liquid, in accordance with EPA methodologies and can significantly effect reported metal concentrations

DHS Certification No 1644

Edward Hamilton Lab Director

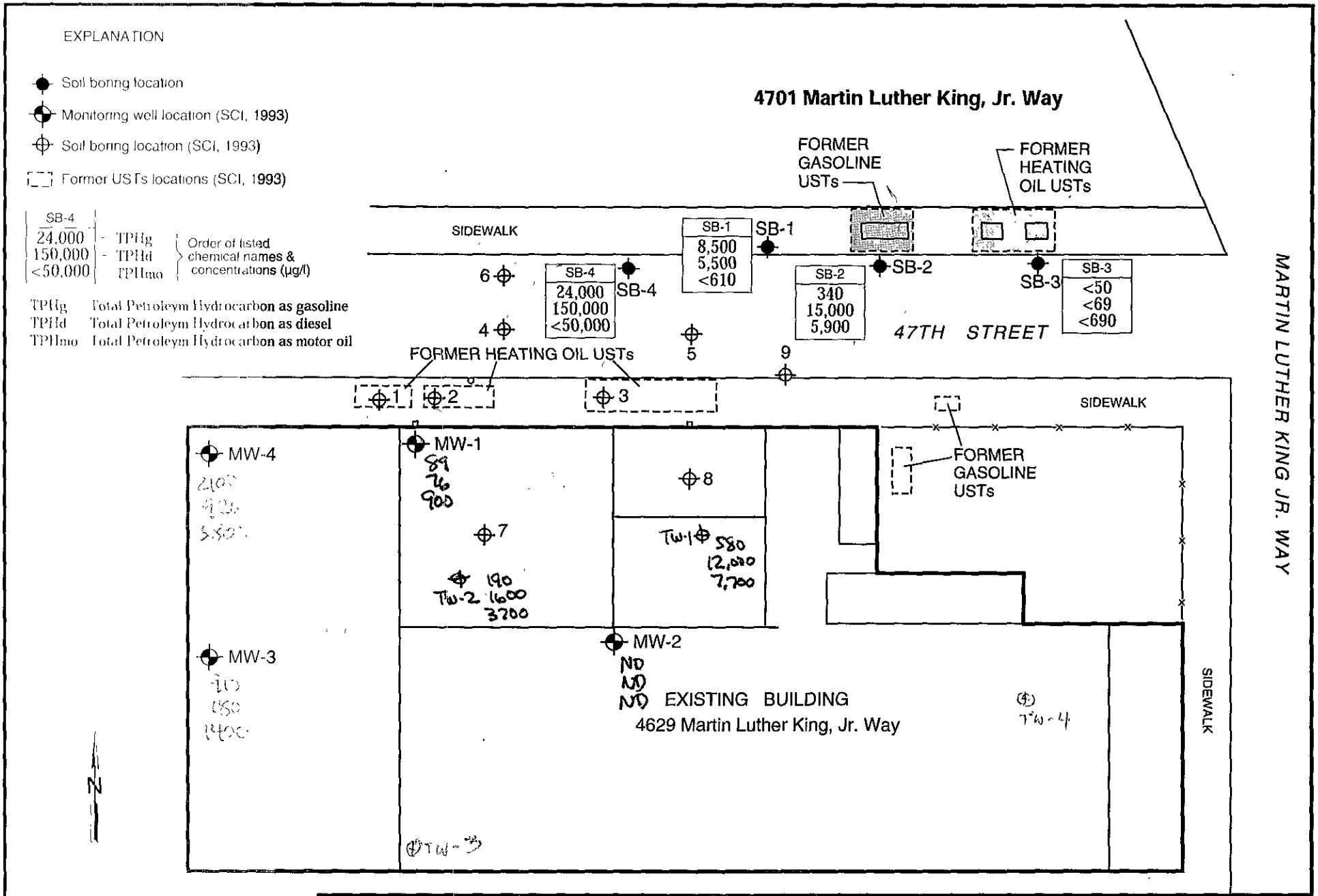


Figure 4

Petroleum Hydrocarbons Concentrations In Groundwater
4701 Martin Luther King, Jr. Way, Oakland, California

July 2000

Children's Hospital of Oakland

WEST
World Environmental Services & Technology

SITE PLAN OF ADJACENT PROPERTY (4701 MLK)

Monitoring Well No. MW-1

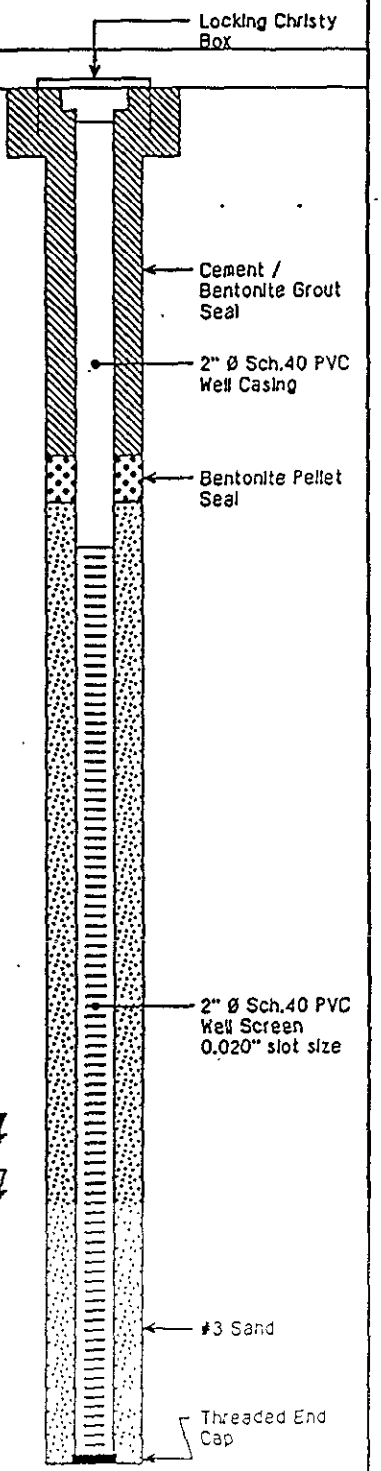
OJECT: MLK Property, Oakland
ILL METHOD: HSA
ITIAL GW DEPTH: 24 ft.

DATE: 11- 14-95
HOLE DIA.: 8 in.
FINAL GW: 22.8 ft.

LOGGED BY: T. Guha
SAMPLER: Split Spoon
HOLE ELEV.: 80 ft. MSL

DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	BLOWS/FT	PID (ppm)
CONCRETE: (5 in.)			0			
CLAYEY SAND: brownish yellow (10YR 5/8) soft, slightly moist. @ 2 ft. reddish black (10R 2.5/1).	SC		1-5			
SANDY CLAY: dark gray (2.5YR N4/1) soft, moist, low plasticity.	CL		6		30	125
SILTY CLAY: light brownish gray (10YR 6/2) soft, moist, high plasticity.			11		34	94
@ 15 ft. color changes to grayish brown (10YR 5/2).			16		19	96
@ 20 ft. with some sand, strong odor.			21		26	1750
SILTY CLAY: light brownish gray (10YR 6/2) some sand, soft, wet, high plasticity, slight odor.			25-26			
Bottom of hole at 30 feet.			30			

WELL CONSTRUCTION DETAIL



ADVANCED ASSESSMENT AND REMEDIATION SERVICES
5018 GLOUCESTER LANE 510-370-8295
MARTINEZ, CA 94553

Notes:
Borehole was drilled by Soils Exploration Services using a Limited Access Rig, Access II.

Project No. 95018

LOG OF EXPLORATORY BORING NO. MW-2

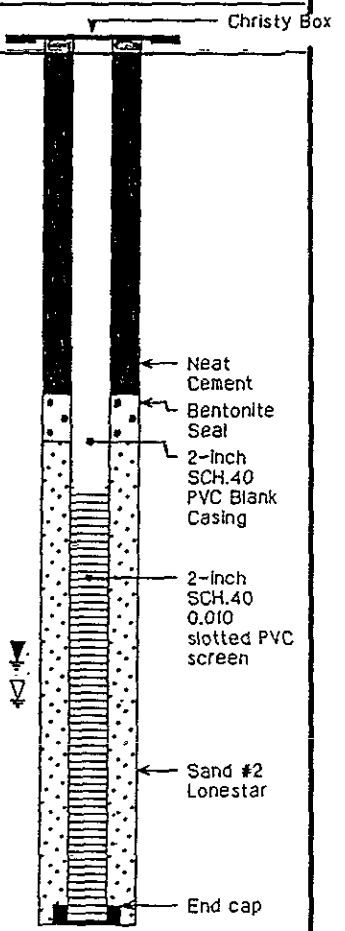
Project: MLK Property.
Drilling Co.: GREGG Drilling & Testing
Start Date: 12/17/98
End Date: 12/17/98

Drill Method: HSA
Driller: Robert Deason
Drill Rig: RHINO D-15

Logged By: T. Guha
Sampler: Split Spoon
Hole Dia.: 8 inch

LITHOLOGIC DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	DRIVEN in	RECOVERY-in	OVA (ppm)
CONCRETE			0				
SILTY CLAY: dark gray, damp, soft	CL		-5-		6 6 6		0
same, color changes to brownish gray			-10-		6 6 6		0
CLAY: brownish gray, moist, stiff, high plasticity, no odor	CH		-15-		6 6 6	6 6 6	0
same, no odor			-20-		6 6 6	6 6 6	
same, wet, no odor			-25-		6 6 6	6 6 6	0
same, wet, no odor	CH		-30-				
BORE HOLE TERMINATED @ 30 feet							

WELL CONSTRUCTION DETAIL



ADVANCED ASSESSMENT & REMEDIATION SERVICES
2380 Salvio Street, Suite202
Concord, CA 94520

Note Borehole was drilled by using a limited access rig

Project No 98017

LOG OF EXPLORATORY BORING NO. MW-3

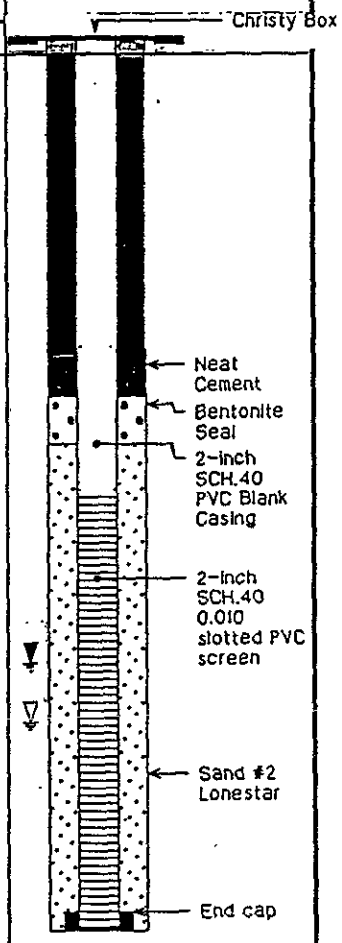
Project: MLK Property.
Drilling Co.: GREGG Drilling & Testing
Start Date: 12/16/98
End Date: 12/16/98

Drill Method: HSA
Driller: Robert Deason
Drill Rig: RHINO D-15

Logged By: T. Guha
Sampler: Split Spoon
Hole Dia.: 8 inch

LITHOLOGIC DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	DRIVEN in	RECOVERY-in	OVA (ppm)
CONCRETE			0				
SILTY CLAY: dark gray, damp, soft	CL						
same, color changes to brownish gray			-5-		6 6 6		0
CLAY: gray, slightly moist, stiff, high plasticity, no odor	CH						
color changes to yellowish brown, moist, stiff, high plasticity			-10-		6 6 6		0
same, no odor	CH		-15-		6 6 6 6 6 6	6 6 6 6 6 6	0
same, wet	CH		-20-				
SILTY CLAY: light brownish gray, soft, high plasticity, wet strong gasoline odor	CL		-25-		6 6 6	6 6 6	1000
BORE HOLE TERMINATED @ 30 feet			-30-				

WELL CONSTRUCTION DETAIL



ADVANCED ASSESSMENT & REMEDIATION SERVICES
2380 Salvio Street, Suite202
Concord, CA 94520

Note: Borehole was drilled by using a limited access rig

Project No. 98017
Page 1 of 1

LOG OF EXPLORATORY BORING NO. TW-3

Project: MLK Property.
Drilling Co.: GREGG Drilling & Testing
Start Date: 12/17/98
End Date: 12/17/98

Drill Method: HSA
Driller: R. Deason
Drill Rig: RHINO D-15

Logged By: T. Guha
Sampler: Split Spoon
Hole Dia.: 6 inch

LITHOLOGIC DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	DRIVEN in	RECOVERY-in	OVA (ppm)	BORING CLOSURE
CONCRETE			0					
CLAY: dark gray, moist, soft, high plasticity	CH		-5-	⊠			0	
Same, very moist, very stiff, high plasticity			-10-	⊠			0	
Same, very moist,, stiff, high plasticity, no odor	CH		-15-	⊠	6 6 6 6	6 6 6 6	0	
Same, color changes to light brown, moist, no petroleum odor	CH		-20-	⊠			0	
BORE HOLE TERMINATED @ 25 feet			-25-	⊠			0	Neat Cement
			-30-					

ADVANCED ASSESSMENT &
REMEDIATION SERVICES
2380 Salvio Street, Suite 202
Concord, CA 94520

Note: Borehole was drilled by using a limited access rig.. During drilling groundwater was not encountered. Borehole left open for 4 hours, it was still dry After 5 hours there was some water, groundwater sampled with a 0.75 inch diameter PVC casing

LOG OF EXPLORATORY BORING NO. TW-4

Project: MLK Property.
Drilling Co.: GREGG Drilling & Testing
Start Date: 12/17/98
End Date: 12/17/98

Drill Method: HSA
Driller: R. Deason
Drill Rig: RHINO D-15

Logged By: T. Guha
Sampler: Split Spoon
Hole Dia.: 6 inch

LITHOLOGIC DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	DRIVEN in	RECOVERY-in	OVA (ppm)	BORING CLOSURE
CONCRETE			0					
CLAY: dark gray, damp, soft, high plasticity	CH			⊠				
							0	
Same, light brown, slightly moist, stiff, high plasticity, no odor			-5-	⊠				
					6	6		
SILTY CLAY: brown, with few rounded gravels and sand, moist, stiff, no odor	CL		-10-		6	6	0	
same			-15-				0	
					6	6		
CLAY: greenish brown, very moist, very stiff, high plasticity, no gasoline odor	CH		-20-		6	6		▽
					6	6	0	
same, wet				⊠				
			-25-				0	
BORE HOLE TERMINATED @ 25 feet								Neat Cement
			-30-					

ADVANCED ASSESSMENT & REMEDIATION SERVICES
2380 Salvio Street, Suite 202
Concord, CA 94520

Note Borehole was drilled by using a limited access rig A groundwater sample was collected (see text)

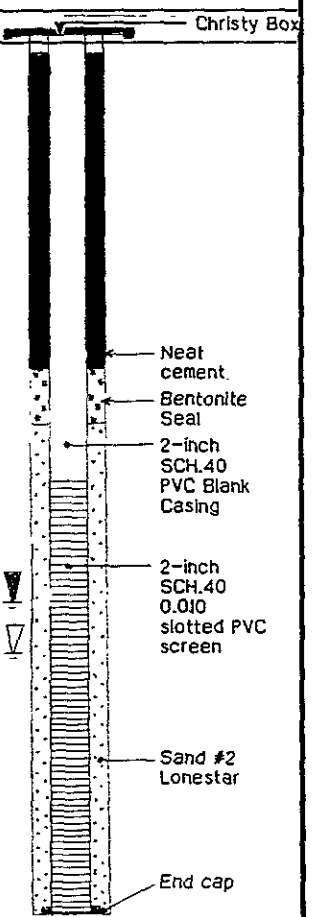
LOG OF EXPLORATORY BORING NO. MW-4/TW-5

Project: MLK Property.
Drilling Co.: GREGG Drilling & Testing
Start Date: 12/16/98
End Date: 12/16/98

Drill Method: HSA
Driller: Robert Deason
Drill Rig: RHINO D-15

Logged By: T. Guha
Sampler: Split Spoon
Hole Dia.: 8 inch

LITHOLOGIC DESCRIPTION	USCS CLASS	GRAPHIC LOG	DEPTH	SAMPLE	DRIVEN in	RECOVERY-in	OVA (ppm)
CONCRETE			0				
SILTY CLAY: dark gray, damp, soft, high plasticity	CL		-5-				0
color changes to brown, moist, stiff, high plasticity	CL		-10-				0
CLAY: greenish gray, moist very stiff, high plasticity, no odor	CH		-15-				0
same, very strong gasoline odor	CH		-20-		6 6 6 6	6 6 6 6	2000
same, wet			-25-				5000
SILTY GRAVEL: grayish brown, angular gravels with silt-sand mixtures	GM		-30-				
BORE HOLE TERMINATED @ 30 feet							



WELL CONSTRUCTION DETAIL

ADVANCED ASSESSMENT & REMEDIATION SERVICES
2380 Salvio Street, Suite202
Concord, CA 94520

Note Borehole was drilled by using a limited access rig Borehole was drilled to 25 feet A groundwater grab sample was collected, strong gasoline odor and sheen was noted Borehole was reentered with 8 inch augers, drilled to 30 feet and converted into a monitoring well (see text)

LOG OF TEST BORING 1

EQUIPMENT 6" Hollow Stem Auger
DATE DRILLED 3/10/93
ELEVATION - -

LABORATORY TESTS	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	OVM (PPM)	DEPTH (FEET)	SAMPLE	BLOWS PER FOOT	
				0			BROWN SAND (SP) loose, moist (fill) GRAY GRAVEL (GP) loose, moist (fill, pea gravel)
				5			BROWN SILTY CLAY (CL) stiff, moist hydrocarbon odor
			26			27*	
			37	10		33*	
			0			32*	
				15			
			422			44*	GRAY BROWN GRAVELLY SANDY CLAY (CL) stiff, moist
							GROUNDWATER LEVEL DURING DRILLING
			8700	20		35*	GRAY GREEN GRAVELLY CLAYEY SAND (SC) dense, wet
			280			35*	
				25			Boring backfilled with cement grout
				30			
				35			
				40			

SAMPLER TYPE:
MODIFIED CALIFORNIA DRIVE
O.D.: 3.0 inches
I.D.: 2.5 inches
*CALIFORNIA DRIVE
O.D.: 2.5 inches
I.D.: 2.0 inches

HAMMER WEIGHT: 140 pounds
HAMMER DROP: 30 inches

Subsurface Consultants

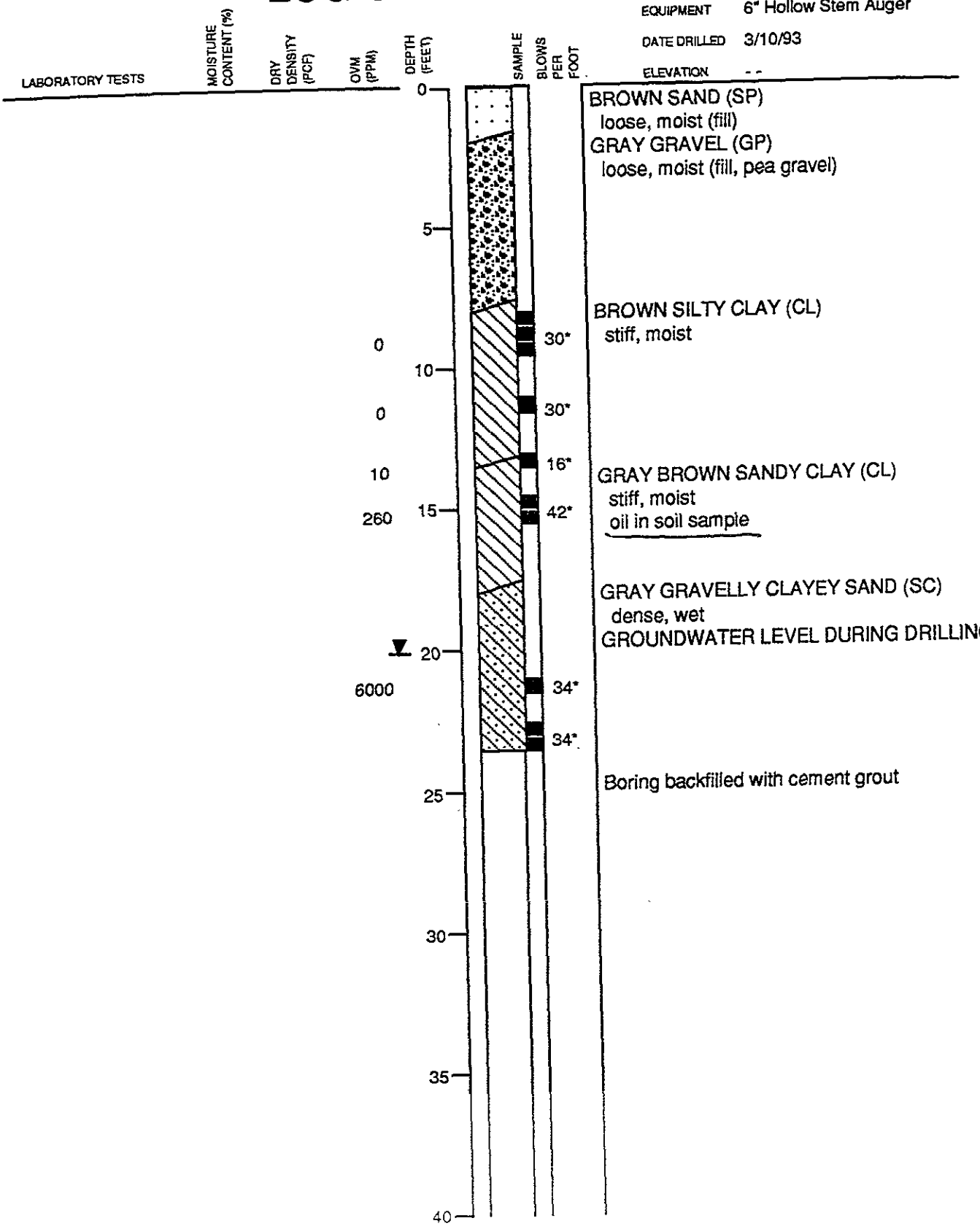
4629 MARTIN LUTHER KING JR. WAY- OAKLAND

JOB NUMBER	DATE	APPROVED
827.001	3/12/93	MC

PLATE 2

LOG OF TEST BORING 2

EQUIPMENT 6" Hollow Stem Auger
DATE DRILLED 3/10/93
ELEVATION - -



Subsurface Consultants

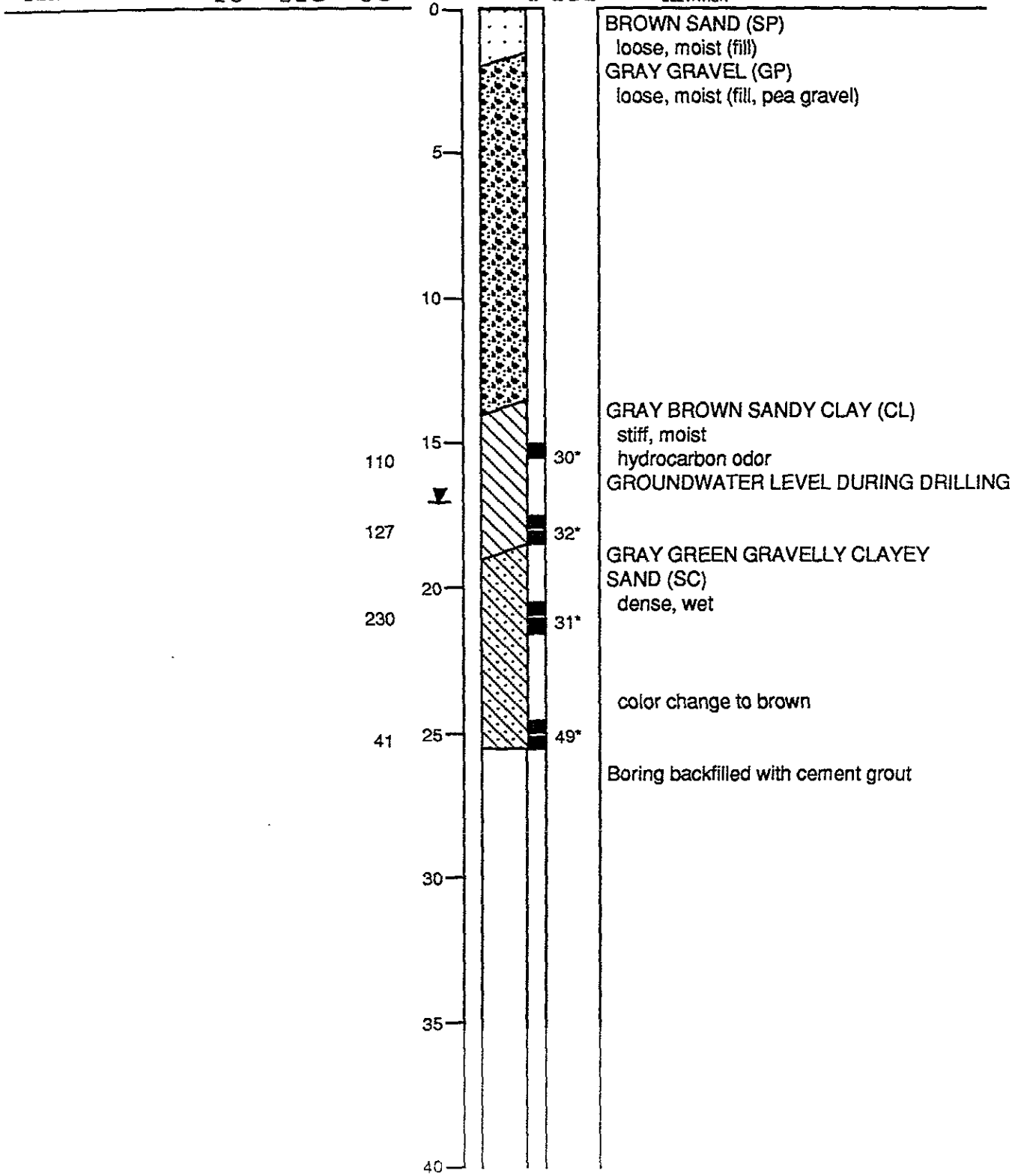
4629 MARTIN LUTHER KING JR. WAY- OAKLAND

JOB NUMBER	DATE	APPROVED
827.001	3/12/93	MC

PLATE 3

LOG OF TEST BORING 3

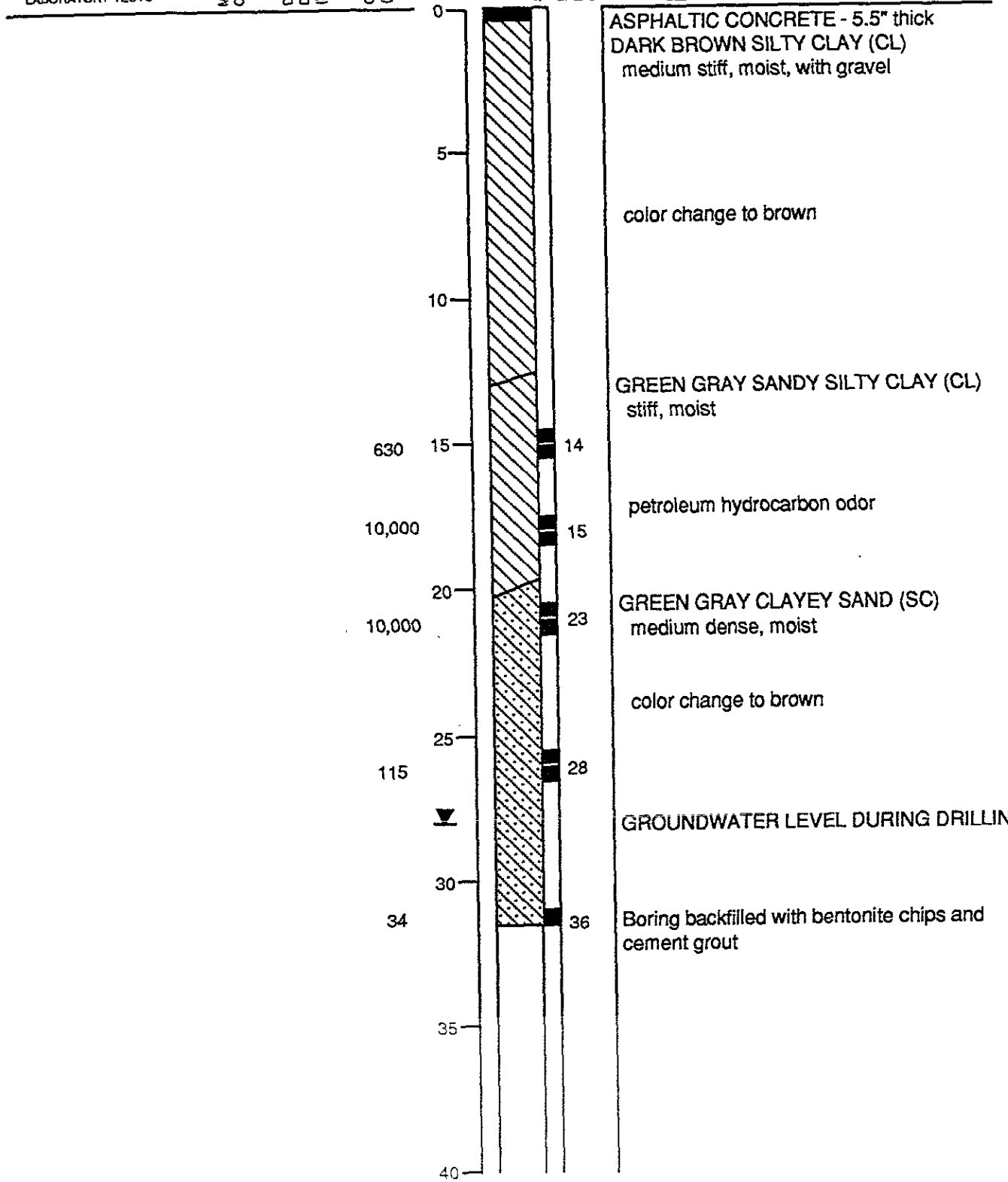
EQUIPMENT 6" Hollow Stem Auger
DATE DRILLED 3/10/93
ELEVATION --



Subsurface Consultants	4629 MARTIN LUTHER KING JR. WAY- OAKLAND			PLATE 4
	JOB NUMBER	DATE	APPROVED	
	827.001	3/12/93		

LOG OF TEST BORING 4

EQUIPMENT 8" Hollow Stem
DATE DRILLED 5/6/93
ELEVATION - -



Subsurface Consultants

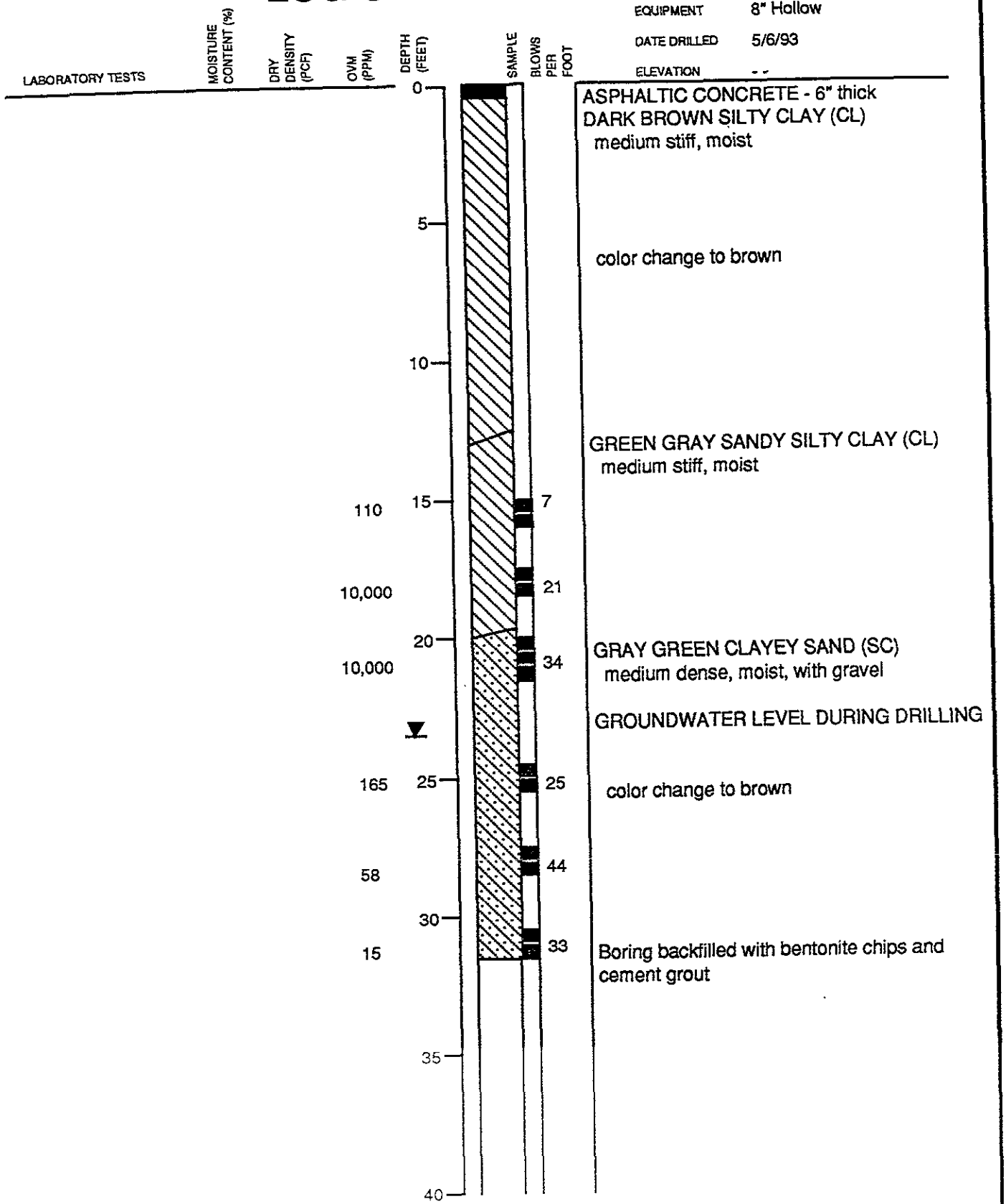
4629 MARTIN LUTHER KING JR. WAY - OAKLAND

JOB NUMBER	DATE	APPROVED
827.001	5/6/93	ME

PLATE 5

LOG OF TEST BORING 5

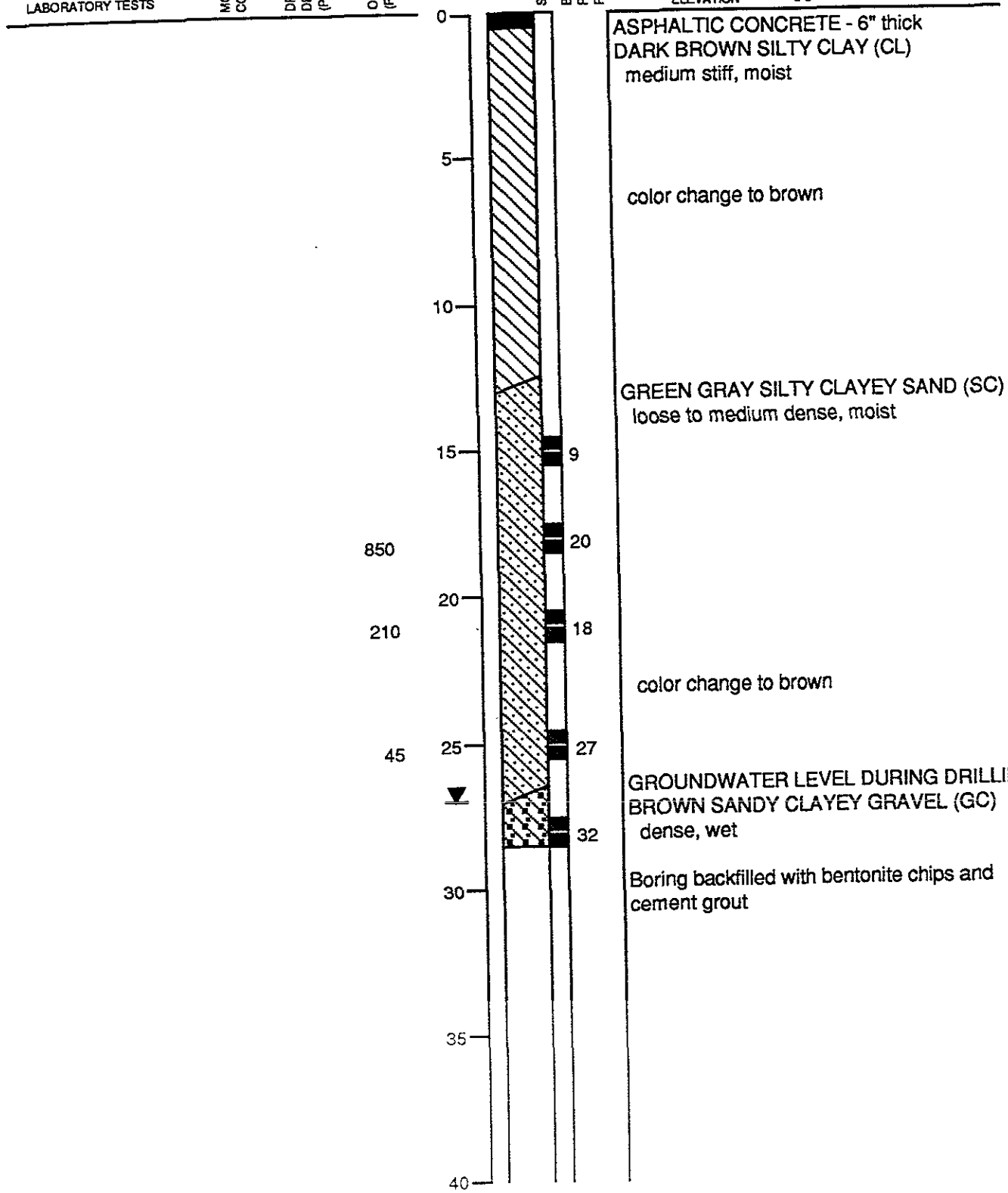
EQUIPMENT 8" Hollow
DATE DRILLED 5/6/93
ELEVATION - -



Subsurface Consultants	4629 MARTIN LUTHER KING JR WAY - OAKLAND			PLATE 6
	JOB NUMBER 827.001	DATE 5/6/93	APPROVED MC	

LOG OF TEST BORING 6

EQUIPMENT 8" Hollow Stem
DATE DRILLED 5/6/93
ELEVATION - -



Subsurface Consultants	4629 MARTIN LUTHER KING JR. WAY - OAKLAND			PLATE 7
	JOB NUMBER 827.001	DATE 5/6/93	APPROVED ME	

LOG OF TEST BORING 7

EQUIPMENT 8" Hollow Stem
DATE DRILLED 5/6/93
ELEVATION - -

LABORATORY TESTS	MOISTURE CONTENT (%)	DRY DENSITY (PCF)	OVM (PPM)	DEPTH (FEET)	SAMPLE	BLOWS PER FOOT	
				0			CONCRETE SLAB - 7" thick DARK BROWN SILTY CLAY (CL) medium stiff, moist, with gravel
			0	5		16	
							BROWN SILTY CLAY (CL) stiff, moist
			0	10		25	
			5	15		22	
						34	GRAY GREEN CLAYEY SAND (SC) medium dense to dense, moist
			165	20		30	
					▼		GROUNDWATER LEVEL DURING DRILLING BROWN GRAVELLY CLAYEY SAND (SC) medium dense, wet
			5	25		16	
						21	Boring backfilled with bentonite chips and cement grout
				30			
				35			
				40			

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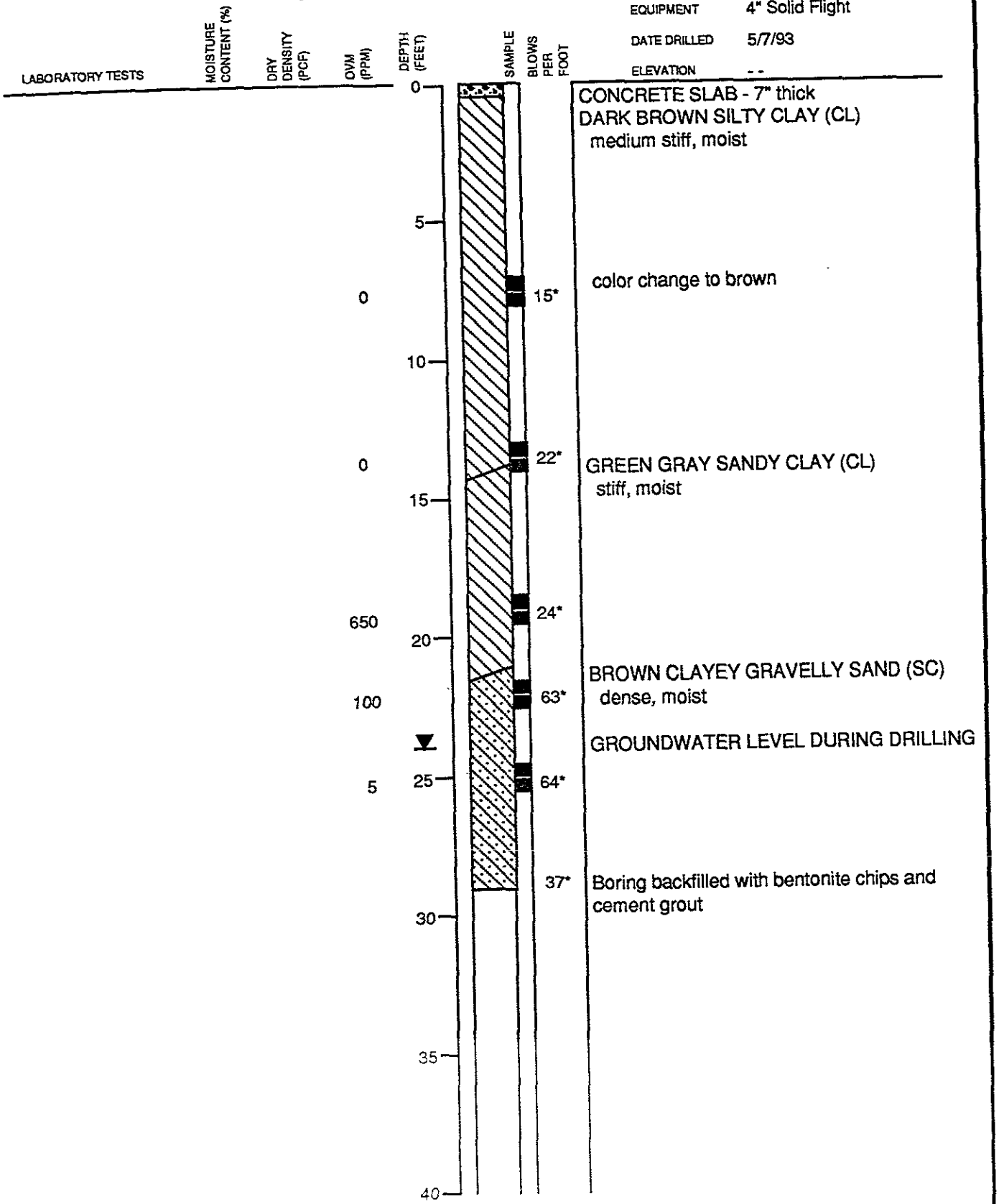
827.001	5/6/93	

PLATE 8

LOG OF TEST BORING 8

EQUIPMENT 4" Solid Flight
DATE DRILLED 5/7/93
ELEVATION - -



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JOB NUMBER	DATE	APPROVED
827.001	5/6/93	MF

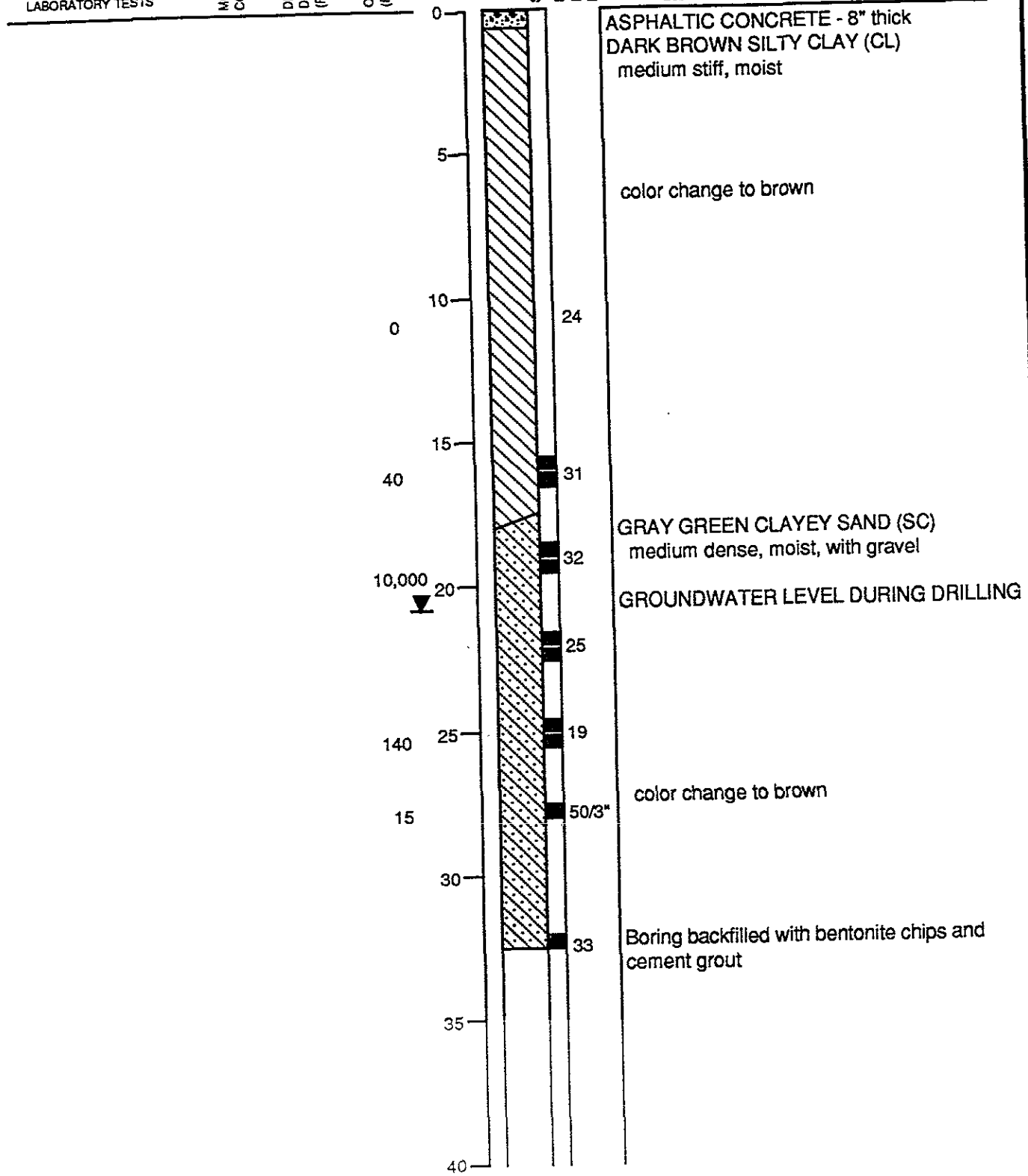
PLATE 9

LOG OF TEST BORING 9

EQUIPMENT 8" Hollow Stem

DATE DRILLED 5/6/93

ELEVATION - -



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JOB NUMBER	DATE	APPROVED
827.001	5/6/93	MK

PLATE 10