PACIFIC
ENVIRONMENTAL
GROUP INC.

October 17, 1996
Project 286-001.6B

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

Re: Well Destruction Letter
Former Estate of John B. Henry Property
1726 Park Street at Eagle Avenue
Alameda, California

Dear Ms. Chu:

This letter has been prepared by Pacific Environmental Group, Inc. (PACIFIC) to document the abandonment of three groundwater monitoring wells (MW-5, MW-8, and MW-9) at the site reference above (Figures 1 and 2). The work was performed on October 8, 1996 by PACIFIC to complete all site activities regarding the remediation of soil and groundwater beneath the site. The work was performed in response to the Alameda County Health Care Services (ACHCS) letter *Well Decommission at 1726 Park Street, Alameda, CA* dated August 26, 1996.

The scope of work included the abandonment of groundwater Monitoring Wells MW-5, MW-8, and MW-9 by pressure grouting. Prior to abandonment, the wells were sounded to ensure no obstructions were present. The well was then backfilled to the surface, by tremming the cement grout from the bottom of the well casing to displace the groundwater. The existing well casings, screen, and filter-pack were then abandoned in place by the placement of neat cement grout under pressure up to approximately 2 feet below ground surface. The well boxes, along with the upper 1 to 2 feet of grout seal were filled with concrete to ground surface. Only California-licensed drilling contractors staffed with 40-hour OSHA trained employees were used for drilling operations.

A well destruction permit number 96701 was obtained prior to field work from the Alameda County Zone 7 Water Agency upon approval to destroy the wells from the

96 OCT 22 AM 8:58
ENVIRONMENTAL PROTECTION

2025 Gateway Place, Suite 440, San Jose, California 95110 (408) 441-7500 FAX (408) 441-7539

ACHCS. Well destruction permit, boring logs, and the ACHCS letter referenced above are presented in Attachment A.

Should you have any questions regarding these site activities, please do not hesitate to call.

Sincerely,

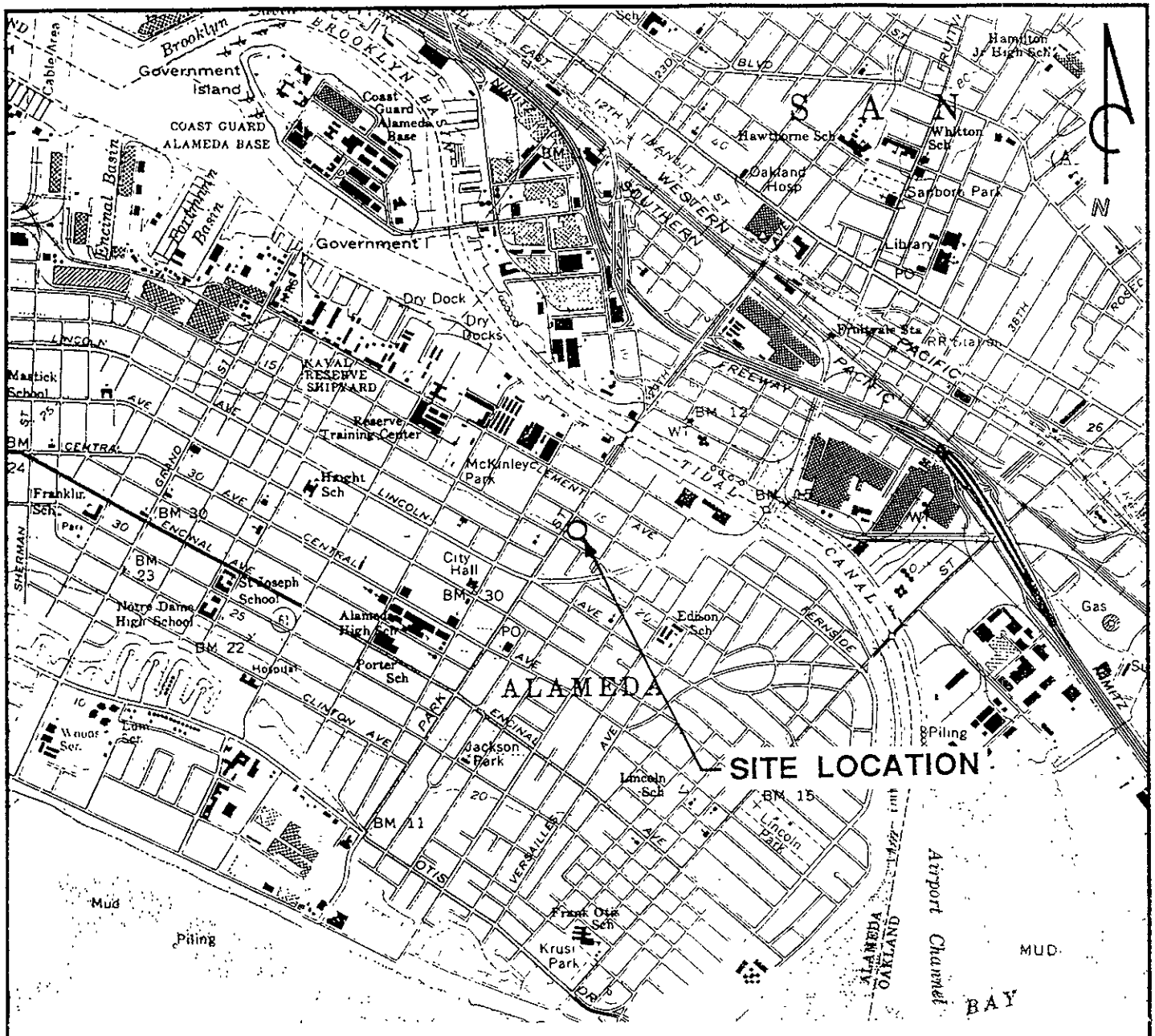
Pacific Environmental Group, Inc.

Douglas J.F. Andrews
Senior Staff Geologist

Keith Winemiller
Project Engineer

Attachments: Figure 1 - Site Location Map
Figure 2 - Site Map
Attachment A - Monitoring Well Destruction Permit, Boring Logs, and ACHCS Letter

cc: Ms. Elsie Matsuno, Mendelson and Brown
Mr. Craig A. Mayfield, Alameda County Zone 7 Water Agency



QUADRANGLE LOCATION

REFERENCES:
USGS 7.5 MIN. TOPOGRAPHIC MAP
TITLED: OAKLAND WEST, CALIFORNIA
DATED: 1959 REVISED: 1980
TITLED: OAKLAND EAST, CALIFORNIA
DATED: 1959 REVISED: 1980

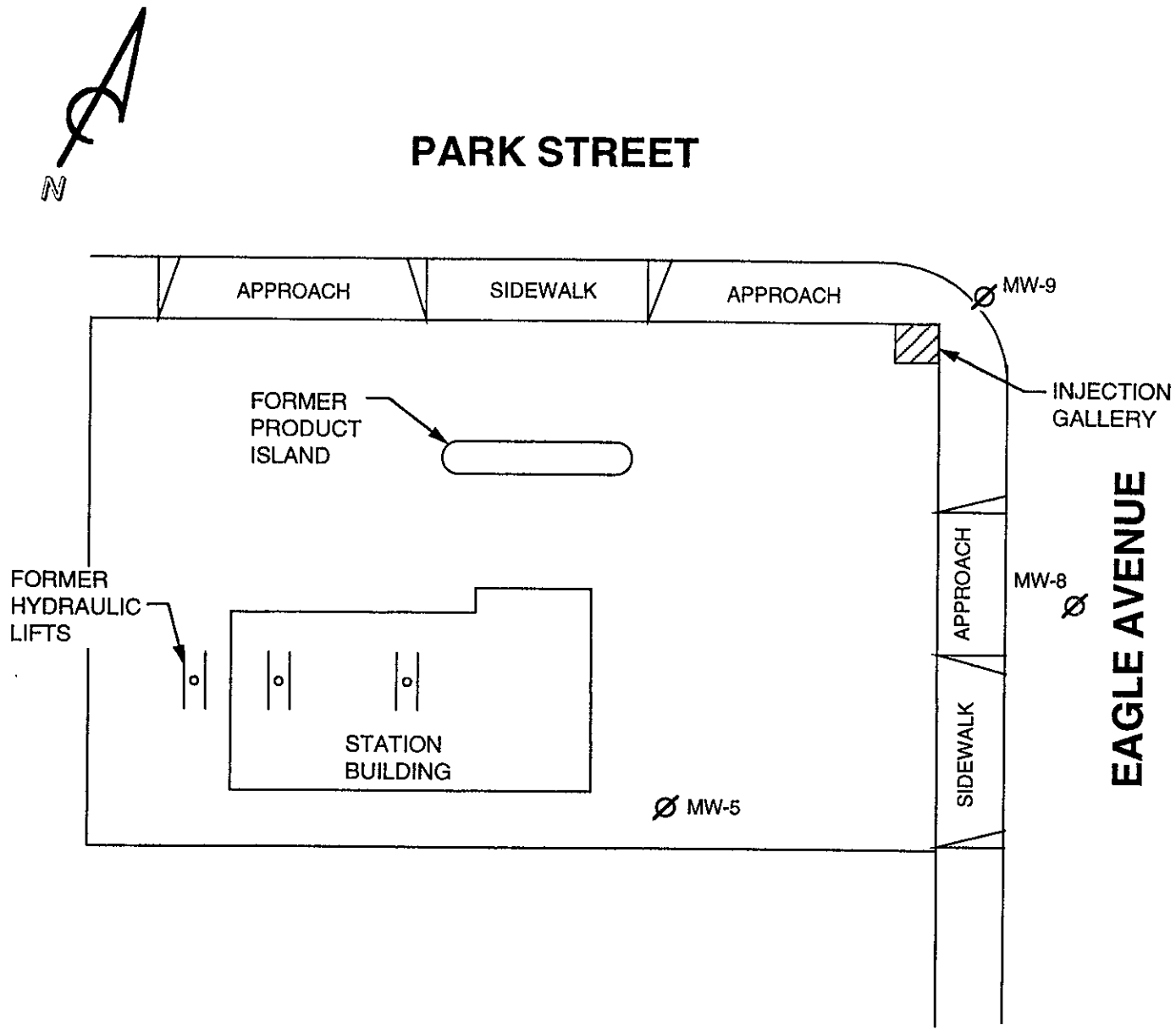
SCALE IN FEET
2000 0 2000

PACIFIC ENVIRONMENTAL GROUP, INC.

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

SITE LOCATION MAP

FIGURE: 1
PROJECT: 286-001.6B



LEGEND

MW-8 ⌀ DESTROYED WELL LOCATION AND DESIGNATION

SCALE

0 20 40 FEET

PACIFIC ENVIRONMENTAL GROUP, INC.

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

SITE MAP

FIGURE: **2**

PROJECT: 281-001.6B

ATTACHMENT A

MONITORING WELL DESTRUCTION PERMIT, BORING LOGS, AND ACHCS LETTER

ALAMEDA COUNTY FLOOD CONTROL AND WATER CONSERVATION DISTRICT
5997 PARKSIDE DRIVE • PLEASANTON, CALIFORNIA 94588-5127 • PHONE (510) 484-2600 FAX (510) 462-3914

October 1, 1996

RECEIVED
OCT 02 1996
PACIFIC ENVIRONMENTAL GROUP, INC.

Ms. Suzanne McClurkin-Nelson
Pacific Environmental
2025 Gateway Place, Suite 440
San Jose, CA 95110

Dear Ms. McClurkin-Nelson:

Enclosed is drilling permit 96701 for the destruction of well 2S/3W 7L80 to 7L82 at 1726 Park Street in Alameda.

Please note that permit condition A-2 requires that a well destruction report be submitted after completion of the work. The report should include a description of methods and materials used to destroy the well, location sketch, date of destruction, and permit number. Please submit the original of your completion report. We will forward your submittal to the California Department of Water Resources.

If you have any questions, please contact Wyman Hong at extension 235 or me at extension 240.

Very truly yours,

Craig A. Mayfield

Craig A. Mayfield
Water Resources Engineer III

CM:ab
Enc.

286-001.3C

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

LOCATION OF PROJECT 1726 PARK ST. @ EAGLE
ALAMEDA, CALIFORNIA

FOR OFFICE USE

PERMIT NUMBER 96701
LOCATION NUMBER 2S/3W 7L80 to 7L82

CLIENT
Name ESTATE OF JOHN B. HENRY C/O HENDERSON & BROWN
Address 1040 MARINA VILLAGE Voice (510) 521-1211
City SUITE B MARINA, CA Zip

APPLICANT
Name PACIFIC ENVIRONMENTAL GROUP, INC.
Fax (408) 441-9102
Address 2025 GATEWAY PL. #440 Voice (408) 441-7500
City SAN JOSE, CA Zip 95110

TYPE OF PROJECT

Well Construction
- Cathodic Protection ___
- Water Supply ___
- Monitoring ___

Geotechnical Investigation
- General ___
- Contamination ___
- Well Destruction X

DESTRUCTION OF MW-5 (ONSITE), & MW-8 & MW-9 (OFFSITE)

PROPOSED WATER SUPPLY WELL USE
Domestic ___ Industrial ___ Other ___
Municipal ___ Irrigation ___

DRILLING METHOD:
Mud Rotary ___ Air Rotary ___ Auger X
Cable ___ Other ___

DRILLER'S LICENSE NO. C-57 - 672617

WELL PROJECTS (well destruction - pressure grout)
- Drill Hole Diameter 8 in.
- Casing Diameter 2 in.
- Surface Seal Depth 2-3 ft.
- Maximum Depth 19 ft.
- Number 3 (MW-5, MW-8, MW-9)

GEOTECHNICAL PROJECTS
- Number of Borings ___
- Hole Diameter ___ in.
- Maximum Depth ___ ft.

ESTIMATED STARTING DATE 9/30/96
ESTIMATED COMPLETION DATE 9/30/96

I hereby agree to comply with all requirements of this permit and Alameda County Ordinance No. 73-68.

APPLICANT'S SIGNATURE [signature] Date 9/17/96

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. 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 tremie.

E. WELL DESTRUCTION. See attached.

Approved Wyman Hong Date 27 Sep 96
Wyman Hong

©1992

27 September 1996

ZONE 7
WATER RESOURCES ENGINEERING
GROUNDWATER PROTECTION ORDINANCE

ESTATE OF JOHN B. HENRY
1726 PARK STREET
ALAMEDA
WELLS 2S/3W 7L80 TO 7L82
PERMIT 96701

Destruction Requirements:

1. Clean out all bridged or poorly compacted materials to the bottom of the well.

2. Pressure grout the casing to 2 feet below finished grade or original ground, whichever is the lower elevation.

3. Remove casing, seal and gravel pack to 2 feet below finished grade or original ground, whichever is the lower elevation.

4. After the seal has set, backfill the remaining hole with compacted material.

These destruction requirements as proposed by Suzanne McClurkin-Nelson of Pacific Environmental meet or exceed Zone 7 minimum requirements.

WELL LOG
KEY TO ABBREVIATIONS

Drilling Method

HSA - Hollow stem auger
CFA - Continous flight auger
Air - Reverse air circulation

Gravel Pack

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.

Moisture Content

Dry - Dry
Dp - Damp
Mst - Moist
Wt - Wet
Sat - Saturated

Sorting

PS - Poorly sorted
MS - Moderately sorted
WS - Well sorted

Plasticity

L - Low
M - Moderate
H - High

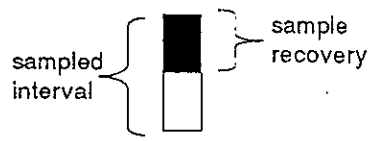
H-NU (ppm)

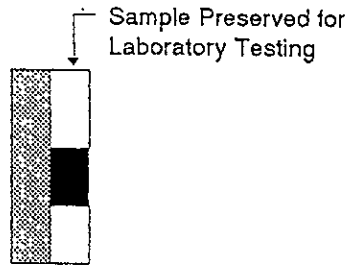
ND - No detection

Symbols

▽ - First encountered ground water

▼ - Static ground water level





Density (Blows/Foot - Cal Mod Sampler)

Sands and gravels

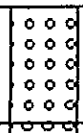
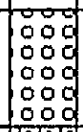
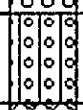
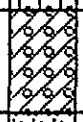
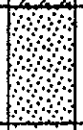
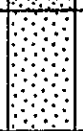
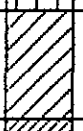
0 - 5	- Very Loose
5 - 13	- Loose
13 - 38	- Medium dense
38 - 63	- Dense
over 63	- Very dense

Silts and Clays

0 - 2	- Very Soft
2 - 4	- Soft
4 - 9	- Firm
9-17	- Stiff
17 - 37	- Very Stiff
37 - 72	- Hard
over 72	- Very Hard

GRAIN - SIZE SCALE

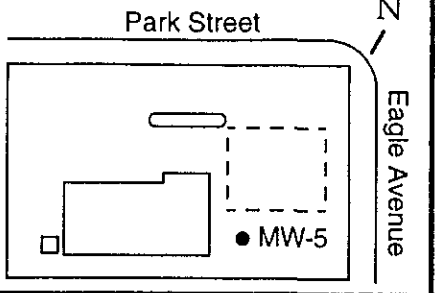
GRADE LIMITS U.S. Standard inch	sieve size	GRADE NAME
12.0		Boulders
3.0	3.0 in.	Cobbles
0.19	No. 4	Gravels
0.08	No. 10	coarse
	No. 40	medium Sand
	No. 200	fine
		Silt
		Clay Size

Primary Divisions			Group Symbol	Graphic	Typical Names
COARSE GRAINED SOILS more than half is larger than #200 sieve	GRAVELS half of coarse fraction larger than #4 sieve	CLEAN GRAVELS (less than 5% fines)	GW		Well graded gravels, gravel-sand mixtures; little or no fines
			GP		Poorly graded gravels or gravel-sand mixtures; little or no fines
		GRAVEL WITH FINES	GM		Silty gravels, gravel-sand-silt mixtures
			GC		Clayey gravels, gravel-sand-clay mixtures
	SANDS half of coarse fraction smaller than #4 sieve	CLEAN SANDS (less than 5% fines)	SW		Well graded sands, gravelly sands, little or no fines
			SP		Poorly graded sands or gravelly sands; little or no fines
		SANDS WITH FINES	SM		*Silty sands, sand-silt mixtures*
			SC		Clayey sands, sand-clay mixtures, plastic fines
FINE GRAINED SOILS more than half is smaller than #200 sieve	SILTS AND CLAYS liquid limit less than 50%		ML		Inorganic silts and very fine sand, rock flour, silty or clayey fine sands or clayey silts, with slight plasticity
			CL		Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL		Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS liquid limit more than 50%		MH		Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH		Inorganic clays of high plasticity, fat clays
			OH		Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt		Peat and other highly organic soils

PACIFIC ENVIRONMENTAL GROUP, INC.

Unified Soil Classification System

LOCATION MAP

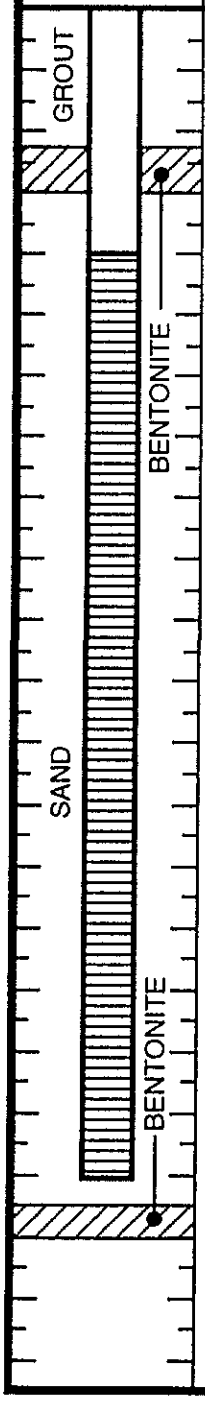


PACIFIC ENVIRONMENTAL GROUP, INC.

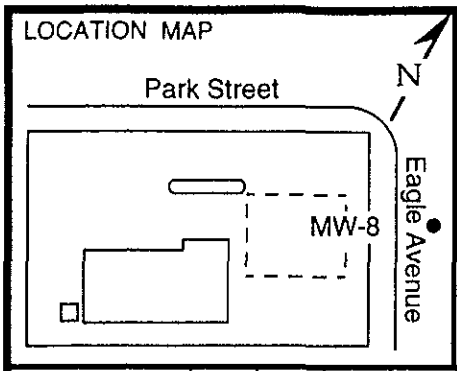
WELL NO. MW-5
PAGE 1 OF 1

PROJECT NO. 286-001.1A
LOGGED BY: RH
DRILLER: TURNER
DRILLING METHOD: HSA
SAMPLING METHOD: Continuous Core
CASING TYPE: Sch 40 PVC
SLOT SIZE: 0.020"
GRAVEL PACK: 2X12 SAND

CLIENT: Estate of JOHN B HENRY
DATE DRILLED: 2-9-94
LOCATION: 1726 Park Street
HOLE DIAMETER: 8"
HOLE DEPTH: 20'
WELL DIAMETER: 2"
WELL DEPTH: 19'
CASING STICKUP: NA



MOISTURE CONTENT	FID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
Dp			1				SP	ASPHALT 1.5": GRAVEL 4.5" SAND: dark brown; fine sand; no product odor.
			2					@1.5': yellowish brown.
			3					
			4					
Mst	0		5					@4.5': as above; yellowish brown mottled with dark brown and strong brown; 5% clay. @5': as above; 10% clay; no product odor. @5.5': as above; brown.
Wet	544		6					
			7					@7': pervasive dark greenish gray discolorations; little or no fines; sulfurous odor; moderate product odor.
Sat			8					
			9					@9': less discoloration - grading to yellowish brown.
Sat	19		10					@10': *as above; yellowish brown; sulfurous odor;* very faint product odor.
			11					
			12					@12': as above; light olive brown.
			13					
			14					@13.5-14.5': as above; partially consolidated.
	0		15					@15': as above; no product odor.
			16					
			17					@17': as above; light olive brown; no product odor.
			18					
	10		19					@18.5': as above; no product odor.
			20				SC	CLAYEY SAND: light olive brown; 20% clay; trace decomposed rootlets; no product odor.
			21					
			22					BOTTOM OF BORING AT 20'



PACIFIC ENVIRONMENTAL GROUP, INC.

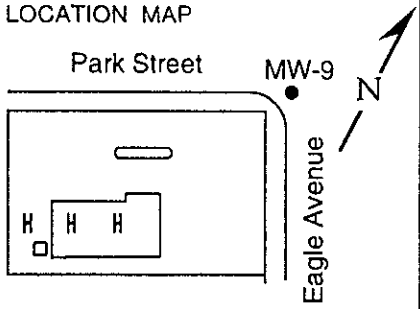
WELL NO. MW-8
PAGE 1 OF 1

PROJECT NO. 286-001.1A	CLIENT: Estate of JOHN B HENRY
LOGGED BY: RH	DATE DRILLED: 2-9-94
DRILLER: TURNER	LOCATION: 1726 Park Street
DRILLING METHOD: HSA	HOLE DIAMETER: 8"
SAMPLING METHOD: Continuous Core	HOLE DEPTH: 20'
CASING TYPE: Sch 40 PVC	WELL DIAMETER: 2"
SLOT SIZE: 0.020"	WELL DEPTH: 19'
GRAVEL PACK: 2X12 SAND	CASING STICKUP: NA

WELL COMPLETION	MOISTURE CONTENT	FID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY	SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
GROUT	Dp			1				SP	ASPHALT 3": GRAVEL 6" SAND: dark brown; fine sand; no product odor.
				2					@1.5': as above; yellowish brown; no product odor.
				3					
				4					
				5					@4.5': as above; yellowish brown mottled with dark greenish gray; 0-5% clay; moderate product odor (old). @5': dark greenish gray; strong product odor.
BENTONITE	Mst	519		6					
	Wet			7					@6.5': as above; mild sulfurous odor; strong product odor. @7': as above; faint product odor.
	Sat	10		8					
				9					@8.5-9': color grades to yellowish brown; very faint product odor. @9': as above; yellowish brown; no product odor.
	Sat	1		10					@10': as above; no product odor.
				11					
				12					
				13					
				14					@14-15': as above; partially consolidated; no product odor.
	Sat	0		15					@15': as above; no product odor.
				16					
	Sat			17					@17': grayish green; fine sand; no product odor.
				18					
				19					@18.5': as above; decomposing organic matter odor; no product odor.
SAND				20					@20': as above.
				21					BOTTOM OF BORING AT 20'
				22					

FIGURE 4

LOCATION MAP



PACIFIC ENVIRONMENTAL GROUP, INC.

WELL NO. MW-9
PAGE 1 OF 1

PROJECT NO. 286-001.3C
LOGGED BY: DA
DRILLER: V&W DRILLING
DRILLING METHOD: HSA
SAMPLING METHOD: CALMOD
CASING TYPE: SCH 40 PVC
SLOT SIZE: 0.020"
SAND PACK: #3 SAND

CLIENT: TEXACO
DATE DRILLED: 9-11-95
LOCATION: 1726 Park Street
HOLE DIAMETER: 8"
HOLE DEPTH: 19'
WELL DIAMETER: 2"
WELL DEPTH: 19'
CASING STICKUP: 1'

WELL COMPLETION	MOISTURE CONTENT	PID	PENETRATION (BLOWS/FT)	DEPTH (FEET)	RECOVERY / SAMPLE INTERVAL	GRAPHIC	SOIL TYPE	LITHOLOGY / REMARKS
				0				ASPHALT: roadbase rock.
				2			SC	CLAYEY SAND: olive; 15-25% clay; 5-10% silt; 65-70% fine to medium sand; loose; moderate product odor.
GROUT	Mst-Wt	987	12	4				
				6				
				8				
				10			SP	SAND: dark yellowish brown; 5-10% fines; 80-85% fine sand; abundant mafics; medium dense; no product odor.
SAND	Sat	31	32	12				
				14			SC	CLAYEY SAND: olive; 25-30% clay; 5-10% silt; 60-65% fine sand; trace medium sand; <0.5mm root lets; medium dense; moderate product odor.
BENTONITE	Sat	793	38	16				
				18			SP	SAND: yellowish brown; 5-10% fines; 85-90% fine sand; 5-10% medium sand; trace coarse sand; dense; no product odor.
	Sat	0	41	20				
				22				BOTTOM OF BORING AT 19'
				24				
				26				
				28				
				30				
				32				
				34				
				36				
				38				
				40				
				42				
				44				