

Continue amp of wells NW-5, NW-8 and NW-9

December 28, 1995 Project 286-001.2A

Ms. Eva Chu Alameda County Health Care Services 1131 Harbor Bay Parkway Alameda, California 94502-6577

Re: Quarterly Report - Fourth Quarter 1995 and Well Installation and Destruction Report Estate of John B. Henry Property 1726 Park Street at Eagle Avenue Alameda, California

Dear Ms. Chu:

Pacific Environmental Group, Inc. (PACIFIC) has prepared this letter to document the destruction and installation of groundwater monitoring wells at the site referenced above (Figure 1). This letter also presents the results of the fourth quarter 1995 monitoring and sampling event.

The destruction and installation of groundwater monitoring wells were performed according to PACIFIC's Remedial Work Plan (Plan, June 29, 1995) submitted to Alameda County Health Care Services (ACHCS). The Plan was approved with minor changes by Ms. Eva Chu of the ACHCS (July 7, 1995). These changes were implemented by PACIFIC with the scope of work described below. Included in this report is a description of the site background, scope of work, and the findings of the well installation.

#### SITE BACKGROUND

The site included an enclosed service repair bay, three hydraulic lifts, an underground storage tank (UST) complex, one product dispenser island, and one underground waste oil storage tank (Figure 2). The USTs, located in the eastern portion of the property, were removed from the site in the early 1970's according to available records. However, the position and number of tanks removed from the site is unknown. From 1991 to

present, the waste oil tank was removed and a series of soil borings were drilled and groundwater monitoring wells were installed. Monitoring Wells MW-1 and MW-2 were drilled and installed in 1992 by TMC Environmental, Inc. (TMC) and Wells MW-3 through MW-8 were drilled and installed by PACIFIC in February 1994.

#### SCOPE OF WORK

Prior to initiating excavation activities, groundwater Monitoring Well MW-9 was drilled on September 11, 1995 and installed to the north of the site at the corner of Park Street and Eagle Avenue (Figure 2). This well was installed to replaced Well MW-7 which was abandoned due to excavation activities. In addition, Monitoring Wells MW-1 through MW-4, MW-6, and MW-7 were destroyed on August 15 through 17, 1995. Field and laboratory procedures and the boring log and well construction details are presented as Attachment A. The monitoring well installation and destruction permits are presented as Attachment B.

#### **FINDINGS**

#### Subsurface Conditions

Soils encountered during drilling consisted predominantly of interbedded sand and clayey sand to the total depth explored of 19 feet below ground surface (bgs). Groundwater was first encountered at approximately 10 feet bgs and then stabilized at 7 feet bgs.

#### Soil Analytical Results

Soil samples were collected from the boring for subsurface logging purposes only. No samples were submitted for hydrocarbon analysis.

#### **Groundwater Elevation Data**

Groundwater elevations for the three wells at the site, MW-5, MW-8, and MW-9, were measured during October and November 1995. Monitoring Wells MW-5 and MW-8 were measured on October 30, 1995 and Well MW-9 was monitored on November 15, 1995. Monitoring Well MW-9 has not been surveyed yet, however it will be surveyed during the next quarter. Groundwater elevation data is presented in Table 1.

#### **Groundwater Analytical Results**

Groundwater samples were collected in October and November 1995 for the fourth quarter monitoring event. Monitoring Wells MW-5 and MW-8 were sampled on

October 30, 1995 and Monitoring Well MW-9 was sampled on November 15, 1995. All groundwater samples were analyzed by Sequoia Analytical, a state-certified laboratory, for total purgeable petroleum hydrocarbons calculated as gasoline (TPPH-g) by EPA Method 8015 and for benzene, toluene, ethylbenzene, and total xylenes (BTEX compounds) by EPA Method 8020. Monitoring Well MW-5 was also analyzed for total extractable petroleum hydrocarbons calculated as diesel (TEPH-d) by EPA Method 8015. The groundwater analytical data are presented in Table 2. The certified analytical reports and chain-of-custody documentation are presented as Attachment C.

If you have any questions regarding this letter, please call.

Sincerely,

Pacific Environmental Group, Inc.

Michelle R. Shipp

Senior Staff Scientist

(Signed for by Lance D. Geselbracht, P.E.

Senior Engineer

Attachments:

Table 1 - Groundwater Elevation Data

Table 2 - Groundwater Analytical Data - Total Petroleum Hydrocarbons

(TPPH as Gasoline, BTEX Compounds, TEPH as Diesel,

and Oil and Grease)

Figure 1 - Site Location Map

Figure 2 - Site Map

Attachment A - Field and Laboratory Procedures and Well MW-9 Boring Log and Well

Attachment B - Monitoring Well Installation and

Destruction Permits

Attachment C - Certified Analytical Reports and Chain-of-Custody Documentation

cc: Michael Brown, Esq., Mendelson and Brown Mr. Marvin Katz, Texaco Refining and Marketing Inc.

Table 1
Groundwater Elevation Data

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

f		Weli	Depth to	Groundwater
Well	Date	Elevation	Water	Elevation
Number	Gauged	(feet, MSL)	(feet, TOC)	(feet, MSL)
MW-1	05/12/92	13.57	6.16	7.41
1	07/28/92		6.68	6.89
	08/17/92		6.77	6.80
Ì	09/21/92		6.96	6.61
t	01/14/93		5.38	8.19
1	09/17/93		7.42	6.15
	01/31/94		6.35	7.22
	02/14/94	16.76	6.59	10.17
1	04/22/94		6.57	10.19
Ì	07/25/94		6.71	10.05
}	02/09/95		5.48	11.28
	08/17/95	We	ll Abandoned	
MW-2	05/12/92	14.35	5.94	8.41
ł	07/28/92		6.80	7.55
}	08/17/92		6.94	7.41
1	09/21/92		7.19	7.16
Ì	01/14/93		<b>√</b> 4.82	9.53
Ì	09/17/93		7.64	6.71
ļ	01/31/94		6.50	7.85
Ì	02/14/94	17.51	6.38	11.13
[	04/22/94		6.50	11.01
1	07/25/94		6.76	10.75
1	02/09/95		4.96	12.55
	08/17/95	Wel	ll Abandoned	
MW-3	02/14/94	17,45	6.58	10.87
11111-0	04/22/94	17.70	6.72	10.07
1	07/25/94		6.95	10.70
<u> </u>	02/09/95		5.14	12.31
	08/17/95	Wel	I Abandoned	
]				
MW-4	02/14/94	18.08	6.70	11.38
ĺ	04/22/94		6.86	11.22
1	07/25/94		7.23	1,0.85
ĺ	02/09/95		5,29	12.79
1	08/17/95	Wel	Abandoned	
MW-5	02/14/94	17.19	7.33	9.86
	04/22/94		6.69	10.50
·	07/25/94		6.96	10.23
	02/09/95		5.45	11.74
}	10/30/95		7.95	9.24

### Table 1 (continued) Groundwater Elevation Data

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

-		Well	Depth to	Groundwater				
Well	Date	Elevation	Water	Elevation				
Number	Gauged	(feet, MSL)	(feet, TOC)	(feet, MSL)				
MW-6	02/14/94	16.63	6.61	10.02				
	04/22/94		6.69	9.94				
ļ	07/25/94		6.80	9.83				
	02/09/95		5.73	10.90				
	08/17/95	We	ll Abandoned					
Ĭ				· ·				
MW-7	02/14/94	16.24	6.55	9.69				
	04/22/94		6.56	9.68				
	07/25/94		6.59	9.65				
	02/09/95		5.82	10.42				
1	08/17/95	We	ll Abandoned					
				Ţ				
MW-8	02/14/94	16.00	6.41	9.59				
	04/22/94		6.43	9.57				
1	07/25/94		6.44	9.56				
	02/09/95		5.90	10.10				
1	10/30/95		7.14	8.86				
MW-9	11/15/95	NM		NM				
MSL = Me	MSL = Mean sea level							
TOC = To	TOC = Top of casing							
NM = No	t measured							

Table 2
Groundwater Analytical Data

Total Petroleum Hydrocarbons

(TPPH as Gasoline, BTEX Compounds, TEPH as Diesel, and Oil and Grease)

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

\		TPPH as			Ethyl-	<del></del>	TEPH as	Oil and
Sample	Date	Gasoline	Benzene	Toluene	benzene	Xylenes	Diesel	Grease
1D	Sampled	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-1	05/11/92	410	<0.5	1	4.2	11	96	NA
1	08/13/92	260	<0.5	0.6	4.2	4	<50	NA
	01/14/93	270	<0.5	<0.5	1.1	6	<50	NA
Ì	05/10/93	450	1.1	1.1	8.7	15	450	<5
	09/17/93	140	<0.5	<0.5	3.5	5.3	160	NA
]	01/31/94	140	<0.5	<0.5	6	1.7	<50	<50
	04/22/94	790	1.9	4.5	11	35	<50	<50
	07/25/94	550	1.2	1.2	8.9	11	310	<200
Į	02/09/95	1,400	3.4	2.4	21	25	<50	NA
	08/17/95			Wel	l Abandone	db		
{								
MW-2	05/11/92	<50	<0.5	<0,5	<0.5	<0.5	<50	<5
{	08/13/92	<50	<0.5	<0.5	<0.5	<0.5	<50	<5
	01/14/93	<50	<0.5	<0.5	<0.5	<0.5	57	<5
{ .	05/10/93	<50	<0.5	<0,5	<0.5	<0.5	<50	<5
	09/17/93	<50	<0.5	<0,5	<0.5	<0.5	<50	<5
1	01/31/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
ĺ	04/22/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
}	07/25/94	<50	0.98	1.4	<0.5	1,3	<50	<200
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5	3,500	NA
Ì	08/17/95			Wel	l Abandone	d		
ł								ı
MW-3	02/15/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
ļ	04/22/94	<50	<0.5	<0.5	<0.5	<0,5	<50	<200
İ	07/25/94	<50	<0.5	0.65	<0.5	<0.5	<50	NA
}	02/09/95	<50	<0.5	<0.5	<0.5	<0.5	NA	NA
]	08/17/95			Wel	Abandone	d		
MW-4	02/15/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
'''''	04/22/94	<50	<0.5	2.5	<0.5	<0.5	<50 <50	NA.
	07/25/94	<50	<0.5	<0.5	<0.5	<0.5	NA	NA.
ĺ	02/09/95	<50	<0.5	<0.5	<0.5	<0.5	NA NA	NA NA
ŀ	08/17/95				Abandone		117	
ļ	30,11,00				, , tourido, je	<b>u</b>		
MW-5	02/15/94	<50	<0.5	<0.5	<0.5	<0.5	<50	<50
\	04/22/94	1,600	4.1	<0.5	22	230	<50	<50
1	07/25/94	400	1.3	0.77	2.5	19	120	<200
	02/09/95	<50	<0.5	<0.5	<0.5	<0.5	<50	NA.
	10/30/95	77	<0.5	<0.5	<0.5	1.7	650	NA
1					2.3	•••		
MW-6	02/15/94	1,100	120	2.2	13	100	NA	NA
	04/22/94	3,800	360	25	420	27	NA	NA
	07/25/94	1,100	110	5.1	190	13	NA	NA
	02/09/95	4,100	490	36	4.2	110	NA	NA
	08/17/95		·		Abandone		······································	

#### Table 2 (continued)

#### **Groundwater Analytical Data**

Total Petroleum Hydrocarbons

(TPPH as Gasoline, BTEX Compounds, TEPH as Diesel, and Oil and Grease)

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

		TPPH as			Ethyl-		TEPH as	Oil and
Sample	Date	Gasoline	Benzene	Toluene	benzene	Xylenes	Diesel	Grease
ID	Sampled	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-7	02/15/94	14,000	3.5	95	4,000	650	NA	N/
	04/22/94	3,400	8.4	6.7	110	600	NA	N/
	07/25/94	2,800	5.4	7.8	100	300	NA	N/
	02/09/95	13,000	20	73	760	2,900	NA	N/
	08/17/95			Wel	i Abandone	d		
MW-8	02/15/94	1,300	15	<0.5	110	23	NA	N
	04/22/94	500	5	<0.5	17	20	NA	N/
	07/25/94	260	11	0.57	1.5	1.8	NA	N.
	02/09/95	820	35	4.3	26	21	NA	N/
	10/30/95	180	26	0.88	1.4	0.54	NT	N.
MW-9	11/15/95	1,200	3.6	<1.2	27	37	ΝΤ	N.

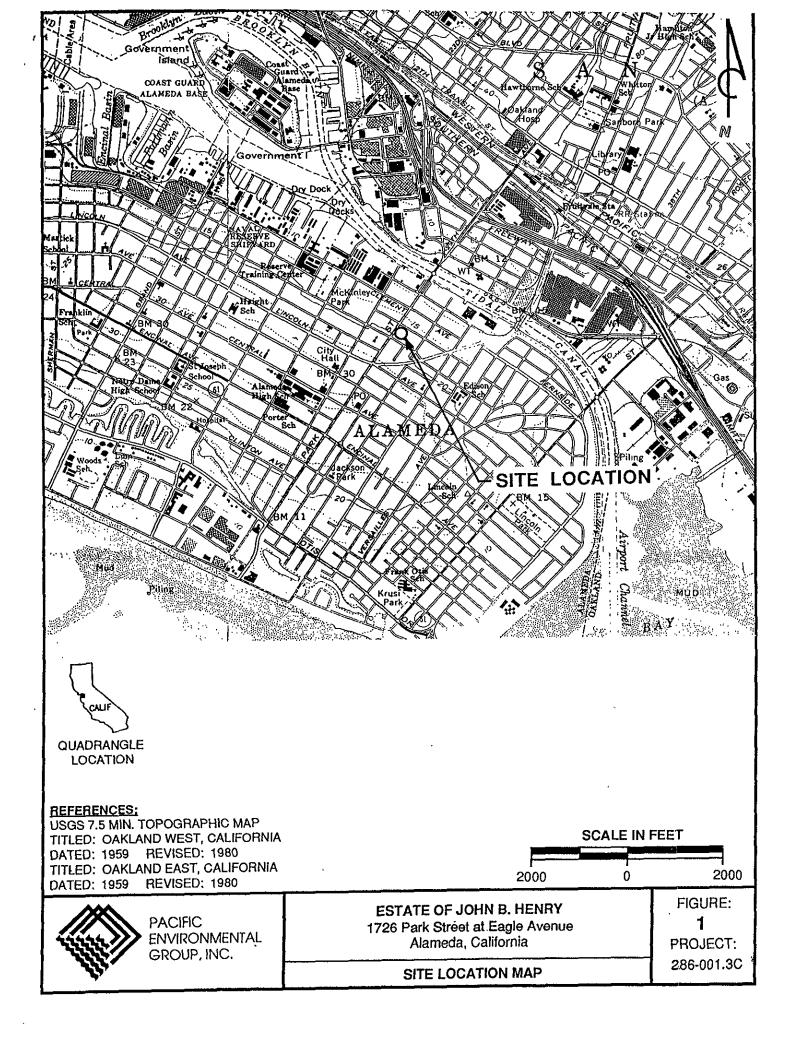
TPPH = Total purgeable petroleum hydrocarbons

TEPH = Total extractable petroleum hydrocarbons

ppb = Parts per billion

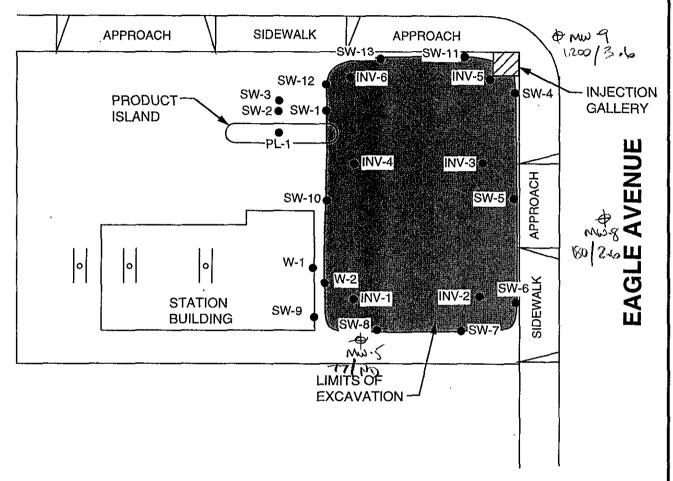
NA = Not available or applicable

NT = Not tested



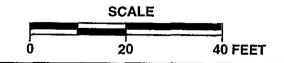


#### **PARK STREET**



#### **LEGEND**

SW-1● SOIL SAMPLE LOCATION AND DESIGNATION





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

**MAP OF EXCAVATION** 

FIGURE:

PROJECT: 286-001.4A

# ATTACHMENT A FIELD AND LABORATORY PROCEDURES AND WELL MW-9 BORING LOG

## ATTACHMENT A FIELD AND LABORATORY PROCEDURES

#### Soil Borings and Groundwater Monitoring Well Installation Procedures

The Groundwater Monitoring Well MW-9 was drilled on September 11, 1995 using 8-inch hollow-stem auger drilling equipment and logged by a Pacific Environmental Group, Inc. geologist using the Unified Soil Classification System and standard geologic techniques. Soil samples for logging were collected at 5-foot depth intervals using a California-modified split-spoon sampler. The California sampler was driven a maximum of 18 inches using a 140-pound hammer with a 30-inch drop. Soil samples for possible chemical analysis were retained in brass liners, capped with Teflon® squares and plastic end caps, taped, and sealed in clean zip-lock bags. The samples were placed on ice for possible transport to the laboratory accompanied by chain-of-custody documentation. All down-hole drilling and sampling equipment was steam-cleaned following the completion of the wells. Down-hole sampling equipment was washed in a tri-sodium phosphate solution between samples.

The boring was converted to groundwater monitoring well by installing 2-inch diameter, flush-threaded, Schedule 40 PVC casing with 0.020-inch factory-slotted screen. Approximately 20 feet of screen was placed in the bottom of the boring. An RMC 2 x 12 sand pack was placed in the annular space across the entire screened interval, and extends approximately 1 feet above the top of the screen for the well. A bentonite and Portland cement seal extends from the sand pack to the ground surface.

Following well completion, the vault box elevation and the elevation of the top of the PVC well casing of the monitoring wells were surveyed to the nearest 0.01 foot, relative to mean sea level, by a licensed surveyor. The boring logs show well construction details.

#### **Well Destruction Procedures**

Monitoring Wells MW-1 through MW-4, MW-6, and MW-7 were destroyed by drilling out the 2-inch PVC well casings, annular sand packs, and sanitary grout seals with 8-inch hollow-stem augers to the total depth of the wells, which was approximately 20 feet below ground surface (bgs). The well borings were backfilled and properly sealed with an grout neat cement seal.

#### Organic Vapor Procedures

Soil samples collected at 5-foot depth intervals during drilling were analyzed in the field for ionizable organic compounds using the HNU Model PI-101 (or equivalent) photo-ionization detector (PID) with a 10.2 eV lamp. The test procedure involves measuring approximately 30 grams from an undisturbed soil sample, placing this subsample in a clean plastic bag, and sealing the bag. The bag was warmed for approximately 20 minutes (in the sun), and the head-space within the bag was tested for total organic vapor, measured in parts per million as benzene (ppm; volume/volume). The instrument was calibrated prior to drilling using a 100-ppm isobutylene standard (in air) and a sensitivity factor of 55 which relates the photo-ionization potential of benzene to that of isobutylene at 100 ppm. The results of the field testing are noted on the boring logs. PID readings are useful for indicating relative levels of contamination, but cannot be used to evaluate hydrocarbon levels with the confidence of laboratory analyses.

#### Well Development

The groundwater monitoring well was developed by PACIFIC. The well development procedures consisted of first measuring the water level in the well with an electronic water-level indicator, and checking the well for the presence of separate-phase hydrocarbons using a clear Teflon bailer or an oil-water interface probe. The well was then surged using a surge block which forces the fine-grained material out of the sandpack and back into the formation. After surging, the well was purged of approximately ten casing volumes using a bailer or centrifugal pump, during which time temperature, pH, and electrical conductivity were monitored to indicate that a representative sample was obtained. After purging, the water level in the well was allowed to restabilize.

## Rinsate, Purge, and Development Waters, and Soil Cuttings Storage and Disposal

Waters produced during field activities were transported via a purge trailer and disposed of at a state-certified treatment and disposal facility. When necessary, waters were temporarily stored on site in DOT-approved 55-gallon drum pending transport and disposal. Drilling cuttings were stored on plastic and then sampled and analyzed for total purgeable petroleum hydrocarbons calculated as gasoline (EPA Method 8015), benzene, toluene, ethylbenzene, and total xylenes (EPA Method 8020). Upon receipt of analytical results (approximately 2 weeks), waste soils were transported for disposal at a California approved waste disposal facility.

Primary	Divisions	Sy	Gr mbol	oup /Gra	phic Typical Names
COARSE GRAINED	GRAVELS	CLEAN GRAVELS	GW	000	Well graded gravels, gravel-sand mixtures;
SOILS  more than half is larger	half of coarse fraction larger than	(less than 5% fines)	GP	000000	Poorly graded gravels or gravel-sand mixtures; little or no fines
than #200 sieve	#4 sieve	GRAVEL WITH	GM	000	Silty gravels, gravel-sand-silt mixtures
	,	FINES	GC		Clayey gravels, gravel-sand-clay mixtures
	SANDS half of	CLEAN SANDS	sw		Well graded sands, gravelly sands, little or no fines
	coarse fraction smaller than #4 sieve	(less than 5% fines)	SP		Poorly graded sands or gravelly sands; little or no fines
		SANDS WITH	sм		Silty sands, sand-silt mixtures
		FINES	sc		Clayey sands, sand-clay mixtures, plastic fines
FINE GRAINED SOILS	SILTS AN	D CLAYS	ML.		Inorganic silts and very fine sand, rock flour, silty or clayey fine sands or clayey silts, with slight plasticity
more than	liquid less tha		CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
half is smaller than #200 sieve		OL		Organic silts and organic silty clays of low plasticity	
#200 51646	SILTS AN	D CLAYS	МН		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
	liquid more tha		СН		Inorganic clays of high plasticity, fat clays
			ОН		Organic clays of medium to high plasticity, organic silts
HIGHLY	ORGANIC S	SOILS	Pt	$\bigotimes$	Peat and other highly organic soils



#### WELL LOG KEY TO ABBREVIATIONS

#### **Drilling Method**

#### Gravel Pack

HSA - Hollow stem auger

CFA - Continous flight auger

Air - Reverse air circulation

CA - Coarse aquarium sand

#### Sampling Method

Cal. Mod. - California modified split-spoon sampler (2" inner diameter) driven 18" by a

140-pound hammer having a 30" drop. Where penetration resistance is

designated "P", sampler was instead pushed by drill rig.

Disturbed - Sample taken from drill-return materials as they surfaced.

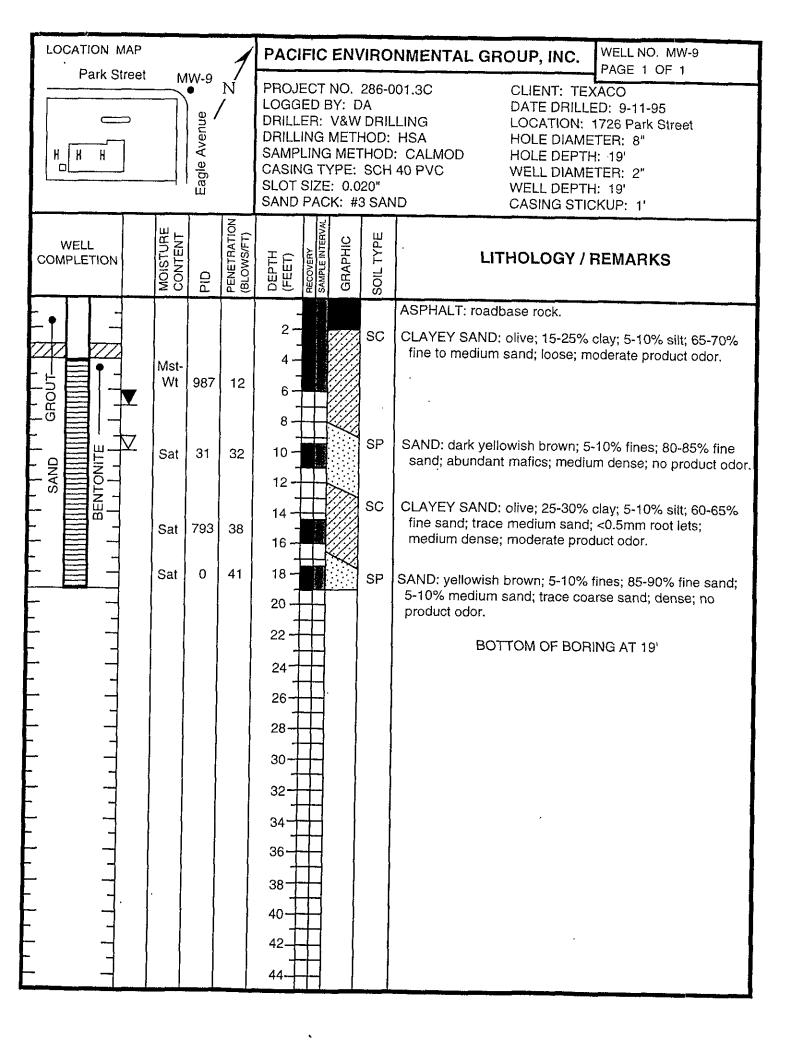
Shelby - Shelby Tube thin-walled sampler (3" diameter), where sampler is pushed by drill-rig.

Molsture Conten  Dry - Dry  Dp - Damp  Mst - Moist  Wt - Wet	PS - Poorly sorted MS - Moderately sorted WS - Well sorted	<u>Plasticity</u> L - Lov M - Mo H - Hig	v derate	H-NU (ppm) ND - No detection			
Sat - Saturated			Γ	<ul> <li>Sample Preserved for Laboratory Testing</li> </ul>			
Symbols	•		<u> </u>				
	intered ground water	sample					
∑ - i list elicodi	sampled	recovery					
Static ground	nd water level interval						
Density (Blows/Fo	oot - Cal Mod Sampler)						
Sands and gravel	els	Silts and Clays		,			
	Very Loose	0-2	- Very Soft				
	_00\$ <del>0</del>	2-4	- Soft				
	Medium dense	4-9	-Fim				
38 - 63 - D	Dense	9-17	- Stiff				
over 63 - V	Very dense	17 - 37	- Very Stiff				
		37 - 72	- Hard				
·		over 72	- Very Hard				
GRAIN - SIZE SCALE							
00400100							

#### **GRADE LIMITS** U.S. Standard

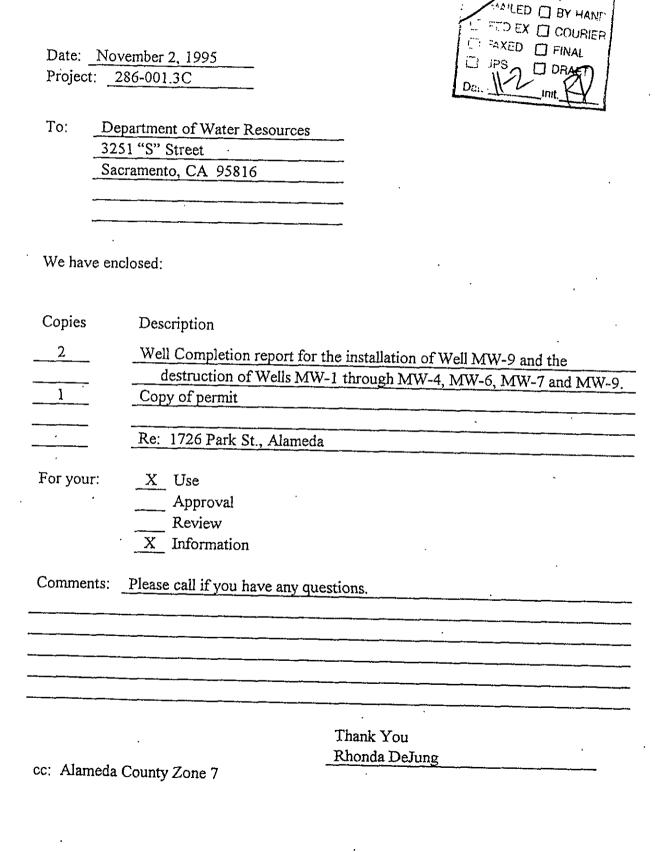
**GRADE NAME** 

inch	sieve size			<del></del>
12.0			Boulders	
<del></del> 3.0 -	3.0 in		Cobbles	
0.19	No. 4		Gravels	
0.08	No. 10	coarse		
<del></del>	No. 40	medium	Sand	
	No. 200			
			Silt	
			Clay Size	



# ATTACHMENT B MONITORING WELL INSTALLATION AND DESTRUCTION PERMITS





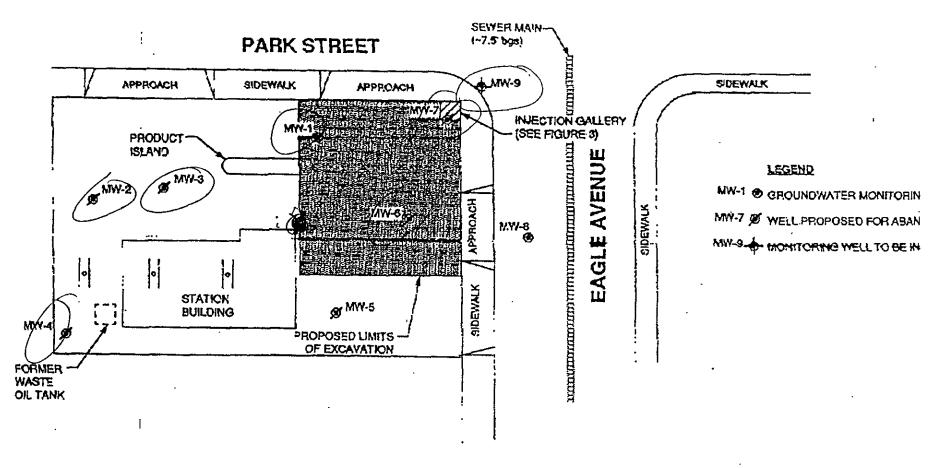
SENT

# CONFIDENTIAL

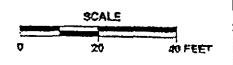
STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

**REMOVED** 

A







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

# CONFIDENTIAL

STATE OF CALIFORNIA DWR WELL COMPLETION REPORT (WELL LOGS)

**REMOVED** 

,				·						
LOCAŢIÓN MAI	<b>.</b>			PAC	PACIFIC ENVIRONMENTAL GROUP, INC. WELL/BORING NO. Μω-1					
ORTHING EA	STING	ELEV	'ATION	LOGO DRILI DRILI SAMF CASII SLOT GRAV	SEU LEF LING PLIN NG 'SI	DBY:> R:ひらい GMET NGME	PA J Dri THOD: THOI : Sch	Oction:  Date Drilled: 9-11-95  LOCATION: Hole DIAMETER: 8"  Hole DEPTH: 19'  Well DIAMETER: 2"  Well DEPTH: 19'		
WELL COMPLETION	MOISTURE CONTENT	Cia	PENETRATION (BLOWS/6")	DEPTH (FEET)	ЯЕСОУЕВУ	SAMPLE INTERVAL GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS		
mail					П	3000		Asphall, valbanirock		
	Lived -	987	5 6/6	4 -		X	SC.	Clarger, sand, pling: 15-25, clay: 5.Pir. 5: Hi; 65-70, fre formersand; books, mst-wet; mpo.		
	32 pm	31	P (1/21	10 -	WWW		SP	Sandjellewish hom; 5-101. Rmes; 30-8%. fine said; in cluse; abundant matics; NPO		
	set	713		/L			SC	Clayersard; Bline: 25-301. Clay: 5-10r. 4.14: 165-60r. freshed, frace med: 6.5mm voolits; sat; MPO  Sand, yellowishbown; 5-10r. fores:		
		ſ		20-			57	85-90: Inesand, 5-101. must sort; traceware, 'Sad,' NPO		
						1000 1000 1000 1000 1000 1000 1000 100				
				+						
117	1-1		日	+	Ŧ		ļ	of a contract of the contract		

٠,



County Ordinance No. 73-68.

APPLICANT'S

### ZONE \*WATER AGENCY

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600 FAX (510) 462-3914

#### DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
LOCATION OF PROJECT 1726 PARK ST @ Eagle Alameda, Ca	PERMIT NUMBER 95464 LOCATION NUMBER 2S/3W 7L80
Address 1040 Marina Village Voice (610) 521-1211  Dity Suit B, Alamean, Ca Zip	SUT & BOWN PERMIT CONDITIONS  Circled Permit Requirements Apply
APPLICANT Name    County   Fax   HOS   HI - F559	A. GENERAL  1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.  2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.  3. Permit is void if project not begun within 90 days of approval date.  8. WATER WELLS, INCLUDING PIEZOMETERS  1. Minimum surface seal thickness is two inches of cement grout placed by tremie.  2. Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.  C. GEOTECHNICAL, Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.  D. CATHODIC, Fill hole above anode zone with concrete placed by tremio.  E. WELL DESTRUCTION, See attached.
Casing Diameter Z in. Depth ft Surface Seal Depth ft Number MW-9)	
GEOTECHNICAL PROJECTS  Number of Borings Maximum  Hole Diameter in. Depth ft.	
ESTIMATED STARTING DATE \$1595 ESTIMATED COMPLETION DATE \$1795	Approved Warnam Hotel Date 26 Jul. 95
thereby agree to comply with all requirements of this permit and Alamoda	Wyman Hong

31 July 1995

## ZONE 7 WATER RESOURCES ENGINEERING DRILLING ORDINANCE

ESTATE OF JOHN HENRY 1726 PARK STREET ALAMEDA WELL 2S/3W 7L80 PERMIT 95464

### Destruction Requirements

- Drill out the well so that the casing, seal, and gravel pack are removed to the bottom of the well.
- 2. Using a tremie pipe, fill the hole to 2 feet below the lower of finished grade or original ground with neat cement.
- After the seal has set, backfill the remaining hole with compacted material.

These destruction requirements as proposed by Lance Geselbracht Pacific Environmental meet or exceed the Zone 7 minimum requirements.

Post-it" Fax Note 7671	Date 10/31/95 pages 2
TO RHONDA	From WYMAN
Co.Dopt. PACTEIC	CO. ZONE 7
Phono #	Phono (510) 484-2600
FOX (40x) 441-9102	Fax 4 7 2 35

THE RESERVE THE PROPERTY OF TH

31 July 1995

## ZONE 7 WATER RESOURCES ENGINEERING DRILLING ORDINANCE

ESTATE OF JOHN HENRY 1726 PARK STREET ALAMEDA WELL 25/3W 7L80 PERMIT 95464

#### <u>Destruction Requirements</u>

- 1. Drill out the well so that the casing, seal, and gravel pack are removed to the bottom of the well.
- 2. Using a tremie pipe, fill the hole to 2 feet below the lower of finished grade or original ground with neat cement.
- 3. After the seal has set, backfill the remaining hole with compacted material.

These destruction requirements as proposed by Lance Geselbracht Pacific Environmental meet or exceed the Zone 7 minimum requirements.

**PLICANT'S** 

NATURE

### **ZONE 7 WATER AGENCY**

5997 PARKSIDE DRIVE

celarally Date 7/2/95

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600 FAX (510) 462-3914

91992

#### DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
CATION OF PROJECT 1726 FORK SHOW.  Eagle  Alameda, Ca	PERMIT NUMBER 95464 LOCATION NUMBER 2S/3W 7L80
ENT  THE Estate of John B. Henry C/O Mendr  Traces 1040 Marina Village Voice (510) 521-1211  Sulf B, Alameda, Ca Zip :::	PERMIT CONDITIONS  Circled Permit Requirements Apply
PLICANT PROJECT FAVIENCE tel Organic SW.  Fax Pros 441 7539  Fass 2025 Contewey P Voice 441 7500, 20  Son Jose (a. Zip 95112  F OF PROJECT  Instruction General Contamination  Water Supply Contamination  Walt Destruction  Maniforing Well Destruction  PPOSED WATER SUPPLY WELL USE MW-6 4 MW-7  Inestic Industrial Other  Icipal Irrigation  LLING METHOD:  Rotary Air Rotary Auger X (MW-9)  LLER'S LICENSE NO. C57 - 374 152  LL PROJECTS  Drill Hole Diameter 8 in. Maximum  Casing Diameter 7 in. Depth 2 tt.  Surface Seal Depth 5 ft. Number (MW-9)	<ol> <li>Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.</li> <li>Permit is void if project not begun within 90 days of approval date.</li> <li>WATER WELLS, INCLUDING PIEZOMETERS</li> <li>Minimum surface seal thickness is two inches of cement grout placed by tremie.</li> <li>Minimum seal depth is 50 feet for municipal and industrial wells or 20 feet for domestic and irrigation wells unless a lesser depth is specially approved. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.</li> <li>GEOTECHNICAL. Backfill bore hole with compacted cuttings or heavy bentonite and upper two feet with compacted material. In areas of known or suspected contamination, tremied cement grout shall be used in place of compacted cuttings.</li> <li>CATHODIC. Fill hole above anode zone with concrete placed by tremie.</li> <li>WELL DESTRUCTION. See attached.</li> </ol>
Number of Borings Maximum Hole Diameter In. Depth ft.  IMATED STARTING DATE ATED COMPLETION DATE  Teby agree to comply with all requirements of this permit and Alameda inty Ordinance No. 73-68.	Approved Wyman Hong Date 26 Jul 9





July 12, 1995 Project 286.001-3C

Mr. Wyman Hong Zone 7 Water Agency 5997 Parkside Drive Pleasanton, California 94588

Re: Estate of John Henry

1726 Park St.

Alameda, California

Dear Mr. Hong:

Pacific Environmental Group, Inc. is submitting this application for well abandonment for the site referenced above. This wells need to be abandoned as part of remedial efforts to be implemented for the site. The permit application fees will be submitted by the successful remediation contractor selected by competitive bid in approximately two weeks from the date of this letter.

If you have any questions concerning this application, please call me.

Sincerely,

Pacific Environmental Group, Inc.

Lance D. Geselbracht, P.E.

Senior Engineer

Attachments:

Permit Application with Boring Logs attached

cc:

Michael Brown, Mendelson and Brown (Estate)

Marvin Katz, Texaco



## **ZONE 7 WATER AGENCY**

5997 PARKSIDE DRIVE

PLEASANTON, CALIFORNIA 94588

VOICE (510) 484-2600 FAX (510) 462-3914

#### DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE	FOR OFFICE USE
ATION OF PROJECT 1726 FORK St. 0	PERMIT NUMBER
Eagle Alameda Ca	LOCATION NUMBER
ESTATE OF JOHN B. Henry C/O Mandels  ess 1040 Marina VIIIage Voice (510) 521-1211  Sout B, Alaman, CR Zip  LICANT D  e Tachic Brutowe tal Group dw.  Fax (405) 441-7539  ess 2025 Gatewey P Voice 741-7500; 202  San Jow (a. Zip 95112  E OF PROJECT  Tastruction Geotechnical Investigation odic Protection General  Vater Supply Contamination  Vater Supply Contamination  Volum of MW-T, MW-2, MW-3, MW-4  POSED WATER SUPPLY WELL USE MW-6	PERMIT CONDITIONS  Circled Permit Requirements Apply  A. GENERAL  1. A permit application should be submitted so as to arrive at the Zone 7 office five days prior to proposed starting date.  2. Submit to Zone 7 within 60 days after completion of permitted work the original Department of Water Resources Water Well Drillers Report or equivalent for well Projects, or drilling logs and location sketch for geotechnical projects.  3. Permit is void if project not begun within 90 days of approval date.  B. WATT  EZOMETERS  ness is two inches of cement grout  at for municipal and industrial wells igation wells unless a lesser finimum seal depth for m depth practicable or 20 feet. with compacted cuttings or h compacted material. In tion, tremied cement grout ings.  with concrete placed by
TECHNICAL PROJECTS  Number of Borings  Hole Diameter  in.  Depth  MATED STARTING DATE  MATED COMPLETION DATE  S1595  Dy agree to comply with all requirements of this permit and Alameda by Ordinance No. 73-68.	ApprovedDate
ATURE Cocal and Date 7/295	91992

OJECT NO. 286-001. 3	3C	GEOLOGIST	Lance Geselbrack
		,	2d Green Drilling
OF BUSINESS AT SITE Vacant	1,80 × 1	·	END DATE 8/10/95 - 8/12/
****ATTACH M	AP WITH PROI	POSED LOCAT	TONS****
MONITOR	RING WELL CONS	TRUCTION PERI	MIT :
WAST OF MELLO ON OFFI			TYPE OF WELL (Check one) Vapor
JMBER OF WELLS ON SITE? (designation)	_ DEPTH/DIAMETER .		Groundwater X
MBER OF WELLS OFF SITE? MW - 9 (designation)		,	Extraction Dual Casing (provide well detail) Other
INULAR SEAL DEPTH 5	_ ANNULAR SEAL MA'	TERIAL POTH a	nd a Bentanite Mix
WELL TO BE CONSTRUCTED WITHIN 50 FEET O	·F-		
	a. The top of a creek i		-
	<ul><li>b. Sanitary sewer line</li><li>c. Septic tank?</li></ul>	? <u>X</u>	-
	d. Cesspool?	No	
BORING	HYDROPUNCH/G	FOPROBE PERM	ir
	······································	· · · · · · · · · · · · · · · · · · ·	
RMIT FOR BORING HYDROPUNCH	GEOPROI	PE	
JMBER OF BORINGS ON SITE? (designation)	_ DEPTH/DIAMETER _		
.3ER OF BORINGS OFF SITE? (designation)	_ DEPTH/DIAMETER .		
ν	VELL DESTRUCTI	ON PERMIT	
			FOR DESTRUCTION (check one)
IMBER OF WELLS ON SITE? MW-1,2,3, (designation)	<u>7</u> ,6,1	a. No longer needed	
		b. Casing collapsed	
JMBER OF WELLS OFF SITE?(designation)	<del></del>	c. Poor water quality d. Land development	
		e. Other (explain)	
DES WELL HAVE:	Al -		
a. Outer conductor casing?	No	<del></del>	1
b. Annular concrete seal outside of casing (provide boring log	.51	•	
· If possible)?	<del></del>	<u></u>	
<ul> <li>A gravel envelope outside of casing at surface?</li> </ul>	No.	<u> </u>	
d. Well depth?	20'		,
THOD OF DESTRUCTION:			
	APPLICATION AS OCC	MACNEO	
	ADDITIONAL CO	ININIEN IS	
<del></del>		<del></del>	
	,,,,,,,,		

WELL COVER USED

SILT TRAP USED?

CHRISTY BOX

NO

YES

PROJECT NAME: ESTATE OF JOHN B HE	NRY	7				x.	CHRISTY	BOX
PROJECT NUMBER: 104891 MGR: MICHAE	L PRINCEVALLE	1 -					LOCKING	STEEL.
LOGGER: M PRINCEVALLE EDITED BY:		1   1	Tr		7	1-	COVER	
WELL NAME: HW - 2 DATE: 05-09	-92	1 7	$\sqcap$				STEEL CO	DIAMETER NDUCTOR
DRILLING CO.: K L Drilling		1					CASING	
EQUIPMENT:  8 INCH HOLLOW STEM AUGER	ORILLER: KEN LINK						BOREHOLE 0 TO 20	PEET
1 ···	HRS. DRILLED: 1 1/2						-SACK CEI	
GALLONS OF WATER USED DURING DRILLING:	O GALLONS						0 TO 2	1/2 FEET
METHOD OF DECONTAMINATION PRIOR TO DRILLING: Steam Cleaning	g w/soap solutio	n	ı		] _	LTC	P OF CASI	ING AT
DEVELOPMENT						TA I	FEET GROUND I	EVEL
METHOD OF DEVELOPMENT: Honda Pump		·					INCH DIA	ŒTER
DEVELOPMENT DATE: 05-08-92 TI	ME: 14:15	]					REHOLE TO 20 I	EET
YIELD: TIME: GPM FROM TO	DATE:				-	J sc	INCH DIX HEDULE 40 ANK CASIN	) PVC
YIELD: TIME: GPM FROM TO	DATE:						0 TO 5 E	Peet
YIELD: TIME: GPH FROM TO	DATE:					لبا	BENTONITE SEAL OR	
YIELD: TIME: GPM FROM TO	DATE:	,					8 SACK CE SAND SEAL 0 TO 2 1/	
TOTAL WATER REMOVED DURING DEVELOPMENT: 27	GALLONS	!				S	ENTONITE EAL /2 TO 3 F	
DESCRIPTION OF CLEAR						2 1	MONTEREY	
END OF DEVELOPMENT MOD.TURBID				_	$  \  $		<del></del>	
SLIGHTLY CLO	· YOUN			_		S	(NAME/NUM AND PACK	•
O VERY MUDDY				-			TO 20 FE	
ODOR OF WATER:				=		S	LOTTED(.0	10
WATER DISCHARGED TO: Drums				_			NCH) SCRE 5 TO 20 F	
DEPTH TO WATER AFTER DEVELOPMENT:	+7 FEET			_				
MATERIALS USED	-							
3 SACKS OF #3 MONTEREY SAND 1 1/2 SACKS OF PORTLAND I-II CEMENT 0 GALLONS OF GROUT USED						:	OTTOM WELL 20 FEET	
0 SACKS OF POWDERED BENTONITE 1/2 BUCKET OF BENTONITE PELLETS		(NOT		\$01	TEN		DLE CLEAN 20 FEE	
0-5 FEET OF 2 INCH PVC BLANK CASING 5-20 FEET OF 2 INCH PVC SLOTTED SCR	G EEN	(	. 10	3 CAT	me l		OTTOM OF	0 2225
O FEET OF INCH STEEL CONDUCTO O YARD CEMENT-SAND (REDI-MIX) O	R CASTNG	*****	17.01	<b></b> .			OREHOLE 2	J FEET
O YARD CEMENT-SAND (REDI-MIX) U	SED	AUUIT	NOT	WL 1	O'IN.	RMATIC	JN 1	<del></del>
CONCRETE PUMPER USED? NO Y	ES	<del>********</del>						
WELL COVER USED CHRISTY BOX								
SILT TRAP USED? NO YES				<del></del>				

#### LOG OF BORING NUMBER MW-1

ROJECT NAME: THE ESTATE OF JOHN B.	HENRY PROJECT NUMBER: 10	4891 SHEET 1 OF 2
LOCATION: 1726 PARK STREET, ALAMEDA,	CALIFORNIA 94501	DATE: 5-8-92
DRILLER: K L DRILLING	DRILL METHOD: HOLLOW STEM	~
LICENSE #:	SAMPLE METHOD: 2" SPLIT SPOON	
AGENCY: ALAMEDA COUNTY HEALTH DEPT	INSPECTOR:	BORING DIA.: 8"
LOGGER: MICHALE PRINCEVALLE APPR	ROVED BY:	TOTAL DEPTH: 20'

\*\* NOTICE - LIMITATIONS APPLY TO THIS LOG - SEE ATTACHED KEY SHEET \*\*

SAMPLE LABEL	SAMPLE DEPTH	REC	BLOWS /FT	PPMV	MODE	DEPTH FEET	LEGEND USCS		STAIN/ OTHER
						°		0-3" ASPHALT	
						1			
·						2			
						3			
HW-1-1	4 1/2	70	12	4		4		Clayey SAND → Sandy CLAY; Brown w/red orange mottles; Moist; Firm	Мо
1					,	5			
						<u> </u>		Staining contact @ 6 1/2-7'	
MW-1-2	7- 7 1/2'	100	32	100		7		Clayey SAND; Brown w/ gray mottles/staining; Moist; Firm	Yes
						8		change to continous sampling; 2 1/2" I. D. Sampler soils sampled for logging	,
	8 1/2- 9 1/2'	30	36			9		Medium sand; Brown; Very moist; Loose	slt.
						10		•	
	9 1/2-	100				11		Medium SAND; Brown w./ Few faint red- orange mottles; Wet; Friable	No
						12		Changed to sampler to 1 1/2"	
	11 1/2 - 13 1/2'		10			13	<u> </u>	Fine to Medium SAND, some Clay, Brown; Wet; Friable	
[	-/-					14			
						15	·		

THIS LOG OF SUBSURFACE CONDITIONS APPLIES ONLY AT THE SPECIFIC LOCATION AND DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF CONDITIONS AT OTHER LOCATIONS AND TIMES.

#### LOG OF BORING NUMBER HW-1

PROJECT NAME: THE ESTATE OF JOHN B.	HENRY PROJECT NUMBER: 104	891 SHEET 2 OF 2
LOCATION: 1726 PARK STREET, ALAMEDA,	CALIFORNIA 94501	DATE: 5-8-92
DRILLER: K L DRILLING	DRILL METHOD: HOLLOW STEM	<del></del>
LICENSE #:	SAMPLE METHOD: 2" SPLIT SPOON	
AGENCY: ALAMEDA COUNTY HEALTH DEPT	INSPECTOR:	BORING DIA.: 8"
LOGGER: MICHALE PRINCEVALLE APPR	OVED BY:	TOTAL DEPTH: 20'

\*\* NOTICE - LIMITATIONS APPLY TO THIS LOG - SEE ATTACHED KEY SHEET \*\*

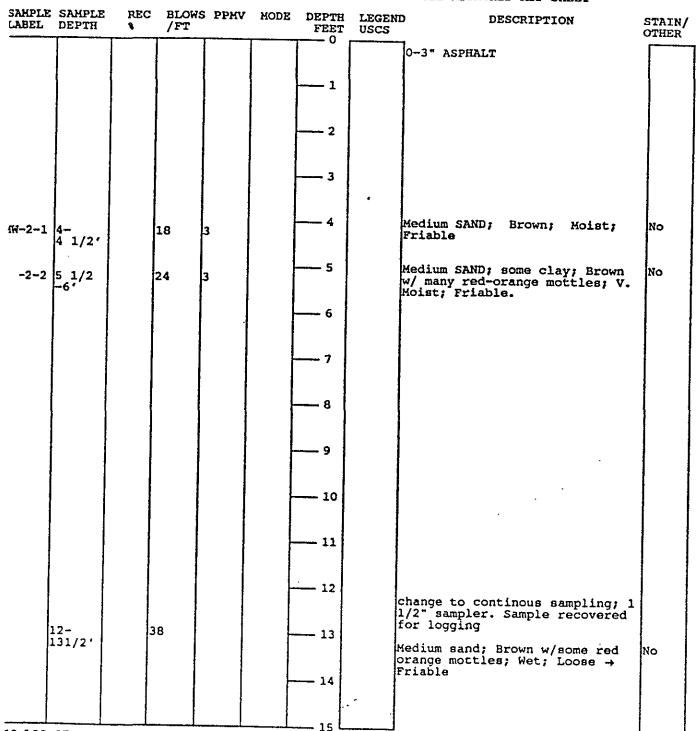
	SAMPLE DEPTH	REC	BLOWS /PT	VMqq	MODE	DEPTH FEET	LEGEN USCS		STAIN/ OTHER
	141/2- 16'		24			16		Fine to Medium SAND; Brown, some gray (staining?) Many distinct olive mottles; Very moist to Wet; Friable	
						17		Fine SAND; Gray w/ few faint olive mottles; Very Moist to Wet, Firm	
MW-1-3	171/2- -18'		20	20		18			·
	18-20 <i>′</i>		18	5		19			
1						20		Boring terminated at 20'	
						<u> </u>			
						22		WELL CASING & SLOT STEAM CLEANED AT SITE.	
						23		Cement Seal: 0 - 2 1/2' Bentonite spacer: 2 1/2-3' Blank well casing: 0-5' Well slot: 5-20' Sand Pack 3-20'	
						24		4 1/2 sacks #2/12 Sand	
						25			
						26		Sampler washed with soapy water between use.	
					}	27			
					}	28			
					-	29		·	
						30			

THIS LOG OF SUBSURFACE CONDITIONS APPLIES ONLY AT THE SPECIFIC LOCATION AND DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF CONDITIONS AT OTHER LOCATIONS AND TIMES.

#### LOG OF BORING NUMBER HW-2

OJECT NAME: THE ESTATE OF JOHN B.	HENRY PROJECT NUMBER: 104891	SHEET 1 OF 2
LOCATION: 1726 PARK STREET, ALAMEDA,	CALIFORNIA 94501	DATE: 5-8-92
DRILLER: K L DRILLING	DRILL METHOD: HOLLOW STEM 4" I D.	8" O D
LICENSE #: C57-596309	SAMPLE METHOD: 2" SPLIT SPOON	
AGENCY: ALAMEDA COUNTY HEALTH DEPT	INSPECTOR: BORI	NG DIA.: 8"
LOGGER: HICHALE PRINCEVALLE APPR	OVED BY: TOTA	L DEPTH: 20'

\*\* NOTICE - LIMITATIONS APPLY TO THIS LOG - SEE ATTACHED KEY SHEET \*\*



IS LOG OF SUBSURFACE CONDITIONS APPLIES ONLY AT THE SPECIFIC LOCATION AND DATE INDICATED. IS NOT WARRANTED TO BE REPRESENTATIVE OF CONDITIONS AT OTHER LOCATIONS AND TIMES.

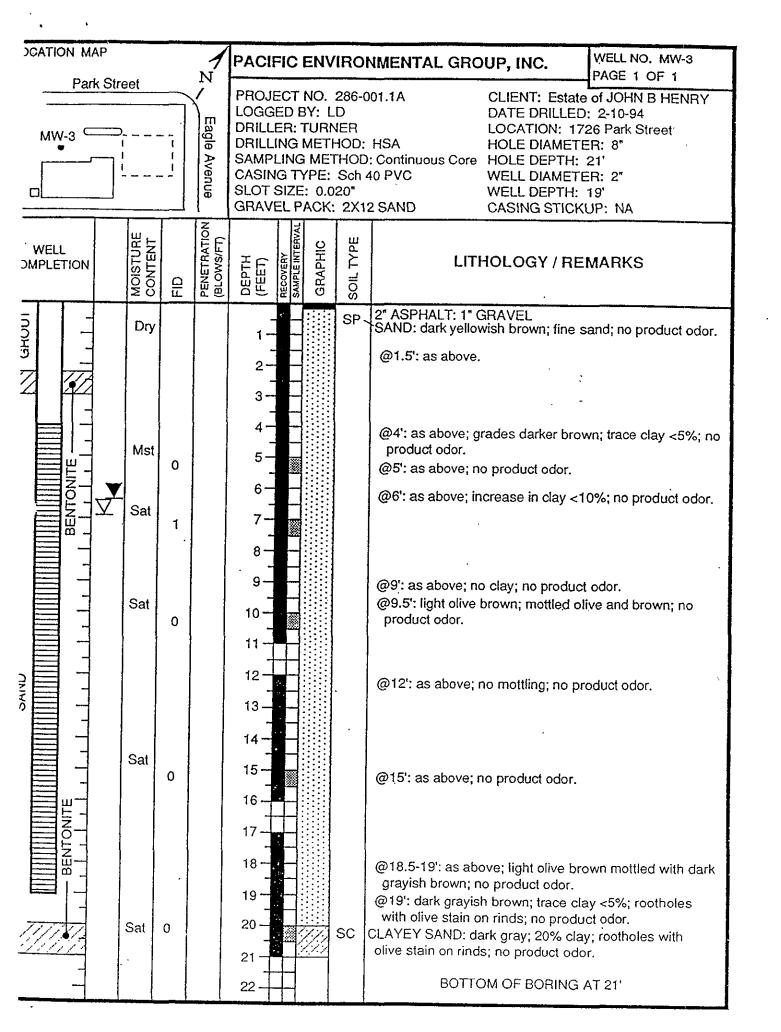
#### LOG OF BORING NUMBER HW-2

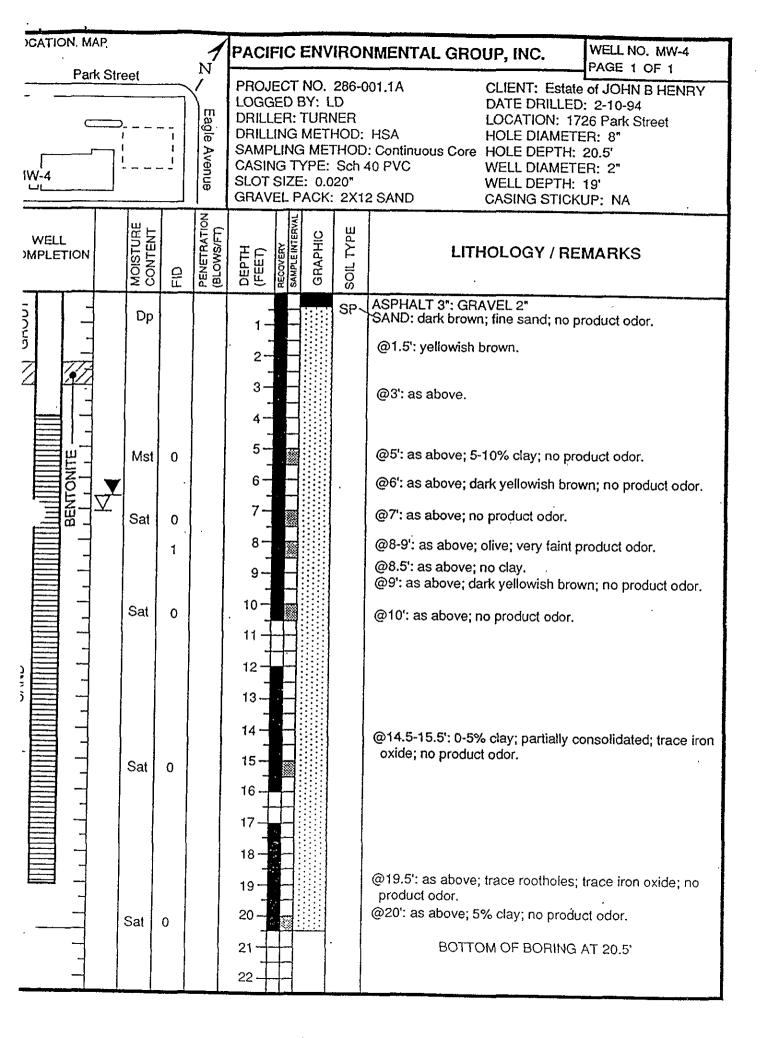
PROJECT NAME: THE ESTATE OF JOHN B.	HENRY PROJECT NUMBER: 1048	91 SHEET 2 OF 2				
LOCATION: 1726 PARK STREET, ALAMEDA,	CALIFORNIA 94501	DATE: 5-8-92				
DRILLER: K L DRILLING	DRILL METHOD: HOLLOW STEM 4" I D, 8" O D					
LICENSE #: C57-596309	SAMPLE METHOD: 2" I. D. SPLIT S	POON				
AGENCY: ALAMEDA COUNTY HEALTH DEPT	INSPECTOR: N/A	BORING DIA.: 8"				
LOGGER: MICHALE PRINCEVALLE APPR	OVED BY:	OTAL DEPTH: 20°				

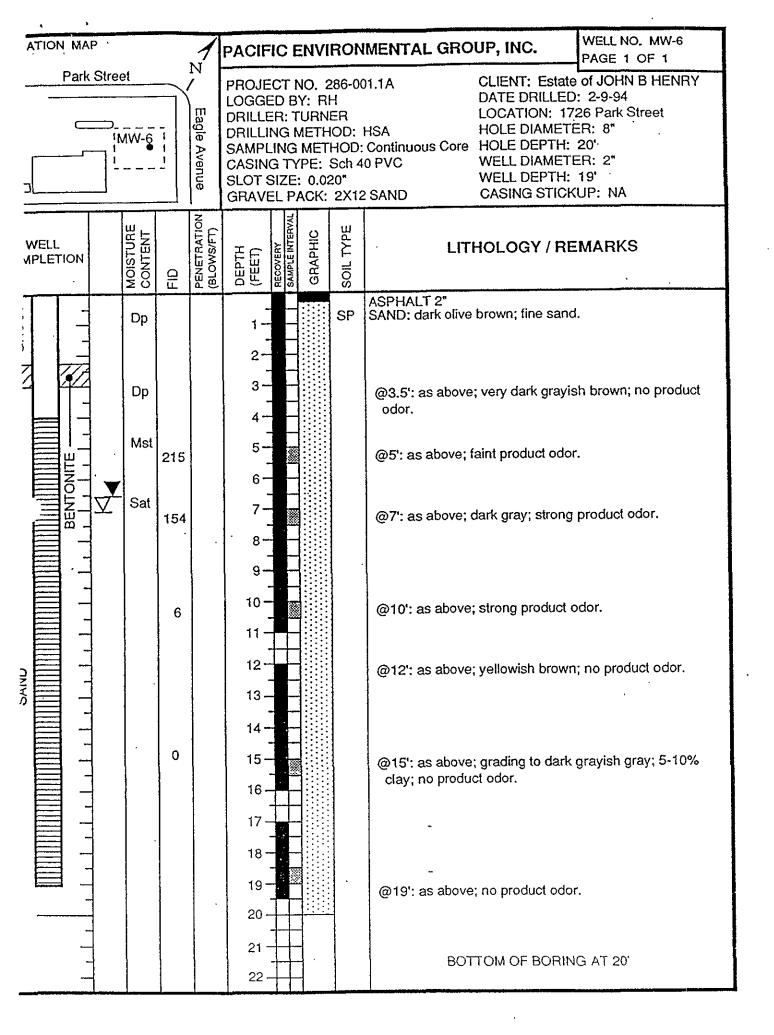
\*\* NOTICE - LIMITATIONS APPLY TO THIS LOG - SEE ATTACHED KEY SHEET \*\*

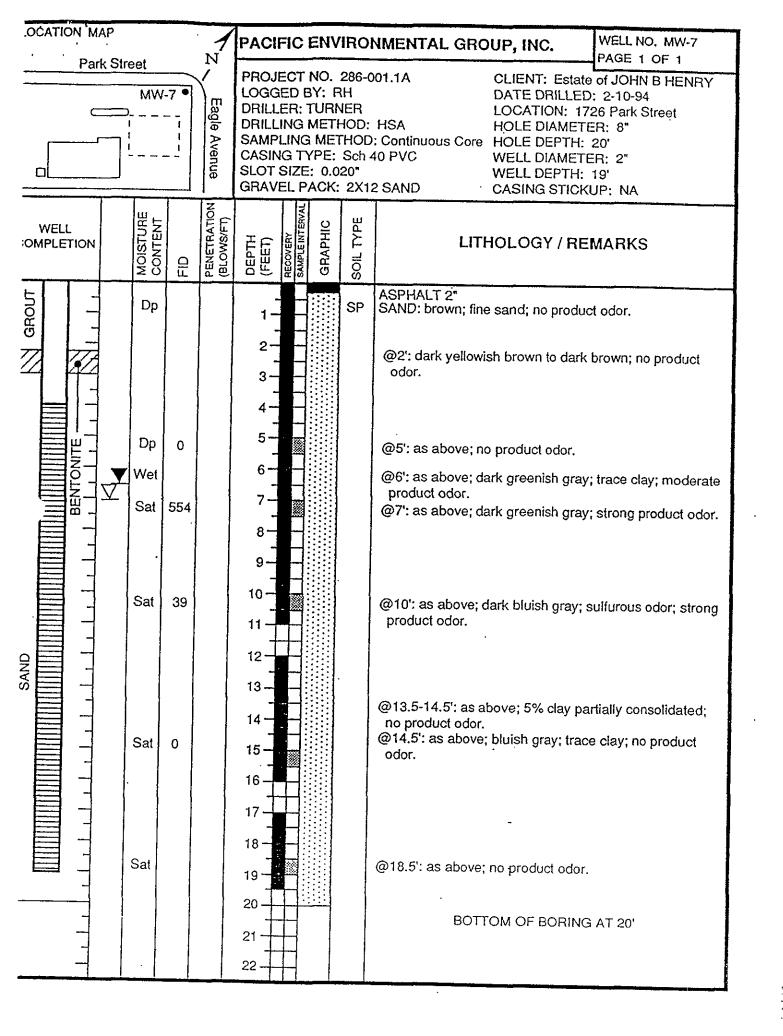
SAMPLE LABEL	SAMPLE DEPTH	REC	BLOWS /FT	PPMV	MODE	DEPTH FEET	LEGENI USCS		STAIN/
			/11			15	0303		OTHER
						16			
						· 17			
	18'- 20'		24			18			
						19		Fine → Hedium SAND; Brown w/ occassional red-orange mottles; V. moist; Wet; Loose -Friable	No
				ł		20		Loose -Friable Boring terminated at 20'	
						21		Well Casing and slot steamed cleaned at site	
						22		WELL CONSTRUCTION	
						23		Cement Seal: 0 - 2 1/2' Bentonite spacer: 2 1/2-3' Blank well casing: 0-5' Well slot(0.010"): 5-20' Sand Pack(3 sacks #3 sand) 3-20'	
						24	į	rack(3 sacks #3 sand) 3-20'	
						25			
						<del></del> 26	:	Sampler and auger washed with soapy water between use.	
						27			
						28		•	
						29			
	OF SUP					30 [			

THIS LOG OF SUBSURFACE CONDITIONS APPLIES ONLY AT THE SPECIFIC LOCATION AND DATE INDICATED. IT IS NOT WARRANTED TO BE REPRESENTATIVE OF CONDITIONS AT OTHER LOCATIONS AND TIMES.









### ATTACHMENT C

# CERTIFIED ANALYTICAL REPORTS AND CHAIN-OF-CUSTODY DOCUMENTATION



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-960

FAX (415) 364-9233 FAX (510) 988-9673

2025 Gateway Place, Suite 440 San Jose, CA 95110

Pacific Environmental Group Client Proj. ID: 286-001.1A/Alameda

Sample Descript: MW8 Matrix: LIQUID

Analysis Method: 8015Mod/8020

Lab Number: 9510L77-01

PACIFIC ENV. RCIMENTAL OFFICIAL INC Sampled: 10/30/95 Received: 10/31/95

Analyzed: 11/01/95 Reported: 11/10/95

Attention: Maree Doden C Batch Number: GC110195BTEX22A

nstrument ID: GCHP22

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Lin ug/L	nit ș	Sample Results ug/L
TPPH as Gas Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern: Weathered Gas			. 2.6 . 0.88 . 1.4 . 0.54
Surrogates Trifluorotoluene	Control Limits 70		Recovery 122

alytes reported as N.D. were not present above the stated limit of detection.

EQUOIA ANALYTICAL - ELAP #1210

rucie Fletcher oject Manager

Page:



680 Chesapeake Drive 404 N. Wiget Lane 819 Striker Avenue, Suite 8 Sacramento, CA 95834

Redwood City, CA 94063 Walnut Creek, CA 94598

(415) 364-9600 ' (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110

Client Proj. ID: 286-001.1A/Alameda

Sampled: 10/30/95

Sample Descript: MW5 Matrix: LIQUID

Received: 10/31/95

Attention: Maree Doden

Analysis Method: 8015Mod/8020 Lab Number: 9510L77-02

Analyzed: 11/01/95 Reported: 11/10/95

C Batch Number: GC110195BTEX22A

istrument ID: GCHP22

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte		ction Limit ug/L	Sample Results ug/L
TPPH as Gas Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		<b>50</b> 0.50 0.50 0.50 0.50 0.50	N.D. N.D. N.D. 1.7
Surrogates Trifluorotoluene	Contro 70	ol Limits % 130	% Recovery

alytes reported as N.D. were not present above the stated limit of detection.

**EQUOIA ANALYTICAL** -

ucie Fletcher oject Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110

Client Proj. ID: 286-001.1A/Alameda Sample Descript: MW5

Sampled: 10/30/95

Matrix: LIQUID

Received: 10/31/95 Extracted: 11/01/95 Analyzed: 11/07/95 Reported: 11/10/95

Attention: Maree Doden

Analysis Method: EPA 8015 Mod Lab Number: 9510L77-02

C Batch Number: GC1101950HBPEXZ

nstrument ID: GCHP4A

### **Total Extractable Petroleum Hydrocarbons (TEPH)**

Analyte			ction Limit ug/L		Sar	nple Results ug/L
TEPH as Diesel Chromatogram Pattern:	•••••		50	•••••		650
Unidentified HC	******			*********		C9-C24
Surrogates n-Pentacosane (C25)		Contr 50	ol Limits %	150	% Re	ecovery 123

halytes reported as N.D. were not present above the stated limit of detection.

EQUOIA ANALYTICAL - ELAP #1210

rucie Fletcher oject Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Pacific Environmental Group Client Proj. ID: 286-001.1A/Alameda Sampled: 10/30/95 2025 Gateway Place, Suite 440 San Jose, CA 95110

Sample Descript: TB-1

Matrix: LIQUID

Received: 10/31/95

Analysis Method: 8015Mod/8020 Lab Number: 9510L77-03

Analyzed: 11/01/95 Reported: 11/10/95

C Batch Number: GC110195BTEX22A

strument ID: GCHP22

Attention: Maree Doden

### Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

	` ,					
Analyte	Detection Limit ug/L	Sample Results ug/L				
FPPH as Gas Benzene Foluene Ethyl Benzene Kylenes (Total) Chromatogram Pattern:	50 0.50 0.50 0.50 0.50	N.D. N.D. N.D. N.D. N.D.				
Surrogates Trifluorotoluene	Control Limits % 130	% Recovery 102				

lytes reported as N.D. were not present above the stated limit of detection.

**:QUOIA ANALYTICAL** - ELAP #1210

cie Fletcher ject Manager



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

PORTRI TO A LOCALIZAÇÃO ARREST DE CAR Pacific Environmental Group 2025 Gateway Place, Suite 440

ent Project ID: 286-001.1A/Alameda Client Project ID:

Matrix:

Work Order #:

San Jose, CA 95110 Attention: Maree Doden

9510L77 02

Reported: Nov 10, 1995 ada de la como processor de la compacta de la comp

#### QUALITY CONTROL DATA REPORT

Analyte:

Diesel

QC Batch#: GC1101950HBPEXZ Analy. Method: EPA 8015 Mod. Prep. Method: **EPA 3520** 

Analyst: MS/MSD #: B. Ali

9510L8002 Sample Conc.: 580 Prepared Date: 11/1/95 Analyzed Date: 11/3/95 Instrument I.D.#:

Conc. Spiked:

GCHP4B  $1000 \mu g/L$ 

Result: MS % Recovery: 1500 92

Dup. Result:

1400

MSD % Recov.:

82

RPD:

6.9

**RPD Limit:** 

0-50

LCS #:

BLK110195

**Prepared Date:** Analyzed Date:

11/1/95 11/3/95

Instrument I.D.#:

GCHP4B

Conc. Spiked:

 $1000 \mu g/L$ 

LCS Result: LCS % Recov.:

1000

100

MS/MSD

LCS

38-122

**Centrol Limits** 

SEGUOIA ANALYTICAL

Brucie Fletchei Project Manager Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600

FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

Pacific Environmental Group 2025 Gateway Place, Suite 440 Client Project ID:

286-001.1A/Alameda

Matrix:

LIQUID

San Jose, CA 95110 Attention: Maree Doden

Work Order #:

9510L77

01-03

Reported:

### **QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl	Xylenes	<del>-</del>
QC Batch#: Analy. Method: Prep. Method:		GC110195BTEX22A EPA 8020 EPA 5030	Benzene GC110195BTEX22A EPA 8020 EPA 5030	GC110195BTEX22A EPA 8020 EPA 5030	
Analyst:     MS/MSD #:     Sample Conc.:     Prepared Date:     Analyzed Date: Instrument I.D.#:     Conc. Spiked:	9510K7803 N.D. 11/1/95	R. Lee 9510K7803 N.D. 11/1/95 11/1/95 GCHP22 10 µg/L	R. Lee 9510K7803 N.D. 11/1/95 11/1/95 GCHP22 10 µg/L	R. Lee 9510K7803 N.D. 11/1/95 11/1/95 GCHP22 30 µg/L	
Result:	9.7	10	11	31	
MS % Recovery:	97	100	110	103	
Dup. Result:	10	10	10	30	
MSD % Recov.:	100	100	100	100	
RPD:	3.0	0.0	9.5	3.3	
RPD Limit:	0-50	0-50	0-50	0-50	

LCS #:	BLK110195	BLK110195	BLK110195	BLK110195	
Prepared Date:	11/1/95	11/1/95	11/1/95	11/1/95	
Analyzed Date:	11/1/95	11/1/95	11/1/95	11/1/95	
Instrument I.D.#:	GCHP22	GCHP22	GCHP22	GCHP22	
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 μg/L	
LCS Result:	9.4	9.8	9. <b>9</b>	31	
LCS % Recov.:	94	98	99	103	
MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120	

SEGUOIA ANALYTICAL

Project Manager

Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

CLIENT NAME: REC. BY (PRINT):	PEG M.Y.		=	WORKORDER: DATE OF LOG-IN:	9510L7 10-	7 31-95	-	-
CIRCLE THE APPROPRIA	TE RESPONSE	LAB SAMPLE	DASH	CLIENT	CONTAINER	SAMPLE	DATE	REMARKS:
1. Custody Seal(s)	Present Absent	#	#	IDENTIFICATION	DESCRIPTION	MATRIX	SAMP.	CONDITION(ETC.)
	Intact / Broken*		A-C	mm8	10A (3)	Lo-	10/30	
2. Custody Seal Nos.:	Put in Remarks Section	2	1	mw5	(BA (3)	1		
3. Chain-of-Custody		3	1B	TB-1	MA (27)			
Records:	Present Absent*	2	DE	MW5	MB (2)			
4. Traffic Reports or								
Packing List:	Present Absent							
5. Airbill:	Airbill / Sticker							
	Present Absent							
6. Airbill No.:								
7. Sample Tags:	Presenty Absent*							
Sample Tag Nos.:	Listed Not Listed				0/31/98			- "
	on Chain-of-Custody			·	10/31			
8. Sample Condition:	Intact) Broken* / Leaking*						<u> </u>	
9. Does information on	custody						<u> </u>	
reports, traffic reports	and ·						ļ	
sample tags agree? (	Yes No*							
10. Proper preservatives								
used:	Yes No*						ļ	
11. Date Rec. at Lab:	10/31/96							
12. Temp. Rec. at Lab:	140						]	
13. Time Rec. at Lab:	1153			,				

<sup>\*</sup> if Circled, contact Project manager and attach record of resolution

	PROJECT No. 28	6	<u>∞</u> ],	IA-				Chain	of C	usto	dy				<del> </del>		2025	Gatew	ay Pla	mental Group, Inc. ace #440, San Jose CA	95110_
- 1	Facility No.	Ū				Facility	/ Address:	17.21	PARK	<u>CI</u>	MI		CV		·			e 408 4			39' .
	CLIENT engineer: $E_{51}$	74 R=	-John	HONE	,	J							<u>9 C/</u>	1	1	/ 1	Billing	g Refe	nce N	umber: 30295	
ľ			<u></u>	LAVE		. Aon	C Point of	Contact: ¿	-Ance (	7 <b>ese/</b> [	RACK!	Samp	ler:	y a	kinh	2007	Labor	ratory I	Vame:		
	•				W=water	G=grab														9510L77	
	Sample I.D.	Cont.	Container Size	Sample	A=air	C=comp.	Sampling	Sampling	BTEX/ VPHgas (8015/	TPH Diesel	Oil and Grease	Total Dislvd.	VOC (EPA 624/	SVOC (EPA 627/	HVOC (EPA 601/		į			95/021	
4		3	(ml)	Preserv.	Matrix	Туре	Date	Time	8020)	(8015)	(5520)	Metals	8240)								İ
	· MW8		40ML	HCL	$\omega$	9	10,30,95	10:33	$\nearrow$		·					_					
,	· MWS		40ml	HCC		_ _		16:58												1	
5	· TB-1	2	40mi	HCL				NA												-	1 2
X	· MWS	2	LIT	NP				87°.CA		V										·_	· · · m
							<b>-</b> ₩	, , , , ,								<u></u>				-	
	,													<del></del> -							}
														·-···			]				1
-	,													<u> </u>							
-			-															+		j.	
-																				- 	
_	Condition of Condition										$\sqrt{}$		wo	,							
	Condition of Sample:					T	Temperatu	re Receiv	ed:	<u></u>		7			Mail orl	ginal An	alytical	Beport	to:	Turnaround Time:	7. 7
R	elinquished by	- -	<del></del>	Date	·	lime	Door to de		*							Enviro			oup _	Priority Rush (1 day)	
	faat Wem	Lan		10,30,95		ime	Received b	) <sub>s</sub>	$\sim$			Date O/1_		Time	2025 Gai 'an Jos	teway Pl	ace #4	40	Z'		
Re	elinguished by	In	'  t	Date, 10/81/06	7		Received b	V.C	ريم		ļC	730 / Date // 18/5	7	Time	620 Cont	tra Costa	ı Bivd. :	#209 [	_	Rush (2 days)	
Re	elinquished by			1010			Received b			<del></del>		12/5 Pate		ime	Pleasant				_	Expedited (5 days)	
Re	elinquished by			Date:		ime F	Onobina d'E	o la bassa	•			_		1	25725 Je Mission '				_	Standard (10 days)	#
			-	ruto;		a F	Received b	y laborato	гу		- 1	ate  3    3   9	٠ سـ ٠		1020 148t Redmond				<b>]</b>		
L_	<u> </u>			<del></del> ·			fa	)			الا	1342	11	53		., mas	00 <u>2</u>			As Contracted	



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-96001

FAX (415) 364-9233 FAX (510) 988-9673 图图智的

NOV 3 0 1995

PACIFIC ENVIRONMENTS 1

Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110

Client Proj. ID: 286-001.4C/Alameda

Sample Descript: MW-9

Matrix: LIQUID

Analysis Method: 8015Mod/8020

den Lab Number: 9511C52-01

Sampled: 11/15/95 Received: 11/16/95

Analyzed: 11/20/95 Reported: 11/22/95

Attention: Maree Doden

C Batch Number: GC112095BTEX20A istrument ID: GCHP20

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Dete	ection Limit ug/L	Sample Results ug/L
TPPH as Gas Benzene Toluene Ethyl Benzene Xylenes (Total) Chromatogram Pattern:		125 1.2 1.2 1.2 1.2	3.6 N.D. 27 37
Surrogates Trifluorotoluene	<b>Cont</b> 70	rol Limits %	% Recovery

alytes reported as N.D. were not present above the stated limit of detection.

EQUOIA ANALYTICAL -

ELAP #1210

rucie Fletcher roject Manager

Page:



Redwood City, CA 94063 Walnut Creek, CA 94598 Sacramento, CA 95834

(415) 364-9600 (510) 988-9600 (916) 921-9600 FAX (415) 364-9233 FAX (510) 988-9673 FAX (916) 921-0100

. De Paris de La Company de la Pacific Environmental Group 2025 Gateway Place, Suite 440

Client Project ID:

Work Order #:

286-001.4C/Alameda

San Jose, CA 95110

Attention: Maree Doden ka andri podrejimo nariikeasonestakkasaakka keeristikookis

Matrix: LIQUID

9511C52 01

Reported: Nov 28, 1995 

### **QUALITY CONTROL DATA REPORT**

Analyte:	Benzene	Toluene	Ethyl	Xylenes	<u> </u>
QC Batch#: Analy. Method: Prep. Method:	GC112095BTEX20A EPA 8020 EPA 5030	GC112095BTEX20A EPA 8020 EPA 5030	Benzene GC112095BTEX20A EPA 8020 EPA 5030	GC112095BTEX20A EPA 8020 EPA 5030	
Analyst: MS/MSD #: Sample Conc.: Prepared Date: Analyzed Date: Instrument I.D.#:	J. Woo 951143326 N.D. 11/20/95 11/20/95 GCHP20	J. Woo 951143326 N.D. 11/20/95 11/20/95 GCHP20	J. Woo 951143326 N.D. 11/20/95 11/20/95 GCHP20	J. Woo 951143326 N.D. 11/20/95 11/20/95 GCHP20	,
Conc. Spiked:	10 μg/L	10 μg/L	10 μg/L	30 μg/L	
Result: MS % Recovery:	11 110	10 100	10 100	31 103	
Dup. Result: MSD % Recov.:	10 100	10 100	10 100	30 100	
RPD: RPD Limit:	9.5 0-50	0.0 0-50	0.0 0-50	3.3 0-50	

LCS #:	BLK112095	BLK112095	BLK112095	BLK112095
Prepared Date:	11/20/95	11/20/95	11/20/95	11/20/95
Analyzed Date:	11/20/95	11/20/95	11/20/95	11/20/95
Instrument I.D.#:	GCHP20	GCHP20	GCHP20	GCHP20
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	11	10-	10	30
LCS % Recov.:	110	100	100	100

MS/MSD		<del> </del>			···········
LCS Control Limits	71-133	72-128	72-130	71-120	
· · · · · · · · · · · · · · · · · · ·	<del></del>				

SEQUOIA ANALYTICAL

Brucie Fletcher Project Manager Please Note:

The LCS is a control sample of known, interferent-free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

PROJECT No.								Pacific Environmental Group, Inc. 2025 Gateway Place #440, San Jose CA 95110 Phone 408 441 7790 Fax 408 441 7539												
i doi				Facility	FIC Point of Contact: AUCEGEEIBEASTAMPIER: PED							CA	<u>.                                    </u>	Billing Refence Number: 30627					7	
CLIENT engineer:	<del>6</del> 4-	AVE	للططم	HEDE	PACIF	IC Point of	Contact:	AUCE	Grege	lbe	Spinp	ler:		20K	P7.	1			1500 UPA	<del></del>
	'											,	1						Comments:	
Sample i.D.	Cont. No.	Container Size (ml)	Sample Preserv.	W=water S=soil. A=air Matrix	G=grab D=disc. C=comp. Type	Sampling Date	Sampling Time	BTEX/ VPHgas (8015/ 8020)	Diesel	Grease	Total Distvd. Metals	(EPA 624/	SVOC (EPA 627/ 8270)	HVOC (EPA 601/ 8010)		C	2(		951Ks	<sup>-</sup> Z_
																		-		:v ≥ I
Condition of Sample:			<del></del>			Temperatu	re Receiv	l ed:		L				<del>,,,,</del> ,						
$\mathcal{L}$	7				•	,							F	Mall of	iginal A	nalytical ronmen	Report to	o; ., · ·	Turnaround Time:	A., 1 A.
Relinquisite 60 17:5 17:5 Date Tim				30 Time	Received by  Date  Time 2025 G  O'TI San Jo  Paceived by  Date  Time 620 Co Pleasa							ateway i se, CA : ntra Cos nt Hill, C	Place #44 95110 ta Blvd. # CA 94523	40 <b>\</b> 7209 [	<b>(</b> j	Priority Rush (1 day)  Rush (2 days)  Expedited (5 days)				
Bellinguisted by 1/1/16 1/1			5.	Received by laboratory  Date  Time 4020 148th Ave							Vlejo, 0	CA 92622	6C		Standard (10 days)	Ø				

## FIELD DATA SHEET

ÆR SAMPLE FIELD DATA SHEET			
PROJECT No.: 286001 LOCATION: PACK AT. AL	ANEOA.	WELLID# A	Ju. 9.
ELIENT/STATION No.: FIELD TECHNICIA	AN: PET	. (	5-5-
MELL INCORMATION	-	10	1. C.
Depth to Liquid:TOBTOC DIAMETER  Depth to water:TOBTOC	GAL/ LINEAR FI 0.17 0.38 0.66 0.83		AMPLE TYPE Groundwater Duplicate extraction well rip blank
I.D. # Electronic indicator	1.02 1.5 2.6	· 🔲 E	ield blank quipment blac ther;
TD $9.15$ - DTW $8.06 = 11.1$ x Foot $17 = 1.8$	Number X Casings	= Pu	culated rge 5.66
DATE PURGED: 11-15-95 START: 9: 30 END (2400 hr):	PI	URGED BY:	DE.
TIME VOLUME pH E.C. TEMPERATURE (2400 hr) (gal.) (units) (umhos/cm@25°C) (°F)		TURBIDITY	ODOR
Pumped dry Yes / No  FIELD MEASUREMENTS AT TIME OF SAMPLE, AFTER RECHARGE:  DTW: TOB/TOC	Cobalt 0-100 Clear Choudy Yellow Brown	NTU 0-200 Heavy Moderate Ught Trace	Strong Moderate Faint None
PURGING EQUIPMENT/I.D. #    Bailer:	⊠ Bailer:/ □ Dedicate	EQUIPMENT/I.I G-/ d:	
SAMP. CNTRL # DATE TIME (2400) No. of Cont. SIZE CONTAINER  WW. 9 11-15-95 9:30 3 40ml UDA	PRESERVE HCL	ANALYTICAL F	PARAMETER
FMARKS:		,	