

## **Harding Lawson Associates**

Engineering and Environmental Services

1355 Willow Way, Suite 109, Concord, California 94520 (510) 687-9660

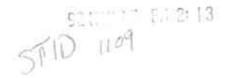
569-4757

Addressee's Fax Phone #: HLA Fax #: (510) 687-9673
To: Ms. Susan Hugo From: Jeanna Hudson
Subject:
Date:
HLA Job Number: 2251, 223.03
Non-chargeable :
Number of Pages (including this cover sheet):
Circulate to: 1.
2.
3
Instructions/Remarks: Attached is the letter for proposed well decommissioning at 500 Grand Arenue.  Hard copy mailed today. Feel free to call with questions or comments.
SHadson

IF YOU DID NOT RECEIVE ALL PAGES

PLEASE CALL (510) 687-9660

A subsidiary of Harding Associates - Offices Nationalds





May 13, 1992

2251,223.03

Alameda County Health Agency Division of Hazardous Materials 80 Swan Way, Room 350 Oakland, California 94621

Attention: Ms. Susan Hugo

Dear Ms. Hugo:

Proposal to Decommission Monitoring Wells 500 Grand Avenue Oakland, California

On behalf of Texaco Refining and Marketing, Inc. (Texaco), Harding Lawson Associates (HLA) wishes to inform you of our plan to decommission three monitoring wells at the subject location.

Between 1988 and late 1991, this site was occupied by a service station operated by Exxon Company U.S.A. (Exxon). Prior to 1988, the station was operated by Texaco. In December 1991, Exxon's lease from Texaco expired, and station operations were discontinued.

In April 1992, Zaccor, Inc. (Zaccor) was contracted by Texaco to demolish the building, and to remove three underground storage tanks, two dispenser islands, and associated piping. HLA was on-site to observe the operations and collect soil samples. Excavated pea gravel was disposed of at an appropriate facility and the tank excavation was backfilled with clean imported fill.

Zaccor resumed excavation at the site on May 5, 1992, and removed approximately 1000 cubic yards of hydrocarbon-bearing soil. This soil is stockpiled on site and excavation has temporarily ceased while we arrange for disposal of the soil. We anticipate that additional excavation will be necessary.

Three of the four on-site monitoring wells (MW-3E, MW-3A, and MW-3B) are in areas of probable soil contamination on the west side of the property (Plate 1). It will be more efficient and easier to excavate contaminated soil if the wells are removed prior to excavating. HLA has submitted permit applications for

May 13, 1992 2251,223.03 Ms. Susan Hugo Alameda County Health Agency Page 2

destruction of these wells to the Alameda Flood Control District, Zone 7. We anticipated decommissioning the wells on April 14. However, it will be better logistically to wait until the stockpiled soil is removed from the site before we move a drilling rig on-site.

Soil boring logs, well construction details, and analytical data are attached. We recognize the importance of these on-site wells for monitoring groundwater conditions at the site, and we plan to install new wells when the excavation work is complete. Please feel free to contact us if you wish to discuss plans for decommissioning the wells and/or installing new wells.

Sincerely,

HARDING LAWSON ASSOCIATES

Jeanna S. Hudson Senior Geologist

Deanua S. H

Edward R. Close Principal Geologist

JSH/ERC/llt 033073P/L35

Table 1. (continued)

	Date			Ethyl-		TPH as	TPH as	TPH
Well	Sampled	<u>Benzene</u>	<u>Toluene</u>	benzene	<u>Xylenes</u>	Gasol ine	Diesel	Other <sup>2</sup>
MW-8E	10/25/88	1,400	510	2.9	420			
	09/28/89	5,600	3,100	<500	<3,000	22,000		
	11/29/89	4,900	2,600	<250	1,490	15,000	6,800	<50
	01/24/90	10,100	3,340	540	1,790	36,000	**	4,900
	04/26/90	11,000	5,700	840	2,900	48,000	1,400	<50
	07/26/90	15,000	6,200	520	4,700	56,000	<50	<50
	(10/18/90)	1,500	1,300	170	1,800	15,000	620	<50
	01/08/91	14,000	5,400	860	1,700	51,000	17,000	520 <sup>3</sup>
	04/23/91	19,000	6,100	<b>75</b> 0	4,100	50,000	4,800	<500
	07/23/91	16,000	5,400	1,100	4,000	47,000	3,500 <sup>4</sup>	<500
	10/24/91	19,000	6,100	1,100	4,900	40,000	9,400	<500
	01/23/92	3,800	2,800	610	4,800	38,000	9,8004	7
	-			`` <u>`</u>				
				_	_			
MW-8F	04/14/89	<0.5	<1	<2	<1			
	09/28/89	<0.5	<0.5	<0.5	<3	<50	.co	
	11/29/89	<0.5	<0.5	<0.5	<0.5	<50	<50	<50
	01/24/90	<0.5	<0.5	<0.5	<0.5	<100		<300
	04/26/90	<0.5	<0.5	<0.5	<0.5	<50	<50	110
	(07/26/90)	<0.5	<0.5	<0.5	<0.5	<50	<50	<50
	10/18/90	<0.5	<0.5	<0.5	<0.5	<50	360	<50
	01/08/91	<0.3	<0.3	<0.3	<0.3	<30	380	620 <sup>3</sup>
	04/23/91	5.9	3.1	<0.5	2.7	<50	1,400	3,200
	07/23/91	<0.5	0.8	<0.5	<0.5	<50 50	60	<500
	10/24/91	<0.5	<0.5	<0.5	<0.5	<50	<50 1,300	<500
	01/23/92	4.0	1.3	<0.5	1.9	<50	1,300	••
MW-8G	04/14/89	<0.5	<1	<2	<1			
	09/28/89	<0.5	<0.5	<0.5	<3	<50		
	11/29/89	<0.5	<0.5	<0.5	<0.5	<50	<50	<50
	01/24/90	<0.5	<0.5	<0.5	<0.5	<100		650
	04/26/90	<0.5	<0.5	<0.5	<0.5	<50	<50	120
	(07/26/90)	<0.5	<0.5	<0.5	<0.5	<50	<50	<50
	10/18/90	<0.5	<0.5	<0.5	<0.5	<50	460	<50
	01/08/91	<0.3	<0.3	<0.3	<0.3	<30	220	260 <sup>3</sup>
	04/23/91	0.9	0.9	<0.5	<0.5	<50	1,100	<500
	07/23/91	0.5	1.5	<0.5	3.0	<50	<50	<500
	10/24/91	0.6	<0.5	<0.5	<0.5	<50	and?	
	01/24/92	<0.5	<0.5	<0.5	<0.5	<50	9805	

Table 1. (continued)

	Date			Ethyl-		TPH as	TPH as	TPH
Well	Sampled_	Benzene	<u>Toluene</u>	<u>benzene</u>	<u>Xylenes</u>	Gasol ine	Diesel	Other <sup>2</sup>
MW-8H	01/24/90	14.8	14.8	10.8	38.8	460		<300
	04/26/90	67	19	43	64	830	<50	820
	(07/26/90)	45	1.3	12	8.2	190	<50	<50
	10/18/90	17	2.5	14	8.5	300	<50	<50
	01/08/91	12	2.2	6.4	4.0	320	180	893
	04/23/91	1.5	<0.5	<0.5	<0.5	<50	730	<500
	07/23/91	21	1.8	9.7	2.6	270	<50	<500
	10/24/91	7.6	1.0	3.5	2.4	120	70	<500
	01/23/92	7.2	1.2	4.7	3.2	110	60₹	••
		4000000	435000				The second of	
MW-8I	01/24/90	116	2.9	13	30.5	580		440
	04/26/90	2,400	100	230	350	4,400	<50	1,400
	(07/26/90)	<0.5	<0.5	<0.5	<0.5	<50	<50	<50
	10/18/90	92	4.1	37	21	530	<50	<50
	01/08/91	500	4.3	36	26	1,300	710	210 <sup>3</sup>
	04/23/91	1,600	17	100	86	1,500	1,100	900
	07/23/91	1,600	30	140	63	1,700	260	<500
	10/25/91	470	6.0	76	13	760	230	<500
	01/23/92	420	7.7	27	20	820	2104	
MW-8J	01/24/90	2.7	<0.5	1	2.6	<100		<300
	04/26/90	28	7.7	19	24	160	<50	320
	(07/26/90)	<0.5	<0.5	<0.5	<0.5	<50	<50	<50
	10/18/90	8.3	<0.5	2.6	1.5	<50	<50	<50
	01/08/91	0.41	<0.3	<0.3	0.52	71	<50	693
	04/23/91	16	2.2	9.3	4.6	300	550	<500
	07/23/91	4.6	<0.5	3.1	<0.5	<50	<50	<500
	10/24/91	0.8	<0.5	<0.5	<0.5	<50	<50	<500
	01/23/92	0.8	<0.5	<0.5	<0.5	<50	<b>&lt;</b> 50	
OB-3	11/06/89	420	8	6	64	4,000		•
	04/26/90	160	19	5	8.6	1,000	3,200	<50
	(07/26/90)	<0.5	<0.5	<0.5	0.9	68	1,200	<50
	10/18/90	260	69	35	490	3,200	2,100	<50
	01/08/91	988	***	6.60	150	3.00	220	***
	04/23/91		**	**		(44)	200	***
	07/23/91	**	**	**			3.6	**
	10/24/91		**	**:	**	**	**	••
	01/23/92	••	**	••	**	**	***	***

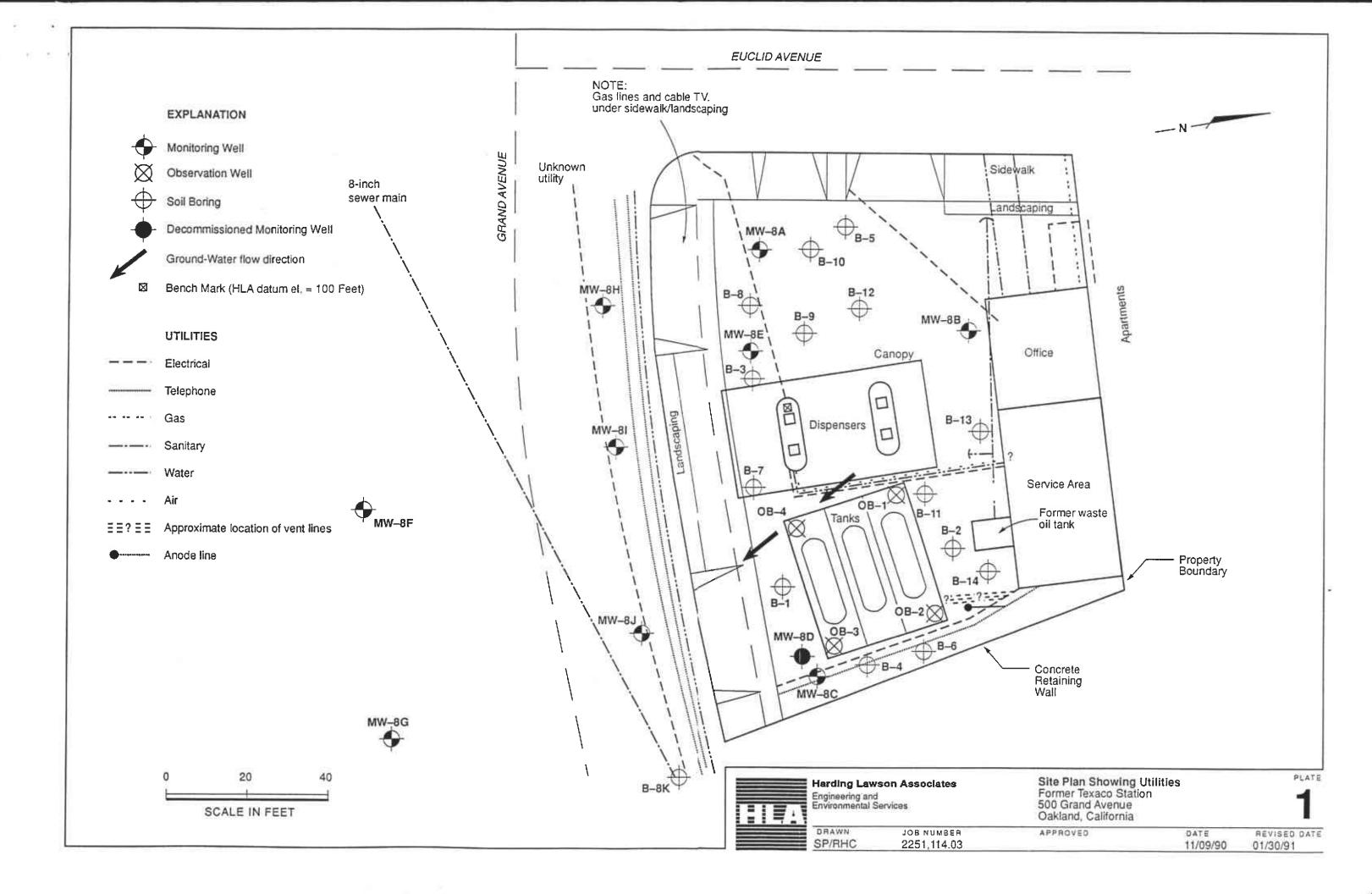
## **Harding Lawson Associates**

Table 1. (continued)

<u>Well</u>	Date <u>Sampled</u>	Benzene	<u>Toluene</u>	Ethyl- benzene	Xylenes	TPM as <u>Gasoline</u>	TPH as <u>Diesel</u>	TPH <u>Other<sup>2</sup></u>
OB-4	11/06/89	500	11	10	24	4,000		<del>-</del> -
	04/26/90	360	10	10	18	460	3,900	<50
	(07/26/90)	23	3.7	1.6	5.9	200	1,600	<50
	10/18/90	600	540	83	840	4,300	330	<50
	01/08/91	001	***	100	**			
	04/23/91		**	**		22	220	22
	07/23/91	••	**		••			
	10/24/91	II.	***	25		25.5	7/357/2	175
	01/23/92	22.	**	**	***	15.5	**	**
DWAL			1.0	680	100	1,750		

DWAL	Drinking water action levels, State of California Department of Health Services (April, 1989).
1 2 3 4 5	<0.5 indicates that concentrations are below the reporting limit of 0.5 $\mu$ g/l. "Heavy" petroleum hydrocarbons such as waste oil, mineral spirits, jet fuel, or fuel oil. TPH as motor oil analyses; analyst did not feel that motor oil was indicted on the chromatogram. Petroleum hydrocarbons quantified as diesel appear to be light hydrocarbons Petroleum hydrocarbons quantified as diesel appear to be heavier hydrocarbons than diesel.
(07/26/90)	Sample not analyzed for BTEX and TPH as gasoline within 14-day holding time Samples not collected/not analyzed for compound

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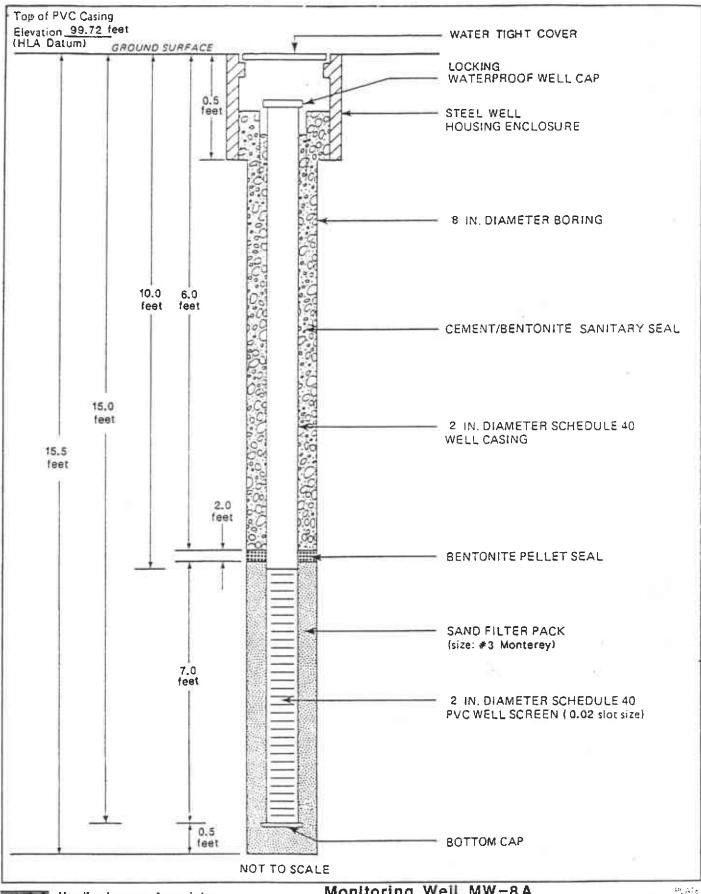
Laboratory Tests	Blows/foot	P.ID.* Reading (ppm)	Deptin (ft)	Equipment 8-inch Hollow Stem Auger  Elevation **100 feet Date 6/6/88  asphaltic pavement BLACK SILTY CLAY (CL) trace sand
		120	<u> </u>	stiff, moist, slight petroleum odor GREENISH GRAY SILTY CLAY with
	19	130 70	5-0	sand (CL) stiff, moist, slight petroleum odor
*	27	30	10-	BROWN SILTY CLAY (CL) very stiff, moist  BROWN CLAYEY SAND (SC)
	30	5		dense, wet
		5	15-	WHITE SILTY CLAY (CL) hard, moist  BROWN SILTY CLAY with sand (CL)
	55	5	20-	hard, moist
	30/6"	5	25	BROWN CLAYEY SAND (SC) very dense, saturated
			30-	the lithology between 15 and 32 feet is inferred from a boring 5-feet to the west of well MW-8A
*PID = photo ioni	ization de	tector.		bottom of boring 32 feet
HNU PI 101 ppm = parts per			35-	stabilized water level at 3 feet on 6/14/88
**Reference Elevat	ion			
			40]	
Harding Lawson A	ssociates		Log of Bo	oring MW-8A



**Harding Lawson Associates** Engineers, Geologists & Geophysicists

Log of Boring MW-8A Texaco Station - 62488000235 500 Grand Avenue Oakland, California

DRAWN RS 2251,054.04 7/88 40 FFYSES





**Harding Lawson Associates** 

Engineers, Geologists & Geophysicists

Monitoring Well MW-8A Completion Detail

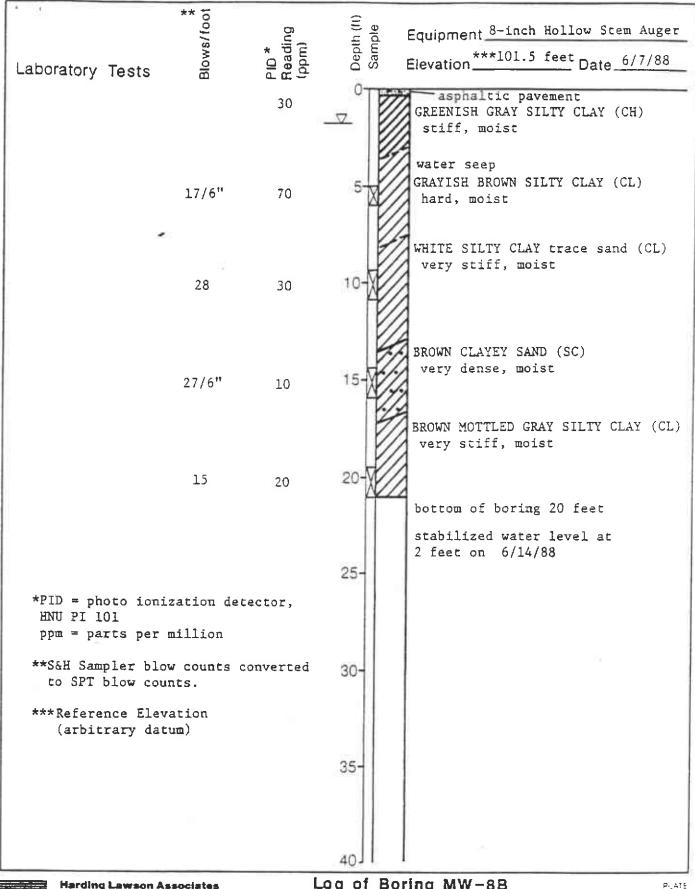
Texaco Station - 62488000235 500 Grand Avenue Oakland, California

REVISED: DATE

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Harding Lawson Associates Engineers, Geologists & Geophysicists

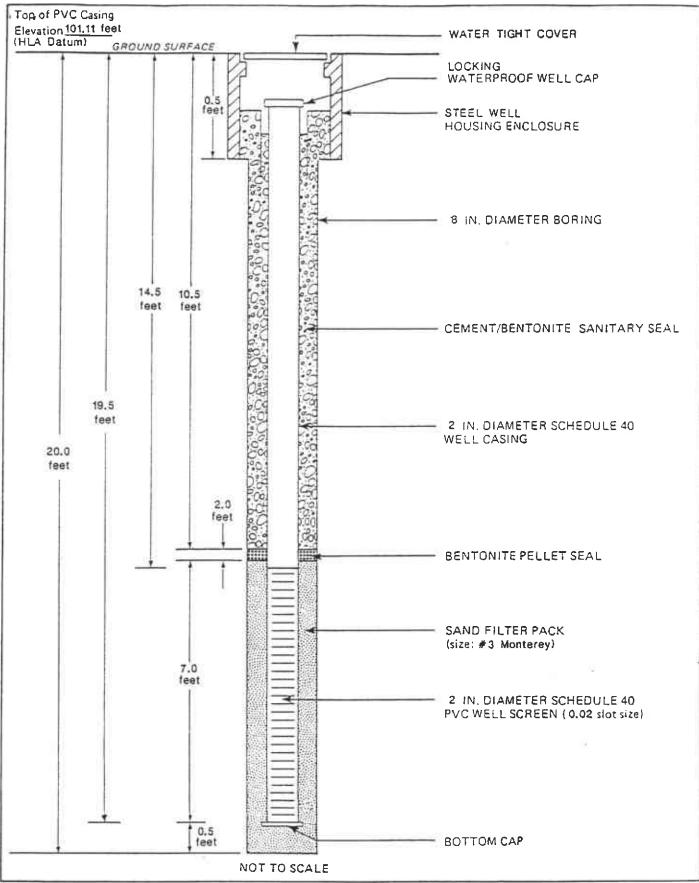
Log of Boring MW-8B

Texaco Station - 62488000235 500 Grand Avenue

Oakland, California 2251,054.04 APPROVED

7/88 40

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Harding Lawson Associates Engineers, Geologists

& Geophysicists

Monitoring Well MW-8B Completion Detail

Texaco Station - 62488000235 500 Grand Avenue Oakland, California

DATE

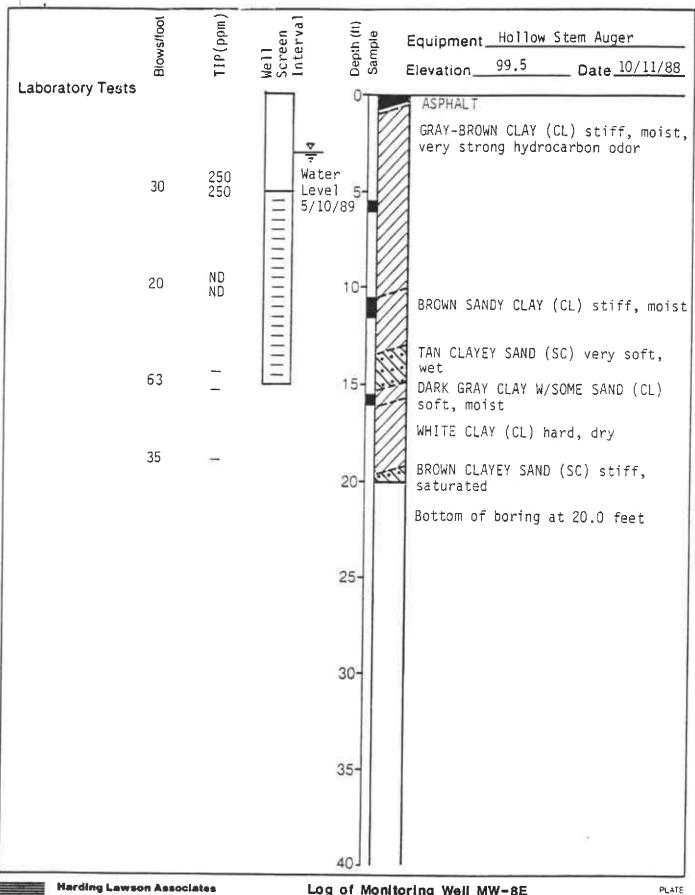
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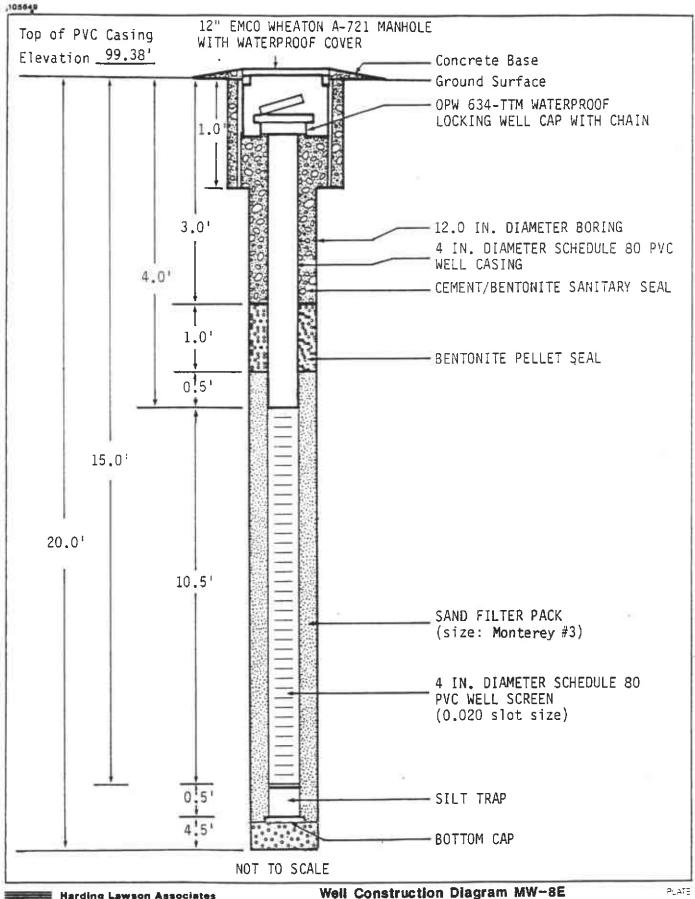
**Harding Lawson Associates** Engineers, Geologists & Geophysicists

Log of Monitoring Well MW-8E Former Texaco Service Station 500 Grand Avenue

Oakland, California PBBMUMBER 11/88 2251,081.03

REVISEO DATE

YC



HLA

Harding Lawson Associates Engineers and Geoscientists Well Construction Diagram MW-8 Former Texaco Service Station 500 Grand Avenue Oakland, California

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DPANN JOB NUMBER APPROVED DATE REVISED DATE

YC 2251,081.03 ≤JD 12/88