aqua science engineers inc.

JUN 25 2001

June 11, 2001

QUARTERLY GROUNDWATER MONITORING AND ADDITIONAL SOIL BORINGS REPORT

ASE JOB NO. 3190

at
Former Peerless Stages Bus Property
2021 Brush Street
Oakland, CA

Prepared by:
AQUA SCIENCE ENGINEERS, INC.
208 W. El Pintado
Danville, CA 94526
(925) 820-9391

1.0 INTRODUCTION

The following report details the results of the May 10, 2001 quarterly groundwater sampling and May 8, 2001 additional subsurface investigation at the former Peerless Stages Bus Company site located at 2021 Brush Street in Oakland, California *(Figure 1)*. ASE has prepared this report on behalf of Mr. Gardner Kent, the current owner of the property.

2.0 DRILL TWO ADDITIONAL SOIL BORINGS AND COLLECT SOIL AND GROUNDWATER SAMPLES

On May 8, 2001, Vironex, Inc. of San Leandro, California drilled soil borings BH-A and BH-B within the eastern parking lane of West Street, approximately 200-feet west of the subject site, using a Geoprobe hydraulic sampling rig. The two additional borings were drilled to determine the extent of groundwater and soil contamination downgradient of the site. Prior to drilling, ASE obtained a drilling permit from the Alameda County Public Works Agency (ACPWA) and an excavation permit from the City of Oakland. Copies of these permits are presented in Appendix A. The drilling was directed by ASE associate geologist Erik Paddleford. A boring location map is presented as Figure 2.

Undisturbed soil samples were collected continuously as drilling progressed for lithologic and hydrogeologic description. The samples were collected by driving a sampler lined with acetate tubes using hydraulic direct push methods. Selective soil samples were cut, sealed with Teflon tape and plastic end caps, labeled, stored on ice, and submitted to Kiff Analytical of Davis, California (ELAP 2236) under chain of custody for analysis. Soil was described by the geologist using the Unified Soil Classification System. Boring logs are presented in Appendix B.

Groundwater samples were removed from the borings using a peristaltic pump with dedicated tubing. The groundwater samples were contained in 40-ml volatile organic analysis (VOA) vials, preserved with hydrochloric acid, and sealed without headspace. The samples were then labeled, stored on ice, and submitted to Kiff Analytical of Davis, California under appropriate chain of custody documentation. Upon completion of the groundwater sampling, the borings were backfilled with neat cement to the ground surface.

3.0 ANALYTICAL RESULTS FOR SOIL SAMPLES

The soil samples collected from 11.5 to 12.0 feet below ground surface (bgs) in boring BH-A and 13.5 to 14.0 feet bgs in boring BH-B were analyzed by Kiff Analytical for total petroleum hydrocarbons as gasoline (TPH-G), benzene, toluene, ethylbenzene, and total xylenes (collectively known as BTEX), and methyl tertiary butyl ether (MTBE) by EPA Method 8260. The soil samples were also analyzed for total petroleum hydrocarbons as diesel (TPH-D) by modified EPA Method 8015. The analytical results are presented in Table One. None of the compounds analyzed were detected above the laboratory detection limits in either of the samples analyzed. The certified analytical report and chain-of-custody documentation are included as Appendix C.

4.0 GROUNDWATER FLOW DIRECTION AND GRADIENT

On May 10, 2001, ASE associate geologist Erik Paddleford measured the depth to water in each site groundwater monitoring well using an electric water level sounder. The surface of the groundwater was also checked for the presence of free-floating hydrocarbons or sheen. There was no free-floating product or sheen present in any well. Current and historical groundwater elevation data is presented as Table Two.

A groundwater potentiometric surface map is presented as Figure 2. The groundwater flow direction is generally to the west with a gradient of approximately 0.022-feet/foot. This groundwater flow direction and gradient are generally consistent with the historical groundwater flow direction and gradient data.

5.0 GROUNDWATER SAMPLE COLLECTION AND ANALYSIS

Prior to sampling, each monitoring well was purged of four well casing volumes of groundwater using a dedicated bailer. The parameters pH, temperature, and conductivity were monitored during the well purging. Samples were not collected until these parameters stabilized. Groundwater samples were collected from each well using dedicated polyethylene bailers. The samples were decanted from the bailers into 40-ml VOA vials, preserved with hydrochloric acid, sealed without headspace, labeled, and placed in coolers with wet ice for transport to Chromalab, Inc. of Pleasanton, California (ELAP 1096) under appropriate chain-of-custody documentation. Well sampling field logs are presented in Appendix D.

6.0 ANALYTICAL RESULTS FOR GROUNDWATER

The groundwater samples collected from all four groundwater monitoring wells were analyzed by Chromalab for TPH-G by modified EPA Method 8015 and BTEX and MTBE by EPA Method 8020. The groundwater samples collected from borings BH-A and BH-B were analyzed by Kiff Analytical for TPH-G, BTEX, and MTBE by EPA Method 8260. All samples were also analyzed for TPH-D by modified EPA Method 8015. The analytical results are tabulated in Table Three. The certified analytical report and chain-of-custody documentation for the samples collected from the soil borings are included as Appendix C. The certified analytical report and chain of custody documentation for the samples collected from the monitoring wells are included as Appendix E.

Water samples collected from monitoring well MW-1 contained 77 parts per billion (ppb) TPH-D. Water samples collected from monitoring well MW-2 contained 1,200 ppb TPH-D and 1,500 ppb MTBE. Water samples collected from monitoring well MW-3 contained 59 ppb TPH-G and 58 ppb TPH-D. Groundwater samples collected from boring BH-A contained 69 ppb TPH-D, 1.5 ppb toluene, and 1.5 ppb total xylenes. Groundwater samples collected from boring BH-B contained 60 ppb TPH-D, 1.7 ppb toluene, and 1.7 ppb total xylenes. Chromalab noted that all of the TPH-D concentrations detected in groundwater samples collected from the monitoring wells were not consistent with their diesel standard. The TPH-D detected in the sample collected from monitoring well MW-3 did not appear to be a hydrocarbon.

7.0 CONCLUSIONS

The groundwater flow direction is generally to the west with a gradient of approximately 0.022-feet/foot. This groundwater flow direction and gradient are generally consistent with the historical groundwater flow direction and gradient data.

The toluene and total xylenes detected in the borings on West Street are not consistent with the contaminants being detected on-site. The possibility exists that the low toluene and total xylene concentrations are originating from a source other than the former Peerless Stages site. The only concentrations detected in any of the samples that exceeded a California Department of Health Services (DHS) maximum contaminant level (MCL) for drinking water was the MTBE concentration of 1,500 ppb in the groundwater sample collected from monitoring well MW-2. No MTBE was detected in either of the downgradient borings BH-A or BH-B.

MTBE concentrations have consistently shown a decreasing trend since the initial sampling event.

8.0 RECOMMENDATIONS

ASE recommends that the site sampling frequency be reduced to semi-annual. Based on the semi-annual sampling schedule, the next scheduled sampling is November 2001. ASE also recommends that monitoring wells MW-1 and MW-3 be removed from the sampling program.

9.0 REPORT LIMITATIONS

The results presented in this report represent the conditions at the time of the groundwater sampling, at the specific locations where the groundwater samples were collected, and for the specific parameters analyzed by the laboratory. It does not fully characterize the site for contamination resulting from sources other than the former underground storage tanks and associated plumbing at the site, or for parameters not analyzed by the laboratory. All of the laboratory work cited in this report was prepared under the direction of independent CAL-EPA certified laboratory. The independent laboratory is solely responsible for the contents and conclusions of the chemical analysis data.

Aqua Science Engineers appreciates the opportunity to provide environmental consulting services to you, and trust that this report meets your needs. Please feel free to call us at (925) 820-9391 if you have any questions or comments.

Respectfully submitted,

AQUA SCIENCE ENGINEERS, INC.

Erik H. Paddleford
Associate Geologist

Robert E. Kitay, R.G., R.E.A.
Senior Geologist

Attachments: Figures 1 and 2
Appendices A through E

cc: Mr. Alex Gaeta, Responsible Party
Mr. Gardner Kent, Property Owner
Ms. Eva Chu, ACHSA
Mr. Chuck Headlee, RWQCB, San Francisco Bay Region

TABLES

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 LOCATION	DEPTH (FT)	TPH-G	TPH-D	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	MTBE
BH-A	11.5'-12.0'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
BH-B	13.5'-14.0'	< 1.0	< 1.0	< 0.0050	< 0.0050	< 0.0050	< 0.0050	< 0.0050
Industrial PRG		NE	NE	1.4	520	230	210	NE
Residential PRG		NE	NE	0.62	520	230	210	NE

Notes:

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 Groundwater Well Survey Data
Former Peerless Stages Property, Oakland, California

WELL ID	Date of Measurement	Top of Casing Elevation (relative to project datum)	Depth to Water (feet)	Groundwater Elevation (project datum)
MW-1	8/26/1999	19.66	16.44	3.22
	11/11/1999		16.56	3.1
	2/16/2000		13.02	6.64
	5/17/2000		14.88	4.78
	8/23/2000		15.86	3.80
	11/30/2000		16.26	3.40
	2/22/2001		14.57	5.09
	5/10/2001		**15.47**	**4.19**
MW-2	8/26/1999	20.00	16.88	3.12
	11/11/1999		16.92	3.08
	2/16/2000		13.76	6.24
	5/17/2000		15.32	4.68
	8/23/2000		15.96	4.04
	11/30/2000		16.73	3.27
	2/22/2001		15.25	4.75
	5/10/2001		**15.91**	**4.09**
MW-3	8/26/1999	18.91	15.94	2.97
	11/11/1999		15.98	2.93
	2/16/2000		12.70	6.21
	5/17/2000		14.44	4.47
	8/23/2000		15.33	3.58
	11/30/2000		15.75	3.16
	2/22/2001		14.06	4.85
	5/10/2001		**15.53**	**3.38**
MW-4	8/26/1999	19.43	16.48	2.95
	11/11/1999		16.50	2.93
	2/16/2000		13.19	6.24
	5/17/2000		14.95	4.48
	8/23/2000		15.97	3.46
	11/30/2000		16.29	3.14
	2/22/2001		14.72	4.71
	5/10/2001		14.90	4.53

TABLE THREE

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

SAMPLE ID	DATE SAMPLED	TPH-G	TPH-D	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	MTBE	PNAs	VOCs
MW-1	8/26/1999	81	<50	3.5	7.9	3.2	15	<5.0	NA	NA
	11/11/1999	<50	110	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	2/16/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	5/17/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	8/23/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	11/30/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	2/22/2001	87**	54*	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	5/10/2001	**<50**	**77***	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**	**NA**	**NA**
MW-2	8/26/1999	8,600	1,200*	<25	<25	<25	<25	14,000	<0.057 - <0.23	NA
	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	<10 - <1,000
	5/17/2000	58	1,400*	<0.5	<0.5	<0.5	<0.5	5,800	NA	NA
	8/23/2000	1,300**	600*	<0.5	<0.5	<0.5	<0.5	2,000	NA	<0.5 - <50
	11/30/2000	<2,500	1,200*	<0.5	<0.5	<0.5	<0.5	2,700	NA	NA
	2/22/2001	<2,500	1,300*	<0.5	<0.5	<0.5	<0.5	1,600	NA	NA
	5/10/2001	**<2,500**	**1200***	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**1,500**	**NA**	**NA**
MW-3	8/26/1999	<50	<63	2.5	3	0.87	4	<5.0	NA	NA
	11/11/1999	<50	<56	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	2/16/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	5/17/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	8/23/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	11/30/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	2/22/2001	<50	<50	<0.5	<0.5	<0.5	<0.5	<0.5	NA	NA
	5/10/2001	**59**	**58***	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**	**NA**	**NA**
MW-4	8/26/1999	<50	420*	<0.5	<0.5	0.88	3.6	<5.0	NA	NA
	11/11/1999	<50	120*	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	2/16/2000	<50	76*	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	5/17/2000	120**	130*	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	8/23/2000	<50	73*	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	11/30/2000	<50	<50	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	2/22/2001	76**	170*	<0.5	<0.5	<0.5	<0.5	<5.0	NA	NA
	5/10/2001	**<50**	**<63**	**<0.5**	**<0.5**	**<0.5**	**<0.5**	**<5.0**	**NA**	**NA**
BH-A	**5/8/2001**	**<50**	**69**	**<0.5**	**1.5**	**<0.5**	**1.5**	**<0.5**	**NA**	**NA**
BH-B	**5/8/2001**	**<50**	**60**	**<0.5**	**1.7**	**<0.5**	**1.7**	**<0.5**	**NA**	**NA**
DHS MCL		NE	NE	1	150	700	1,750	13	varies	varies

Notes:

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

NE = DHS MCL not established

PNAs = Polynuclear Aromatic Hyarocarbons

VOCs = Volatile Organic Compounds

DHS MCL = Department of Health Services Maximum Contaminant Level for drinking water

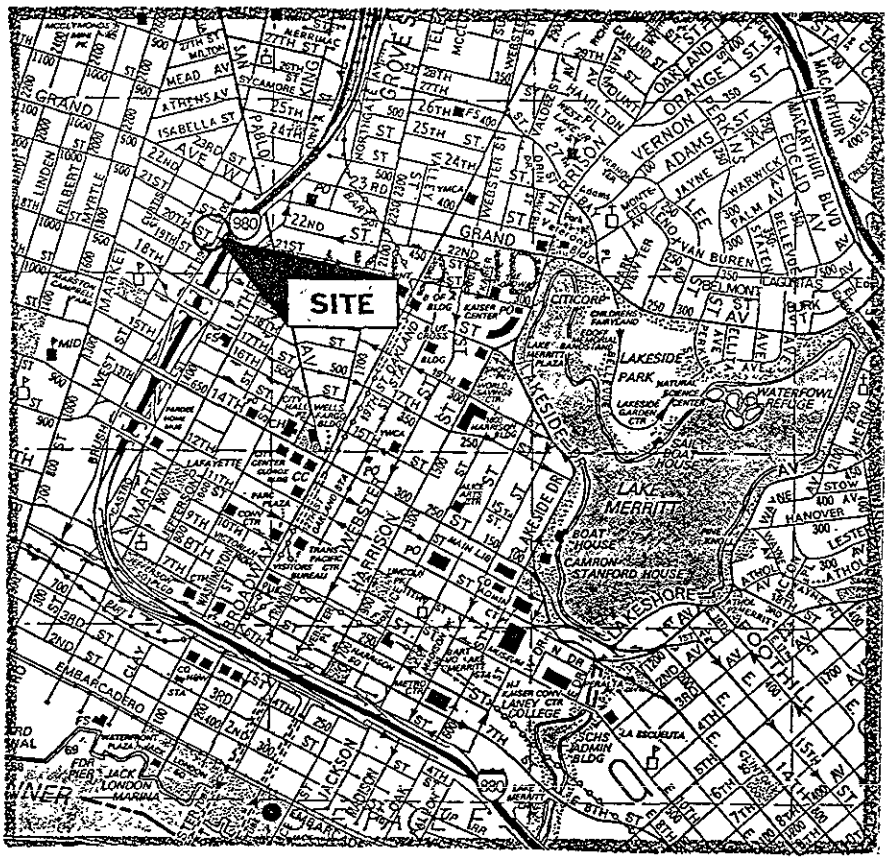
NA = Sample was not analyzed for these compounds

* = Hydrocarbons do not match the laboratory diesel standard

** =Hydrocarbons do not match the laboratory gasoline standard

FIGURES

N



SITE LOCATION MAP

Former Peerless Stages, Inc. Property
2021 Brush Street
Oakland, California

Aqua Science Engineers	Figure 1

21th STREET

NORTH
SCALE 1" = 30'

SIDEWALK

RESIDENTIAL

RESIDENTIAL

RESIDENTIAL

GATE

RESIDENTIAL

MW-3
(3.38)

3.5'

SHOP

OFFICE

4.0'

STORAGE SHED

MW-4
(4.53)

FORMER
DISPENSERS

4.5'

4.0'

BH-B

WEST STREET

BH-A

SIDEWALK

RESIDENTIAL

MW-2
(4.09)

FORMER
USTs

MW-1
(4.19)

GATE

SIDEWALK

BRUSH STREET

RESIDENTIAL

RESIDENTIAL

BLOCKWALL

SIDEWALK

20th STREET

LEGEND

MW-4 — MONITORING WELL

FORMER UST LOCATION

BH-A — GEOPROBE LOCATION

GROUNDWATER ELEVATION
CONTOUR MAP 5/10/01

Former Peerless Stages, Inc. Property
2021 Brush Street
Oakland, California

AQUA SCIENCE ENGINEERS | Figure 2

APPENDIX A

Permits

ALAMEDA COUNTY PUBLIC WORKS AGENCY

WATER RESOURCES SECTION
399 ELMHURST ST. HAYWARD CA. 94544-1395
PHONE (510) 670-5554
FAX (510)782-1939

DRILLING PERMIT APPLICATION

FOR APPLICANT TO COMPLETE

LOCATION OF PROJECT 2021 Brush Street
Oakland, CA 94612
east side of west st

CLIENT
Name Gardner Kent
Address 494 Broadway Phone
City San Francisco, CA Zip 94133

APPLICANT
Name Aqua Science Engineers Inc. Fax (925) 837-4853
Address 208 W El Pintado Phone 925-820-9391
City Danville Zip 94526

TYPE OF PROJECT

		Geotechnical Investigation	
Well Construction		General	0
Cathodic Protection	0	Contamination	X
Water Supply	0	Well Destruction	0
Monitoring	0		

PROPOSED WATER SUPPLY WELL USE

New Domestic	0	Replacement Domestic	0
Municipal	0	Irrigation	0
Industrial	0	Other	

DRILLING METHOD:

Mud Rotary	0	Air Rotary	0
Cable	0	Other	Auger 0 & geoprobe

DRILLER'S NAME Vironex
DRILLER'S LICENSE NO. C57-705927

WELL PROJECTS
Drill Hole Diameter ____ in. Maximum
Casing Diameter ____ in. Depth ____ ft.
Surface Seal Depth ____ ft. Owner's Well Number ____

GEOTECHNICAL PROJECTS
Number of Borings 2 Maximum
Hole Diameter 2 in. Depth 25 ft.

ESTIMATED STARTING DATE 5/4/01
ESTIMATED COMPLETION DATE 5/8/01

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

APPLICANT'S SIGNATURE [signature] DATE 4/30/01
PLEASE PRINT NAME Erik Peddicord

Rev 5-13-99

FOR OFFICE USE
PERMIT NUMBER W01-255
WELL NUMBER
APN

PERMIT CONDITIONS
Circled Permit Requirements Apply

A. GENERAL
1. A permit application should be submitted so as to arrive at the ACPWA office five days prior to proposed starting date.
2. Submit to ACPWA within 60 days after completion of permitted original Department of Water Resources-Well Completion Report.
3. Permit is void if project not begun within 90 days of approval date

B. WATER SUPPLY WELLS
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.

C. GROUNDWATER MONITORING WELLS INCLUDING PIEZOMETERS
1. Minimum surface seal thickness is two inches of cement grout placed by tremie.
2. Minimum seal depth for monitoring wells is the maximum depth practicable or 20 feet.

D. GEOTECHNICAL
Backfill bore hole by tremie with cement grout or cement grout/sand mixture. Upper two-three feet replaced in kind or with compacted cuttings.

E. CATHODIC
Fill hole anode zone with concrete placed by tremie.

F. WELL DESTRUCTION
Send a map of work site. A separate permit is required for wells deeper than 45 feet

G. SPECIAL CONDITIONS

NOTE: One application must be submitted for each well or well destruction. Multiple borings on one application are acceptable for geotechnical and contamination investigations.

Please Contact the City of Oakland for a excavation or encroachment Permit @ (510) 238-6320

APPROVED [signature] DATE 4-30-01

CITY OF OAKLAND
Office of Planning and Building

EXCAVATION PERMIT

TO EXCAVATE IN STREETS OR OTHER SPECIFIED WORK

CIVIL ENGINEERIN

PERMIT NUMBER		SITE ADDRESS/LOCATION
X0100786		2021 Brush street
APPROX. START DATE: 5/8/01	APPROX. END DATE: 5/8/01	24-HOUR EMERGENCY PHONE NUMBER (Permit not valid without 24-Hour number): 925 820 9391
CONTRACTOR'S LICENSE # AND CLASS: 487000		CITY BUSINESS TAX #:

ATTENTION:

1) State law requires that the contractor/owner call *Underground Service Alert (USA)* two working days before excavating. This permit is not valid unless applicant has secured an inquiry identification number issued by USA. The USA telephone number is 1 (800) 642-2444. UNDERGROUND SERVICE ALERT (USA) #: 125216

2) 48 hours prior to starting work, YOU MUST CALL (510) 238-3651 TO SCHEDULE AN INSPECTION.

OWNER/BUILDER

I hereby affirm that I am exempt from the Contractor's License Law for the following reason (Sec. 7031.5 Business and Professions Code: Any city or county which requires a permit to construct, alter, improve, demolish, or repair any structure, prior to its issuance, also requires the applicant for such permit to file a signed statement that he is licensed pursuant to the provisions of the Contractor's License law Chapter 9 (commencing with Sec. 7000) of Division 3 of the Business and Professions Code, or that he is exempt therefrom and the basis for the alleged exemption. Any violation of Section 7031.5 by any applicant for a permit subjects the applicant to a civil penalty of not more than $500):

☐ I, as an owner of the property, or my employees with wages as their sole compensation, will do the work, and the structure is not intended or offered for sale (Sec. 7044, Business Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who does such work himself or through his own employees, provided that such improvements are not intended or offered for sale. If however, the building or improvement is sold within one year of completion, the owner-builder will have the burden of proving that he did not build or improve for the purpose of sale).

☐ I, as owner of the property, am exempt from the sale requirements of the above due to: (1) I am improving my principal place of residence or appurtenances thereto, (2) the work will be performed prior to sale, (3) I have resided in the residence for the 12 months prior to completion of the work, and (4) I have not claimed exemption on this subdivision on more than two structures more than once during any three-year period. (Sec. 7044 Business and Professions Code).

☐ I, as owner of the property, am exclusively contracting with licensed contractors to construct the project, (Sec. 7044, Business and Professions Code: The Contractor's License Law does not apply to an owner of property who builds or improves thereon, and who contracts for such projects with a contractor(s) licensed pursuant to the Contractor's License law).

☐ I am exempt under Sec. _____, B&PC for this reason _____.

WORKER'S COMPENSATION

☐ I hereby affirm that I have a certificate of consent to self-insure, or a certificate of Worker's Compensation Insurance, or a certified copy thereof (Sec. 3700, Labor Code).

Policy # _____ Company Name _____

☐ I certify that in the performance of the work for which this permit is issued, I shall not employ any person in any manner so as to become subject to the Worker's Compensation Laws of California (not required for work valued at one hundred dollars ($100) or less).

NOTICE TO APPLICANT: If, after making this Certificate of Exemption, you should become subject to the Worker's Compensation provisions of the Labor Code, you must forthwith comply with such provisions or this permit shall be deemed revoked. This permit is issued pursuant to all provisions of Title 12 Chapter 12.12 of the Oakland Municipal Code. It is granted upon the express condition that the permittee shall be responsible for all claims and liabilities arising out of work performed under the permit or arising out of permittee's failure to perform the obligations with respect to street maintenance. The permittee shall, and by acceptance of the permit agrees to defend, indemnify, save and hold harmless the City, its officers and employees, from and against any and all suits, claims, or actions brought by any person for or on account of any bodily injuries, disease or illness or damage to persons and/or property sustained or arising in the construction of the work performed under the permit or in consequence of permittee's failure to perform the obligations with respect to street maintenance. This permit is void 90 days from the date of issuance unless an extension is granted by the Director of the Office of Planning and Building.

I hereby affirm that I am licensed under provisions of Chapter 9 of Division 3 of the Business and Professions Code and my license is in full force and effect (if contractor), that I have read this permit and agree to its requirements, and that the above information is true and correct under penalty of law.

X Ed Robitaille
Signature of Permittee ☐ Agent for ☒ Contractor ☐ Owner — Date: 4/27/01

DATE STREET LAST RESURFACED: 1/90	SPECIAL PAVING DETAIL REQUIRED? ☐ YES ☒ NO	HOLIDAY RESTRICTION? (NOV 1 - JAN 1) ☐ YES ☒ NO	LIMITED OPERATION AREA? (7AM-9AM & 4PM-6PM) ☒ YES ☐ NO
ISSUED BY:		DATE ISSUED: 4/27/01	

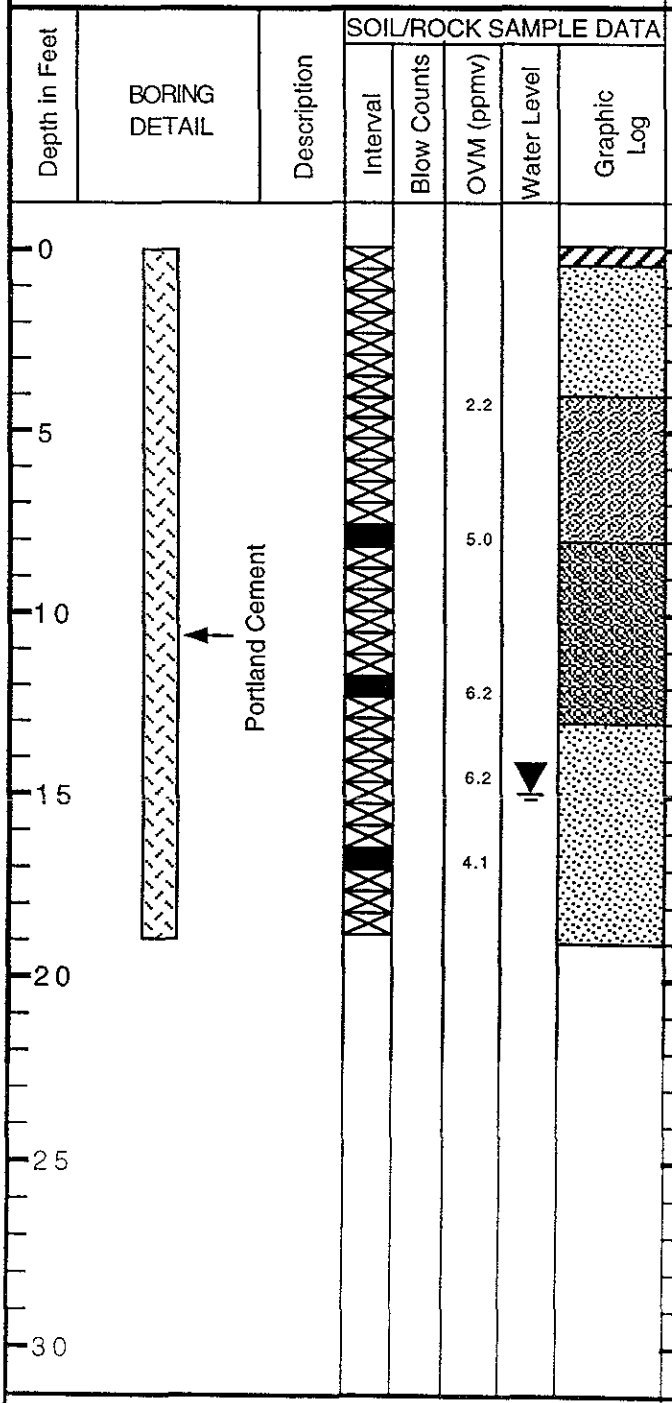
APPENDIX B

Boring Logs

SOIL BORING LOG AND MONITORING WELL COMPLETION DETAILS		Boring: BH-A
Project Name: Former Peerless Stages	Project Location: 2021 Brush Street, 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

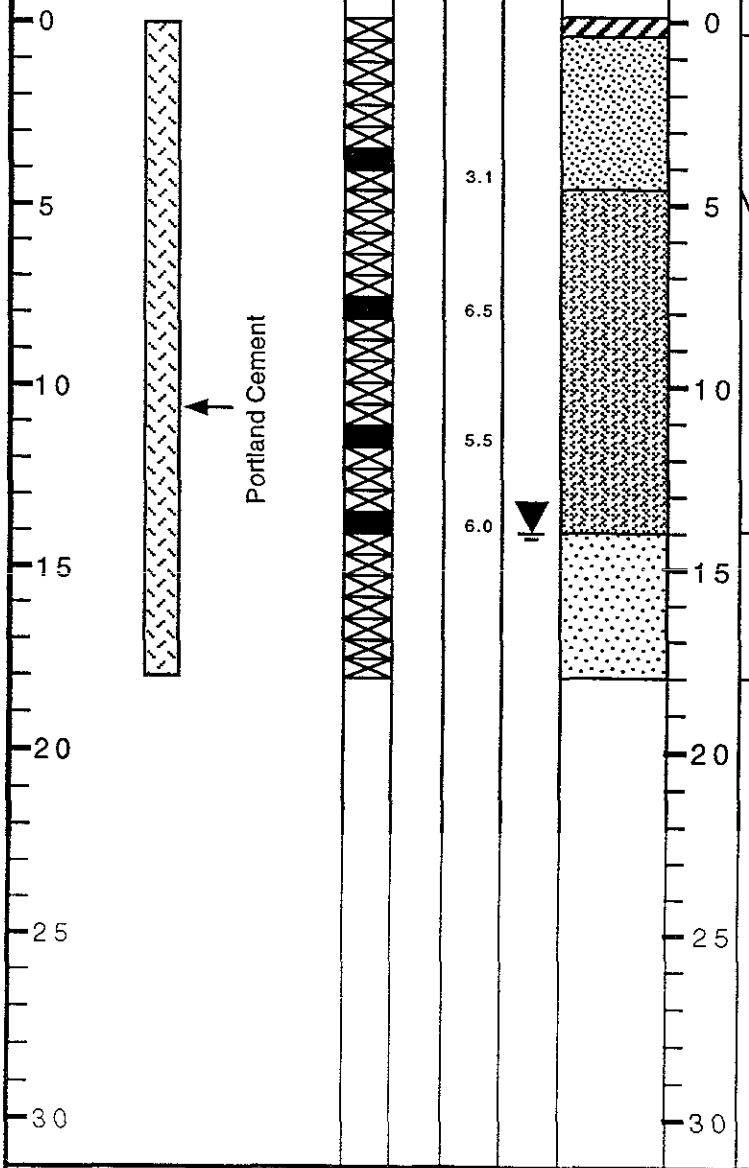
Depth of Water First Encountered: 15'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 19'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sampler



Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Asphalt
	Silty 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% clay
5	Sandy SILT (ML); brown to gray; stiff; moist; 70% silt; 25% fine sand; 5% gravel; moderate plasticity; low estimated K; no odor
10	Clayey SILT (ML); blue-green; very stiff; moist; 60% silt; 30% clay; 10% fine sand; low plasticity; very low estimated K; no odor
15	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
20	End of Boring at 19'
25	
30	

SOIL BORING, LOG AND MONITORING WELL COMPLETION DETAILS		Boring: BH-B
Project Name: Former Peerless Stages	Project Location: 2021 Brush Street, 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: 14'	Total Depth of Well Completed: NA
Static Depth of Water in Well: NA	Well Screen Type and Diameter: NA
Total Depth of Boring: 18'	Well Screen Slot Size: NA
	Type and Size of Soil Sampler: 2.0" I.D. Macro Core Sampler



Depth in Feet	DESCRIPTION OF LITHOLOGY standard classification, texture, relative moisture, density, stiffness, odor-staining, USCS designation.
0	Asphalt
	Silty SAND (SM); brown; loose; dry; 60% medium to coarse sand; 20% silt; 20% gravel; non-plastic; medium estimated K; no odor
5	gray; stiff; moist; 70% fine sand; 25% silt; 5% gravel; no odor
	Sandy SILT (ML); blue-gray; very stiff; moist; 60% silt; 30% clay; 10% fine sand; low plasticity; very low estimated K; no odor
10	
15	SAND (SP); brown; medium dense; wet; 90% fine sand; 10% silt; non-plastic; high estimated K; no odor
	End of Boring at 18'
20	
25	
30	

APPENDIX C

Certified Analytical Report
and
Chain of Custody Documentation
For
Samples Collected From Borings BH-A and BH-B

KIFF ANALYTICAL LLC

Report Number : 20243
Date : 5/24/2001

Eric Paddleford
Aqua Science Engineers, Inc.
208 West El Pintado Rd.
Danville, CA 94526

Subject : 2 Water Samples and 7 Soil Samples
Project Name : Peerless
Project Number : 3190

Dear Mr. Paddleford,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

Joel Kiff

Joel Kiff

KIFF ANALYTICAL LLC

Report Number : 20243
Date : 5/24/2001

Project Name : **Peerless**
Project Number : **3190**

Sample : **BH-A** Matrix : Water Lab Number : 20243-01
Sample Date :5/8/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	5/20/2001
Toluene	**1.5**	0.50	ug/L	EPA 8260B	5/20/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	5/20/2001
Total Xylenes	**1.5**	0.50	ug/L	EPA 8260B	5/20/2001
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	5/20/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	5/20/2001
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	5/20/2001
4-Bromofluorobenzene (Surr)	103		% Recovery	EPA 8260B	5/20/2001
TPH as Diesel	**69**	50	ug/L	M EPA 8015	5/24/2001

Approved By Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 20243
Date : 5/24/2001

Project Name : **Peerless**
Project Number : **3190**

Sample : BH-A 11.5-12.0 Matrix : Soil Lab Number : 20243-03
Sample Date :5/8/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
Toluene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
Ethylbenzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
Total Xylenes	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
Methyl-t-butyl ether	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	5/16/2001
Toluene - d8 (Surr)	99.5		% Recovery	EPA 8260B	5/16/2001
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	5/16/2001
TPH as Diesel	**< 1.0**	1.0	mg/Kg	M EPA 8015	5/13/2001
1-Chlorooctadecane (Diesel Surrogate)	100		% Recovery	M EPA 8015	5/13/2001

Approved By Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 20243
Date : 5/24/2001

Project Name : **Peerless**
Project Number : **3190**

Sample : **BH-B** Matrix : Water Lab Number : 20243-05
Sample Date :5/8/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.50**	0.50	ug/L	EPA 8260B	5/20/2001
Toluene	**1.7**	0.50	ug/L	EPA 8260B	5/20/2001
Ethylbenzene	**< 0.50**	0.50	ug/L	EPA 8260B	5/20/2001
Total Xylenes	**1.7**	0.50	ug/L	EPA 8260B	5/20/2001
Methyl-t-butyl ether (MTBE)	**< 0.50**	0.50	ug/L	EPA 8260B	5/20/2001
TPH as Gasoline	**< 50**	50	ug/L	EPA 8260B	5/20/2001
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	5/20/2001
4-Bromofluorobenzene (Surr)	104		% Recovery	EPA 8260B	5/20/2001
TPH as Diesel	**60**	50	ug/L	M EPA 8015	5/24/2001

Approved By Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

KIFF ANALYTICAL LLC

Report Number : 20243
Date : 5/24/2001

Project Name : **Peerless**
Project Number : **3190**

Sample : **BH-B 13.5-14.0** Matrix : Soil Lab Number : 20243-09
Sample Date :5/8/2001

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
Toluene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
Ethylbenzene	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
Total Xylenes	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
Methyl-t-butyl ether	**< 0.0050**	0.0050	mg/Kg	EPA 8260B	5/16/2001
TPH as Gasoline	**< 1.0**	1.0	mg/Kg	EPA 8260B	5/16/2001
Toluene - d8 (Surr)	99.9		% Recovery	EPA 8260B	5/16/2001
4-Bromofluorobenzene (Surr)	101		% Recovery	EPA 8260B	5/16/2001
TPH as Diesel	**< 1.0**	1.0	mg/Kg	M EPA 8015	5/13/2001
1-Chlorooctadecane (Diesel Surrogate)	104		% Recovery	M EPA 8015	5/13/2001

Approved By Joel Kiff

720 Olive Drive, Suite D Davis, CA 95616 530-297-4800

Aqua Science Engineers, Inc.
208 W. El Pintado Road
Danville, CA 94526
(925) 820-9391
FAX (925) 837-4853

Chain of Custody

20243

PAGE 1 OF 1

SAMPLER (SIGNATURE) Eric Paddleford (PHONE NO.)

PROJECT NAME Peerless JOB NO. 3196

ADDRESS 2021 Brush street, Oakland CA

ANALYSIS REQUEST

SPECIAL INSTRUCTIONS:
5 Day TAT

SAMPLE ID.	DATE	TIME	MATRIX	NO. OF SAMPLES	TPH-GAS / MTBE & BTEX (EPA 8260/8020) 8240	TPH-DIESEL (EPA 3510/8015)	TPH-DIESEL & MOTOR OIL (EPA 3510/8015)	PURGEABLE HALOCARBONS (EPA 601/8010)	VOLATILE ORGANICS (EPA 624/8240/8260)	SEMI-VOLATILE ORGANICS (EPA 625/8270)	OIL & GREASE (EPA 5520)	LUFT METALS (5) (EPA 6010+7000)	CAM 17 METALS (EPA 6010+7000)	PCBs & PESTICIDES (EPA 608/8080)	ORGANOPHOSPHORUS PESTICIDES (EPA 8140 EPA 608/8080)	FUEL OXYGENATES (EPA 8260)	Pb (TOTAL or DISSOLVED) (EPA 6010)	TPH-G/BTEX/5 OXYS (EPA 8260)	TPH-G/BTEX/7 OXYS / HVOCS (EPA 8260)	Hold			
BH-A	5/8/01	1000	W	5	X	X																	1
BH-A 7.5-8.0		1030 1023	S	1																X			2
BH-A 11.5-12.0		932	S	1	X	X																	3
BH-A 15.5-16.0		946	S	1																X			4
BH-B		1115	W	5	X	X																	5
BH-B 3.5-4.0		1030	S	1																X			6
BH-B 7.5-8.0		1036	S	1																X			7
BH-B 10.5-11.0		1045	S	1																X			8
BH-B 13.5-14.0	↓	1052	S	1	X	X																	9

RELINQUISHED BY:	RECEIVED BY:	RELINQUISHED BY:	RECEIVED BY LABORATORY:	COMMENTS:
Eric Paddleford 1:20pm (signature) (time)	(signature) (time)	(signature) (time)	Harold Bacon 1315 (signature) (time)	
Eric Paddleford 5/9/01 (printed name) (date)	(printed name) (date)	(printed name) (date)	HAROLD BACON 050901 (printed name) (date)	TURN AROUND TIME: STANDARD 24Hr 48Hr 72Hr
Company- ASE	Company-	Company-	Company- LFT Analytical	OTHER:

APPENDIX D

Well Sampling Field Logs

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Former Peerless Stages
Job #: 3190 Date of sampling: 5/10/01
Well Name: MW-1 Sampled by: EP
Total depth of well (feet): 27.0' Well diameter (inches): 2"
Depth to water before sampling (feet): 15.47
Thickness of floating product if any: 15.91
Depth of well casing in water (feet): 11.53
Number of gallons per well casing volume (gallons): 1.96
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 7.84
Equipment used to purge the well: bailer
Time Evacuation Began: 1150 Time Evacuation Finished: 1210
Approximate volume of groundwater purged: 8
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1215
Depth to water at time of sampling: —
Percent recovery at time of sampling: 790%
Samples collected with: bailer
Sample color: brown/clear Odor: none
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-1	3	40 ml VOA	X	X	
	2	1 liter Amber		X	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: former Peerless stages
Job #: 3190 Date of sampling: 5-10-01
Well Name: MW-2 Sampled by: EP
Total depth of well (feet): 29.7' Well diameter (inches): 2
Depth to water before sampling (feet): 15.91
Thickness of floating product if any: —
Depth of well casing in water (feet): 13.79
Number of gallons per well casing volume (gallons): 2.3
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 9.4
Equipment used to purge the well: bailer
Time Evacuation Began: 1220 Time Evacuation Finished: 1240
Approximate volume of groundwater purged: 9.5
Did the well go dry?: no After how many gallons: —
Time samples were collected: 1245
Depth to water at time of sampling: —
Percent recovery at time of sampling: >90%
Samples collected with: bailer
Sample color: brown/clear Odor: none
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-2	3	40 ml VOA	X	X	
	2	1 liter amber		X	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Former Peerless Stages
Job #: 3190 Date of sampling: 5/10/01
Well Name: MW-3 Sampled by: EB
Total depth of well (feet): 25.71 Well diameter (inches): 2"
Depth to water before sampling (feet): 15.53
Thickness of floating product if any: —
Depth of well casing in water (feet): 10.18
Number of gallons per well casing volume (gallons): 1.73
Number of well casing volumes to be removed: ~~6.9~~ 4
Req'd volume of groundwater to be purged before sampling (gallons): 6.9
Equipment used to purge the well: bailer
Time Evacuation Began: 1255 Time Evacuation Finished: 1315
Approximate volume of groundwater purged: 7
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1320
Depth to water at time of sampling: —
Percent recovery at time of sampling: 79%
Samples collected with: bailer
Sample color: brown/clear Odor: none
Description of sediment in sample: silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-3	3	40 ml VOA	X	X	
	2	1 liter Amber		X	

aqua science engineers inc.

WELL SAMPLING FIELD LOG

Project Name and Address: Former Peerless Stages
Job #: 3190 Date of sampling: 5/16/01
Well Name: MW-4 Sampled by: EP
Total depth of well (feet): 29.64 Well diameter (inches): 2"
Depth to water before sampling (feet): 14.90
Thickness of floating product if any: —
Depth of well casing in water (feet): 14.74
Number of gallons per well casing volume (gallons): 2.5
Number of well casing volumes to be removed: 4
Req'd volume of groundwater to be purged before sampling (gallons): 10
Equipment used to purge the well: bailer
Time Evacuation Began: 1330 Time Evacuation Finished: 1355
Approximate volume of groundwater purged: 10
Did the well go dry?: NO After how many gallons: —
Time samples were collected: 1405
Depth to water at time of sampling: —
Percent recovery at time of sampling: >50%
Samples collected with: bailer
Sample color: brown/clear Odor: none
Description of sediment in sample: Silt

CHEMICAL DATA

Volume Purged	Temp	pH	Conductivity

SAMPLES COLLECTED

Sample	# of containers	Volume & type container	Pres	Iced?	Analysis
MW-4	3	40 ml VOA	X	X	
	2	1 liter Amber		X	

208 W El Pintado, Danville, California 94526 • 925-820-9391 • Fax 925-837-4853

APPENDIX E

Certified Analytical Report
and
Chain of Custody Documentation
For Monitoring Wells

Aqua Science Engineers, Inc.
208 West El Pintado
Danville, CA 94526

Attn.: Erik Paddleford

Project: 3190
Former Peerless Stages

Attached is our report for your samples received on Friday May 11, 2001
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after June 25, 2001 unless you have requested otherwise. We appreciate the opportunity to be of service to you.
If you have any questions, please call me at (925) 484-1919. You can also contact me via email.
My email address is: vvancil@chromalab.com

Sincerely,

Vincent Vancil

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-05-0222

Diesel

Aqua Science Engineers, Inc.	208 West El Pintado Danville, CA 94526
Attn: Erik Paddleford	Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3190	Project Former Peerless Stages

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	05/10/2001 12:15	1
MW-2	Water	05/10/2001 12:45	2
MW-3	Water	05/10/2001 13:10	3
MW-4	Water	05/10/2001 14:05	4

To: **Aqua Science Engineers, Inc.**
Attn.. Erik Paddleford

Test Method: 8015M
Prep Method: 3510/8015M

Diesel

Sample ID:	**MW-1**	Lab Sample ID:	**2001-05-0222-001**
Project:	3190 Former Peerless Stages	Received:	05/11/2001 18:07
		Extracted:	05/14/2001 05:02
Sampled:	05/10/2001 12:15	QC-Batch:	2001/05/14-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	77	50	ug/L	1.00	05/15/2001 07:58	ndp
Surrogate(s)						
o-Terphenyl	94.6	60-130	%	1.00	05/15/2001 07:58	

To: **Aqua Science Engineers, Inc.**
Attn.: Erik Paddleford

Test Method: 8015M
Prep Method: 3510/8015M

Diesel

Sample ID:	**MW-2**	Lab Sample ID:	**2001-05-0222-002**
Project:	3190 Former Peerless Stages	Received:	05/11/2001 18:07
		Extracted:	05/14/2001 05:02
Sampled:	05/10/2001 12:45	QC-Batch:	2001/05/14-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	1200	50	ug/L	1.00	05/15/2001 04:44	ndp
Surrogate(s)						
o-Terphenyl	90.2	60-130	%	1.00	05/15/2001 04:44	

To: **Aqua Science Engineers, Inc.**
Attn.: Erik Paddleford

Test Method: 8015M
Prep Method: 3510/8015M

Diesel

Sample ID:	**MW-3**	Lab Sample ID:	**2001-05-0222-003**
Project:	3190 Former Peerless Stages	Received:	05/11/2001 18:07
		Extracted:	05/14/2001 05:02
Sampled:	05/10/2001 13:10	QC-Batch:	2001/05/14-01.10
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	58	50	ug/L	1.00	05/15/2001 04:56	nhc
Surrogate(s)						
o-Terphenyl	91.3	60-130	%	1.00	05/15/2001 04:56	

To: **Aqua Science Engineers, Inc.**
Attn.: Erik Paddleford

Test Method: 8015M
Prep Method: 3510/8015M

Diesel

Sample ID:	**MW-4**	Lab Sample ID:	**2001-05-0222-004**
Project:	3190 Former Peerless Stages	Received:	05/11/2001 18:07
		Extracted:	05/14/2001 05:02
Sampled:	05/10/2001 14:05	QC-Batch:	2001/05/14-01.10
Matrix:	Water		

Sample/Analysis Flag rl (See Legend & Note section)

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Diesel	ND	63	ug/L	1.25	05/15/2001 05:34	
Surrogate(s)						
o-Terphenyl	84.2	60-130	%	1.25	05/15/2001 05:34	

To: **Aqua Science Engineers, Inc.**
Attn.: Erik Paddleford

Test Method: 8015M
Prep Method: 3510/8015M

Batch QC Report
Diesel

Method Blank	**Water**	**QC Batch # 2001/05/14-01.10**
MB: 2001/05/14-01.10-001		Date Extracted: 05/14/2001 05:02

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Diesel	ND	50	ug/L	05/14/2001 11:18	
Surrogate(s)					
o-Terphenyl	84.5	60-130	%	05/14/2001 11:18	

To: **Aqua Science Engineers, Inc.**
Attn Erik Paddleford

Test Method. 8015M
Prep Method: 3510/8015M

Batch QC Report

Diesel

Laboratory Control Spike (LCS/LCSD) Water **QC Batch # 2001/05/14-01.10**

LCS: 2001/05/14-01.10-002 Extracted: 05/14/2001 05 02 Analyzed 05/14/2001 10:01
LCSD: 2001/05/14-01.10-003 Extracted: 05/14/2001 05:02 Analyzed 05/14/2001 10:40

Compound	Conc [ug/L]		Exp.Conc [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Diesel	809	802	1250	1250	64 7	64.2	0 8	60-130	25		
Surrogate(s)											
o-Terphenyl	24.2	23 4	20.0	20 0	121 0	117.0		60-130			

To: **Aqua Science Engineers, Inc.**
Attn: Erik Paddleford

Test Method: 8015M
Prep Method: 3510/8015M

Legend & Notes

Diesel

Analysis Flags

rl

Reporting limits raised due to reduced sample size.

Analyte Flags

ndp

Hydrocarbon reported does not match the pattern of our Diesel standard

nhc

Compounds reported are in this range but they do not exhibit a pattern characteristic of petroleum hydrocarbon.

Gas/BTEX and MTBE

Aqua Science Engineers, Inc.
208 West El Pintado
Danville, CA 94526
Attn: Erik Paddleford
Phone: (925) 820-9391 Fax: (925) 837-4853
Project #: 3190
Project Former Peerless Stages

Samples Reported

Sample ID	Matrix	Date Sampled	Lab #
MW-1	Water	05/10/2001 12:15	1
MW-2	Water	05/10/2001 12:45	2
MW-3	Water	05/10/2001 13:10	3
MW-4	Water	05/10/2001 14:05	4

To: **Aqua Science Engineers, Inc.**

Attn.: Erik Paddleford

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-1**	Lab Sample ID:	**2001-05-0222-001**
Project:	3190 Former Peerless Stages	Received:	05/11/2001 18:07
		Extracted:	05/14/2001 16:05
Sampled:	05/10/2001 12:15	QC-Batch:	2001/05/14-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	05/14/2001 16:05	
Benzene	ND	0.50	ug/L	1.00	05/14/2001 16:05	
Toluene	ND	0.50	ug/L	1.00	05/14/2001 16:05	
Ethyl benzene	ND	0.50	ug/L	1.00	05/14/2001 16:05	
Xylene(s)	ND	0.50	ug/L	1.00	05/14/2001 16:05	
MTBE	ND	5.0	ug/L	1.00	05/14/2001 16:05	
Surrogate(s)						
Trifluorotoluene	113.7	58-124	%	1.00	05/14/2001 16:05	
4-Bromofluorobenzene-FID	93.9	50-150	%	1.00	05/14/2001 16:05	

STL ChromaLab

Environmental Services (CA 1094)

Submission #: 2001-05-0222

To: **Aqua Science Engineers, Inc.**

Attn.: Erik Paddleford

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-2**	Lab Sample ID:	**2001-05-0222-002**
Project:	3190 Former Peerless Stages	Received:	05/11/2001 18:07
		Extracted:	05/14/2001 16:36
Sampled:	05/10/2001 12:45	QC-Batch:	2001/05/14-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	2500	ug/L	50.00	05/14/2001 16:36	
Benzene	ND	0.50	ug/L	1.00	05/14/2001 18:11	
Toluene	ND	0.50	ug/L	1.00	05/14/2001 18:11	
Ethyl benzene	ND	0.50	ug/L	1.00	05/14/2001 18:11	
Xylene(s)	ND	0.50	ug/L	1.00	05/14/2001 18:11	
MTBE	1500	250	ug/L	50.00	05/14/2001 16:36	
Surrogate(s)						
Trifluorotoluene	112.7	58-124	%	1.00	05/14/2001 18:11	
Trifluorotoluene	110.9	58-124	%	1.00	05/14/2001 16:36	
4-Bromofluorobenzene-FID	89.5	50-150	%	1.00	05/14/2001 18:11	

To: **Aqua Science Engineers, Inc.**

Attn.: Erik Paddleford

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-3**	Lab Sample ID:	**2001-05-0222-003**
Project:	3190 Former Peerless Stages	Received:	05/11/2001 18:07
		Extracted:	05/14/2001 17:08
Sampled:	05/10/2001 13:10	QC-Batch:	2001/05/14-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	59	50	ug/L	1.00	05/14/2001 17:08	g
Benzene	ND	0.50	ug/L	1.00	05/14/2001 17:08	
Toluene	ND	0.50	ug/L	1.00	05/14/2001 17:08	
Ethyl benzene	ND	0.50	ug/L	1.00	05/14/2001 17:08	
Xylene(s)	ND	0.50	ug/L	1.00	05/14/2001 17:08	
MTBE	ND	5.0	ug/L	1.00	05/14/2001 17:08	
Surrogate(s)						
Trifluorotoluene	109.1	58-124	%	1.00	05/14/2001 17:08	
4-Bromofluorobenzene-FID	91.0	50-150	%	1.00	05/14/2001 17:08	

To: **Aqua Science Engineers, Inc.**

Attn.: Erik Paddleford

Test Method: 8020
8015M

Prep Method: 5030

Gas/BTEX and MTBE

Sample ID:	**MW-4**	Lab Sample ID:	**2001-05-0222-004**
Project:	3190 Former Peerless Stages	Received:	05/11/2001 18:07
		Extracted:	05/14/2001 17:39
Sampled:	05/10/2001 14:05	QC-Batch:	2001/05/14-01.02
Matrix:	Water		

Compound	Result	Rep.Limit	Units	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	05/14/2001 17:39	
Benzene	ND	0.50	ug/L	1.00	05/14/2001 17:39	
Toluene	ND	0.50	ug/L	1.00	05/14/2001 17:39	
Ethyl benzene	ND	0.50	ug/L	1.00	05/14/2001 17:39	
Xylene(s)	ND	0.50	ug/L	1.00	05/14/2001 17:39	
MTBE	ND	5.0	ug/L	1.00	05/14/2001 17:39	
Surrogate(s)						
Trifluorotoluene	94.8	58-124	%	1.00	05/14/2001 17:39	
4-Bromofluorobenzene-FID	71.5	50-150	%	1.00	05/14/2001 17:39	

To: **Aqua Science Engineers, Inc.**

Attn.: Erik Paddleford

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report
Gas/BTEX and MTBE

Method Blank	**Water**	**QC Batch # 2001/05/14-01.02**
MB: 2001/05/14-01.02-008	Date Extracted: 05/14/2001 11:14	

Compound	Result	Rep.Limit	Units	Analyzed	Flag
Gasoline	ND	50	ug/L	05/14/2001 11:14	
Benzene	ND	0.5	ug/L	05/14/2001 11:14	
Toluene	ND	0.5	ug/L	05/14/2001 11:14	
Ethyl benzene	ND	0.5	ug/L	05/14/2001 11:14	
Xylene(s)	ND	0.5	ug/L	05/14/2001 11:14	
MTBE	ND	5.0	ug/L	05/14/2001 11:14	
Surrogate(s)					
Trifluorotoluene	123.8	58-124	%	05/14/2001 11:14	
4-Bromofluorobenzene-FID	100.0	50-150	%	05/14/2001 11:14	

To: **Aqua Science Engineers, Inc.**
Attn: Erik Paddleford

Test Method: 8020
Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2001/05/14-01.02**

LCS: 2001/05/14-01.02-004 Extracted: 05/14/2001 08:55 Analyzed 05/14/2001 08:55
LCSD: 2001/05/14-01.02-005 Extracted: 05/14/2001 09:26 Analyzed 05/14/2001 09:26

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Benzene	105	100	100.0	100.0	105.0	100.0	4.9	77-123	20		
Toluene	106	99.8	100.0	100.0	106.0	99.8	6.0	78-122	20		
Ethyl benzene	105	99.3	100.0	100.0	105.0	99.3	5.6	70-130	20		
Xylene(s)	301	287	300	300	100.3	95.7	4.7	75-125	20		
Surrogate(s)											
Trifluorotoluene	610	557	500	500	122.0	111.4		58-124			

To: **Aqua Science Engineers, Inc.**

Attn: Erik Paddleford

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Laboratory Control Spike (LCS/LCSD) **Water** **QC Batch # 2001/05/14-01.02**

LCS: 2001/05/14-01.02-006 Extracted: 05/14/2001 09:57 Analyzed 05/14/2001 09:57

LCSD: 2001/05/14-01.02-007 Extracted: 05/14/2001 10:29 Analyzed 05/14/2001 10:29

Compound	Conc. [ug/L]		Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	LCS	LCSD	LCS	LCSD	LCS	LCSD	[%]	Recovery	RPD	LCS	LCSD
Gasoline	527	495	500	500	105.4	99.0	6.3	75-125	20		
Surrogate(s)											
4-Bromofluorobenzene-FI	542	525	500	500	108.4	105.0		50-150			

To: **Aqua Science Engineers, Inc.**
Attn.: Erik Paddleford

Test Method: 8020
Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Matrix Spike (MS / MSD) **Water** **QC Batch # 2001/05/14-01.02**

Sample ID: **MW-3** Lab Sample ID: 2001-05-0222-003

MS: 2001/05/14-01.02-021 Extracted: 05/14/2001 18:42 Analyzed: 05/14/2001 18:42 Dilution: 1.0
MSD: 2001/05/14-01.02-022 Extracted: 05/14/2001 19:13 Analyzed: 05/14/2001 19:13 Dilution: 1.0

Compound	Conc. [ug/L]			Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Benzene	104	102	ND	100.0	100.0	104.0	102.0	1.9	65-135	20		
Toluene	105	102	ND	100.0	100.0	105.0	102.0	2.9	65-135	20		
Ethyl benzene	104	102	ND	100.0	100.0	104.0	102.0	1.9	65-135	20		
Xylene(s)	296	292	ND	300	300	98.7	97.3	1.4	65-135	20		
Surrogate(s)												
Trifluorotoluene	118.5	572		500	500	118.5	114.4		58-124			

To: **Aqua Science Engineers, Inc.**

Attn.: Erik Paddleford

Test Method: 8015M
8020

Prep Method: 5030

Batch QC Report

Gas/BTEX and MTBE

Matrix Spike (MS / MSD) **Water** **QC Batch # 2001/05/14-01.02**

Sample ID: **MW-3** Lab Sample ID: 2001-05-0222-003

MS: 2001/05/14-01.02-023 Extracted: 05/14/2001 19:45 Analyzed: 05/14/2001 19:45 Dilution: 1.0

MSD: 2001/05/14-01.02-024 Extracted: 05/14/2001 20:16 Analyzed: 05/14/2001 20:16 Dilution: 1.0

Compound	Conc. [ug/L]			Exp.Conc. [ug/L]		Recovery [%]		RPD	Ctrl. Limits [%]		Flags	
	MS	MSD	Sample	MS	MSD	MS	MSD	[%]	Recovery	RPD	MS	MSD
Gasoline	461	469	59.0	500	500	80.4	82.0	2.0	65-135	20		
Surrogate(s)												
4-Bromofluorobenzene-F	96.9	100.0		500	500	96.9	100.0		50-150			

To: **Aqua Science Engineers, Inc.**

Attn: Erik Paddleford

Test Method: 8015M
8020

Prep Method: 5030

Legend & Notes

Gas/BTEX and MTBE

Analyte Flags

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

CHROMALAB, INC.

Environmental Services (SDB) (DOHS 1094)

1220 Quarry Lane • Pleasanton, California 94566-4756
(925) 484-1919 • Fax (925) 484-1096

2001-05-0222

Reference #: 59203

Chain of Custody

DATE 5/10/01 PAGE 1 of 1

PROJ MGR Erik Paddleford
COMPANY Aqua Science Engineers Inc.
ADDRESS 208 W. El Pintado Rd.

SAMPLERS (SIGNATURE) Erik Paddleford
(PHONE NO.) 925 820 9391
(FAX NO.) 925 837 4853

SAMPLE ID	DATE	TIME	MATRIX	PRESERV.	TPH-(EPA 8015,8020) ☒Gas w/ ☒BTEX ☒MTBE	PURGEABLE AROMATICS BTEX (EPA 8020)	TPH-Diesel (EPA 8015M)	TEPH (EPA 8015M) ☐Diesl ☐M.O. ☐Other	PURGEABLE HALOCARBONS (HVOCs) (EPA 8010)	VOLATILE ORGANICS (VOCs) (EPA 8260)	SEMIVOLATILES (EPA 8270)	TOTAL OIL AND GREASE (SM 5520 B+F, E+F)		☐ PESTICIDES(EPA 8080) ☐ PCB'S (EPA 8080)	PNA's by ☐ 8270 ☐ 8310	☐ Spec. Cond. ☐ TSS ☐ TDS	LUFT METALS: Cd, Cr, Pb, Ni, Zn	CAM 17 METALS (EPA 6010/7470/7471)	TOTAL LEAD	☐ W.E.T. (STLC) ☐ TCLP	☐ Hexavalent Chromium ☐ pH (24 hr hold time for H20)				NUMBER OF CONTAINERS
MW-1	5/10/01	1215	W	HCl	X		X																			5
MW-2	↓	1245	↓	↓	X		X																			↓
MW-3		1320			X		X																			
MW-4	↓	1405	↓	↓	X		X																			↓

PROJECT INFORMATION

PROJECT NAME: Former Peerless Stages
PROJECT NUMBER 3190
P.O. #

SAMPLE RECEIPT

TOTAL NO. OF CONTAINERS
HEAD SPACE
TEMPERATURE 4.4°C
CONFORMS TO RECORD

TAT	STANDARD 5-DAY			24	48	72	OTHER

SPECIAL INSTRUCTIONS/COMMENTS:
Report: ☒Routine ☐Level 2 ☐Level 3 ☐Level 4 ☒Electronic Report

RELINQUISHED BY 1.	RELINQUISHED BY 2.	RELINQUISHED BY 3.
(SIGNATURE) 1005 (TIME)	(SIGNATURE) (TIME)	(SIGNATURE) 1047 (TIME)
Erik Paddleford 5-11-01 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	B Morrow 5-11-01 (PRINTED NAME) (DATE)
ASE (COMPANY)	(COMPANY)	STL-CC (COMPANY)
RECEIVED BY 1.	**RECEIVED BY 2.**	**RECEIVED BY (LABORATORY) 3**
(SIGNATURE) 1005 (TIME)	(SIGNATURE) (TIME)	Denise Harrington (SIGNATURE) (TIME)
B Morrow 5-11-01 (PRINTED NAME) (DATE)	(PRINTED NAME) (DATE)	D. Harrington 1807 (PRINTED NAME) (DATE)
STL-CC (COMPANY)	(COMPANY)	STL-CC 5/11/01 (LAB)