AGENCY



DAVID J. KEARS, Agency Director

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

### REMEDIAL ACTION COMPLETION CERTIFICATION

RO-407 - 2021 Brush Street, Oakland, CA (1-2K and 1-10K gallon tanks removed in May and December 1998)

February 15, 2002

Mr. Alex Gaeta 1415 Morton St., Apt A Alameda, CA 94501 Mr. Gardner Kent Green Tortoise 494 Broadway San Francisco, CA 94133

Dear Messrs. Gaeta and Kent:

This letter confirms the completion of site investigation and corrective action for the underground storage tanks formerly located at the above-described location. Thank you for your cooperation throughout this investigation. Your willingness and promptness in responding to our inquiries concerning the former underground storage tanks are greatly appreciated.

Based on information in the above-referenced file and with the provision that the information provided to this agency was accurate and representative of site conditions, this agency finds that the site investigation and corrective action carried out at your underground storage tank site is in compliance with the requirements of subdivisions (a) and (b) of Section 25299.37 of the Health and Safety Code and with corrective action regulations adopted pursuant to Section 25299.77 of the Health and Safety Code and that no further action related to the petroleum release(s) at the site is required.

This notice is issued pursuant to subdivision (h) of Section 25299.37 of the Health and Safety Code. Please contact our office if you have any questions regarding this matter.

Sincerely,

Mee Ling Tung, Director

cc: Chuck Headlee, RWQCB Dave Deaner, SWRCB Leroy Griffin, OFD files-ec (peerless-13)

# ALAMEDA COUNTY **HEALTH CARE SERVICES**





DAVID J. KEARS, Agency Director

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

R00000407

February 15, 2002

Mr. Alex Gaeta 1415 Morton St., Apt A Alameda, CA 94501

Mr. Gardner Kent Green Tortoise 494 Broadway San Francisco, CA 94133

Re: Fuel Leak Site Case Closure for 2021 Brush Street, Oakland, CA

Dear Messrs. Gaeta and Kent:

This letter transmits the enclosed underground storage tank (UST) case closure letter in accordance with Chapter 6.75 (Article 4, Section 25299.37[h]). The State Water Resources Control Board adopted this letter on February 20, 1997. As of March 1, 1997, the Alameda County Environmental Protection Division is required to use this case closure letter for all UST leak sites. We are also transmitting to you the enclosed case closure summary. These documents confirm the completion of the investigation and cleanup of the reported release at the subject site. The subject fuel leak case is closed.

### SITE INVESTIGATION AND CLEANUP SUMMARY

Please be advised that the following conditions exist at the site:

- 240ppm TPH as diesel, and 4.0ppm MTBE exists in soil beneath the site at 10 feet
- up to 1,200ppb TPHd, and 1,500pbb MTBE exists in groundwater beneath the site;
- a site safety plan must be prepared in the event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.

If you have any questions, please contact me at (510) 567-6762.

eva chu

Hazardous Materials Specialist

enlosures: 1. Case Closure Letter

2. Case Closure Summary

c. Mark Gomez, City of Oakland, Public Works, 250 Frank H Ogawa Plaza, Suite 5301, Oakland, CA 94612

PB# 01-2419

CALIFORNIA REGIONAL WATER

# CASE CLOSURE SUMMARY Leaking Underground Fuel Storage Tank Program

. IANI 0.3 2002

QUALITY CONTROL BOARD

I. AGENCY INFORMATION

Agency name: Alameda County-HazMat

City/State/Zip: Alameda, CA 94502

Responsible staff person: Eva Chu

Address: 1131 Harbor Bay Pkwy

Phone: (510) 567-6700

Date: December 28, 2001

Title: Hazardous Materials Spec.

**II. CASE INFORMATION** 

Site facility name: Peerless Stages

Site facility address: 2021 Brush St, Oakland, CA 94612

RB LUSTIS Case No: N/A Local Case No./LOP Case No.: R00000407

URF filing date: 1/29/98 SWEEPS No: N/A

Responsible Parties: Addresses: Phone Numbers:

Alex Gaeta 1415 Morton St, Apt A

1415 Morton St, Apt A Alameda, CA 94501

Gardner Kent Green Tortoise 494 Broadway

San Francisco, CA 94133

(415) 739-5011

Tank No:	<u>Size in</u> gal.:	Contents:	Closed in-place or removed?:	<u>Date:</u>
1	2000	Gasoline	Removed	5/13/98
2	10000	Diesel	tr	12/17/98

### III. RELEASE AND SITE CHARACTERIZATION INFORMATION

Cause and type of release: **Unknown** Site characterization complete? **YES** 

Date approved by oversight agency: 7/18/2001
Monitoring Wells installed? Yes Number: 4

Proper screened interval? Yes, 9 to 30 feet bgs in well MW-2

Highest GW depth below ground surface: 13.76 Lowest depth: 16.92 feet in well MW-2

Flow direction: Westerly (see Fig 7)

Most sensitive current use: Mixed commercial/residential

Are drinking water wells affected? No Aquifer name: NA Is surface water affected? No Nearest affected SW name: NA

Off-site beneficial use impacts (addresses/locations): NA

Report(s) on file? YES Where is report(s) filed? Alameda County Oakland Fire Dept-OES

1131 Harbor Bay Pkwy and 1605 MLK Jr Wy Alameda, CA 94502 Oakland, CA 94612

Page 1 of 4

# Treatment and Disposal of Affected Material:

<u>Material</u>	<u>Amount</u>	Action (Treatment Date
-	(include units)	or Disposal w/destination)
Tank	2 USTs	Disposed by Erickson, in Richmond, CA 5/21 and 12/17/1998
Soil	150 tons	Disposed at Forward landfill in Manteca, CA 5/25/99
Groundwater		

Maximum Documented Contactor Contact	aminant Co Soil (p		Before and After Cleanup Water (ppb)
	Before <sup>1</sup>	After <sup>2</sup>	Before <sup>3</sup> After <sup>4</sup>
TPH (Gas)	26	17	8,600 <2,500
TPH (Diesel)	3800	250	58,000 1,200
Benzene	<1.2	<.005	3.5 <.5
Toluene	.048	< ,005	7.9 < .5
Ethylbenzene	.150	<.005	3.2 < .5
Xylenes	.620	< .005	15 < .5
MTBE	4.0	4.0	14,000 1,500
Heavy Metals Pb/Sol Pb	< 5.0	4.6/4.9	
Other PNAs/HVOCs			ND

- NOTE: 1 Soil sample from north dispenser, except MTBE from gasoline tank pit at 10 feet bgs
  - 2 soil sample from dispenser after overexcavation to 11 feet bgs, except for MTBE
  - maximum groundwater concentrations from monitorings wells, except TPHd is from grab groundwater sample from boring SB-4, advanced in 10/97
  - 4 most recent groundwater data from well MW-2, 5/01. MTBE confirmed at 1,400ppb and TBA at 230ppb in 8/01

# IV. CLOSURE

Does completed corrective action protect existing beneficial uses per the Regional Board Basin Plan?
Does completed corrective action protect potential beneficial uses per the
Regional Board Basin Plan?
Does corrective action protect public health for current land use? YES
Site management requirements: A site safety plan must be prepared for construction workers in the
event excavation/trenching is proposed in the vicinity of residual soil and groundwater contamination.
Should corrective action be reviewed if land use changes? YES
Chicala Contochio action by forther to a familia act changes.
Monitoring wells Decommissioned: None, pending site closure

List enforcement actions taken: **NA**List enforcement actions rescinded: **NA** 

# V. LOCAL AGENCY REPRESENTATIVE DATA

Name: Eva Chu Title: Haz Mat Specialist

Signature: Date: 12/28/01

Reviewed by

Name: Barney Chan Title: Haz Mat Specialist

Signature: Barner Che Date: 12/28/04

Name: Scott Seery Title: Haz Mat Specialist

Signature: Date: /2-28-01

VI. RWOCB NOTIFICATION

Date Submitted to RB: RB Response: Concur

RWQCB Staff Name: Chuck Headlee Title: AEG

Signature: Chul Headlle Date: 1/3/02

# VII. ADDITIONAL COMMENTS, DATA, ETC.

The site is located at the northwest corner of the intersection of Brush Street and 20<sup>th</sup> Street in Oakland, CA. The site was formerly a bus yard. The site is bounded to the north and west by residential properties. Two USTs (2,000-gallon gasoline and 10,000-gallon diesel) and one above ground waste oil tank were located in the northern portion of the site, behind the shop. (See Fig 1, 2)

A subsurface investigation was conducted on October 3, 1997, where five direct-push borings (SB-1 through SB-5) were advanced to 20' to 22'bgs. Groundwater was encountered at approximately 15 to 17 feet bgs. The subsurface consisted of clayey silts of low estimated permeability to approximately 11 to 15 feet bgs, which is underlain by silty sands of low to moderate estimated permeability to a depth of 22'bgs. (See Table 1)

Field screening methods noted hydrocarbon concentrations in soil samples taken from approximately 15 feet bgs in borings SB-1 and SB-4. However, only soil samples from borings SB-3 and SB-5 were selected for laboratory analysis. In addition, two water samples (from SB-2 and SB-4) were selected for TPHg, TPHd, and BTEX analyses. The water sample from boring SB-4 was also analyzed for purgeable halocarbons (HVOC). Hydrocarbon contamination was not identified in the two soil samples. Groundwater from boring SB-4 contained up to 58,000ppb TPHd and 120ppb TPHg. HVOCs were not detected.

In May 1998 the 2000-gallon gasoline UST was removed. Hydrocarbon impacted soil was overexcavated to a depth where no obvious signs of contamination remained. A soil sample was collected beneath each end of the UST at approximately 10 feet bgs. Analytical results did not identify TPHg, TPHd or BTEX above the detection limits (note that the detection limit for BTEX was 1.2ppm). Up to 4.0ppm MTBE was identified in soil (using Method 8020). (See Fig 3, Table 2)

In December 1998 the 10,000-gallon diesel UST and dispensers (2 diesel, 1 gasoline) were removed. Two soil samples (TB-W-13' and TB-E-13') were collected from the bottom of the tank excavation. These samples did not contain remarkable levels of petroleum hydrocarbons. (See Fig 4, Table 3)

Beneath each of the dispenser piping, obvious soil contamination was present. Soil was excavated from the area below the dispensers to a depth of 5 feet bgs. Low levels of TPHg, BTEX and MTBE were in the soil samples from 5 feet bgs. Up to 3,800ppm TPHd was found beneath the north dispenser. Additional overexcavation to 11 feet bgs was conducted beneath the former dispensers. A total of approximately 10 cy of soil was removed. Confirmatory soil samples (OEX-N and OEX-S) were collected at 11 feet bgs. A maximum of 250ppm TPHd was identified. BTEX and MTBE were non-detect. (See Fig 5, 6 and Table 3, 4)

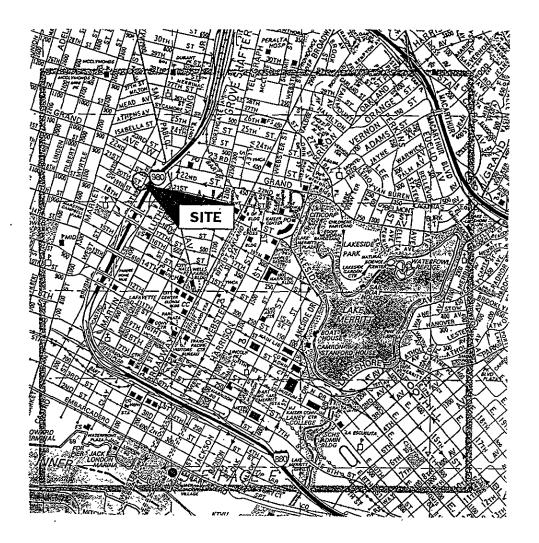
In August 1999 four groundwater monitoring wells (MW-1 through MW-4) were installed. Soil samples were collected from 15.5 feet bgs. Only soil from boring MW-2 contained petroleum hydrocarbon constituents (53ppm TPHg, 190ppm TPHd) (see Fig 7, Table 5). Groundwater samples were also collected in August 1999. Low levels of petroleum hydrocarbon constituents were detected in each well, with the exception of Well MW-2, which contained 8,600ppb TPHg, 1,200ppb TPHd, and 14,000ppb MTBE.

Quarterly groundwater monitoring commenced in August 1999. The MTBE concentrations have steadily decreased. Two offsite soil borings, BH-A and BH-B, were advanced west of the site, along West Street (downgradient) in May 2001. Soil samples collected from these boreholes did not contain analytes sought. Grab groundwater samples did not contain MTBE, but identified 69ppb TPHd. It appears that the contaminant plume is limited in extent (see Fig 7, Table 6, 7). Continued monitoring is not warranted.

In summary, case closure is recommended because:

- the leak and ongoing sources have been removed;
- the site has been adequately characterized;
- the dissolved hydrocarbon plume is not migrating;
- no preferential pathways exist at the site;

  A conduit study demonstrated that utility trenches will not act as preferential pathways.
- no water wells, deeper drinking water aquifers, surface water, or other sensitive receptors are likely to be impacted;
  - A water well survey conducted did not identify any drinking water wells within 1,000 feet of the site. (see Fig 8)
- the site presents no significant risk to human health or the environment.



# SITE LOCATION MAP

Peerless Stages, Inc 2021 Brush Street Oakland, California

Aqua Science Engineers

Figure 1

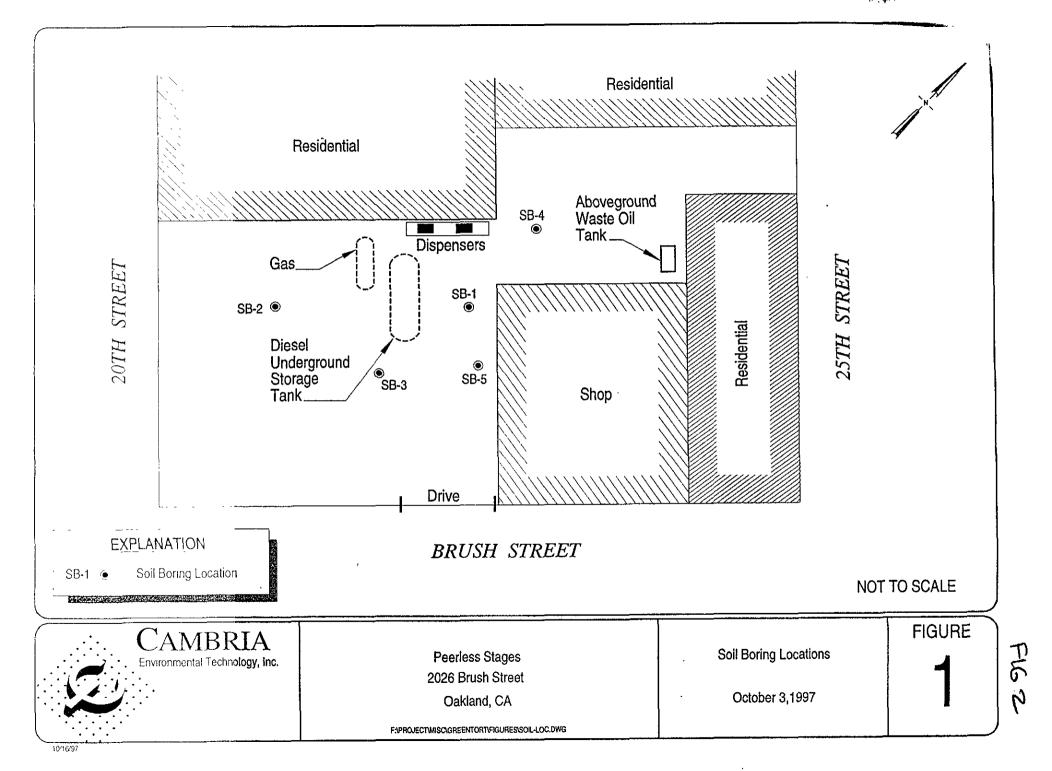


Table 1. Soil and Ground Water Analytic Data - Peerless Stages, 2026 Brush Street, Oakland, California

Sample 1D	Units	Date Collected	ТРНд	TPHd	Benzene	Toluene	Ethylbenzene	Xylenes
Soil Samples:						-		
SB-3, 16'	mg/kg	10/03/97	<1.0	<1.0	<0.005	<0.005	<0.005	<0.005
SB-5, 15 5'	mg/kg	10/03/97	<1.0	<1.0	< 0.005	<0.005	<0.005	<0.005
Vater Samples								
SB-2	ug/L	10/03/97	<50	310 a	<0.5	0.70	<0.5	0.91
SB-4	ug/L	10/03/97	120 b	58,000 a,c	<0.5	1.8	0.50	3.7

### Abbreviations/Notes:

TPHg = Total petroleum hydrocarbons as gasoline by modified EPA method 8015. Benzene, ethylbenzene, toluene, xylenes by EPA method 8020.

a = oil range compounds are significant

b = strongly aged gasoline or diesel range compounds are significant

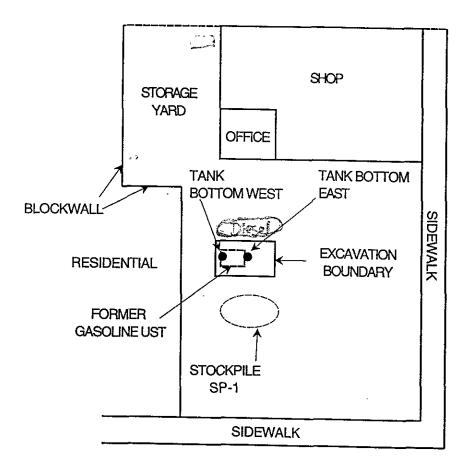
c = gasoline range compounds are significant

No volatile organic compounds detected in ground water sample SB-4 by EPA method 8010.

Soil samples reported in milligrams per kilogram (mg/kg). Water samples reported micrograms per liter (ug/L).



NORTH SCALE 1" = 40'



BRUSH STREET

20 TH STREET

SOIL BORING LOCATION

FORMER GASOLINE UST

SITE MAP

Peerless Stages, Inc. 2021 Brush Street Oakland, California

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Figure 2

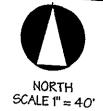
# SOIL SAMPLE RESULTS GASOLING UST TPH-G, TPH-D, BTEX, MTBE & TTLC Lead All Results in Parts Per Million

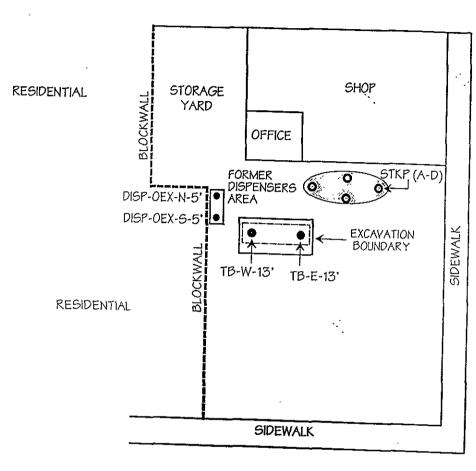
Sample Name	TPH Gasoline	TPH Diesel	Benzene	Toluene	Ethyl Benzene	Total Xylenes	MTBE	Total Lead
WEST-10.0'	< 20	< 1.0	< 1.2	< 1.2	< 1.2	< 1.2	2.4	< 5.0
EAST-10.0'	< 20	< 1.0	< 1.2	< 1.2	< 1.2	< 1.2	4.0	< 5.0
SP1 ABCD	1.6	170	< 0.005	0.0067	< 0.005	0.081	0.23	180
EPA METHOL	8015M	8015M	8020	8020	8020	8020	8020	7420A

Notes:

Detectable concentrations are in **bold**.

Non-detectable concentrations are indicated by a less than sign (<) followed by the laboratory detection limit.





BRUSHSTREET

20 TH STREET

# LEGEND LEGEND DESEL DISCRETE SOLSAMPLE LOCATION COMPOSITE SOL SAMPLE LOCATION

0

SITE MAP

Peeriess Stages, Inc. 2021 Brush Street Cakland, California

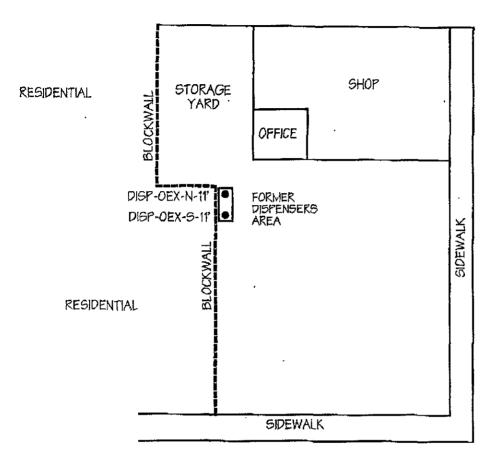
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Figure 2

F165



NORTH SCALE 1" = 40'



BRIISH STRE

20 TH STREET

# SITE MAP

Peerless Stages, Irc. 2021 Brush Street Oakland, California

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Figure 2

DIESEL UST SOIL SAMPLE RESULTS All Results in Parts Per Million

Sample Name, depth	TPH Gasoline	Benzene	Toluene	Ethyl- Benzene	Total Xylenes	MTBE
TB-W-13' TB-E-13' STKP-(A-D) DISP-OEX-S-5' DISP-OEX-N-5'	$< 1.0^{1}$ $< 1.0^{2}$ $5 1 0$ $2 6 . 0$ $< 10.0^{3}$	< 0.005 < 0.005 < 0.01 < 0.005 < 0.005	< 0.005 < 0.005 0.063 < 0.005 0.048	<0.005 · <0.005 0.27 <0.005 0.15	< 0.005 < 0.005 0.32 < 0.005 0.62	< 0.005 0.064 < 0.2 0.26 0.011
EPA METHOD Sample Name	8015M TPH Diesel	8020 TTLC Lead	8020 STLC Lead	8020	8020	8020
TB-W-13' TB-E-13' STKP-(A-D) DISP-OEX-S-5' DISP-OEX-N-5'	5.1* 30.0* 2,900 26.0** 3,800*	< 5.0 < 5.0 1 3 0 < 5.0 < 5.0	4.9			
EPA METHOD	8015M	7420A	7420A			

# Notes:

₹.

- 1. Hydrocarbons found are uncharacteristic of gasoline profile. Quantified value 1.1 ppm
- 2. Hydrocarbons found are uncharacteristic of gasoline profile. Quantified value 12 ppm 3. Hydrocarbons found are uncharacteristic of gasoline profile. Quantified value 450 ppm
- \* Hydrocarbons reported are in the early diesel range and do not match diesel standard
- \*\* Hydrocarbon report has characteristic of weathered/aged diesel Detectable concentrations are in bold.

# TABLE ONE

Summary of Chemical Analysis of Dispenser Overexcavation Soil Samples Peerless Stages Property, Oakland, California TPH-G, TPH-D, BTEX, MTBE, and Total Lead

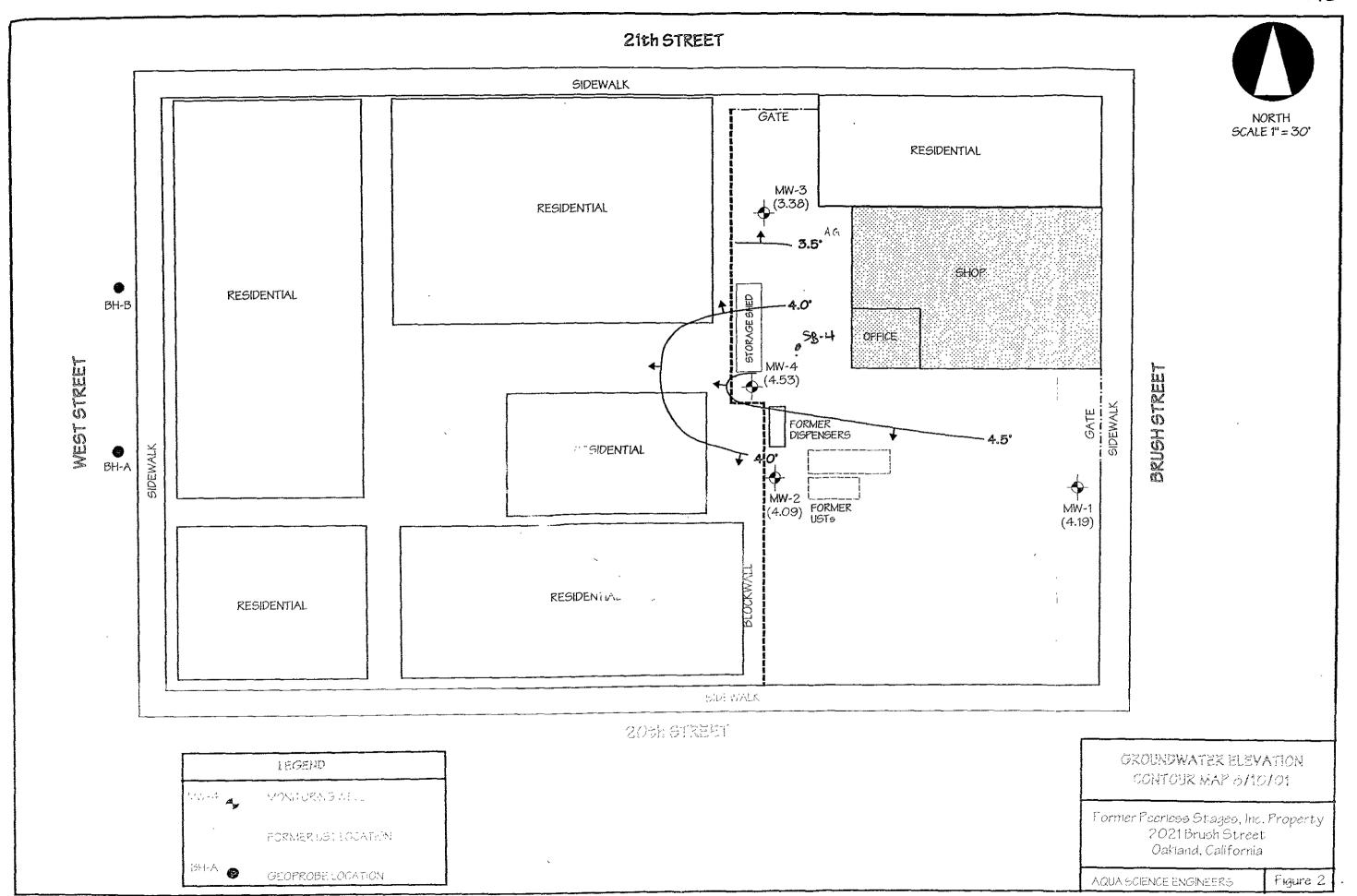
All results are in parts per million

AME WME				TOLDEN.	ije Wiesies		ero <b>Wari Sze</b>	
DIS.OEX.N.11	17	250	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.6
DIS.OEX.S.11'	8.9	55	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	4.1
EPAMETHOD	<i>80</i> 15М	, <u>80</u> 15М	8020	8020	8020	8020	8020	7420
_	-		:	•				

# NOTES:

Detectable concentrations are in bold.

Non-detectable concentrations are noted by the less than sign (<) followed by the laboratory detection limit.



# TABLE ONE

# Summary of Chemical Analysis for Soil Samples Collected 8/18/99 Peerless Stages Property, Oakland, California All results are in parts per million (ppm)

SAMPLE	DEPT <b>H</b>				~~	ETHYL-	TOTAL		TOTAL	
LOCATION	(F <u>T)</u>	TPH-G	TPH-D	BENZENE	TOLUENE	BENZENE	XYLENES	MTBE	LEAD	PNAs
MW 1	15.5	< 1.0	< 1.0	< 0.0050	< 0 0050	< 0 0050	< 0.0050	< 0.0050	< 5.0	NA
MW-2	15.5	53	190	< 0.62	< 0.62	< 0.62	< 0.62	< 0.62	< 5.0	0.018*
MW-3	15.5	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0 0050	< 0.0050	< 5.0	NA
MW-4	15 ()	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 5.0	NA
Industrial PRG Residential PRG		NE NE	NE NE	0.62	520 520	230 230	210 210		1000 130	varies Varies

### Notes.

Detected concentrations in bold.

Non-Detectable concentrations are noted by a less than symbol (<) followed by the laboratory reporting limit

NE = Not established

PNAs = Polynuclear Aromatic Hydrocarbons

\* Fluorene at 0.018 ppb was the only PNA detected above the laboratory reporting method

NA = Sample was not analyzed

PRG - US BPA Picliminary Remediation Goal

# TABLE ONE

# Summary of Chemical Analysis for Soil Samples Collected 5/8/01 Former Peerless Stages Property, Oakland, California All results are in parts per million (ppm)

SAMPLE	DEPTH	·····			<del></del>	ETHYL-	TOTAL	
LOCATION	(FT)	TPH-G	TPH-D	BENZENE	TOLUENE	BENZENE	XYLENES	мтве
вн А	11.5'-12.0'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
ен-в	13.5'-14.0'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
industriál PRG Reeildential PRC	<del>)</del>	NE NE	A NE Las par NECAVAL	1.4	520a 40ya 520	230 230 :	210 210	NE NE

### Notco:

Detected concentrations in bold

Non-Detectable concentrations are noted by a less than symbol (<) followed by the laboratory reporting limit

NE - Not established

PRG = US EPA Preliminary Remediation Goal

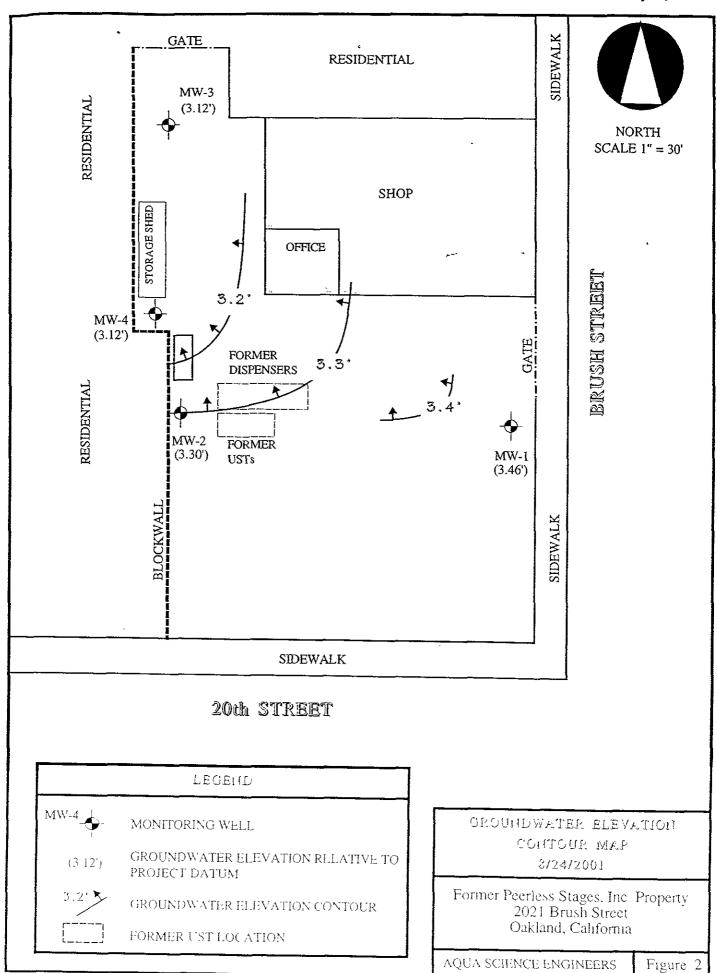


TABLE TWO

Summary of Chemical Analysis for Groundwater Samples Former Peerless Stages Property, Oakland, California All results are in parts per billion (ppb)

CALIFICIO	DATE	TOU C	-COLL C	PP. 190		ETHYL-	TOTAL		Tert-		
SAMPLE ID	SAMPLED	TPH-G	TPH-D	BENZENE	TOLUENE	BENZENE	XYLENES	MTBE	Butonal	PNAs	Y0Cs
MW-1	8/26/1999	81	< 50	3.5	7.9	3.2	15	< 5.0	NA	NA	NA
	11/11/1999	< 50	110	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
	2/16/2000	< 50	< 5 <i>0</i>	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA.	NA
	5/17/2000	< 50	< 5 <i>0</i>	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA.
	812312000	<50	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA.	NA.
	11/30/2000	< 50	< 5 <i>0</i>	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA.
	2/22/2001	87**	54*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA.	NA.
	5/10/2001	< 5 <i>0</i>	77*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0.	NA	NA	NA
	8/24/2001					No	ot Sampled	•	,	1475	NA
√W-2	8/26/1999	8,600	1,200*	< 25	< 25	< 25	< 25	14,000	ΝA	< 0.057 - < 0.23	***
	11/11/1999	710	2,300*	< 0.5	< 0.5	< 0.5	< 0.5	6,200	NA NA		
	2/16/2000	< 50	1,500*	< 0.5	< 0.5	< 0.5	< 0.5	3,800	NA	NA	NA .
	5/17/2000	58	1,400*	< 0.5	< 0.5	< 0.5	< 0.5	5,800	NA NA	NA	< 10 - < 1,00
	8/23/2000	1,300**	600*	< 0.5	< 0.5	< 0.5	< 0.5	2,000	NA.	NA	NA -
	11/30/2000	< 2,500	1,200*	< 0.5	< 0.5	< 0.5	< 0.5	2,700		NA	< 0.5 - < 50
	2/22/2001	< 2,500	1,300*	< 0.5	< 0.5	< 0.5	< 0.5	1,600	NA NA	NA	NA
	5/10/2001	< 2,500	1200*	< 0.5	< 0.5	< 0.5	< 0.5	1,500	NA NA	NA	NA
	8/24/2001	NA	NA	NA	NA	NA.	NA.	1,400	230	NA NA	NA NA
/W-3	8/26/1999	< 50	< 63	2.5	3	0.07	4				
-	11/11/1999	< 50	< 56	< 0.5	< 0.5	0.87 < 0.5	4	< 5.0	NA	NA	NA
	2/16/2000	< 50	< 5 <i>0</i>	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
	5/17/2000	< 50	<50	< 0.5	< 0.5		< 0.5	< 5.0	NA	NA	NA
	8/23/2000	< 50	<50	< 0.5	< 0.5	< 0.5 < 0.5	< 0.5	< 5.0	NA	NA	NA
	11/30/2000	<50	<50	< 0.5	< 0.5		< 0.5	< 5.0	NA	NA	NA
	2/22/2001	< 50	<50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
	5/10/2001	59	58*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	NA	NA	NA
	8/24/2001	00	50	(0.5	₹0.5	< 0.5 <b>N</b> o	< 0.5 ot Sampled	< 5.0	NA	NA	NA
/W-4	8/26/1999	.50	100*	0.5			*				
	11/11/1999	< 50 < 50	420*	< 0.5	< 0.5	0.88	3.6	< 5.0	NA	NA	NA
	2/16/2000	< 5 <i>0</i>	120*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NΑ	NA	NA
	5/17/2000	120**	76*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
	8/23/2000	< 50	13 <i>0</i> *	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
	11/30/2000	< 50	73*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
	2/22/2001	< 50 76**	< 50	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
	5/10/2001		170*	< 0.5	< 0.5	< 0.5	< 0.5	< 5.0	NA	NA	NA
	8/24/2001	< 5 <i>0</i>	< 63	< 0.5	< <i>0.</i> 5	< 0.5	< 0.5	< 5.0	NA	NA	NA
						No	t Sampled				
³H-A	5/8/2001	<50	69	< <i>0.</i> 5	1.5	< <i>0.</i> 5	1.5	< 0.5	NA	NA	NA
Н-В	5/8/2001	< 50	60	< 0.5	1.7	< 0.5	1.7	< 0.5	NA	NA	NA.

# <u>Notes:</u>

Non-Detectable concentrations are noted by a least than symbol (x,f,g) oweaby the lateratory reporting that

NE = DHS MOLinot estantished

PNAs = Polynuclear Aromation y diocarbons

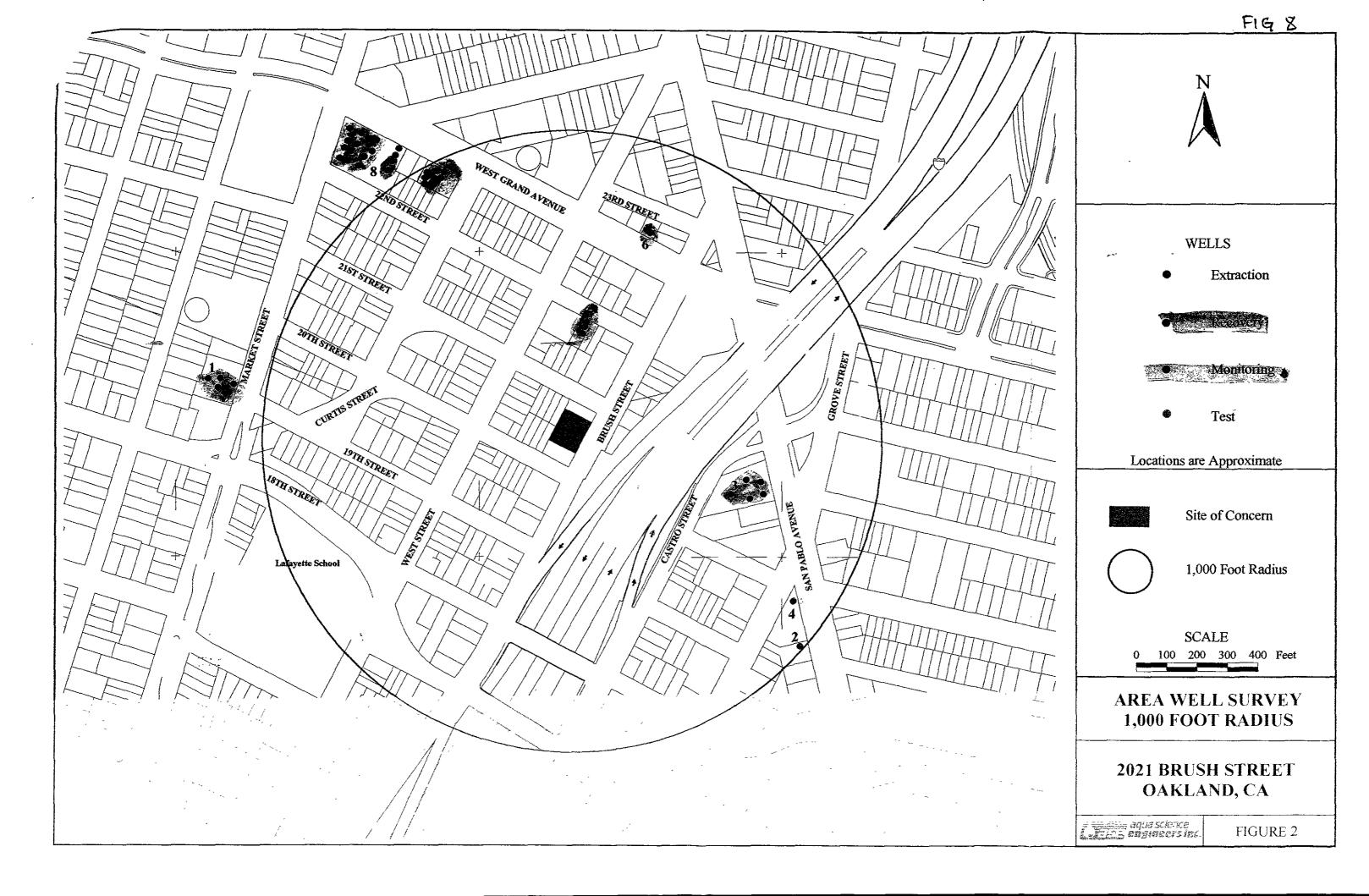
<sup>700</sup>s = Volatile Organic Comp. Jhas

DHS MCL = Department of health Dervices Maximum Contaminant Level for drisking water

 $M^{2}=Sample was not analyzed for these compounds.$ 

instructions do not more the approximate at and and

Thydrox arbons approximation all exponentiary gasoline standard



	Pectes Stages 5:2026						B- (			MW						
	•	Number			Boring Location: 5 Drilling Method: j	eze-m Nydraul	e-map shop-side o tranks draulic push				Date: 10/3/97 Time: 9:15					
	interval	w Cnt.	ıst.	55.	Soil Type		slst.	•		F	ercer	itages	S	y	oillity	
Depth (ft)	Sample Interval	Time/Blow Cnt.	Well Const.	USC Class.	and Comments	Color	Pen. Resist	Moisture	Odor	Clay	Silt	Sand	Gravel	Plasiticity	Permeability	
5_	-				organics	slkjbru	losc	damp		ાંડ	804	. <u>.</u>		vL	<b>E</b> m	
	- -				organic 5	tani gruy	5-37			₹5	85	63		m	L	
- 15 1 20 20 20 20 20 20 20 20 20 20 20 20 20	又			SW	organics @185-	gra gra	#SHIP Loose	,	,		15	80 80		VL UL	Lotte annotation seemed on the	A SAME TO SAME SECTION OF THE PARTY OF THE P
25				•	Cambria Environ											

Cambria Environmental Technology, Inc.

At	ess:	Pres. 20	-lesç 26	Br	inges 3h St	- F	B- 2	-				MV			
<i>P</i> roje	ct N	: 🏒	7		Boring Location: © Drilling Method:	lown q	zodieu	ne of	tar			(0/		?7	
<b>2</b>	Sample Interval	Time/Blow Cnt.	nst.	ass.	Soil Type		sist.	е				ntage		^	Allic
Depth (ft)	Sample	Time/Bl	Well Const.	USC Class.	and Comments	Color	Pen. Resist.	Moisture	Odor	Clay	Silt	Sand	Gravel	Plasiticity	Permeability
-	-				Asphalts	-									
- IXX					organtes	benj Tan	s tist		. /	15	75	10		I-W	_
100	6	Орф	٨.		, , , , , ,	tan	st:FF	wotst		15	75	10		М	L
KINDA	б	Opp	n		@ (4 <sup>1</sup>		SOFT			10	80	10		<u>L</u>	M
NAK NAK MANA	Z (	Opp	v		•	Tan	soft	damp		10	85	5		I-W	L
<u>Q</u>	3	į.				bin	sofq	wer		15	(0	75		LM	L
20 <u>5</u>					•										
- - 25_			٠		) i i i i i i i i i i i i i i i i i i i					-					
  -  -			-		bkg DVA =		1 7 1	M							
30_		•		     	Water red	wge	d 95.	in	7	ev	pr	5	Co	ee	11
							<i>y</i>					1			
35_												:		; 	
_		<u></u>			- Cambria Environm	nental	Techn	ology	v. Inc	<u> </u> 					

	, s	leer : 207	less 26 i	, 3,000	sh St		8B- 🦩					M\	<b>N</b> -		٠,
		Numbe st: 5			Boring Location: Drilling Method:	K-9.	ad c	ot to	an k5	_	Date: Time:	19/	/3/ 20	97	
Depth (ft)	Sample Interval	Time/Blow Cnt.	Well Const.	USC Class.	Soil Type and Comments	Color	Pen. Resist.	Moisture	Odor			Sand		Plasiticity	Permeability
  -  -  -					concrete - 6"	Sigbt-v	leose	damp	1	15	80	5		vL	M
5					•	ben	SOFT			10	36	Ø		4	L-M
<b>水</b> 1 <b>0</b> 1	-	:			organics	tan	SiA			<b>3</b> 5	70	5		Μ	L
	7	·				pt 10	loose soud pocks		slight		华	Ø	-	L	М
208		·				bru	Soft	wer		15	10	75		LM	L
25_ - 30_ - 35_ -					Cambria Environm										

Cambria Environmental Technology, Inc.

es	P=e+1 \$:202	es 5 -6 · 5	n şl	Se, Oakland	8	B-L	}				M۱	<b>N</b> -		
-	Numbe	τ.		Boring Location: Drilling Method:	down-	grad.	ot	W.O.			12		/97	
t) Interval	ow Cnt.	nst.	188.	Soil Type		sist.					ntage			lity
Depth (ft) Sample Interval	Time/Blow Cnt.	Well Const.	USC Class.	and Comments	Color	Pen. Resist.	Moisture	Odor	Clay	Silt	Sand	Gravel	Plasiticity	Permeability
-				Aspnal+	blibn	loose	damp		15	80	5		UL	M
5_					bin, Tan	5-16 FP		j	15	75	ſΟ		L-M	L
163				organics	Tan W green	hard/ s-tiff			20	75	5		L=M	L
一工				crganics	green	loose	Weist	wild	5	30	65	-		LM
200					green bru	loose	uet wet	mild.	55	10	85 85		VL	H
25				Water ra	edra	rge	d	te	ro	<b>D</b> -	5		~ee	И,
<u></u>				Cambria Environm	ental C	Fachne	alagr	Inc	i 		í			

Cambria Environmental Technology, Inc.

		. 7	/ .							<u></u>					<u> </u>	
	į					Stages sh St.		SB- '	5			_	Μ\	٧-		
	∳ri Ge	oject i ologi:	Number st: 5	r. 3		Boring Location: Drilling Method:	NE	corner	of	cant		Date: Time:	10/	3/0	?>	
1	=	Sample Interval	ow Cnt.	nst.	38S.	Soil Type		slst.				Perce.	ntages	5		Jilly
	Depth (II)	Sample	Time/Blow Cnt.	Well Const.	USC Class.	and Comments	Color	Pen. Resist	Molsture	Odor	Clay	Tils:	Sand	Gravel	Plasiticity	Permeability
	=					Lonerete - 8"	blkybr	n loose	clamp		-20	75	5	; ;	し	M
	5 XX						bon	Stiff	· · · · · · · · · · · · · · · · · · ·		( <i>b</i>	40	50		L	L
	1683 1683 1					organics	bry	suff		•	10	70	20	7		4
			;			organics	lite bin	5teA		_	[0	ЦÒ	50		<b>L</b>	ĿM
	20					no recovery	brn	loose			5	40	55		<u>.</u>	M
	- 25_ -			Fr	: : : : : : : : : : : : : : : : : : : :											
	30_ - -	:	1											-		
	_ _ _ _	;		:		! :	;		:		:	; ; ;				
	35_ - -						i				:		:	,	ı	,

Static Depth of Water in Well: 16.44'   Well Screen Stage Static Depth of Boring: 31.0'   Type and Size of Soil Sampler: 2.0"   Logard Size of Drill: 8.0" Diameter	GORING LOG AND MONIT	OPING WELL	
Total Depth of Water in Well: 16.44'  Total Depth of Boring: 31.0'  Solit/Rock sample Data  Boring  Bo			
Logged By: Ian Reed  Date Drilled: August 18, 1999  Checked By: Robert E. Kitay, R.G.  WATER AND WELL DATA  Depth of Water First Encountered: 22.0'  Well Screen Type and Diameter: Sch. 40 PVC, 2" diameter  Static Depth of Water in Well: 16.44'  Well Screen Slot Size: 0.02"  Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  BORING  BORING  DETAIL  BORING  DETAIL  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  Asphalt  Clayey SILT (ML); olive gray and brown; stiff; damp; 70% silt; 20% clay; 10% sand; trace gravel; moderate plasticity; low estimated K; no odor		1	1 230 : 01 1
WATER AND WELL DATA  Depth of Water First Encountered: 22.0'  Static Depth of Water in Well: 16.44'  Total Depth of Boring: 31.0'  Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  O Asphalt  Clayey SILT (ML); olive gray and brown; stiff; damp; 70% silt; 20% clay; 10% sand; trace gravel; moderate plasticity; low estimated K; no odor		1	Statilities
Depth of Water First Encountered: 22.0'  Well Screen Type and Diameter: Sch. 40 PVC, 2" diameter  Static Depth of Water in Well: 16.44'  Well Screen Slot Size: 0.02"  Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  DESCRIPTION OF LITHOLOGY  Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  O Asphalt  Clayey SILT (ML); olive gray and brown; stiff; damp; 70% silt; 20% clay; 10% sand; trace gravel; moderate plasticity; fow estimated K; no odor		Date Drilled: A	August 18, 1999 Checked By: Robert E. Kitay, R.G.
Static Depth of Water in Well: 16.44'  Well Screen Slot Size: 0.02"  Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DETAIL	•	}_	Total Depth of Well Completed: 29.0
Static Depth of Water in Well: 16.44'  Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  Asphalt  Clayey SILT (ML); olive gray and brown; stiff; damp; 70% silt; 20% clay; 10% sand; trace gravel; moderate plasticity; low estimated K; no odor		.0'	Well Screen Type and Diameter: Sch. 40 PVC, 2" diameter
SOIL/ROCK SAMPLE DATA  SOIL/ROCK SAMPLE DATA  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  Asphalt  Clayey SILT (ML); olive gray and brown; stiff; damp; 70% silt; 20% clay; 10% sand; trace gravel; moderate plasticity; low estimated K; no odor			
BORING DETAIL BOX DETA			Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler
BORING DETAIL  Street Box Lodking Wel Cap  Clayey SILT (ML); olive gray and brown; stiff; damp; 70% silt; 20% clay; 10% sand; trace gravel; moderate plasticity; low estimated K; no odor  Street Box Thought and the property of the property	SOIL/ROCK	SAMPLE DATA	
Street Bo Lodking Wel Car Clayey SILT (ML); olive gray and brown; stiff; damp; 70% silt; 20% clay; 10% sand; trace gravel; moderate plasticity; low estimated K; no odor	E BORING IT FOR S	Leve hic	5
Asphalt  Clayey SILT (ML); olive gray and brown; stiff; damp; 70% silt; 20% clay; 10% sand; trace gravel; moderate plasticity; low estimated K; no odor	Des Des NVM (	Grap Log	density, stiffness, odor-staining, USCS designation.
Clayey SILT (ML); olive gray and brown; stiff; damp; 70% silt; 20% clay; 10% sand; trace gravel; moderate plasticity; low estimated K; no odor		<del>                                     </del>	
The moderate plasticity; low estimated K; no odor    11	Street Box		·
5			1 70% Sill, 20% Clay; 10% Sand: trace gravel:
	<b>-                                      </b>		moderate plasticity; low estimated K; no odor
	that the the that the the the that the the the the the the the the the th		. 5
-10 Seal Seal Solution Seal Seal Seal Seal Seal Seal Seal Seal			
-10 Sylvening Sy	Seal Seal		]
	-1 0 € 6 °		10
Sandy SILT (ML); dark brown; stiff; moist; 70% silt; 30% sand; non-plastic; high estimated K; no odor	F <sub>15</sub>	-	
Sandy SILT (ML); dark brown; stiff; moist; 70% silt; 30% sand; non-plastic; high estimated K; no odor	Mag ≥ 12 16 16 16 16 16 16 16 16 16 16 16 16 16	$\square$	Januay Siel (WE): Gark brown: efiff: moiet. 700/ - 11.
□ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □ □	- G 8	-	many months, mgr estimated K; no odor
	-	F	Í
20 80% silt; 15% sand; 5% clay	4 0.5 1 18 18 18 18 18 18 18 18 18 18 18 18 1	-2	2 0 80% silt; 15% sand; 5% clay
	- 15 15 15 15 15 15 15 15 15 15 15 15 15	<b>Y</b>	
25 Sifty SAND (SP), light brown, dense, wet. 90% fine to medium sand, 10% silt, non-plastic high estimated K	<u>1</u> 25   1	-2	25 Silty SAND (SP), light brown dense wat one to
medium sand. 10% silt, non-plastic high estimated K	- da		modium saliu, 10% SIII, non-plastic high actimated is
-30 Pues 30 30	-30 - San		
27 0 30		2222	
AOUA SCIEUSE ENGINEERS, 106.			FOUR COLETICE ENGINEERS, 100.

	FORING I	OG A	NID.	MO		ADIN!	C WELL				
			ND	IWIOI	$\neg$				IPLETION DETAILS	Monitoring V	Vell: MW-1
L	oject Name: Pe	eriess	ko:	L/DA					21 Brush Street, Oakland	, CA	Page 2 of 2
Feet		u	PUI	1			LE DATA	Depth in Feet	DESCRIPT	ION OF LITHOLO	GY
Depth in Feet	BORING DETAIL	Description	Interval	Blow Counts	OVM (ppmv)	Water Level	Graphic Log	ri Fi	standard classificati	ion, texture, rel	ative moisture,
Dep		Des	Inte	3low	MAC	Vater	Graph	Dep	density, stiffness, or	dor-staining, US(	CS designation.
				27					Clayou SUT (ALL)		
-				53				_	Clayey SILT (ML); gray 20% clay; medium plast	to brown; dense icity; low estima	; wet; 80% silt;   ted: no odor
E									End of boring at 31.0'		
-35							-	- -35	2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2		
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F <sup>40</sup>							ļ	<b>-</b> 40			
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BORING LOG AND MONIT	ORING WELL	COMPLETION DETAILS   Monitoring Wells M	
ect Name: Peerless Stages		on: 2021 Brush Street California	
filler: West Hazmat Drilling Corp.		i age i	of 2
Logged By: Ian Reed	1	ole Sidmeter	
WATER AND WELL DATA		J. Hoselt E. Kildy,	R.G.
Depth of Water First Encountered: 19	.5'	Total Depth of Well Completed: 30.0'	
Static Depth of Water in Well: 16.88'		Well Screen Type and Diameter: Sch. 40 PVC, 2" diam	neter
Total Depth of Boring: 31.0		Well Screen Slot Size: 0.02"	
	SAMPLE DATA	Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sa	ampler
		DESCRIPTION OF LITHOLOGY	
Depth in F  TIVE BOUNDS  Description  Interval  Slow Counts  OVM (ppmv)	Water Level Graphic Log	standard classification, texture, relative moderate density, stiffness, odor-staining, USCS designed	oisture,
De De OVIv	Wate Gra	density, stiffness, odor-staining, USCS desig	nation.
-0 ← Street Box		Asphalt	
Looking Well Ca		Clayey SAND (SC): brown: dense: damp. 70% C	ne to
Portland Cement		medium sand; 20% clay; 10% silt; medium plas low estimated K; no odor	sticity;
-5 × × 7 0			
- In the state of		5	
			ĺ
-1 0 -1 11 11 11 11 11 11 11 11 11 11 11 11		Sandy CLAY (CH); yellow-brown speckled black;	
# to of 14 %	-	1 () 1 Viiii, udiiip, 70 /o Clav. 25% sand, 50/ 5/4, 6:	٠
		plasticity; very low estimated K; no odor	
		City CAND TO THE	
- -15	_	Silty SAND (SM); olive; dense; moist; 70% sand; silt; 5% clay; low plasticity; medium estimated in moderate bydrosests.	15%
- 15 15 170 DAC DAC 32 170	$\nabla$	moderate hydrocarbon odor	ζ;
F   ₩ E   ₩ E   1			
-20 \\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	<b>Y</b>	<u> </u>	
-20 % of the distriction of the	_	85% fine to medium sand; 15% silt; light brown;	wet:
550,80	_	non-plastic; high estimated K; no odor	,
25		5	
- dia S			
-30	***************************************	0	
₩ ₩ 14 0			
		AOUA OCIENCE ENGINEERS. L	NC.

	ame: Pe	erless	loou	/200	1	Proje	ct Locati	on: 20	21 Brush Street, Oakland,	CA	Page 2 of 2
-35 -40 -45 -50	ame: Pee	Description	Interval O	/ROG Blow Counts	CK (vmdd) MVO	Water Level W	Ct Pocati	on: 20	DESCRIPTION  standard classification density, stiffness, od  Silty CLAY (CH); olive silt; 5% sand; high plass no odor	ON OF LITHOLO on, texture, re or-staining, US	lative moisture, CS designation.
-55 60 65								60	AQUA SCIEN		

BORING LOG AND MONIT	ORING WELL CO	OMPLETION DETAILS   Monitoring Well: MW-3
ect Name: Peerless Stages	Project Location:	2021 Brush Street, Oakland, CA Page 1 of 2
Driller: West Hazmat Drilling Corp.	Type of Rig: Holle	low-Stem Auger   Size of Drill: 8.0" Diameter
Logged By: Ian Reed	Date Drilled: Augu	Checked By: Robert E. Kitay, R.G.
WATER AND WELL DATA	To	otal Depth of Well Completed: 30.0'
Depth of Water First Encountered: 16.	.0' We	ell Screen Type and Diameter: Sch. 40 PVC, 2" diameter
Static Depth of Water in Well: 15.94		ell Screen Slot Size: 0.02"
Total Depth of Boring: 31.0'	Тур	pe and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler
	SAMPLE DATA	
Depth in Fe Description Description Interval Blow Counts	Water Level Graphic Log Depth in F	standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
	Wat G	i songradon.
-0 ← Sree Box	0	Asphalt
Locking Well Ca	аф 	Clayey SILT (SM); yellow brown; dense; damp; 60% silt; 20% clay; 20% sand; medium plasticity; low estimated K; no odor
Dording Dordin Dording Dording Dording Dording Dording Dording Dording Dording	5	5
-10 Seal Bentonnie Seal 14	-10	0 70% silt; 20% clay; 10% sand
2" ID Blank Sch 40 Sch. 40 PVC	<b>∑</b> -15	Silty SAND (SM); yellow brown; dense; damp; 75% sand: 25% silt; non-plastic; medium estimated K; no odor wet at 16.0'
-2 0	-20	O Silty SAND (SW); yellow brown; dense; wet; 90% well-graded fine to coarse sand; 10% silt; non-plastic high estimated K; no odor
-25	25	5
-30 ← S £ X 30 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	30	
# KX **		AQUA COLETOR ELIGINEERS, INC.
		AQUA COLETCE ENGMEERS. INC.

BORING	LOG A	ND	MON	NTO	RING	G WELL	. COM	IPLETION DETAILS	Monitoring V	Vell: MW-3
eject Name:	Peerless				•		_	21 Brush Street, Oakland	, CA	Page 2 of 2
9	Ę	SOII				LE DATA	-eet	DESCRIPT	ION OF LITHOLO	GY
BORING DETAIL		Interval	Blow Counts	OVM (ppmv)	Water Level	Graphic Log	Depth in Feet	standard classificat density, stiffness, o	ion, texture, rel	ative moisture,
Ded	Des	Inte	Blow	MVO	Wate	Gre	Deg		gor starring, oo	oo designation.
- - - - - 35 - -			17				35	Silty CLAY (CH); olive silt; high plasticity; low End of be	e gray; stin; wet; estimated K; no cring at 31.0'	5 80% clay; 20% 5 odor
-40 -40  -45							40			
- - - - 50										
- - - - 55						Ē	_ _ _ _ _ 55			
_ _ _60 _							_ _ _ _ _ _ _			
<b>-</b> - 65 -							65			-
					:					
	···							A OUA. ŠC	JENCE ENGI	NEERS, IIIC.

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BORING LOG AND MONITORING WELL COMPLETION DETAILS  Monitoring Well: MW-4  Page 1 of 2  Page 1 of	RORING	LOG AND M	ONIT	ORIN	ig Well	. COI	MPLETION DE	TAILS	Monitoring V	
Priller: West Hazmat Drilling Corp. Type of Rig: Hollow-Stem Auger Size of Drill: 8.0" Diameter  Logged By: Ian Reed Date Drilled: August 18, 1999 Checked By: Robert E. Kitay, R.G.  WATER AND WELL DATA Total Depth of Well Completed: 30.0'  Depth of Water First Encountered: 20.0' Well Screen Type and Diameter: Sch. 40 PVC, 2" diameter Static Depth of Water in Well: 16.48' Well Screen Slot Size: 0.020"  Total Depth of Boring: 31.0' Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	· · · · · · · · · · · · · · · · · · ·								omtoring v	veli: MW-4
Logged By: Ian Reed  Date Drilled: August 18, 1999  Checked By: Robert E. Kitay, R.G.  WATER AND WELL DATA  Depth of Water First Encountered: 20.0'  Well Screen Type and Diameter: Sch. 40 PVC, 2" diameter  Static Depth of Water in Well: 16.48'  Well Screen Slot Size: 0.020"  Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY				Proje	ect Locati	on: 20	021 Brush Stree	t, Oakland	, CA	Page 1 of 2
WATER AND WELL DATA  Depth of Water First Encountered: 20.0'  Well Screen Type and Diameter: Sch. 40 PVC, 2" diameter  Static Depth of Water in Well: 16.48'  Well Screen Slot Size: 0.020"  Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY			orp.	Туре	of Rig:	Hollov	v-Stem Auger	Size of D	rill: 8.0" Diame	ter
Depth of Water First Encountered: 20.0'  Well Screen Type and Diameter: Sch. 40 PVC, 2" diameter  Static Depth of Water in Well: 16.48'  Well Screen Slot Size: 0.020"  Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	Logged By: Ian R	eed		Date	Drilled:	Augus	t 18, 1999	Chec	ked By: Robert I	E. Kitay, R.G.
Static Depth of Water in Well: 16.48'  Well Screen Slot Size: 0.020"  Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	/					Total	Depth of Well (	Completed:	30.0'	
Total Depth of Boring: 31.0'  Type and Size of Soil Sampler: 2.0" I.D. Split-barrel Sampler  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	Depth of Water Fi	rst Encountere	d: 20.	0'		Well	Screen Type an	nd Diamete	r: Sch. 40 PVC	, 2" diameter
SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	Static Depth of Wa	ater in Well: 10	6.48'			Well	Screen Slot Siz	:e: 0.020"		
BORING DETAIL DETAIL DETAIL SOIL/ROCK SAMPLE DATA  O DETAIL DETAIL DESCRIPTION OF LITHOLOGY  SOIL/ROCK SAMPLE DATA  O DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation						Туре	and Size of Sc	il Sampler	: 2.0" I.D. Split-l	parrel Sampler
Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation	Feet	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			PLE DATA	Feet		DESCRIPTI	ON OF LITHOLO	GY
	E BORING  DETAIL	escription	maa) W M (bom	ter Leve	raphic Log		standard (	classificati	on, texture, rela	ative moisture
				Wa	Ü	Ŏ —				s soughaton.
O Siree Box O Asphalt	0					<b>-</b> 0	Asphalt			
Silty SAND (SM); light brown; medium dense; damp; 70% fine to medium sand; 25% silt; 5% clay; low plasticity; medium estimated K; no odor		<del>.  </del>	Vell Ca	ip 		- -	70% tine to r	nedium sa	nd; 25% silt: 5%	clay: low
5   11   0   18   18   18   18   18   18	_ <sub>5</sub>	rtfand Ce	6			<b>-</b> <b>-</b> 5			,	
		Seal				-				
70% fine to coarse sand; 20% silt; 10% clay; medium plasticity	F-1 0	PVC Bentonite	6			- -10 - -	70% fine to coplasticity	oarse sand	d; 20% silt; 10%	clay; medium
dense; moist; 85% fine to medium sand; 25% silt; non-plastic; high estimated K; no odor	-15 - -	2" ID Blank Sch	8 0	≖		- 15 -	dense; moist; non-plastic; hig	85% fine t gh estimate	o medium sand; ed K; no odor	25% silt;
-20 wet at 20'	<b>-</b> 20	solting Solting 51	0	<b>Y</b>		20	wet at 20'			
-2 5 63 c -2 5	2 5		C			25				
-30	<b>-</b> 30	#3 Sand	c	<b>1</b>		30				
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BORING DETAIL STUDY OF LITHOLOGY  BORING DETAIL STUDY OF LITHOLOGY  BORING DETAIL STUDY OF LITHOLOGY  SOIL/ROCK SAMPLE DATA  TO SOIL/ROCK SAMPLE DATA  TO SOIL/ROCK SAMPLE DATA  TO SOIL/ROCK SAMPLE DATA  TO SOIL/ROCK SAMPLE DATA  TO SOIL/ROCK SAMPLE DATA  TO SOIL/ROCK SAMPLE DATA  TO SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY  density, stiffness, odor-staining, USCS designation  TO SOIL/ROCK SAMPLE DATA  TO SOIL/ROCK SAMPLE DA	ject Name:	Peerless	Stage	9S					1 Brush Street, Oakland, CA	Page 2 of 2
Silty CLAY (CH); olive gray; stiff; wet; 80% clay; 20 silt; high plasticity; low estimated K; no odor  End of boring at 31.0'  51  -45  -55  -55  -60  -60  -60			SOII	<u>/RO</u>	-	AMP	LE DATA	eet	DESCRIPTION OF LITH	OLOGY
Sity CLAY (CH); ofive gray; stiff; wet; 80% clay; 20 silt; high plasticity; low estimated K; no odor  End of boring at 31.0'  40  45  45  60  60  60	BORING DETAIL	Description	Interval	Blow Counts	OVM (ppmv	Water Level	Graphic Log	Depth in F		
5				51				_		
0								- -	End of boring at 31.0	1
5 -45 - 50 - 50 - 55 - 55 - 60 - 60 - 60 - 6	5							<b>-</b> 35		
5 -45 -50 -50 -55 -55 -60 -60 -60 -60										
0 -50 -50 -55 -55 -60 -60 -60 -60 -60 -60 -60 -60 -60 -60	0							40		
0 -50 -50 -55 -55 -60 -60 -60 -60 -60 -60 -60 -60 -60 -60								_		
50	5							45		
5 - 55 - 60 - 60 - 60 - 60 - 60								F		
50	0							F		
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60 - 60								<del> -</del>		
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- 65 										
	5					!		_ _ 6 5		
								-		
								_		

Project Namo-Former Peerless Stage Project Location: 2021 Brush Sirvet, Oakland, CA Page 1 of 1  Driller: Vironex Type of Rig: Geoprobe Size of Drill: 2.0* Diameter  Logged By: Erik H. Paddleford Date Drilled: May 8, 2001 Checked By: Robert E. Kitay, R.G.  WATER AND WELL DATA  Depth of Water First Encountered: 15' Veil Screen Type and Diameter: NA  Well Screen Type and Diameter: NA  Total Depth of Boring: 19' Type and Size of Soil Sampler: 2.0* I.D. Macro Core Sampler  BORING DETAIL OF BORING D	OIL BORING LOG AND MONIT	ORING WELL	COMPLETION	DETAILS Boring: BH-A	<u> </u>	
Total Depth of Water First Encountered: 15'  Well Screen Type and Diameter: NA  Well Screen Type and Diameter: NA  Static Depth of Water First Encountered: 15'  Well Screen Type and Diameter: NA  Total Depth of Boring: 19'  Type and Size of Soil Sampler: 2.0* I.D. Macro Core Sampler  DECRING DETAIL  DETAIL  DECRING DETAIL  DECRING DETAIL  DECRING DETAIL  DECRING DETAIL  DECRING DETAIL  DECRING DETAIL  DECRING DETAIL  DECRING DETAIL  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, non-plastic; medium setsmated K; no odor moist, 80% fine sand; 20% sitt; 20% gravet; non-plastic; medium setsmated K; no odor  Clayey SILT (ML); brown to gray; stiff; moist; 70% sit; 20% gravet; non-plastic; weetlimated K; no odor  Clayey SILT (ML); brown to gray; stiff; moist; 60% silt; 30% clay; 10% fine sand; 10% silt; 10% gravet setsmated K; no odor  Clayey SILT (ML); brown; stiff; moist; 60% silt; 30% silt; 10% gravet; non-plastic; moderate setsmated K; no odor  Silty SAND (SM); brown; stiff; moist; 60% silt; 30% silt; 10% gravet; non-plastic; moderate setsmated K; no odor  DEACH D	project Name:Former Peerless Stage	Project Location				
WATER AND WELL DATA Depth of Water First Encountered: 15'  Static Depth of Water in Well: NA  Total Depth of Water in Well: NA  Well Screen Slot Size: NA  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sampler  DETAIL  BOFRNG	Driller: Vironex Type of Rig: G		ieoprobe	eoprobe Size of Drill: 2.0" Diameter		
Depth of Water First Encountered: 15'  Well Screen Type and Diameter: NA  Well Screen Slot Size: NA  Total Depth of Boring: 19'  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sampler  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sampler  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  Standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  Sity SAND (SM); brown; loose; dry; 60% medium to coarse sand; 20% silt; 20% gravel; mon-plastic; more moist; 60% fine sand; 20% silt; 20% gravel; more sand; S% gravel; molerate plasticity; low estimated K; no odor  Sity SAND (SM); brown; stiff; moist; 60% fine sand; 30% silt; 10% gravel; non-plastic; moderate estimated K; no odor  Sity SAND (SM); brown; stiff; moist; 60% fine sand; 30% silt; 10% gravel; non-plastic; moderate estimated K; no odor  80% fine sand; 10% silt; 10% gravel 80% fine sand; 20% silt  End of Boring at 19'	Logged By: Erik H. Paddleford	Date Drilled:	te Drilled: May 8, 2001 Checked By: Robert E. Kitay,			
Static Depth of Water in Well: NA  Total Depth of Boring: 19'  SOIL/ROCK SAMPLE DATA Type and Size of Soil Sampler: 2.0" 1.D. Macro Core Sampler  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  OR Sample: 2.0% silt; 20% gravel; non-plastic; moderate plasticity; low estimated K; no odor  Clayey SILT (ML); brown; store, sand; how plasticity; very low estimated K; no odor  Clayey SILT (ML); blue-green; very stiff; moist; 60% fine sand; low plasticity; very low estimated K; no odor  Silty SAND (SM); brown; stiff; moist; 60% fine sand; low plasticity; very low estimated K; no odor  Clayey SILT (ML); blue-green; very stiff; moist; 60% silt; 10% gravel; mon-plastic; moderate estimated K; no odor  Silty SAND (SM); brown; stiff; moist; 60% fine sand; low plasticity; very low estimated K; no odor  Clayey SILT (ML); blue-green; very stiff; moist; 60% silt; 10% gravel; mon-plastic; moderate estimated K; no odor  Silty SAND (SM); brown; toose; dry; 60% medium to coarse sand; 20% gravel; mon-plastic; moderate estimated K; no odor  Silty SAND (SM); brown; toose; dry; 60% medium to coarse sand; 20% gravel; mon-plastic; moderate estimated K; no odor  Silty SAND (SM); brown; toose; dry; 60% medium to coarse sand; 20% gravel; mon-plastic; moderate estimated K; no odor  Silty SAND (SM); brown; t	WATER AND WELL DATA	Total Depth of Well Completed: NA				
Total Depth of Boring: 19'  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sampler  DESCRIPTION OF LITHOLOGY  standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.  O  Asphalt  Sity SAND (SM): brown; loose; dry; 60% medium to coarse sand; 20% silt; 20% gravel; non-plastic; medium estimated K; no odor moist; 60% fine sand; 20% silt; 20% gravel; moderate plasticity; low estimated K; no odor  Clayey SILT (ML); blue-green; very stiff; moist; 60% silt; 30% clay; 10% fine sand; 10% gravel; moderate estimated K; no odor  Sity SAND (SM): brown; loose; dry; 60% medium to coarse sand; 20% silt; 20% gravel; non-plastic; moderate plasticity; low estimated K; no odor  Clayey SILT (ML); blue-green; very stiff; moist; 60% silt; 30% clay; 10% gravel; non-plastic; moderate estimated K; no odor  Sity SAND (SM): brown; stiff; moist; 60% fine sand; 30% silt; 10% gravel; non-plastic; moderate estimated K; no odor  Sity SAND (SM): brown; stiff; moist; 60% fine sand; 30% silt; 10% gravel; non-plastic; moderate estimated K; no odor  Sity SAND (SM): brown; stiff; moist; 60% fine sand; 30% silt; 10% gravel; non-plastic; moderate estimated K; no odor  End of Boring at 19'						
BORING DETAIL  BORING						
BORING DETAIL    Detail   Deta	Joon (Book	SAMPLE DATA				
Silty SAND (SM); brown; loose; dry; 60% medium to coarse sand; 20% silt; 20% gravel; non-plastic; medium estimated K; no odor molst, 60% fine sand; 20% silt; 20% clay  Sandy SiLT (ML); brown to gray; stiff; moist; 70% silt; 25% fine sand; 5% gravel; moderate plasticity; low estimated K; no odor  Clayey SiLT (ML); blue-green; very stiff; moist; 60% silt; 30% clay; 10% fine sand; low plasticity; very low estimated K; no odor  Silty SAND (SM); brown; stiff; moist; 60% fine sand; 30% silt; 10% gravel; non-plastic; moderate estimated K; no odor 80% fine sand; 10% silt; 10% gravel 80% fine sand; 20% silt  End of Boring at 19'	<u> </u>	\$   _	Standa density	standard classification, texture, relative moisture,		
	10 -10 -15 -20 -25 -25	5.0	Silty SANI coarse sa non-plastic moist; 60° Sandy Silt; plasticity;  Clayey Silt; 30% estimated  Silty SAN 30% silt; K; no odo 80% fine 80% fine	nd; 20% silt; 20% gravel; c; medium estimated K; no och fine sand; 20% silt; 20%. T (ML); brown to gray; stiff 25% fine sand; 5% gravel; r low estimated K; no odor LT (ML); blue-green; very sclay; 10% fine sand; low p K; no odor  D (SM); brown; stiff; moist; 10% gravel; non-plastic; more sand; 10% silt; 10% gravel sand; 20% silt	dor clay; moist; moderate stiff; moist; 60% lasticity; very low	

Driller: Vironex  Type of Rig: Geoprobe  Size of Drill: 2.0" Diameter  Logged By: Erik H. Paddleford  Date Drilled: May 8, 2001  Checked By: Robert E. Kitay, R.G.  WATER AND WELL DATA  Depth of Water First Encountered: 14'  Well Screen Type and Diameter: NA  Static Depth of Water in Well: NA  Well Screen Slot Size: NA  Total Depth of Boring: 18'  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sample  SOIL/ROCK SAMPLE DATA  BORING  BORING  BORING  BORING  BORING  BORING  Size of Drill: 2.0" Diameter  Checked By: Robert E. Kitay, R.G.  Well Screen Type and Diameter: NA  Well Screen Slot Size: NA  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sample  Soil-Rock Sample Data  Size of Drill: 2.0" Diameter  Description of Water in Well: NA  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sample  Soil-Rock Sample Standard classification, texture, relative moisture	1							
Driller: Vironex  Type of Rig: Geoprobe  Size of Drill: 2.0" Diameter  Logged By: Erik H. Paddleford  Date Drilled: May 8, 2001  Checked By: Robert E. Kitay, R.G.  WATER AND WELL DATA  Depth of Water First Encountered: 14'  Well Screen Type and Diameter: NA  Static Depth of Water in Well: NA  Well Screen Slot Size: NA  Total Depth of Boring: 18'  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sample  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	OIL BORING, L	LOG AND MONIT	TORING WELL	COMPLETION	DETAILS Boring: BH-B			
Logged By: Erik H. Paddleford Date Drilled: May 8, 2001 Checked By: Robert E. Kitay, R.G.  WATER AND WELL DATA  Depth of Water First Encountered: 14' Well Screen Type and Diameter: NA  Static Depth of Water in Well: NA  Total Depth of Boring: 18' Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sample  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	Project Name:Form	ormer Peerless Stage	es Project Locatio	n: 2021 Brush Str	eet, Oakland, CA	Page 1 of 1		
WATER AND WELL DATA  Depth of Water First Encountered: 14'  Static Depth of Water in Well: NA  Well Screen Type and Diameter: NA  Well Screen Slot Size: NA  Total Depth of Boring: 18'  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sample  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	Driller: Vironex Type of Rig: G			eoprobe Size of Drill: 2.0" Diameter		er		
Depth of Water First Encountered: 14'  Static Depth of Water in Well: NA  Well Screen Type and Diameter: NA  Well Screen Slot Size: NA  Total Depth of Boring: 18'  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sample  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	Logged By: Erik H	k H. Paddleford	Date Drilled: M	May 8, 2001 Checked By: Robert E. Kitay, R.G.				
Static Depth of Water in Well: NA  Well Screen Slot Size: NA  Total Depth of Boring: 18'  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sample  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	WATER AND WEL	VELL DATA		Total Depth of Well Completed: NA				
Total Depth of Boring: 18'  Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sample  SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	Depth of Water Fire	First Encountered: 14	4'	Well Screen Type and Diameter: NA				
SOIL/ROCK SAMPLE DATA  DESCRIPTION OF LITHOLOGY	Static Depth of Wat	Vater in Well: NA		Well Screen Slot Size: NA				
DESCRIPTION OF LITHOLOGY	Total Depth of Bori			Type and Size of	Soil Sampler: 2.0" I.D. Macro	Core Sampler		
BORING DETAIL DETAIL DETAIL DETAIL DETAIL DESCRIPTION OF THE PARTY OF	Feet	1	रा ।	Feet	DESCRIPTION OF LITHOLO	OGY		
		Description Interval Blow Coun	OVM (ppm Water Leve Graphic Log	standar density,	standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.			
Asphalt Sity SAND (SM); brown; loose; dry; 60% medium to coarse sand; 20% silt; 20% gravel; non-plastic; medium estimated K; no odor gray; stiff; moist; 70% fine sand; 25% silt; 5% gravel; no odor  Sandy SILT (ML); blue-gray; very stiff; moist; 60% 30% clay; 10% fine sand; low plasticity; very low estimated K; no odor  SAND (SP); brown; medium dense; wet; 90% fine sand; 10% silt; non-plastic; high estimated K; no odor  End of Boring at 18'	-10 -15	Portland Cemeni	6.5	Silty SAND coarse san non-plastic; gray; stiff; 5% gravel; Sandy SIL 30% clay; estimated k  10  SAND (SP) sand; 10%  20  25	nd; 20% silt; 20% gravel; medium estimated K; no od moist; 70% fine sand; 25% no odor  T (ML); blue-gray; very stiff 10% fine sand; low plasticit K; no odor  ; brown; medium dense; wet; silt; non-plastic; high estimat	or silt; moist; 60% silt; y; very low		
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