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

RO#885

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

REMEDIAL ACTION COMPLETION CERTIFICATION

StID 587 - 1726 Park Street, Alameda, CA 94501

October 23, 1996

Ms. Melinda Henry-Dare
c/o Mendelson & Brown
P.O. Box 2426
Alameda, CA 94501

Mr. Ron Zielinski
Texaco
108 Cutting Blvd
Richmond, CA 94804

Dear Ms. Henry-Dare and Mr. Zielinski:

This letter confirms the completion of site investigation and remedial action for the former underground storage tanks removed on and before December 5, 1991. Enclosed is the Case Closure Summary for the referenced site for your records.

Based upon the available information, including the current land use, and with the provision that the information provided to this agency was accurate and representative of site conditions, no further action related to the underground tank release is required.

This notice is issued pursuant to a regulation contained in Title 23, Division 3, Chapter 16, Section 2721(e) of the California Code of Regulations. If changes in land use, structural configuration, or site activities are proposed such that more conservative exposure scenarios should be evaluated, the owner must promptly notify this agency.

Please contact Ms. Eva Chu at (510) 567-6700 if you have any questions regarding this matter.

Very truly yours,

Mee Ling Tung, Director

cc: Chief, Division of Environmental Protection
Kevin Graves, RWQCB
Lori Casias, SWRCB (with attachment)
files (jhenry.6)

01-0008

CASE CLOSURE SUMMARY
Leaking Underground Fuel Storage Tank Program

I. AGENCY INFORMATION Date: July 12, 1996

Agency name: **Alameda County-HazMat** Address: **1131 Harbor Bay Pkwy**
City/State/Zip: **Alameda, CA 94502** Phone: **(510) 567-6700**
Responsible staff person: **Eva Chu** Title: **Hazardous Materials Spec.**

II. CASE INFORMATION

Site facility name: **John Henry Estate**
Site facility address: **1726 Park Street, Alameda, CA 94501**
RB LUSTIS Case No: **N/A** Local Case No./LOP Case No.: **587**
URF filing date: **3/26/92** SWEEPS No: **N/A**

Responsible Parties:	Addresses:	Phone Numbers:
1. Melinda Henry-Dare c/o Mendelson & Brown	P.O. Box 2426 Alameda, CA 94501	510/521-1211
2. Ron Zielinski Texaco	108 Cutting Blvd Richmond, CA 94804	510/236-1770

Tank No:	Size in gal.:	Contents:	Closed in-place or removed?:	Date:
1	250	Waste Oil	Removed	12/5/91

III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown**
Site characterization complete? **YES**
Date approved by oversight agency: **7/3/96**
Monitoring Wells installed? **Yes** Number: **9**
Proper screened interval? **Yes, from 4.5' to 18' bgs (below ground surface)**
Highest GW depth below ground surface: **5.9'** Lowest depth: **7.14' in MW-8**
Flow direction: **NE**
Most sensitive current use: **Commercial**
Are drinking water wells affected? **No** Aquifer name: **Merritt Sand**
Is surface water affected? **No** Nearest affected SW name: **NA**
Off-site beneficial use impacts (addresses/locations): **None**

Report(s) on file? **YES** Where is report(s) filed? **Alameda County**
1131 Harbor Bay Pkwy
Alameda, CA 94502

Treatment and Disposal of Affected Material:

Material	Amount (include units)	Action (Treatment or Disposal w/destination)	Date
Tank & Piping	1 UST	Erickson, in Richmond	12/5/91
Rinsate	180 gallon	Waste Oil Recovery System	12/5/91

Maximum Documented Contaminant Concentrations - - Before and After Cleanup

Contaminant	Soil (ppm)		Water (ppb)	
	Before[1]	After[2]	Before	After[7]
TPH (Gas)	3,200	4,500	14,000	270
TPH (Diesel)	2,000[3]	NA[6]	650[4]	150[4]
Benzene	8.1	<10	120	6.6
Toluene	22	4.1	95	ND
Ethylbenzene	320	35	4,000	9.3
Xylenes	90	60	2,900	95
Oil & Grease	1,800[3]	2,400[5]	ND	ND
Metals Cd Cr Pb Ni Zn	<10x STLC			

NOTE:
1. from borings B-28 at 8' bgs or B-8B at 6' bgs
2. soil sample from final UST excavation
3. from hand-augered boring HB-3 or B-14, near former waste oil tank and hoist
4. from well MW-5
5. from hoist area, sample HL4
6. the waste oil pit was overexcavated with the hoists, however, analysis for diesel was not performed
7. groundwater from well MW-8

IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan? **Undetermined**
Does completed corrective action protect potential beneficial uses per the Regional Board Basin Plan? **Undetermined**
Does corrective action protect public health for current land use? **YES**
Site management requirements: **A site safety plan is required if there is to be excavation beneath the sidewalk of Park Street or the onsite service building.**
Should corrective action be reviewed if land use changes? **YES**
Monitoring wells Decommissioned: **Yes**
Number Decommissioned: **6** Number Retained: **3**
List enforcement actions taken: **None**
List enforcement actions rescinded: **NA**

V. LOCAL AGENCY REPRESENTATIVE DATA

Name: **Eva Chu** Title: **Haz Mat Specialist**

Signature: Date: 8/1/96

Reviewed by

Name: **Juliet Shin** Title: **Sr. Haz Mat Specialist**

Signature: Date: 7/15/96

Name: **Thomas Peacock** Title: **Supervisor**

Signature: Date: 7-31-96

VI. RWQCB NOTIFICATION

Date Submitted to RB: 8/2/96 RB Response: Approved

RWQCB Staff Name: **Kevin Graves** Title: **AWRCE**

Signature: Date: 8/9/96

VII. ADDITIONAL COMMENTS, DATA, ETC.

The site operated a former service station from the 1920s to early 1970s. Records were not available, but it is believed that fuel USTs were removed in the early 1970s. The USTs were believed to be located in the eastern portion of the site, and their location and number were not known.

From the early 1970s to 1993 the site operated an auto repair shop. Three hydraulic lifts, a product dispenser island, and a waste oil UST were still found on the site. In August 1991 seven hand-augered borings (HB1 though HB7) were drilled on site to identify any hydrocarbons present in the subsurface soils and to locate any remaining USTs. Soil samples collected identified low levels of TPHg and BTEX (in boring B-6) in the vicinity of the former UST complex, and elevated levels of TPHd and TOG (boring B-2 and B-3) in the vicinity of the waste oil UST. No fuel USTs were identified. (See Fig 1, 2, and Table 1)

The 250 gallon waste oil UST was removed on Dec 5, 1991. Soil samples collected from the bottom of the tank pit did not contain detectable levels of TPHg, TPHd, BTEX, TOG, HVOCs, or SVOCs. Metals (Cd,Cr,Pb, and Zn) were not above regulatory action levels. (See Table 2)

To further delineate the extent of soil contamination and/or groundwater contamination at the site, 12 soil borings (B-8A, B-8B, B-9 through B-18) were drilled in May 1992. Two additional borings were advanced to 20' bgs and converted into groundwater monitoring wells (MW-1, MW-2). The other soil borings were mostly drilled to the capillary fringe (7' to 8' bgs).

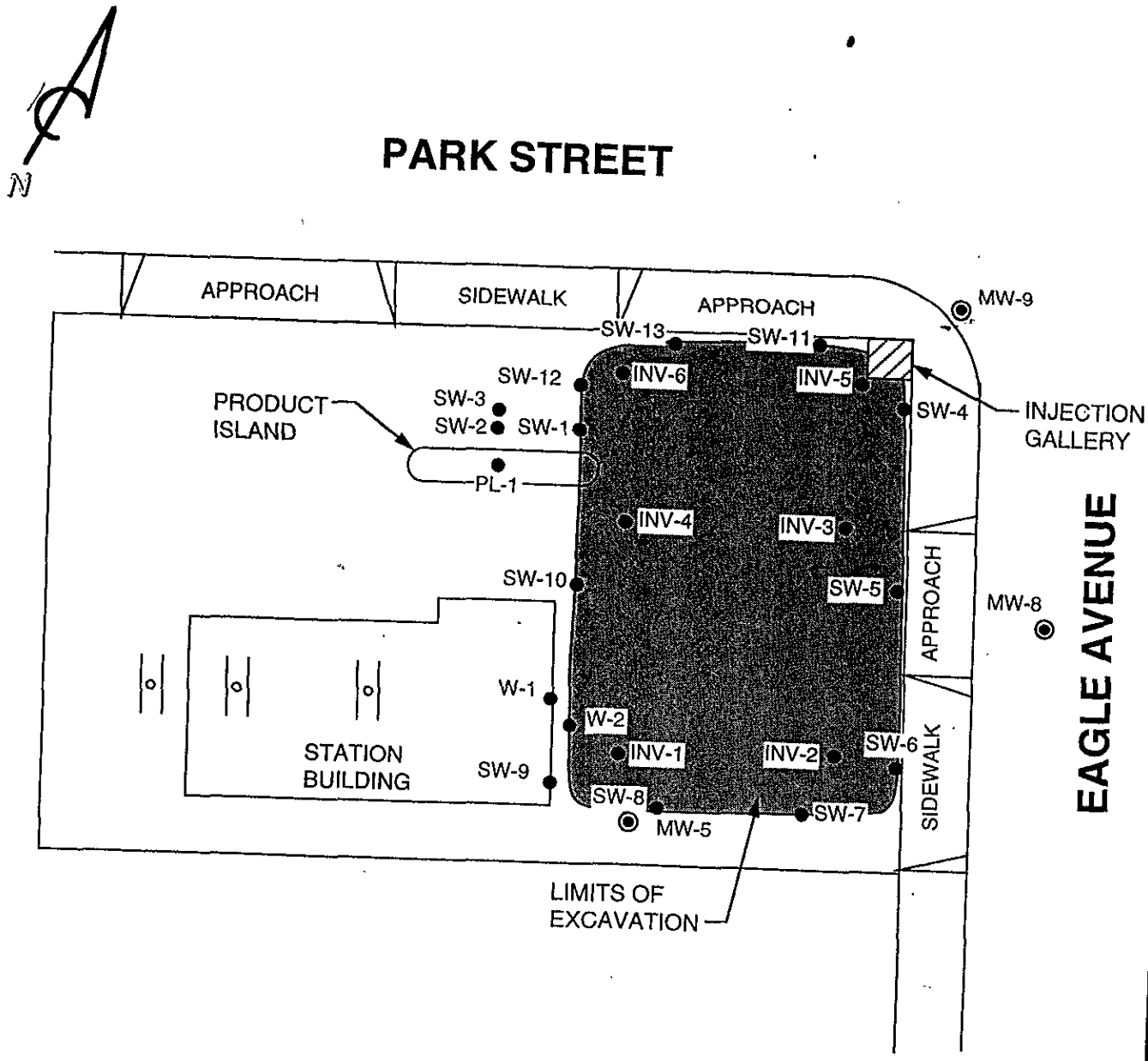
"Grab" groundwater samples were collected from two of the borings (B-8B, B-15). Elevated TPHg and BTEX were identified in soil collected from 6 to 8' bgs from borings around the former UST complex, and elevated TOG around the hoists within the service building and around the former waste oil UST excavation. (See Fig 3, Table 3)

In Feb 1994 site characterization resumed with the drilling of 12 exploratory borings (B-19 through B-30) and six groundwater monitoring wells (MW-3 through MW-8). (See Fig 4). Remedial action proposed for the site included the excavation and disposal of hydrocarbon-impacted soil, the abandonment of six monitoring wells (MW-1 through MW-4, MW-6 and MW-7), the installation of one replacement, downgradient monitoring well (MW-9), and the backfilling of the excavation with clean, imported soil.

Remedial activities as proposed began in September 1995. A dewatering system was installed prior to the start of excavation. A total of ~750 cy of soil was removed from the former UST complex. The final pit excavation dimensions were 37' wide by 48' long by 11' deep. Confirmatory soil samples were taken from the pit bottom and sidewalls (INV-1 through INV-6, W-1, W-2, and SW-1 through SW-13). Elevated residual TPHg and benzene remained below the east wall of the station building (W-1, SW-9) and under the sidewalk of Park Street (SW-11). The fuel product lines and the three hydraulic lifts were also removed. Soil analytical results (samples PL-1 and HL-1 through HL-6) were not remarkable except for sampled HL-4 which contained up to 2,400 ppm TOG. Excavation of this area was completed to the extent possible without undermining the west wall of the building. Wells MW-1 through MW-4, 6, and 7 were destroyed. (See Fig 5, 6, and Table 4, 5)

All wells have been sampled for at least four quarters (with the exception of well MW-9 which was installed in November 1995). Additionally, in February 1995 six "hydro-punches" were advanced offsite, downgradient, and along the sewer lines along Eagle Avenue. It appears the plume does not extend beyond the sewer line along Eagle Ave. Plume concentrations have shown a decreasing trend. The most recent sampling event shows benzene concentrations in the downgradient wells at up to 6.6 ppb. (See Fig 7, Table 6)

A small quantity of residual contaminated soil remains beneath the service building and below Park Street. It's removal is not economically feasible, as it would require the demolition of both the building's foundation and the sidewalk of Park Street, a major thoroughfare through the city of Alameda. Residual benzene in subsurface soil (at 8' bgs and below an asphalt top) does not pose an outdoor inhalation risk greater than 10^{-4} to onsite employees when site data was compared to the RBCA Lookup Table's allowable concentrations. Residual soil and groundwater contamination should naturally bioattenuate. Therefore, continued sampling is not warranted and no further action is required.



LEGEND

MW-4 ◉ GROUNDWATER MONITORING WELL LOCATION AND DESIGNATION

HL-3 ● SOIL SAMPLE LOCATION AND DESIGNATION

SCALE

0 20 40 FEET

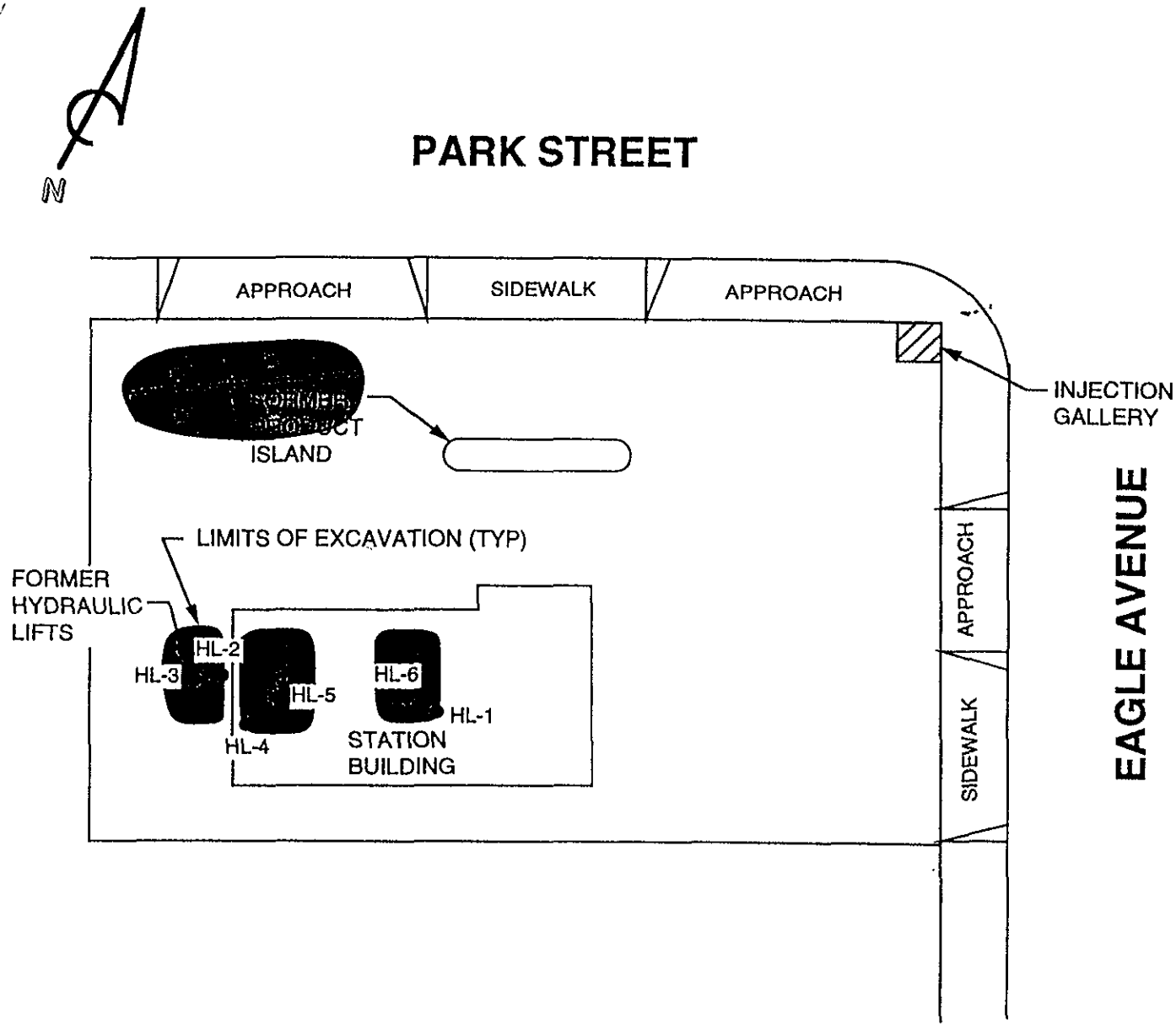
PACIFIC ENVIRONMENTAL GROUP, INC.

ESTATE OF JOHN B. HENRY
1726 Park Street at Eagle Avenue
Alameda, California

MAP OF EXCAVATION

FIGURE: 2 5

PROJECT: 286-001.4A



LEGEND

HL-3 ● SOIL SAMPLE LOCATION AND DESIGNATION

✖ COMPOSITED SOIL SAMPLES LOCATION, HLSP-1D AND HLSP-2D

SCALE

0 20 40 FEET

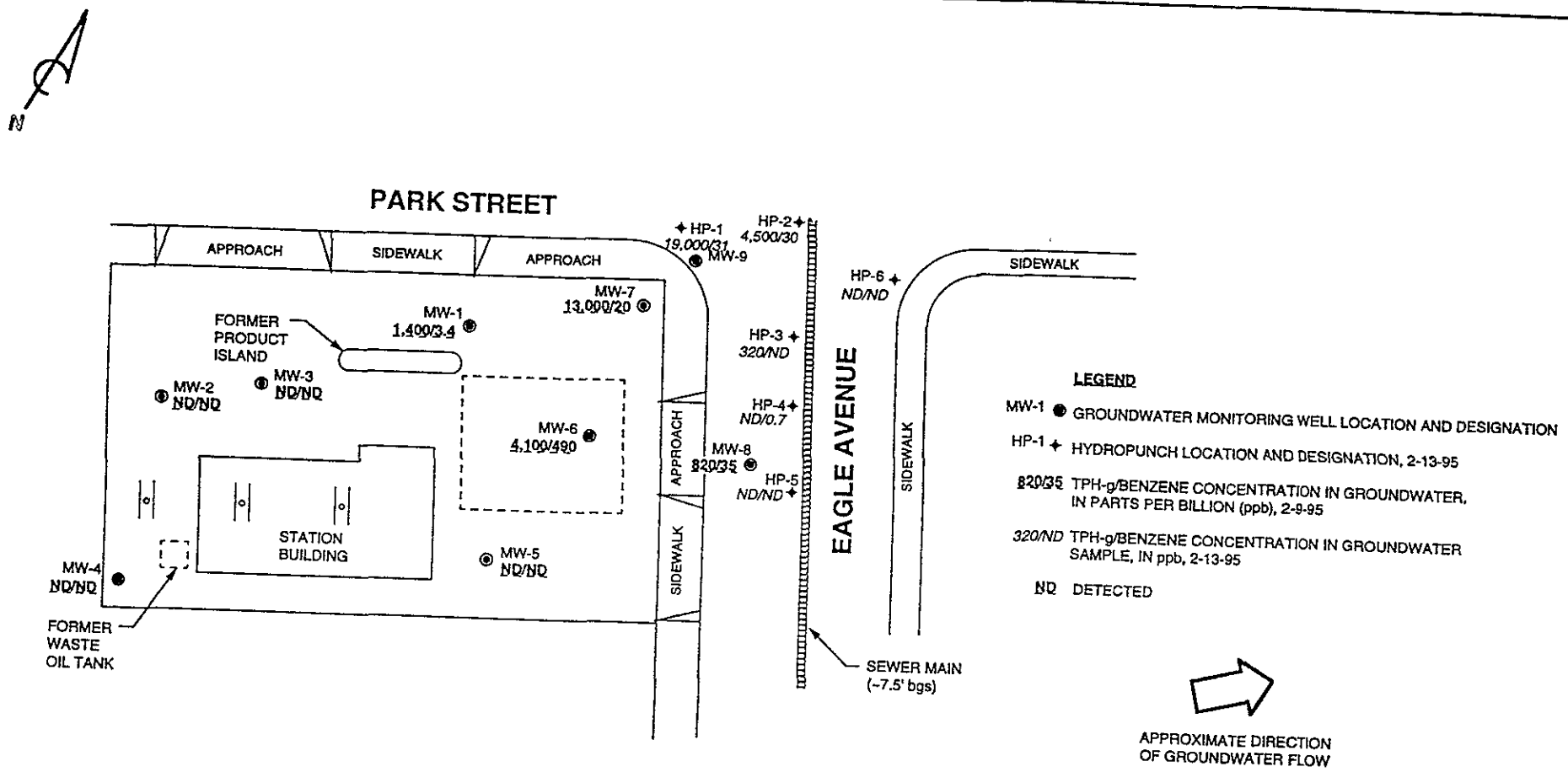
PACIFIC ENVIRONMENTAL GROUP, INC.

ESTATE OF JOHN B. HENRY PROPERTY
1726 Park Street at Eagle Avenue
Alameda, California

HYDRAULIC LIFT EXCAVATION MAP

FIGURE: 6

PROJECT: 286-001.6A



PACIFIC ENVIRONMENTAL GROUP, INC.

SCALE
0 20 40 FEET

ESTATE OF JOHN B. HENRY
1726 Park Street at Eagle Avenue
Alameda, California

SEWER MAIN HYDROPUNCH MAP

FIGURE: 7
PROJECT: 286-001.6A

TABLE 1
CHEMICAL ANALYSIS RESULTS
OF
SOIL HAND BORINGS

SAMPLE NUMBER	TVH AS GASOLINE (MG/KG)	BENZENE (UG/KG)	TOLUENE (UG/KG)	ETHYL BENZENE (UG/KG)	TOTAL XYLENES (UG/KG)
HB1-1	NA	NA	NA	NA	NA
HB2-1	NA	NA	NA	NA	NA
HB2-2	NA	NA	NA	NA	NA
HB2-3	NA	NA	NA	NA	NA
HB3-1	NA	NA	NA	NA	NA
HB4-1	NA	NA	NA	NA	NA
HB5-1	NA	NA	NA	NA	NA
HB6-1	NA	NA	NA	NA	NA
HB6-2	56	15	22	660	250
HB6-3	39	9.3	9.4	390	260

SAMPLE NUMBER	KEROSENE RANGE (MG/KG)	DIESEL RANGE (MG/KG)	HYDROCARBON OIL & GREASE	REPORTING LIMIT (MG/KG)
HB1-1	NA	NA	NA	NA
HB2-1	ND	30	340	1.0
HB2-2	NA	NA	NA	NA
HB2-3	210	ND	ND	1.0
HB3-1	ND	2000	1500	10
HB4-1	NA	NA	NA	NA
HB5-1	NA	NA	NA	NA
HB6-1	NA	NA	NA	NA
HB6-2	ND	13	NA	1.0
HB6-3	NA	NA	NA	NA
HB7	NA	NA	NA	NA

NA = Not Analyzed
ND = Not Detected at or above reporting limit.

Table 2

Soil Analytical Data - Tankpull

Total Petroleum Hydrocarbons

(TPH as Gasoline, TPH as Diesel, Metals, Volatile Organic Halocarbons by Method 8010, Base Neutral and Acid Extractables by Method 8270, and Oil and Grease)

Estate of John B. Henry Property
1726 Park Street at Eagle Avenue
Alameda, California

Type of Sample	Sample ID	Sample Depth (feet)	Date Sampled	TPH as Gasoline (ppm)	TPH as Diesel (ppm)	Cadmium (ppm)	Chromium (ppm)	Lead (ppm)	Zinc (ppm)	VOHs 8010 (ppb)	Extractables 8270 (ppb)	Oil and Grease (ppm)
Soil Beneath Tank	SS-1	6.5	12/05/91	<1.0	<1.0	<0.25	44.7	<3.0	48.5	<5.0 to <10	<330 to <1,650	<50
Soil South of Tank	SS-2	6.5	12/05/91	<1.0	<1.0	<0.25	36.6	<3.0	147	<5.0 to <10	<330 to <1,650	<50

ppm = Parts per million
ppb = Parts per billion

5.1.4 CHEMICAL ANALYSIS RESULTS OF SOIL SAMPLES

All samples recovered were transported and submitted to Curtis & Tompkins, Ltd. (C&T), a State-DOHS approved laboratory, located in Berkeley, California, for chemical analysis. Selected samples were chemically analyzed for total volatile hydrocarbons (TVH) as Gasoline with benzene, toluene, ethylbenzene, and total xylenes (BTEX), total extractable hydrocarbons (TEH) as Diesel, petroleum hydrocarbon oil and grease, and volatile organic compounds (VOC's). Borings not completed into monitoring wells were back filled with portland cement grout.

Chemical analysis of the soil samples are presented below in Table 2 and Table 3. Certified analytical reports and chain-of-custody forms are included in the Attachment 2, Laboratory Reports.

TABLE 3
BORINGS B-8 TO B-18
SOIL ANALYSES RESULTS FOR
TVH AS GASOLINE, WITH BTEX DISTINCTION

SAMPLE NO./ DEPTH(FT)	DATE SAMPLED	TVH AS GASOLINE (MG/KG)	BENZENE (UG/KG)	TOLUENE (UG/KG)	ETHYL BENZENE (UG/KG)	TOTAL XYLENES (UG/KG)	EPA 8240 (UG/KG)	EPA 8010 (UG/KG)
B-8A 2 - 2 1/2	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
B-8A 2 1/2 - 3	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
B-8A 4 - 4 1/2	05-05-92	5.2	15	9	8	320	NA	NA
B-8B 5 1/2 - 6	05-05-92	1,300	ND(400)	3,600	15,000	90,000	NA	NA
B-8B 7 - 7 1/2	05-05-92	550	ND(400)	2,400	7,400	46,000	ND	ND
B-9 6 - 6 1/2	05-05-92	94	ND(80)	120	500	3,400	NA	NA
B-10 4 1/2 - 5	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA

Table 3 (cont)

1726 Park Street, Alameda, California / August 28, 1992

SAMPLE NO./ DEPTH(FT)	DATE SAMPLED	TVH AS GASOLINE (MG/KG)	BENZENE (UG/KG)	TOLUENE (UG/KG)	ETHYL BENZENE (UG/KG)	TOTAL XYLENES (UG/KG)	EPA 8240 (UG/KG)	EPA 8010 (UG/KG)
B-10 6 - 6 1/2	05-05-92	870	ND(400)	ND(400)	12,000	67,000	NA	NA
B-10 8 - 8 1/2	05-05-92	NA	NA	NA	NA	NA	NA	ND
B-11 5 1/2 - 6	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
B-11 7 - 7 1/2	05-05-92	580	ND(400)	ND(400)	1,600	6,200	NA	NA
B-12 4 1/2 - 5	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
B-12 7 - 7 1/2	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
B-13 4 - 4 1/2	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
B-13 7 1/2 - 8	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	ND	NA
B-14 1/2 - 1	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	ND	NA
B-14 4 - 4 1/2	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
B-14 5 1/2 - 6	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
B-15 4 1/2 - 5	05-05-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA
B-15 6 1/2 - 7	05-05-92	1,000	1,600	1,600	10,000	58,000	ACETONE 49(20) 2-BUTANONE 11(10) ETHYL BENZENE 51(5) TOTAL XYLENES 260(5)	ND
B-16-2	05-08-92	NA	NA	NA	NA	NA	ND	NA
MW2-5.5-6	05-08-92	ND(1)	ND(5)	ND(5)	ND(5)	ND(5)	NA	NA

NA = NOT ANALYZED
ND = NOT DETECTABLE AT OR ABOVE REPORTING LIMITS
( ) = REPORTING LIMIT

TABLE 3 Cont.
BORINGS B-8 TO B-18 SOIL ANALYSIS RESULTS FOR PETROLEUM OIL & GREASE AND DIESEL

SAMPLE NO./ DEPTH (FT)	DATE SAMPLED	PETROLEUM OIL & GREASE (MG/KG)	KEROSENE RANGE (MG/KG)	DIESEL RANGE (MG/KG)	REPORTING LIMIT (MG/KG)
B-8 2 - 2 1/2	05-05-92	NA	ND	2	1
B-8B 2 1/2 - 3	05-05-92	ND	ND	ND	1
B-8B 4 - 4 1/2	05-05-92	NA	**	ND	1
B-8B 5 1/2 - 6	05-05-92	NA	**	31	1
B-8B 7 - 7 1/2	05-05-92	NA	**	21	1
B-9 6 - 6 1/2	05-05-92	NA	**	10	1
B-10 4 1/2 - 5	05-05-92	NA	ND	1	1
B-10 6 - 6 1/2	05-05-92	NA	**	57	10
B-11 5 1/2 - 6	05-05-92	NA	ND	ND	1
B-11 7 - 7 1/2	05-05-92	ND	**	2	1
B-12 4 1/2 - 5	05-05-92	ND	ND	ND	1
B-12 7 - 7 1/2	05-05-92	ND	ND	ND	1
B-13 4 - 4 1/2	05-05-92	ND	ND	ND	1
B-13 7 1/2 - 8	05-05-92	ND	ND	ND	1
B-14 1/2 - 1	05-05-92	1,800	ND	5	1
B-14 4 - 4 1/2	05-05-92	ND	**	10	1
B-14 5 1/2 - 6	05-05-92	ND	ND	ND	1

Table 3 (cont.)

SAMPLE NO./ DEPTH (FT)	DATE SAMPLED	PETROLEUM OIL & GREASE (MG/KG)	KEROSENE RANGE (MG/KG)	DIESEL RANGE (MG/KG)	REPORTING LIMIT (MG/KG)
B-15 4 1/2 - 5	05-05-92	NA	ND	ND	1
B-15 6 1/2 - 7	05-05-92	NA	**	7	1
B-16-1	05-08-92	640(50)	NA	NA	NA
B-16-2	05-08-92 52(50)	52(50)	NA	NA	NA
B-17-1	05-08-92	ND	NA	NA	NA
B-17-2	05-08-92	240(50)	NA	NA	NA
MW1-17.5-18	05-08-92	ND	NA	NA	NA
MW2-5.5-6	05-08-92	ND	ND	ND	1

ND = NOT DETECTABLE AT OR ABOVE REPORTING LIMITS
NA = NOT ANALYZED ** = QUANITITATED AS DIESEL

The chemical analysis results of the soil samples reveal relatively high levels of gasoline and BTEX in the area of the former fuel tanks. Detectable levels of diesel were also found in the majority of the samples, however, the levels were relatively low.

In addition to gasoline, BTEX and diesel, detectable levels of acetone and 2-butanone (constituents usually found in petroleum solvents) were found in boring B-15.

The results indicate that the highest concentrations of the contaminants are lower in the soil profile, approximately 5½ to 7½ feet, BGS.

Relatively high levels of petroleum oil and grease (POG) were found in the areas of the hydraulic hoists (inside the existing shop), and where surficial petroleum-like stains were observed. The POG contaminants inside the shop area were found lower in the soil profile (approximately 6½ feet BSG). As was expected, the highest concentrations of POG found in the areas of the site with surficial stains was in the top foot of the soil profile. Levels of gasoline, BTEX and/or diesel in samples recovered from these areas were relatively low.

Table 4

Soil Analytical Data - Excavation

Total Petroleum Hydrocarbons

(TPH as Gasoline, BTEX Compounds, and Lead)

Estate of John B. Henry Property
1726 Park Street at Eagle Avenue
Alameda, California

Type of Sample	Sample ID	Sample Depth (feet)	Date Sampled	TPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylenes (ppm)	Lead (ppm)
Stockpile	SP-(1-4)	NA	09/13/95	590	<0.50	1.8	9.1	11	15
	SP-(1-4) Comp	NA	09/19/95	120	<0.25	<0.25	<0.25	1.6	12
	SP-5 (A-D) Comp	NA	09/20/95	150	<0.05	0.3	1.3	6.4	5.1
	SP-6 (A-D) Comp	NA	09/21/95	580	<0.50	1.2	5.5	28	6.6
	SP-7D	NA	09/21/95	230	<0.25	<0.25	1.5	3.5	7.2
	SP-8D	NA	09/21/95	170	<0.25	0.32	0.68	2.6	17
	SP-9 (A-D)	NA	09/22/95	250	<0.25	0.77	0.97	3.5	<5.0
	SP-10 (A-D)	NA	09/22/95	780	<1.0	<1.0	<1.0	2.1	5
Invert of Pit	INV-1	11	09/21/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
	INV-2	11	09/21/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
	INV-3	11	09/21/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
	INV-4	11	09/22/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
	INV-5	NA	09/29/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
	INV-6	NA	09/29/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
Product Line	PL-1	18	09/27/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
Sidewall of Pit	W-1	3	09/19/95	110	<1.2	4.1	7.7	33	6.7
	W-2	4	09/19/95	3,500	<1.2	4.1	35	170	8.7
	SW-1	2	09/22/95	4.3	<0.005	<0.005	0.081	0.32	<5.0
	SW-2	8	09/27/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
	SW-3	8	09/27/95	50	<0.05	<0.05	0.16	0.3	NT
	SW-4	NA	09/29/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
	SW-5	NA	09/29/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
	SW-6	NA	09/29/95	<1.0	<0.005	<0.005	<0.005	0.0074	NT
	SW-7	NA	09/29/95	<1.0	<0.005	<0.005	<0.005	<0.005	NT
	SW-8	NA	09/29/95	72	0.17	0.65	0.18	0.41	NT
	SW-9	NA	09/29/95	1,500	<1.5	<1.5	5.5	15	NT
	SW-10	NA	09/29/95	76	<0.10	<0.10	0.84	4.6	NT
	SW-11	NA	09/29/95	4,500	<10	<10	35	60	NT
	SW-12	NA	09/29/95	290	<0.50	<0.50	0.71	2.1	NT
	SW-13	NA	09/29/95	120	<0.12	<0.12	0.28	0.9	NT

ppm = Parts per million
NA = Not available
NT = Not tested

Table 5

Soil Analytical Data - Hoist Removal

Total Petroleum Hydrocarbons

(TPH as Gasoline, BTEX Compounds, TRPH, and Metals)

Estate of John B. Henry

1726 Park Street at Eagle Avenue

Alameda, California

Sample ID	Date Sampled	TPH as Gasoline (ppm)	Benzene (ppm)	Toluene (ppm)	Ethyl-benzene (ppm)	Xylenes (ppm)	TRPH (ppm)	Cad-mium (ppm)	Chrom-ium (ppm)	Lead (ppm)	Nickel (ppm)	Zinc (ppm)
HL-1	10/25/95	<1.0	<0.005	<0.005	<0.005	<0.005	<15	NT	NT	NT	NT	NT
HL-2	10/25/95	25	<0.12	<0.12	<0.12	0.19	66	NT	NT	NT	NT	NT
HL-3	10/25/95	<1.0	<0.005	<0.005	<0.005	<0.005	<15	NT	NT	NT	NT	NT
HL-4	10/25/95	1400	<2.0	<2.0	4.3	15	2400	NT	NT	NT	NT	NT
HL-5	10/25/95	<1.0	<0.005	<0.005	<0.005	<0.005	<15	NT	NT	NT	NT	NT
HL-6	10/25/95	<1.0	<0.005	<0.005	<0.005	<0.005	<15	NT	NT	NT	NT	NT
HLSP-1D (Comp. 1A-1D)	10/26/95	NT	NT	NT	NT	NT	880	<0.50	35	11	24	30
HLSP-2D (Comp. 2A-2D)	10/26/95	NT	NT	NT	NT	NT	500	0.57	42	46	24	47

TRPH = Total recoverable petroleum hydrocarbons
ppm = Parts per million
NT = Not tested

Table 6 (continued)
Groundwater Analytical Data
Total Petroleum Hydrocarbons
(TPH as Gasoline, BTEX Compounds, TPH as Diesel, Oil and Grease, and MtBE)

Estate of John B. Henry Property
1726 Park Street at Eagle Avenue
Alameda, California

Sample ID	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	TPH as Diesel (ppb)	Oil and Grease (ppb)	MtBE (ppb)
MW-8	02/15/94	1,300	15	<0.5	110	23	NA	NA	NT
	04/22/94	500	5	<0.5	17	20	NA	NA	NT
	07/25/94	260	11	0.57	1.5	1.8	NA	NA	NT
	02/09/95	820	35	4.3	26	21	NA	NA	NT
	10/30/95	180	2.6	0.88	1.4	0.54	NT	NT	NT
	01/31/96	87	1.7	<0.50	<0.50	<0.50	160	NT	NT
	05/03/96	270	6.6	<0.50	9.3	95	440	NT	6.2
MW-9	11/15/95	1,200	3.6	<1.2	27	37	NT	NT	NT
	01/31/96	<50	<0.50	<0.50	<0.50	0.91	<50	NT	NT
	05/03/96	<50	<0.50	<0.50	<0.50	1.4	<50	NT	<2.5

ppb = Parts per billion
NA = Not available or applicable
MtBE = Methyl tert-butyl ether
NT = Not tested

Table 6

Groundwater Analytical Data

Total Petroleum Hydrocarbons

(TPH as Gasoline, BTEX Compounds, TPH as Diesel, Oil and Grease, and MtBE)

Estate of John B. Henry Property
1726 Park Street at Eagle Avenue
Alameda, California

Sample ID	Date Sampled	TPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Xylenes (ppb)	TPH as Diesel (ppb)	Oil and Grease (ppb)	MtBE (ppb)
MW-1	05/11/92	410	<0.5	1	4.2	11	96	NA	NT
	08/13/92	260	<0.5	0.6	4.2	4	<50	NA	NT
	01/14/93	270	<0.5	<0.5	1.1	6	<50	NA	NT
	05/10/93	450	1.1	1.1	8.7	15	450	<5	NT
	09/17/93	140	<0.5	<0.5	3.5	5.3	160	NA	NT
	01/31/94	140	<0.5	<0.5	6	1.7	<50	<50	NT
	04/22/94	790	1.9	4.5	11	35	<50	<50	NT
	07/25/94	550	1.2	1.2	8.9	11	310	<200	NT
	02/09/95	1,400	3.4	2.4	21	25	<50	NA	NT
	08/17/95	---------- Well Abandoned ----------							
MW-2	05/11/92	<50	<0.5	<0.5	<0.5	<0.5	<50	<5	NT
	08/13/92	<50	<0.5	<0.5	<0.5	<0.5	<50	<5	NT
	01/14/93	<50	<0.5	<0.5	<0.5	<0.5	57	<5	NT
	05/10/93	<50	<0.5	<0.5	<0.5	<0.5	<50	<5	NT
	09/17/93	<50	<0.5	<0.5	<0.5	<0.5	<50	<5	NT
	01/31/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	NT
	04/22/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	NT
	07/25/94	<50	0.98	1.4	<0.5	1.3	<50	<200	NT
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5	3,500	NA	NT
	08/17/95	---------- Well Abandoned ----------							
MW-3	02/15/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	NT
	04/22/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<200	NT
	07/25/94	<50	<0.5	0.65	<0.5	<0.5	<50	NA	NT
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NT
	08/17/95	---------- Well Abandoned ----------							
MW-4	02/15/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	NT
	04/22/94	<50	<0.5	2.5	<0.5	<0.5	<50	NA	NT
	07/25/94	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NT
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NT
	08/17/95	---------- Well Abandoned ----------							
MW-5	02/15/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50	NT
	04/22/94	1,600	4.1	<0.5	22	230	<50	<50	NT
	07/25/94	400	1.3	0.77	2.5	19	120	<200	NT
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5	<50	NA	NT
	10/30/95	77	<0.5	<0.5	<0.5	1.7	650	NA	NT
	01/31/96	180	0.94	<0.50	2.1	18	190	NT	NT
	05/03/96	230	<0.50	<0.50	7.8	13	150	NT	<2.5
MW-6	02/15/94	1,100	120	2.2	13	100	NA	NA	NT
	04/22/94	3,800	360	25	420	27	NA	NA	NT
	07/25/94	1,100	110	5.1	190	13	NA	NA	NT
	02/09/95	4,100	490	36	4.2	110	NA	NA	NT
	08/17/95	---------- Well Abandoned ----------							
MW-7	02/15/94	14,000	3.5	95	4,000	650	NA	NA	NT
	04/22/94	3,400	8.4	6.7	110	600	NA	NA	NT
	07/25/94	2,800	5.4	7.8	100	300	NA	NA	NT
	02/09/95	13,000	20	73	760	2,900	NA	NA	NT
	08/17/95	---------- Well Abandoned ----------							

PROPERTY ADDRESS
1726 PARK STREET
ALAMEDA, CA.

SURVEYOR
DAVID M. LOGAN L.S. 5003
803 DORSET WAY
BENICIA, CA.
(707) 745-5053

DATE: MAY, 1992

SCALE: 1" = ± 25'

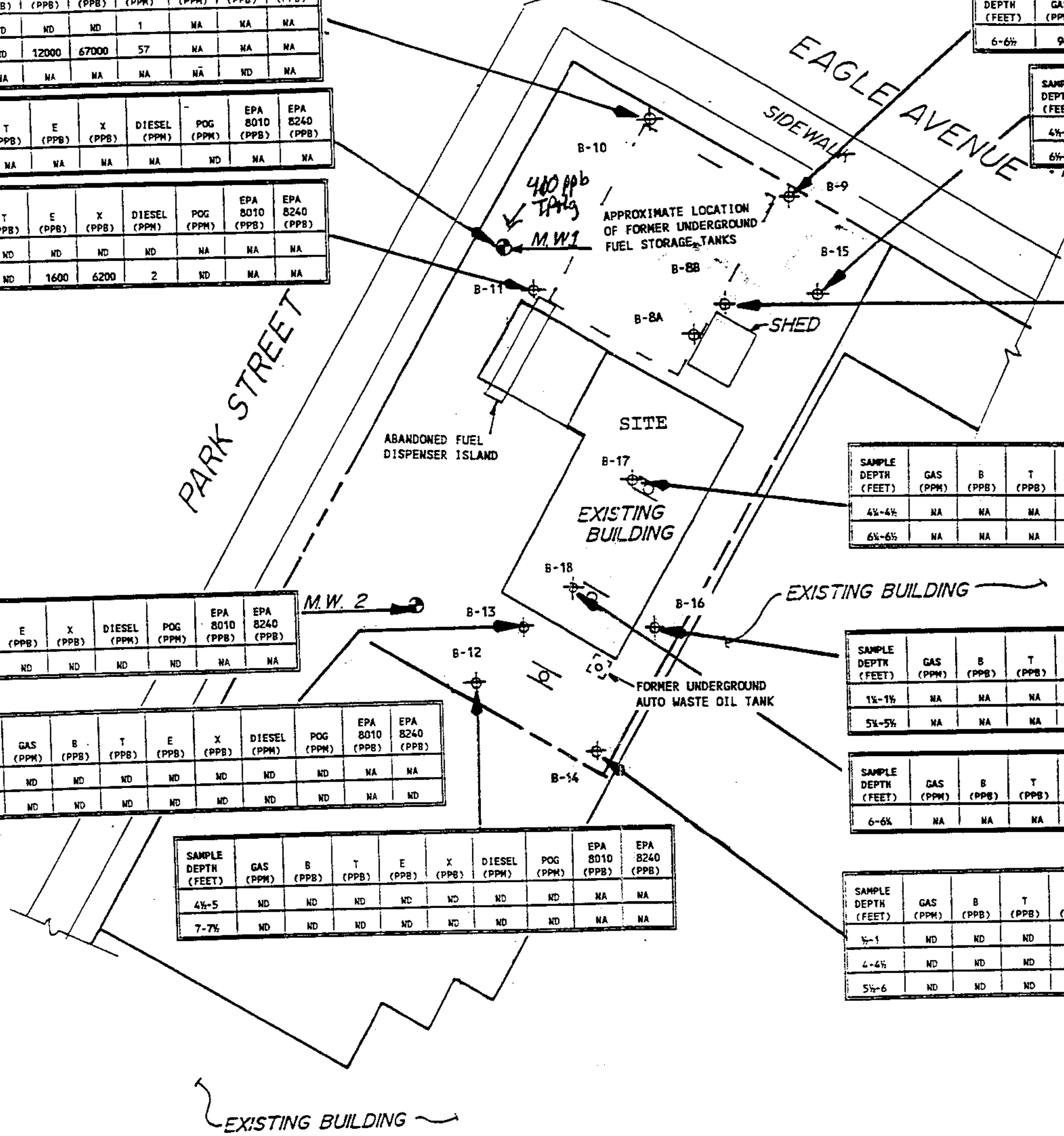
REVISED JUNE 12, 1992 BY TMC, INC.

LEGEND

M.W. — MONITOR WELL

— — — — PROPERTY LINE

⌖ SOIL BORING



SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
4½-5	ND	ND	ND	ND	ND	1	NA	NA	NA
6-6½	870	ND	ND	12000	67000	57	NA	NA	NA
8-8½	NA	NA	NA	NA	NA	NA	NA	ND	NA

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
17½-18	NA	NA	NA	NA	NA	NA	ND	NA	NA

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
5½-6	ND	ND	ND	ND	ND	ND	NA	NA	NA
7-7½	580	ND	ND	1600	6200	2	ND	NA	NA

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
6-6½	94	ND	120	500	3400	10	NA	NA	NA

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
4½-5	ND	ND	ND	ND	ND	ND	NA	NA	NA
6½-7	1000	1600	1600	10000	58000	7	NA	NA	*

* ACETONE - 47 ppb; 2-BUTANONE - 11 ppb

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
5½-6	1300	4000 ND	3600	15000	90000	31	NA	NA	NA
7-7½	550	ND	2400	9400	46000	21	NA	NA	NA

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
4¼-4½	NA	NA	NA	NA	NA	NA	ND	NA	NA
6¼-6½	NA	NA	NA	NA	NA	NA	240	NA	NA

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
5½-6	ND	ND	ND	ND	ND	ND	ND	NA	NA

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
1¼-1½	NA	NA	NA	NA	NA	NA	640	NA	NA
5¼-5½	NA	NA	NA	NA	NA	NA	52	NA	ND

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
4-4½	ND	ND	ND	ND	ND	ND	ND	NA	NA
7-7½	ND	ND	ND	ND	ND	ND	ND	NA	ND

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
6-6¼	NA	NA	NA	NA	NA	NA	1600	NA	ND

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
4½-5	ND	ND	ND	ND	ND	ND	ND	NA	NA
7-7½	ND	ND	ND	ND	ND	ND	ND	NA	NA

SAMPLE DEPTH (FEET)	GAS (PPM)	B (PPB)	T (PPB)	E (PPB)	X (PPB)	DIESEL (PPM)	POG (PPM)	EPA 8010 (PPB)	EPA 8240 (PPB)
½-1	ND	ND	ND	ND	ND	5	1800	NA	ND
4-4½	ND	ND	ND	ND	ND	10	ND	NA	NA
5½-6	ND	ND	ND	ND	ND	ND	ND	NA	NA

"Grab" g.w. sam... identified hig... conc. of cont...

LICENSED LAND SURVEYOR DAVID M. LOGAN No. 5003 STATE OF CALIFORNIA

RESULTS OF SOIL BORING SAMPLES

MAY 5 AND 8, 1992
1726 PARK STREET
ALAMEDA, CALIFORNIA

TMC Environmental, Inc.

~~PLATE 4~~ FIG 3

JOB: 104891