

March 28, 2002  
1424-9B

Ms. Donna Drogos  
**ALAMEDA COUNTY HEALTH CARE SERVICES  
AGENCY  
DEPARTMENT OF ENVIRONMENTAL HEALTH**  
1131 Harbor Bay Parkway, 2<sup>nd</sup> Floor  
Alameda, California 94502

**RE: 1300 AND 1350 POWELL STREET  
EMERYVILLE, CALIFORNIA**

Dear Ms. Drogos:

We understand Susan Hugo has transferred oversight for this site to you. This letter has been prepared to update you on our recent meeting to discuss soil and ground water conditions and recommended remedial guidelines for 1300 and 1350 Powell Street in Emeryville, California. The meeting was held on March 21, 2002 at the City of Emeryville offices at 1333 Park Avenue in Emeryville. In attendance at the meeting were Ravi Arulanantham representing the California Regional Water Quality Control Board (CRWQCB), Steve Kalmbach for Pulte Home Corporation, Richard Becker for the owners of 1300 Powell Street, David Diamond for the owners of 1350 Powell Street, Ignacio Dayrit for the City of Emeryville, and Mark Arniola for Lowney Associates (consultant for Pulte Home Corporation). Susan Hugo of the Alameda County Department of Environmental Health (ACDEH) was scheduled to be at the meeting but was unable to attend do to illness.

Lowney Associates recently performed an evaluation of the soil and ground water quality at the site. The results of Lowney Associates evaluation as well as data from previous investigations at the site were discussed. Based on the available data, it was concluded that the contaminants of concern for both soil and groundwater at the site are total petroleum hydrocarbons in the gasoline, diesel, and motor oil ranges. The ground water impact includes floating product in the ground water on the southern portion of the 1350 Powell Street property, however, benzene, toluene, ethylbenzene, and xylenes (BTEX) were detected at only one location.

Based on the existing conditions at the site, Mr. Arulanantham set the following cleanup goals for redevelopment of the site with high density residential housing (no single family residences with yard areas).

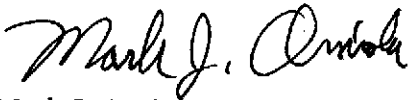
- 1) Remediation of the upper 10 feet of soil to less than 1,000 parts per million (ppm) total petroleum hydrocarbons (combined) for any location at the site.

- 2) Removal of floating product from the ground water, dewatering, and reduction of dissolved hydrocarbons in the ground water to less than 10 to 20 ppm total petroleum hydrocarbons (combined).
- 3) Following completion of remedial activities, sampling of the ground water to confirm the dissolved hydrocarbon concentration.

4) Please confirm receipt of this summary and provide any comments. We look forward to your response. If you have any questions, please call and we will be glad to discuss them with you.

Very truly yours,

**LOWNEY ASSOCIATES**

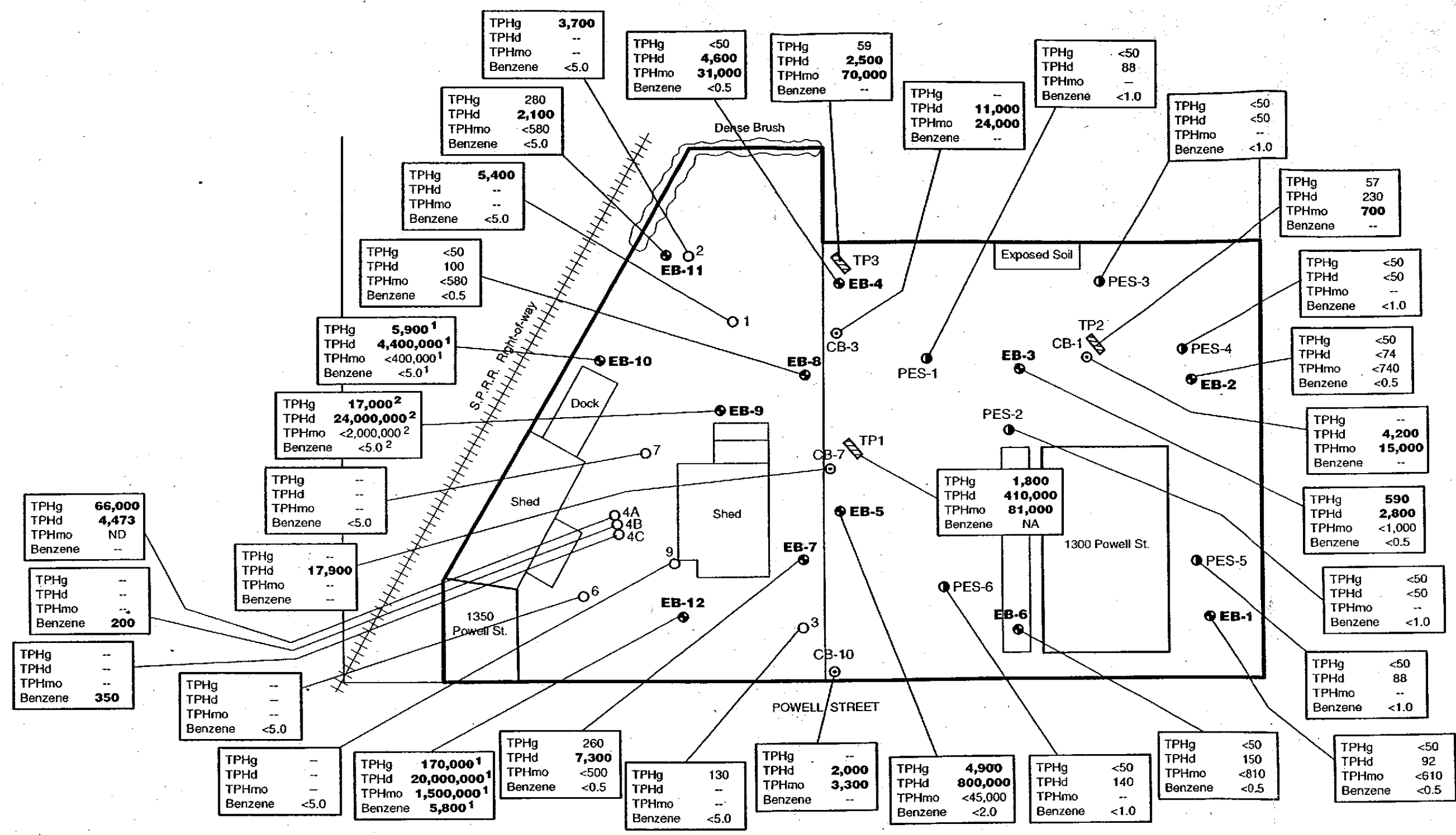


Mark J. Arniola, R.G., R.E.A.  
Project Geologist

- Copies: Addressee (1)  
California Regional Water Quality Control Board (1)  
Attn: Mr. Ravi Arulanantham  
Pulte Hume Corporation (1)  
Attn: Mr. Steve Kalmbach

OK, 1424-9B ACDEH Letter 2.doc

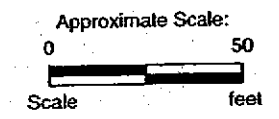
- NO utilities penetrating the Vapor barrier
- any Landscaped areas, planting boxes etc. - new soil (for a depth of 2') shall be brought in.
- deed restriction for the site



**LEGEND**

- ⊙ - Approximate location of exploratory boring (Lowney Associates, 2002)
- - Approximate location of exploratory boring (R.T. Hicks, 2001)
- ⊞ - Approximate location of exploratory test pit (R.T. Hicks, 2001)
- ⊙ - Approximate location of exploratory boring (PES, 2000)
- ⊙ - Approximate location of exploratory boring (Cambria, 1997)
- - Not Analyzed
- ND - Not detected at or above laboratory reporting limit

Concentrations in parts per billion (ppb)  
 Concentrations exceeding CRWQCB RBSLs are shown in bold  
<sup>1</sup> Free product observed on ground water  
<sup>2</sup> Fuel sheen observed on ground water



**TPHg, TPHd, TPHmo, AND BENZENE  
IN GROUND WATER**

1300 AND 1350 POWELL STREET  
Emeryville, California

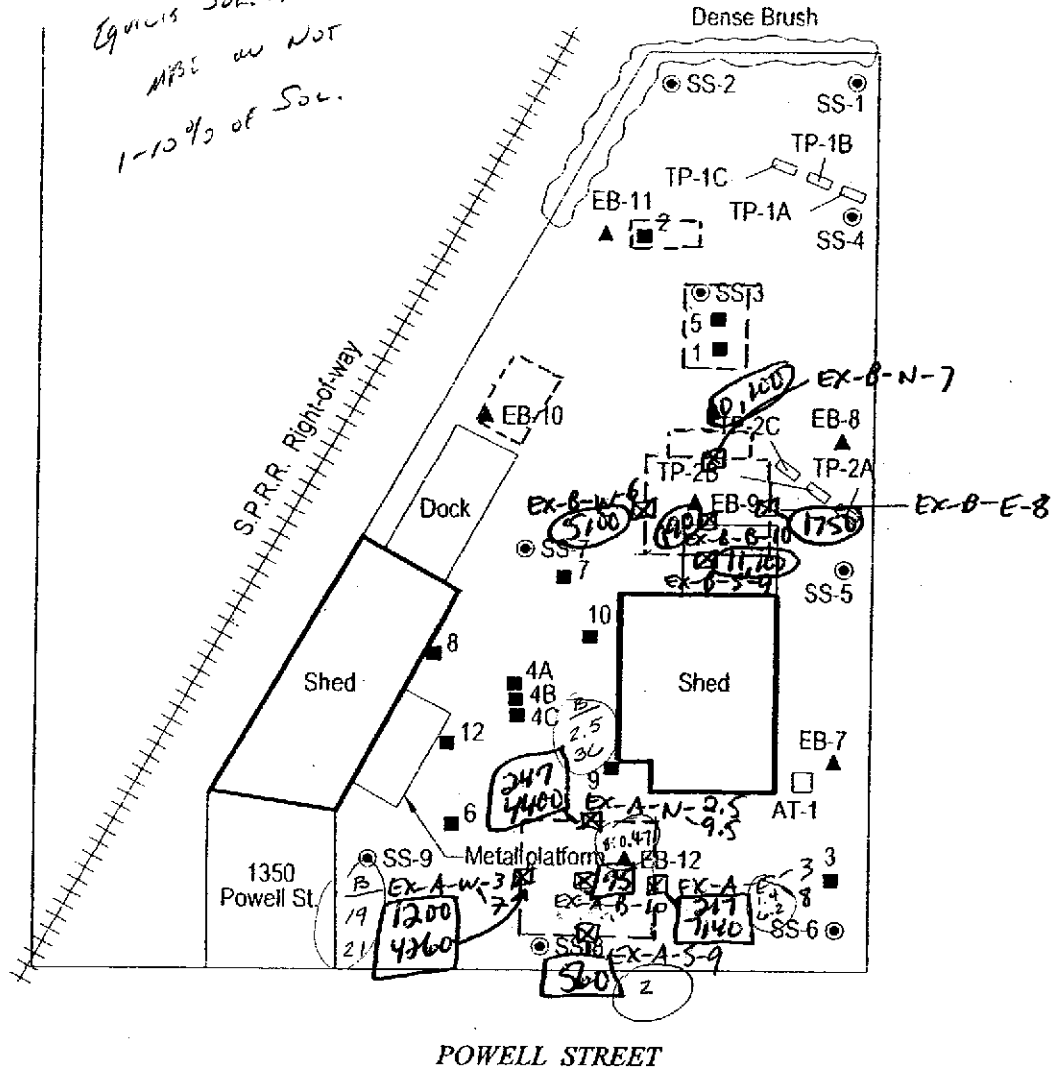
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Environmental/Geotechnical/Engineering Services

**FIGURE 7**  
1424-9B

Base by Lush Geosciences, dated 4/95.

*Equival Sol. of PHC  
MSE or NOT  
1-10% of Sol.*

HOLLIS STREET

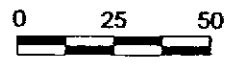


POWELL STREET

*DTW: 1-7' BGS*

**EXPLANATION**

- EB-11 ▲ - Approximate location of exploratory ground water boring (by Lowney)
- SS-9 ● - Approximate location of exploratory soil boring (by Lowney)
- 12 ■ - Approximate location of exploratory boring (by R.T. Hicks)
- TP-1A □ - Approximate location of exploratory test pit (by Lowney)



Approx. Scale (ft)

FIGURE

**2**

Base by Lowney Associates dated 5/02.

H:\BALAAM\FIGURE\SITEPLAN.DWG

**Balaam Property**

1350 Powell Street  
Emeryville, California



C A M B R I A

*were other results  
in soil composite samples*  
**Site Plan**

# CAMBRIA

**Table 1. Soil Sidewall Sampling Analytical Data - Balaam Airgas,  
1350 Powell Street, Emeryville, California**

Sample ID (Depth - feet bgs)	Date Sampled	TPHg	TPHd	TPHmo	TPHbo	Total TPH (mg/kg)	Benzene	Toluene	Ethylbenzene	Xylenes	MTBE
		(C6-C9) (mg/kg)	(C10-C23) (mg/kg)	(C-18+) (mg/kg)	(C-10+) (mg/kg)		(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)	(mg/kg)
EPA Method:		8015m	8015	8015	8015		8021	8021	8021	8021	8021
EX-B-W-6	7/24/02	<200	4,600	1,900	5,000	5,100	<1	<1	<1	<1	<10
EX-B-N-7	7/24/02	<200	9,600	2,800	10,000	10,100	<1	<1	<1	<1	<10
EX-B-E-8	7/24/02	<100	1,900	500	1,700	1,750	<0.5	<0.5	<0.5	<0.5	<5.0
EX-B-S-9	7/24/02	<200	12,000	2,300	11,000	11,100	<1	<1	<1	<1	<10
EX-B-B-10	7/24/02	<20	200	35	180	190	<0.1	<0.1	<0.1	<0.1	<10
EX-A-W-3	7/24/02	900	330	25	300	1,200	19	89	29	130	<10
EX-A-W-7	7/24/02	460	3,300	520	3,800	4,260	21	3.6	12	14	<10
EX-A-N-2.5	7/24/02	67	200	13	180	247	2.5	0.26	0.39	0.37	<0.5
EX-A-N-9.5	7/24/02	2,100	2,700	<500	2,300	4,400	36	24	85	350	<10
EX-A-B-10	7/24/02	7.4	99	18	88	95	0.47	0.027	0.038	0.13	<0.5
EX-A-E-3	7/24/02	67	170	28	150	217	1.4	0.34	0.043	0.12	<0.5
EX-A-E-8	7/24/02	240	7,100	900	6,900	7,140	6.20	1.5	1.4	2.7	<10
EX-A-S-9	7/24/02	350	230	18	210	560	2.0	0.30	3.4	2.1	<2.0
Cleanup Goal						1,000					

## Abbreviations and Notes:

TPHg = Total petroleum hydrocarbons as gasoline

TPHd = Total petroleum hydrocarbons as diesel

TPHmo = Total petroleum hydrocarbons as motor oil

TPHbo = Total petroleum hydrocarbons as bunker oil

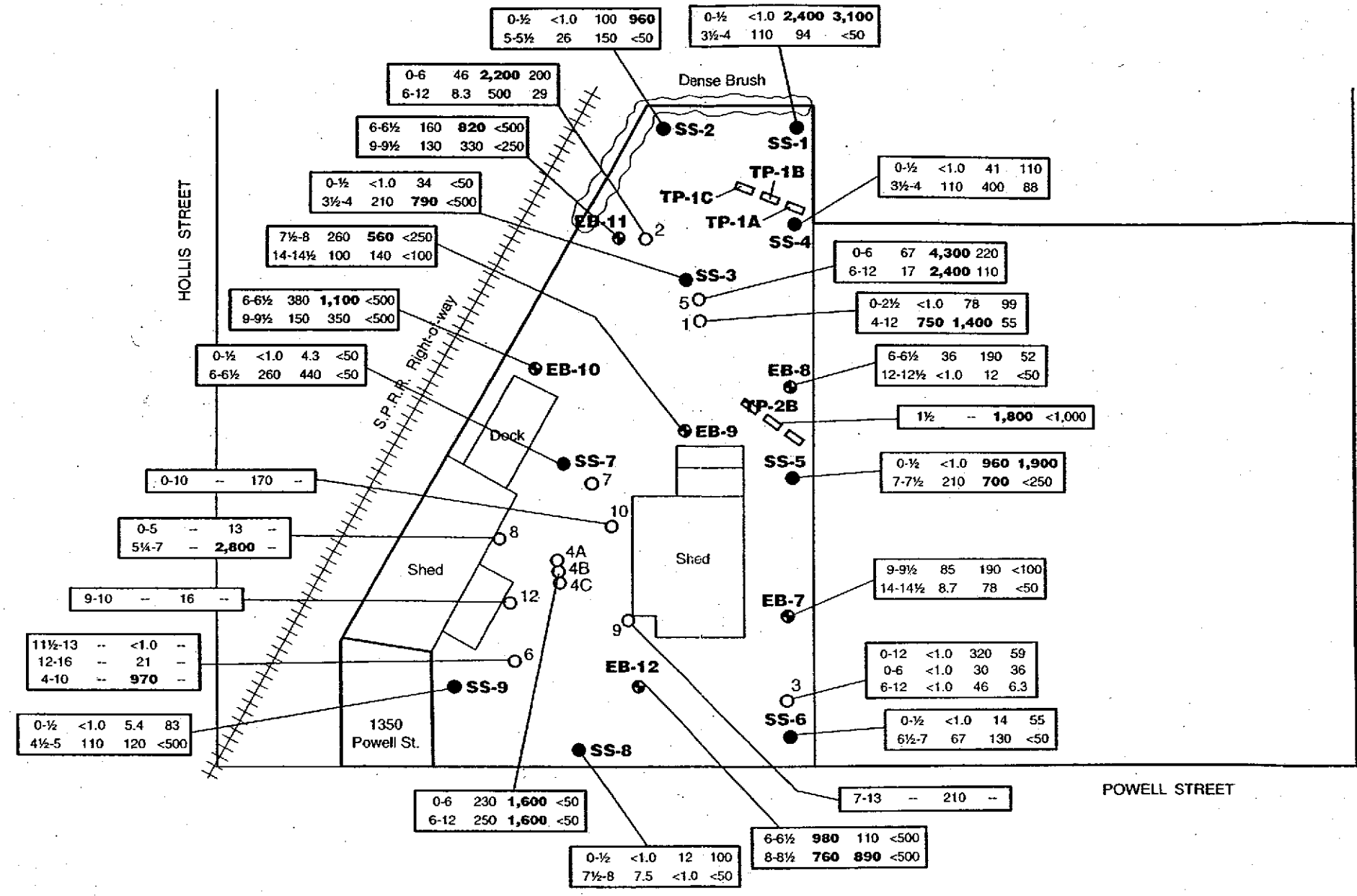
Total TPH = TPHg + TPHbo. Results below detection limits added as 1/2 the detection limit.

MTBE = Methyl tert-butyl ether

mg/kg = Milligrams per kilogram

<n = Below detection limit of n mg/kg

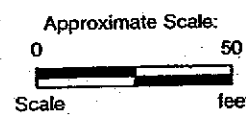
-- = Not analyzed



**LEGEND**

- - Approximate location of exploratory boring (Lowney Associates, 2002)
- - Approximate location of exploratory soil boring (Lowney Associates, 2002)
- - Approximate location of exploratory test pit (Lowney Associates, 2002)
- - Approximate location of exploratory boring (R.T. Hicks, 2001)
- - Not Analyzed
- < - Indicates that the compound was not detected at or above the stated laboratory limit
- Concentrations in parts per million (ppm)
- Concentrations exceeding CRWQCB RBSLs are shown in bold.

Depth(ft)	TPHg	TPHd	TPHmo
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**TPHg, TPHd, AND TPHmo IN SOIL**  
 1350 POWELL STREET  
 Emeryville, California

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 Environmental/Geotechnical/Engineering Services

**FIGURE 5**  
 1424-9B

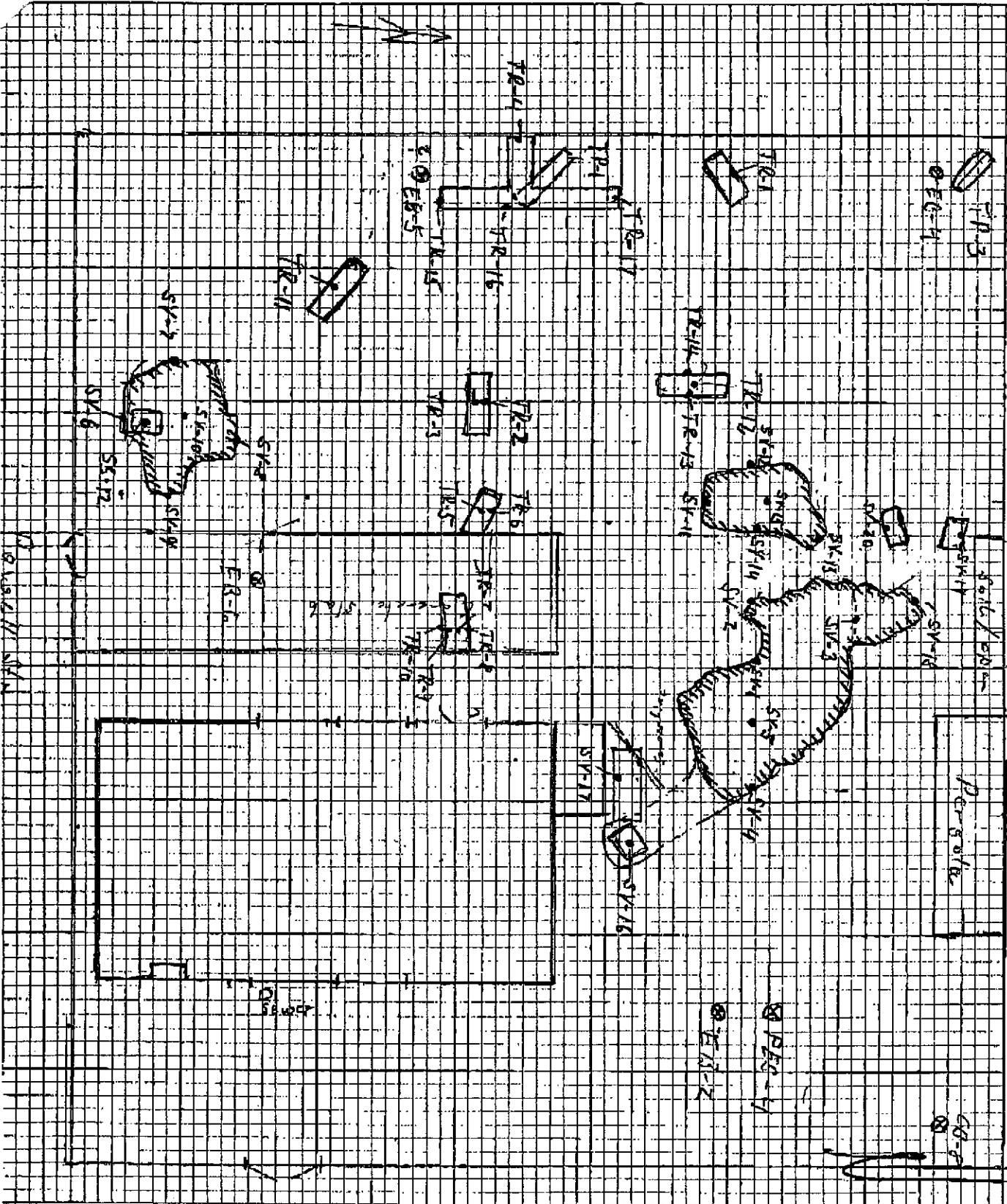
Base by Lush Geosciences, dated 4/95.

Sheet: \_\_\_\_\_ Of \_\_\_\_\_

Date: \_\_\_\_\_

Rev.: \_\_\_\_\_

By: \_\_\_\_\_



**Table 1. Analytical Results of Selected Soil Samples -  
Petroleum Hydrocarbons**  
(concentrations in parts per million)

Boring Number	Depth (feet)	TPHg	TPHd	TPHmo	Benzene	Toluene	Ethylbenzene	Xylenes	O&G
SV-1	2	<1.0	42	260	<0.005	<0.005	<0.005	<0.005	NA
SV-2	1½	<1.0	<1.0	<50	<0.005	<0.005	<0.005	<0.005	<50
SV-3	2	<1.0	72	230	<0.005	<0.005	<0.005	<0.005	640
SV-4	2	<1.0	1.3	<50	<0.005	<0.005	<0.005	<0.005	NA
SV-5	2½	<1.0	100	740	<0.005	<0.005	<0.005	<0.005	NA
SV-6	2	NA	1.1	<50	NA	NA	NA	NA	<50
SV-7	1½	NA	61	270	NA	NA	NA	NA	330
SV-8	2	NA	9.7	6.7	NA	NA	NA	NA	370
SV-9	1½	NA	<1.0	<50	NA	NA	NA	NA	<50
SV-10	2½	NA	25	220	NA	NA	NA	NA	350
SV-11	1½	NA	81	360	NA	NA	NA	NA	NA
SV-12	2	NA	42	380	NA	NA	NA	NA	NA
SV-13	2	NA	41	250	NA	NA	NA	NA	NA
SV-14	2	NA	<1.0	<50	NA	NA	NA	NA	NA
SV-15	2½	NA	13	140	NA	NA	NA	NA	NA
SV-16	3	<1.0	17	93	<0.005	0.005	<0.005	<0.005	NA
SV-18	1	1.8	8.8	<50	<0.005	0.005	<0.005	<0.005	120
TR-1	6	78	310	<500	<0.62	<0.62	<0.62	<0.62	NA
TR-2	6	NA	1,900	<1,000	NA	NA	NA	NA	NA
TR-4	6½	NA	700	<500	NA	NA	NA	NA	NA
TR-6	7½	NA	2,100	14,000	NA	NA	NA	NA	NA
TR-8	7½	NA	2,900	7,800	NA	NA	NA	NA	NA
TR-13	7	NA	140	750	NA	NA	NA	NA	NA
TR-15	7½	NA	18	<50	NA	NA	NA	NA	NA
TR-16	7½	NA	2,100	<1,000	NA	NA	NA	NA	NA
TR-17	7½	NA	820	<500	NA	NA	NA	NA	NA
SP(1-4)	--	<1.0	210	590	<0.005	<0.005	<0.005	<0.005	NA
SP(5-8)	--	93	670	<500	<0.62	<0.62	<0.62	<0.62	NA
Residential PRG*		NE	NE	NE	0.65	520	230	210	--
Residential RBSL**		100	100	500	0.045	2.6	2.5	1.0	--

< Indicates that the compound was not detected at or above the stated laboratory reporting limit

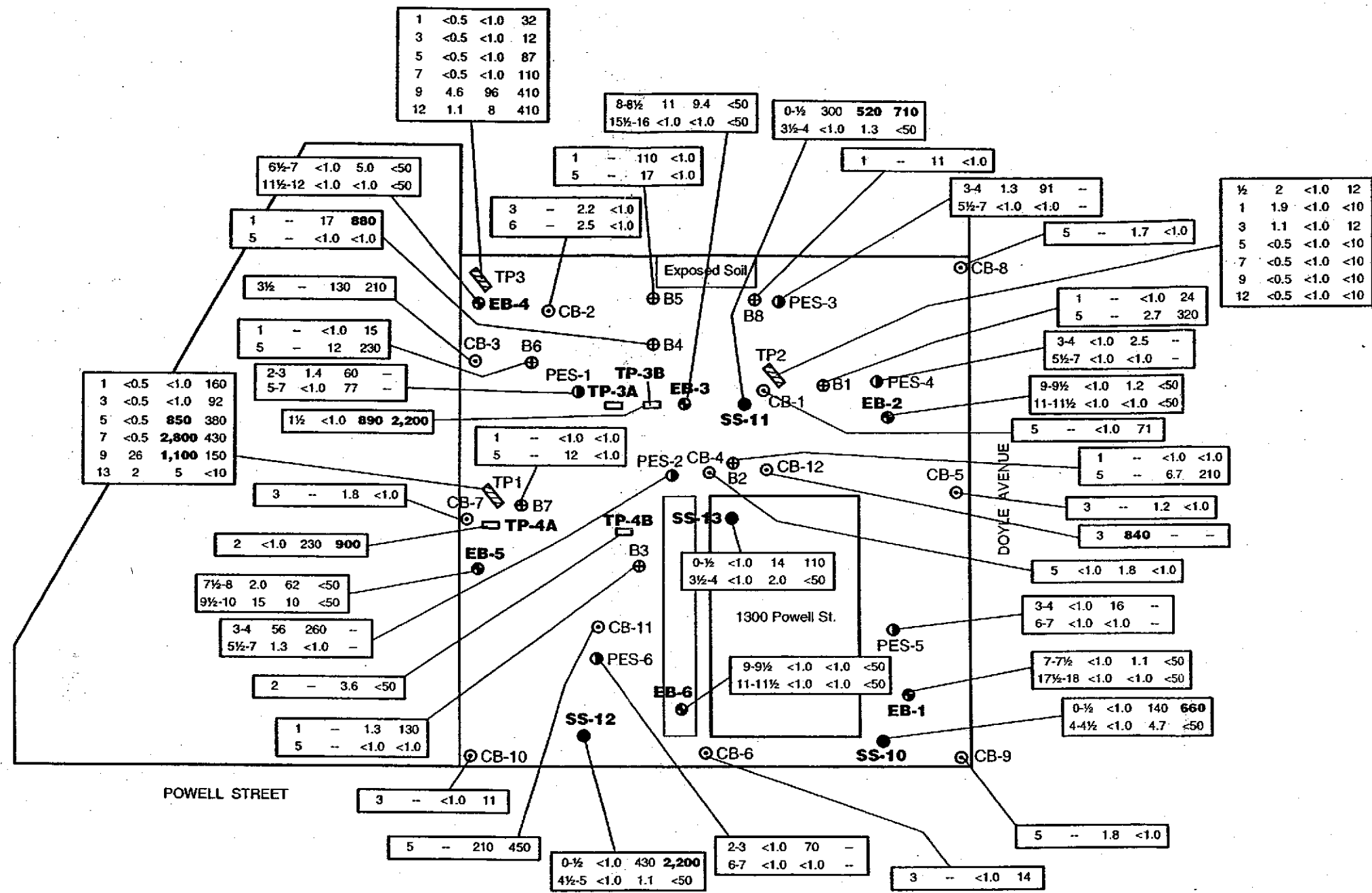
\* Preliminary Remediation Goal (PRG)-EPA Region 9, 2000

\*\* Risk Based Screening Level (RBSL), CRWQCB, August 2000

NA Not Analyzed

NE Not established



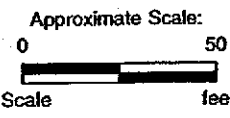


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- ⊙ - Approximate location of exploratory boring (Cambria, 1997)
- ⊕ - Approximate location of exploratory boring (Lush Geosciences, 1995)
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Concentrations in parts per million (ppm)  
 Concentrations exceeding CRWQCB RBSLs are shown in bold

Depth(ft)	TPHg	TPHd	TPHmo
--	--	--	--



**TPHg, TPHd, AND TPHmo IN SOIL**

1300 POWELL STREET  
 Emeryville, California

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**FIGURE 3**  
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Base by Lush Geosciences, dated 4/95.