COPY

STRATUS ENVIRONMENTAL, INC.

3330 Cameron Park Drive, Ste 550
Cameron Park, California 95682
(530) 676-6004 - Fax: (530) 676-6005

April 17, 2008
Project No. E11117-09

RECEIVED
APR 21 2008
ENVIRONMENTAL HEALTH SERVICES

Ms. Gayle Tupper
East Bay Municipal Utility District
Environmental Services Division, MS 702
P. O. Box 24055
Oakland, CA 94623-1055

Re: Application to Discharge Extracted Groundwater to the Sanitary Sewer, Former BP Service Station No. 11117, 7210 Bancroft Avenue, Oakland, California

Dear Ms. Tupper:

Stratus Environmental Inc. (Stratus) has prepared this letter, on behalf of Atlantic Richfield Company (ARCO-a BP affiliated company), to request a permit to discharge treated groundwater to the sanitary sewer at ARCO Service Station No. 11117, located at 7210 Bancroft Avenue in Oakland, California (see Figure 1). A completed wastewater discharge permit application is included in Appendix A. The proposed dual phase extraction (DPE) system, in conjunction with a groundwater treatment system (GTS), is tentatively scheduled to be installed during May-June 2008. The remediation systems will operate 24 hours a day, 7 days a week, and 365 days a year beginning May-June 2008.

Based on the data collected during site assessment studies and quarterly monitoring events completed at the site, Broadbent and Associates, Inc. (Broadbent), prepared and submitted a '*Corrective Action Plan*' (CAP) to Alameda County Health Care Services (ACHCS) proposing to install a DPE and GTS to mitigate the subsurface petroleum hydrocarbon impact. This CAP was subsequently approved by ACHCS in a letter dated March 19, 2007.

Petroleum hydrocarbon impacted soil vapors and groundwater will be extracted from wells DPE-1, DPE-2, DPE-3, MW-2, MW-4, and EX-1 using a Solleco Equipment, LLC, 300 cubic feet per minute (cfm) DPE system. Soil vapors will be abated in the thermal oxidizer prior to discharge to atmosphere and the groundwater will be treated using three 1,000-pound (lb) granular activated carbon (GAC) units, in series, prior to discharge to the sewer.

SYSTEM DESCRIPTION

The proposed DPE system will consist of a 25-horse power (hp) liquid ring pump, a 100-gallon knockout tank, a 2-hp transfer pump, and a 300 cfm thermal/catalytic oxidizer (see Appendix B). Soil vapors and groundwater from the subsurface will be extracted by applying high vacuum on extraction wells using the liquid ring blower. The air-water composition in the extracted stream will be separated in the knockout tank of the DPE unit. Groundwater separated in the knockout tank will be routed to a 500-gallon holding tank using the 2-hp transfer pump in-built on the DPE system. The groundwater from the holding tank will then be treated using three 1,000-pound carbon vessels, in series, prior to discharge to the sewer clean out. The carbon vessels and holding tanks will be housed in an approximate 15 feet long by 15 feet wide and 6 inches high concrete containment. The locations of extraction wells, sanitary sewer clean-out, and other pertinent site features are shown on Figure 2.

Level Controls

The knockout tank, the holding tank, and the secondary containment will be equipped with level controls. The 100-gallon knockout tank and the 500-gallon holding tank will be equipped with level high-high alarms and a shut-off switch. In the event of transfer pump failure resulting in high water level in the holding tank, the level high-high control will be programmed to alarm and also shutdown the DPE system. The functions of these level controls associated with the fail-safe operation of the DPE system are illustrated in Figure 3.

In case of treatment system failure [carbon vessel(s) or holding tank(s)] resulting in water flooding in the secondary containment, the level controls in the secondary containment berm are designed to shutdown the entire DPE system. The total storage capacity of the secondary containment is approximately 840 gallons.

EXTRACTION AND DISCHARGE RATES

A DPE pilot test was conducted by Cambria Environmental (Cambria), using wells EX-1, EX-2, and MW-4 in August 2002, to evaluate use of high vacuum conditions to extract soil vapors and groundwater from the subsurface and to evaluate the possibility of using DPE as a remedial alternative. During this test, the groundwater extraction flow rate was in the range of 1 gallon per minute (gpm) to 1.5 gpm per extraction well. The highest gasoline range organics (GRO), benzene, and methyl tertiary butyl ether (MTBE) concentrations during the test were reported at 140,000 micrograms per liter (µg/L) (at well MW-2), 16,600 µg/L (at well MW-2), and 60,000 µg/L (at well MW-4), respectively (Appendix C). During the recent quarterly groundwater monitoring events (between 2002 and 2007), the highest average GRO, benzene, and MTBE concentrations were at

170,454.55 µg/L (MW-4), 10,925.96 µg/L (MW-2), and 14,443.91 µg/L (MW-2), respectively (Appendix C).

Considering the average petroleum hydrocarbon concentrations during the last 5 years of groundwater monitoring and an anticipated groundwater extraction rate of 5 gpm, Stratus proposes to use three 1,000-pound carbon units to treat the extracted groundwater. Based on the carbon usage estimates (Appendix D) from the vendor, the breakthrough period for the first carbon unit is estimated to occur after approximately 4 days. However, it has been our experience at sites with similar remediation systems that influent petroleum hydrocarbon concentrations decline drastically within the first few days of operation of the remediation system. Hence, three 1,000-pound carbon vessels, in series, should be adequate to treat the petroleum hydrocarbon impacted groundwater. Additionally, Stratus will collect a water sample after the first carbon vessel and an effluent water sample on weekly basis for the first one month after start-up to evaluate the carbon utilization rate. Thereafter, water samples from the groundwater treatment system will be collected on a monthly basis.

Stratus proposes to the discharge the treated groundwater to sanitary sewer at the rate of 15 gpm.

SAMPLING AND REPORTING PROTOCOL

During the initial start-up and operation, the treatment system will be monitored twice a week during the first week after start-up, then once a week for the first month, and then twice per month thereafter. Prior to start-up, sample ports will be installed prior to the primary carbon vessel (influent), between the primary and secondary vessels (GAC-1), between the secondary and tertiary vessels (GAC-2), and after the tertiary vessel (effluent). Upon start-up, Stratus proposes to collect the first set of influent and effluent samples after treating approximately 5,000-gallons (approximate volume of three carbon vessels) of extracted groundwater. The groundwater samples from all the sampling ports will be collected on a monthly basis to evaluate system performance and also to monitor for any carbon breakthrough, warranting carbon change-out. In addition, as discussed above, to evaluate the carbon utilization rate for current site conditions, water samples from GAC-1 and effluent sample ports will be collected on a weekly basis during the first month after start-up. The samples will be analyzed for GRO, benzene, toluene, ethylbenzene, and xylenes (BTEX), and five oxygenates (MTBE, Ethyl Tertiary Butyl Ether [ETBE], Di-isopropyl Ether [DIPE], Tertiary Amyl Methyl Ether [TAME], Tertiary Butyl Alcohol [TBA]), and 1,2-Dichloroethane [1,2-DCA]) using United States Environmental Protection Agency (USEPA) Method 8260B.

During each site visit a Stratus technician will complete the following:

- Record total inflow of groundwater into the system,
- Record rate of discharge to the sanitary sewer and cumulative discharge total,
- Collect influent, GAC-1, GAC-2, and effluent water samples for laboratory analyses,
- Check system performance,
- Record hour meter reading for the DPE system, and
- Replace filters as necessary and check system for leaks.

Stratus will prepare, and submit to East Bay Municipal Utility District (EBMUD), a system start-up report within 60-days of the start-up date. Thereafter, monitoring/status reports will be prepared and submitted on a quarterly basis, or at a frequency specified in the EBMUD permit. These reports will include, but not be limited to, extraction flow rates, total volume of groundwater extracted, discharge rate to the sewer clean-out, volume of treated water discharged for that period, cumulative volume of treated water discharged to the sewer, petroleum hydrocarbon concentrations for samples collected from the identified sampling ports, and mass of petroleum hydrocarbons removed by the carbon units. Copies of analytical reports with appropriate chain of custody documentation will also be included in these reports.

If you have any questions or comments, please call Kiran Nagaraju at (530) 676-6007.

Sincerely,

STRATUS ENVIRONMENTAL INC.,

Kiran Nagaraju
Staff Engineer

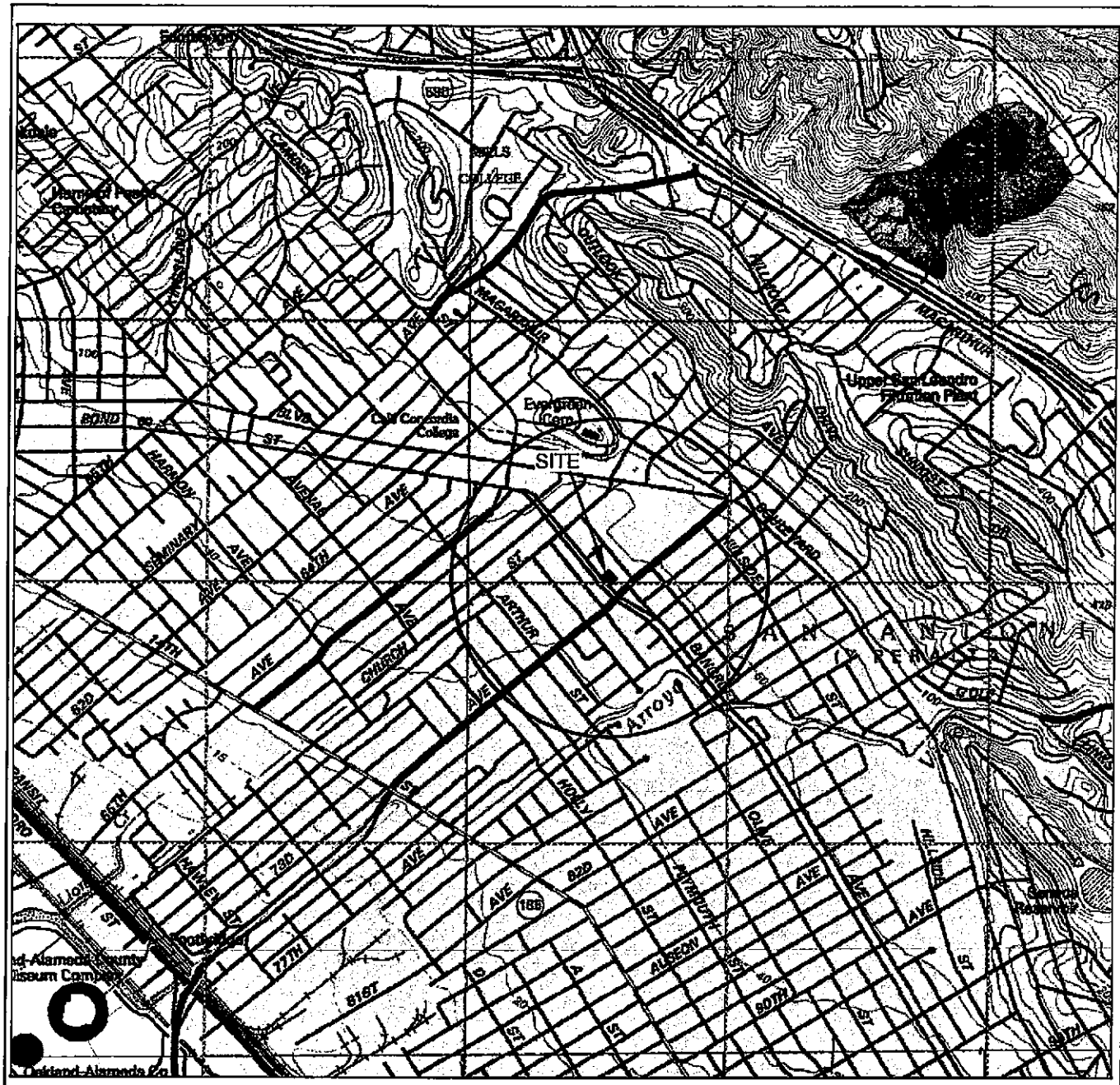
Jay R. Johnson, P.G.
Project Manager

PROFESSIONAL GEOLOGIST
Jay R. Johnson
No. 5867
STATE OF CALIFORNIA

Attachments:

Figure 1	Site Location Map
Figure 2	Site Plan
Figure 3	Process Flow Diagram
Appendix A	Permit Application
Appendix B	Manufacturer's Literature (DPE System)
Appendix C	Feasibility Study Results and Historical Analytical Summary
Appendix D	Carbon Usage Estimates

cc: Mr. Paul Supple, BP-ARCO
Mr. Steven Plunkett, Alameda County Health Care Services
Mr. Rob Miller, Broadbent and Associates, Inc.



GENERAL NOTES:
BASE MAP FROM U.S.G.S., 7.5 MINUTE TOPOGRAPHIC
OAKLAND, CA. PHOTO REVISED 1980

QUADRANGLE LOCATION

N

0 2000 FT

SCALE 1:24,000

JMP REV December 28, 2007 BP11117 Site Location Map

BP 11117

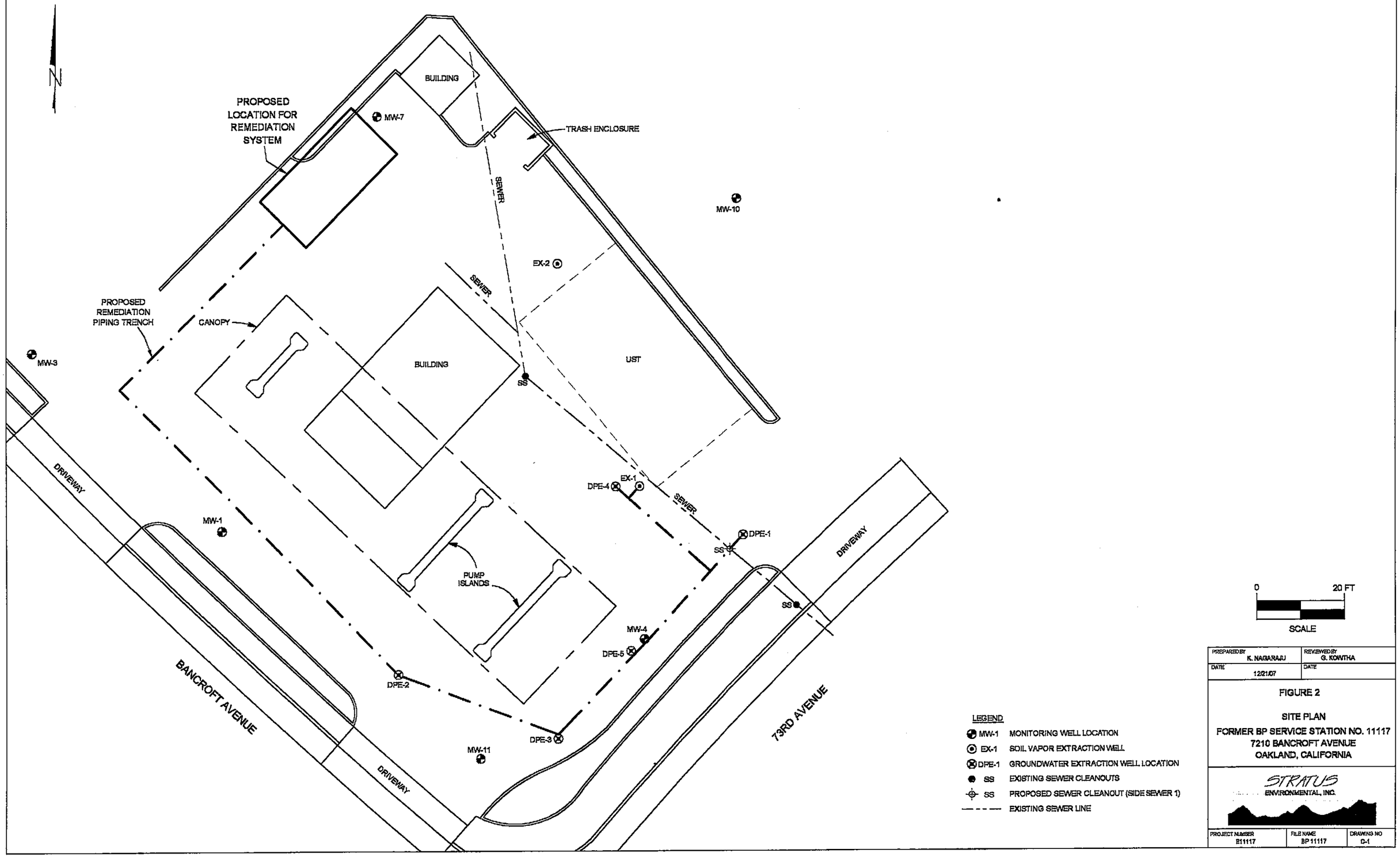
STRATUS ENVIRONMENTAL, INC.

BP SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

SITE LOCATION MAP

FIGURE
1

PROJECT NO.
E11117



PREPARED BY	REVIEWED BY
K. NAGARAJU	G. KOWTHA
DATE 12/21/07	DATE

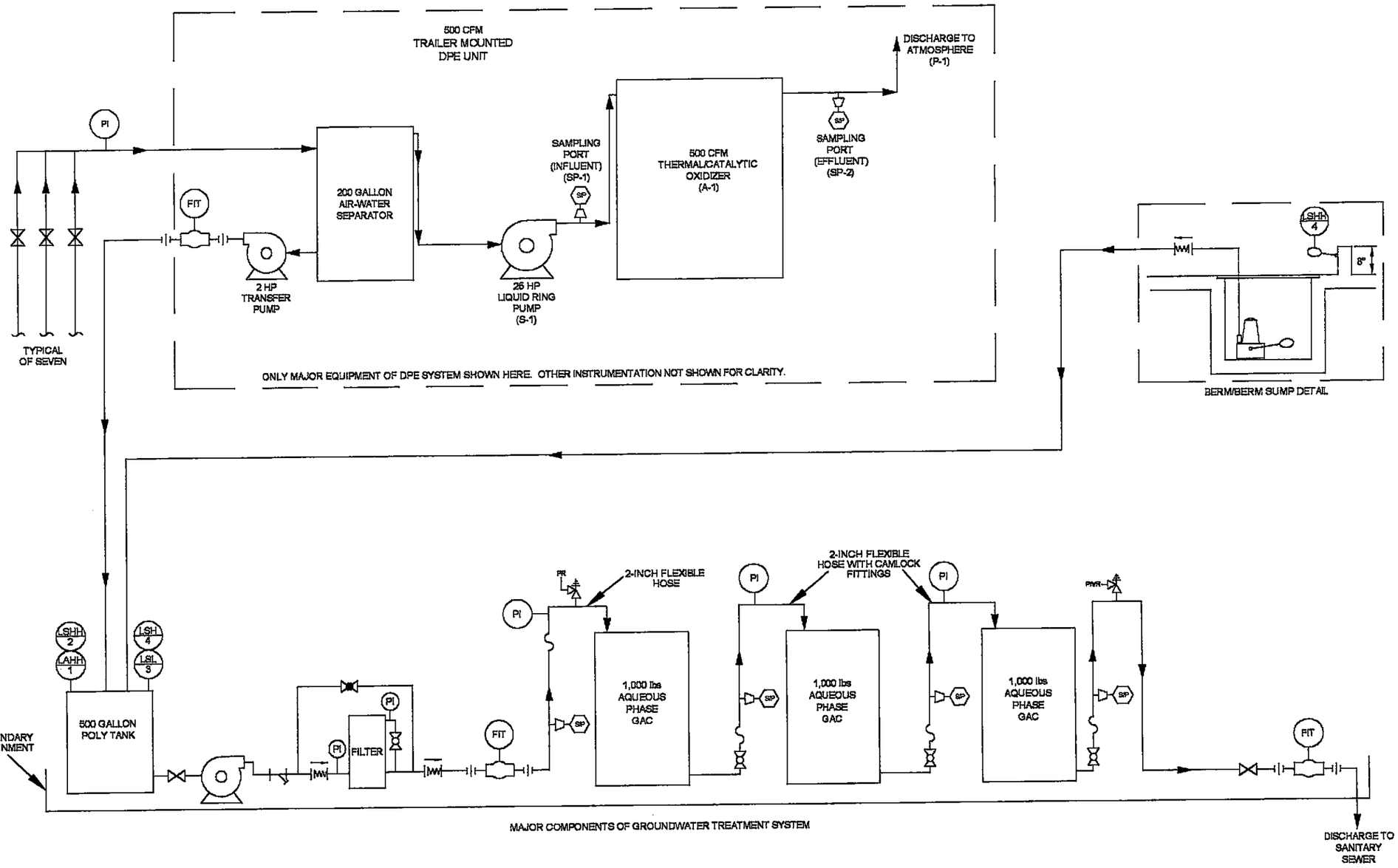
FIGURE 2

SITE PLAN

FORMER BP SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

STRATUS ENVIRONMENTAL, INC.

PROJECT NUMBER	FILE NAME	DRAWING NO
B11117	BP11117	D-1



CONTROL UNIT	FUNCTION
LAHH 1	LEVEL ALARM HIGH HIGH - TURNS OFF DUAL PHASE BLOWER/ THERMAL UNIT
LSHH 2	LEVEL SWITCH HIGH HIGH - TURNS OFF DUAL PHASE BLOWER/ THERMAL UNIT
LSH 3	LEVEL ALARM HIGH - TURNS ON TRANSFER PUMP (T-1)
LSL 3	LEVEL SWITCH LOW - TURNS OFF TRANSFER PUMP (T-1)

ABBREVIATIONS

FIT	FLOW INDICATOR AND TOTALIZER
LAHH	LEVEL ALARM HIGH HIGH
LAH	LEVEL ALARM HIGH
LAL	LEVEL ALARM LOW
LI	LEVEL INDICATOR
LSHH	LEVEL SWITCH HIGH HIGH
LSH	LEVEL SWITCH HIGH
LSL	LEVEL SWITCH LOW
PI	PRESSURE INDICATOR

LEGEND

PRIMARY EQUIPMENT SYMBOLS

- CENTRIFUGAL PUMP

FITTINGS SYMBOLS

- WYE STRAINER
- FLEXIBLE HOSE OR CONNECTOR
- UNION
- FLANGED JOINT

VALVE SYMBOLS

- GATE (NORMALLY OPEN)
- GATE (THROTTLED)
- BALL (NORMALLY OPEN)
- BALL (NORMALLY CLOSED)
- SPRING CHECK
- VACUUM RELIEF
- PRESSURE RELIEF
- PRESSURE/ VACUUM RELIEF

MISCELLANEOUS SYMBOLS

- LOCALLY MOUNTED INSTRUMENT/SENSOR
- CONTROL PANEL MOUNTED INSTRUMENT
- SAMPLE/PRESSURE PORT

PREPARED BY	REVIEWED BY
JMP	K. NAGARAJU
DATE 12/20/07	DATE

FIGURE 3

PROCESS FLOW DIAGRAM
DUAL PHASE EXTRACTION SYSTEM
FORMER BP SERVICE STATION NO. 11117
7210 BANCROFT AVENUE
OAKLAND, CALIFORNIA

STRATUS ENVIRONMENTAL, INC.

PROJECT NUMBER	FILE NAME	DRAWING NO.
11117	BP 11117	P-1

APPENDIX A

PERMIT APPLICATION

EBMUD

WASTEWATER DISCHARGE PERMIT
Terms and Conditions
APPLICANT INFORMATION

APPLICANT BUSINESS NAME	PERMIT NUMBER
ATLANTIC RICHFIELD COMPANY (ARCO)	

ADDRESS OF SITE DISCHARGING WASTEWATER

STREET ADDRESS	CITY	ZIP CODE
7210 BANCROFT AVENUE	OAKLAND	94605

PERSON TO BE CONTACTED REGARDING THIS APPLICATION

NAME	ELECTRONIC MAIL ADDRESS	TELEPHONE NUMBER	FACSIMILE NUMBER
KIRAN NAGARAJU	Knagaraju@stratusinc.net	(530) 676 6007	(530) 676 6005

PERSON(S) TO RECEIVE PERMIT AND CORRESPONDENCE IF DIFFERENT THAN PERSON SIGNING APPLICATION

NAME	MAILING ADDRESS

PERSON TO BE CONTACTED IN THE EVENT OF AN EMERGENCY

NAME	DAYTIME TELEPHONE NUMBER	NIGHTTIME TELEPHONE NUMBER
JAY R. JOHNSON	(530) 676 6000	(916) 765 1848

AUTHORIZATION

JAY R. JOHNSON, PROJECT MANAGER, *is authorized to sign reports, documents, and other correspondence required by this Permit.*

NAME & TITLE

CERTIFICATION

I understand that I am legally responsible for discharge of wastewater from the facility and for complying with the Terms and Conditions of this Wastewater Discharge Permit.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

NAME	TITLE
JAY R. JOHNSON, P. GE.	PROJECT MANAGER
SIGNATURE	DATE
	4/18/08

(TO BE SIGNED BY CHIEF EXECUTIVE OFFICER OR DULY AUTHORIZED REPRESENTATIVE. SEE CERTIFICATION REQUIREMENTS ON REVERSE)

MAILING ADDRESS	PHONE NUMBER
3330 CAMERON PARK DR, #550 CAMERON PARK, CA 95682	(530) 676 6000

EBMUD

WASTEWATER DISCHARGE PERMIT
Terms and Conditions
PROCESS DESCRIPTION

APPLICANT BUSINESS NAME Atlantic Richfield Company

The information on this form provides a description of wastewater generating processes, characteristics of the wastewater, and waste management activities. Instructions are on the back of this form.	Permit Number

BUSINESS ACTIVITY Groundwater Remediation System	Standard Industrial Classification	Business Classification Code

PROCESSES

Process Description	Wastewater Characteristics	Schematic Process Number
Extraction/Monitoring Wells	Petroleum Hydrocarbons & Fuel Oxygenates (GRO, BTEX, MTBE, TBA, DIPE, TAME & ETBE)	1

POLLUTION PREVENTION TECHNIQUES / BEST MANAGEMENT PRACTICES (BMPs)

NA

PRETREATMENT

Pretreatment System	Design Capacity	Loading Rate	Size	Side Sewer Number
☐ filtration				
☐ grease trap/oil and water separator				
☒ granular activated carbon	50 GPM	1719 gal/ft²-d (15gpm)	Three 1,000 lbs	1
☐ sedimentation				
☐ pH adjustment				
☐ chlorination				
☐ chemical precipitation				
☐ other (describe)				
☐ none				

PROCESS GENERATED WASTE

Waste / Disposal Method	Annual Waste Generation Quantity	Unit
NA		

EBMUD

WASTEWATER DISCHARGE PERMIT

APPLICANT BUSINESS NAME ATLANTIC RICHFIELD COMPANY Terms and Conditions

WATER BALANCE/STRENGTH SUMMARY

WASTEWATER STRENGTH ESTIMATES		Wastewater Discharge to each Side Sewer				
		No. 1	No.	No.	No.	No.
Total Suspended Solids mg/L (TSS)	Average					
	Maximum					
Filtered Chemical Oxygen Demand mg/L (CODF)	Average					
	Maximum					

DISCHARGE FREQUENCY

Days of Week	7				
Time of Day (Start & Stop Time)	0000 hrs to 2359 hrs				
Volume, if Batch Discharge					

SIDE SEWER LOCATION

No. 1 (See Figure 2)

No.

No.

No.

No.

STORMWATER AREA

Total square-foot area exposed to stormwater that drains to the sanitary sewer: _____ sq. ft.

EBMUD

WASTEWATER DISCHARGE PERMIT

APPLICANT BUSINESS NAME ATLANTIC RICHFIELD COMPANY

Terms and Conditions

WATER BALANCE/STRENGTH SUMMARY

The information on this form describes the volume, source, and strength of wastewater discharged to the community sewer. Instructions are on the back of this form.	Permit Number

WATER USE AND WASTEWATER DISCHARGE BALANCE

Units expressed in: (gallons per calendar day) or ☐ gallons per working day (Number of working days per year_____)

Water Use	Source			Wastewater Discharge to each Side Sewer					Water Diverted	Code[2]
	EBMUD	Other	Code[1]	No. 1	No.	No.	No.	No.		
Sanitary										
Processes										
Product										
Boiler										
Cooling										
Washing										
Irrigation										
REMEDIATION		21,600	A	21,600						
Sub-total		21,600		21,600						
Total	All Sources 21,600			All Side Sewers 21,600			All Side Sewers + Water Diverted			
Maximum Daily Discharge (gallons)										

METERED WATER

Water Meter Number	Code[3]	Percent Discharge to each Side Sewer					Total % Discharge
	P	100					100

[1]Other / Code: Compute the average gallon per day water use from non-EBMUD sources and enter the value in the Other "Sub-total" box. Do not include sources that discharge only to the stormdrain. Allocate the subtotal value to each type of water use. Enter the code(s) that identifies the source water:

A= Well Water / Groundwater *B= Stormwater* *C= Reclaimed Water* *D= Other (describe)*

[2]Water Diverted/Code: Enter the diverted volume for each type of water use. Enter the code(s) that identifies the diversion:

A= Product *B= Evaporation* *C= Irrigation* *D= Creek/Bay* *E= Rail, Truck, Vessel* *F= Other (describe)*

[3]Metered Water Code(s): E= EBMUD Meter P= Private Meter

APPENDIX B

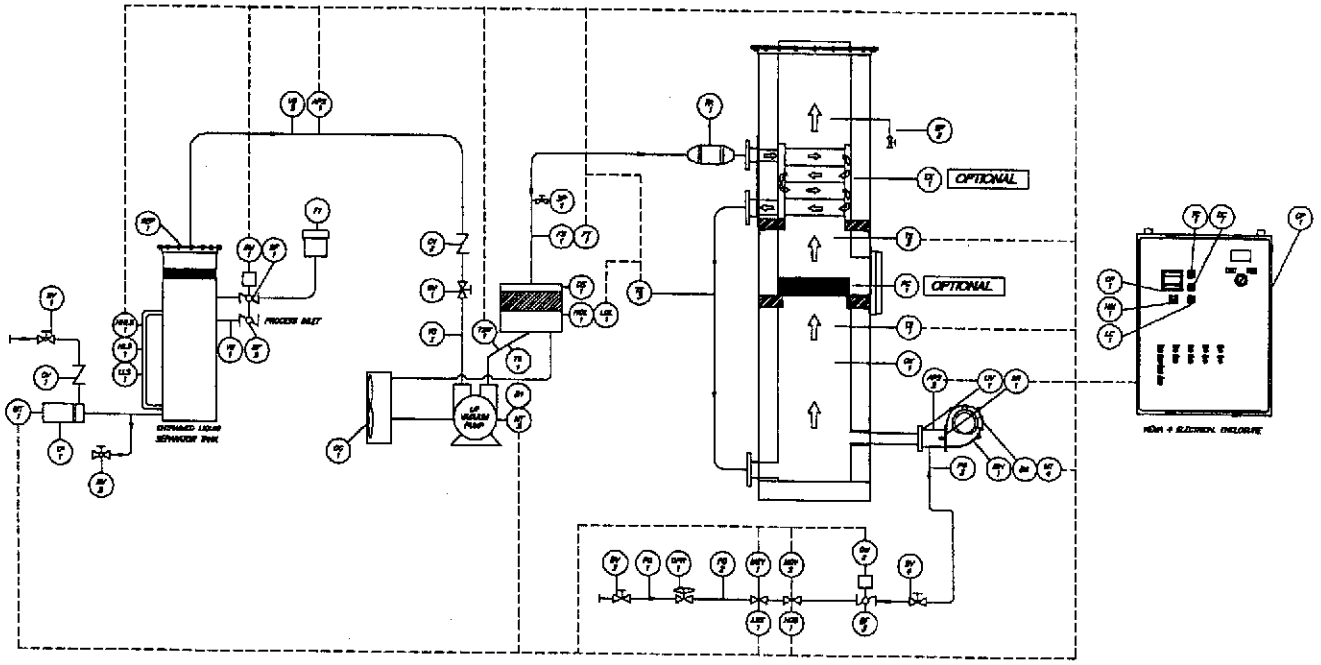
MANUFACTURER'S LITERATURE (DPE SYSTEM)

TECHNICAL SPECIFICATIONS FOR THE 350 SCFM THERMAL / CATALYTIC OXIDIZER

Oxidizer Specifications	
Chamber Length	10feet
Chamber Retention Time	10 feet / second
Stack Exit Velocity	40 feet / second
Throat Velocity	40 feet / second
Stack Discharge Height	13 feet
Overall Dimensions	7 feet wide / 12 feet long
Chamber Dimensions	30" outside / 20" inside
Chamber Internal Lining	Ceramic Fiber
Chamber Mixing Throat Diameter	17" I.D.
Destruction Efficiency	99% +
Operating Temperature "Thermal"	1400° to 2000°
Operating Temperature "Catalytic"	600° to 1200°
Maximum VOC Influent "Thermal"	15,000 ppmv
Normal VOC Effluent	< 50 ppmv
Blower Specifications	
Blower Type	Oil Sealed Liquid Ring Blower
Volumetric Flow	350 ACFM
Vacuum	Up to 29" Mercury
Motor Type	25 HP / TEFC / 208-230 Volt / 3phase
Catalyst Specifications	
Catalyst Type	Platinum Coated Metal Monolithic
Catalyst Size	19.5" O.D. x 3.0" Height
Catalyst Volume	.51 ft^3
Destruction Efficiency	99% +
Maximum VOC Influent	3500 ppmv
Normal VOC Effluent	<50 ppmv
Utility Specifications	
Supplemental Fuel	Natural Gas or Propane
Fuel Pressure	2-5 p.s.i.
Fuel Volume	500 SCFH
Electrical Requirements	208/230 Volt/3 Phase/100 Amp

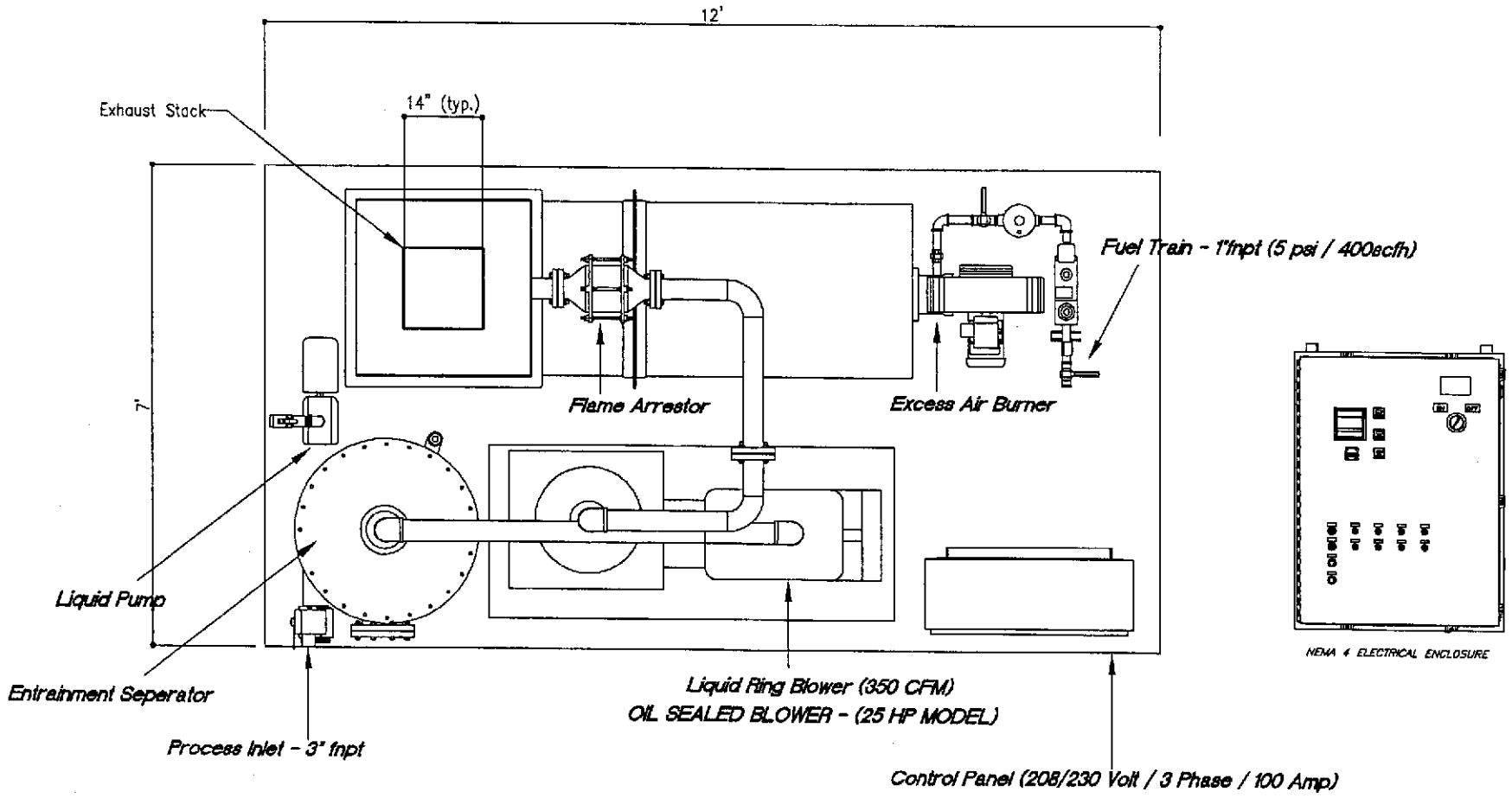
350 TCAT (LR)

APS-1	AIR PRESSURE SWITCH - PROCESS
APS-2	AIR PRESSURE SWITCH - COMBUSTION
B-1	BLOWER - LIQUID RING (350CFM)
B-2	BLOWER - COMBUSTION AIR
BF-1	BUTTERFLY VALVE - DILUTION (3")
BF-2	BUTTERFLY VALVE - PROCESS (3")
BF-3	BUTTERFLY VALVE - COMBUSTION AIR
BV-1	BALL VALVE - AUTO DRAIN (1")
BV-2	BALL VALVE - MANUAL DRAIN (1")
BV-3	BALL VALVE - MAIN GAS (1")
BV-4	BALL VALVE - MAIN GAS (2")
CP-1	CONTROL PANEL - NEMA 4 (48 x 36)
CR-1	CHART RECORDER - 4 CHANNEL
CV-1	CHECK VALVE - AUTO DRAIN (1")
CV-2	CHECK VALVE - BLOWER INLET
DC-1	DILUTION CONTROLLER
DM-1	DRIVE MOTOR - DILUTION/ISOLATION
DM-2	DRIVE MOTOR - COMBUSTION AIR
EX-1	EXCHANGER - 65% EFFICIENCY (OPTIONAL)
F-1	FILTER - DILUTION INLET
FA-1	FLAME ARRESTOR (3")
FS-1	FLOW SENSOR - PITOT TUBE (3")
FT-1	FLOW TRANSMITTER - DIFFERENTIAL
GPR-1	GAS PRESSURE REGULATOR
GV-1	GATE VALVE - BLOWER INLET RESTRICTION
HGS-1	HIGH GAS PRESSURE SWITCH
HHLS-1	HIGH HIGH LIQUID LEVEL SWITCH
HLS-1	HIGH LIQUID LEVEL SWITCH
HOL-1	HIGH OIL LEVEL SWITCH
HM-1	HOUR METER
IGN-1	IGNITION TRANSFORMER
LC-1	LIMIT CONTROLLER - HIGH TEMPERATURE
LGS-1	LOW GAS PRESSURE SWITCH
LLS-1	LOW LIQUID LEVEL SWITCH
LOL-1	LOW OIL LEVEL SWITCH
MOV-1	MAIN GAS VALVE (1")
MOV-2	MAIN GAS VALVE (1")
MT-1	MOTOR - LIQUID TRANSFER PUMP (3HP)
MT-2	MOTOR - PROCESS BLOWER (2.5HP)
MT-4	MOTOR - COMBUSTION AIR BLOWER (1/4HP)
OC-1	OIL COOLER - LIQUID RING BLOWER
OS-1	OIL SEPERATOR - LIQUID RING BLOWER
OX-1	OXIDIZER - THERMAL CATALYTIC (350 CFM)
PC-1	PLATINUM CATALYST CELL (90")
PG-1	PRESSURE GAUGE (0-15 PSI)
PG-2	PRESSURE GAUGE (0-30" WC)
PG-3	PRESSURE GAUGE (0-30" WC)
SEP-1	SEPERATOR - LIQUID (200 GALLON)
SP-1	SAMPLE PORT - INFLUENT
SP-2	SAMPLE PORT - EFFLUENT
SPK-1	SPARK ROD
TC-1	TEMPERATURE CONTROLLER
TG-1	TEMPERATURE GAUGE
TP-1	TRANSFER PUMP - 50 GPM + 62' HEAD LOSS
TS-1	TEMPERATURE SENSOR - CATALYST INLET
TS-2	TEMPERATURE SENSOR - CATALYST OUTLET
TS-3	TEMPERATURE SENSOR - HEAT EX. OUTLET
UV-1	UV SCANNER
VG-1	VACUUM GAUGE - PROCESS INLET (0-30 hg)
VG-2	VACUUM GAUGE - BLOWER INLET (0-30"hg)
VG-3	VACUUM GAUGE - BLOWER INLET (0-30"hg)



350 TCAT(LR) GAS FIRED THERMAL CATALYTIC OXIDIZER PACKAGE	
PROCESS INSTRUMENTATION DIAGRAM	
REMEDIATECH	DATE 2/1/08
	FILE 350TCAT(LR).PID - PERMIT DRAWING
	350TCAT(LR) - PERMIT DRAWING

350 TCAT-LR



350 TCAT(LR) THERMAL/CATALYTIC OXIDIZER PACKAGE		
GENERAL ARRANGEMENT - TOP		
REMEDIATECH	DATE: 2/1/08	FILE: 350TCAT(LR).GEN - PERMIT DRAWING
	350TCAT(LR)-PERMIT DRAWING	

Kiran Nagaraju

From: John Tittelfitz [johntittel@yahoo.com]
Sent: Wednesday, January 16, 2008 5:21 PM
To: Kiran Nagaraju
Subject: Re: Equipment Literature-Oakland Project

----- Original Message ----
From: Kiran Nagaraju <knagaraju@stratusinc.net>
To: John Tittelfitz <johntittel@yahoo.com>
Sent: Wednesday, January 16, 2008 2:26:49 PM
Subject: RE: Equipment Literature-Oakland Project

Hi John,

Thank for the basic information. I will also need the following to complete the AQMD permit application:

1. Stack Diameter: Inside and outside - **14" ID (14.5" OD) square**
2. Confirm stack height is 13 feet - **YES**
3. Combustion blower - horsepower rating and also the maximum airflow rate from this blower - **.25 HP / 100 CFM**
4. Maximum capacity (flow in cfm) the oxidizer can handle - **500 CFM max**
5. Note stating that 'Sample ports installed in accordance with CARB requirements' and - **Sample ports are installed in accordance with CARB requirements**
6. Burner rating (BTU/hr) - **400,000 btu**

I would greatly appreciate if you can get this additional information to me at your earliest convenience.

Thanks,
Kiran

-----Original Message-----
From: John Tittelfitz [mailto:johntittel@yahoo.com]
Sent: Wednesday, January 16, 2008 9:32 AM
To: Kiran Nagaraju
Subject: Re: Equipment Literature-Oakland Project

This is the basic specs. If you need more let me know. I will also forward a PID and general drawing briefly.

JT

----- Original Message ----
From: Kiran Nagaraju <knagaraju@stratusinc.net>
To: johntittel@yahoo.com
Sent: Wednesday, January 16, 2008 8:48:21 AM
Subject: Equipment Literature-Oakland Project

Hi John,

APPENDIX C

FEASIBILITY STUDY RESULTS AND

HISTORICAL ANALYTICAL SUMMARY

CAMBRIA

Table 5. Grab Water Analytical Results
BP Oil Site No. 11117
7210 Bancroft Avenue, Oakland, California

Extraction Well	Date	TPHg (ug/l)	Benzene (ug/l)	Toluene (ug/l)	Ethylbenzene (ug/l)	Xylenes (ug/l)	MTBE (ug/l)
		8015M	8021	8021	8021	8021	8021
MW-2	10/29/01	140,000	16,600	22,800	2,800	18,700	12,900
MW-2	11/2/01	110,000	10,100	12,800	1,710	11,600	56,500
MW-4	10/29/01	74,000	5,530	5,620	2,950	9,660	21,700
MW-4	11/2/01	80,000	9,420	1,470	1,770	3,320	60,000
EX-1	10/29/01	26,000	2,600	253	1,450	6,090	1,550
EX-1	11/2/01	54,000	3,070	6,870	1,320	8,060	7,300
EX-2	10/29/01	<50	<0.50	<0.50	<0.50	<1.5	<0.50
EX-2	11/2/01	<50	<0.50	<0.50	<0.50	<1.5	1.29
Tank	11/2/01	26,000	890	1,300	580	2,600	9,500

MTBE = Methyl tert buty ether
ug/l = micrograms per liter
<n = less than method reporting limit

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Table 2. Dual Phase Extraction Step Vacuum Test Summary
BP Oil Site No. 11117
7210 Bancroft Avenue, Oakland, California

Date and Time	Flowrate					Stinger Depth	Applied Vacuum	Well Influent Concentration	Estimated Water Extraction Rate	Water Level				Pressure/Vacuum Reading:		
	MW-2	MW-4	EX-1	EX-2	System					MW-2	MW-4	EX-1	EX-2	MW-2	MW-4	EX-1
	(cfm)	(cfm)	(cfm)	(cfm)	(cfm)	(feet bgs)	(inches of Hg)	(ppmv)	(gpm)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(inches of water)	(inches of water)	(inches of (ir water)
Well MW-4 Step Vacuum Test																
10/29/01 9:00	-	-	-	-	-	-	-	-	-	22.82'	-	-	-	-	-	-
10/29/01 9:55	-	-	-	-	-	-	-	-	-	-	-	23.15	-	-	-	-
10/29/01 9:35	-	-	-	-	-	-	-	-	-	-	22.93'	-	-	-	-	-
10/29/01 10:25	-	-	-	-	192	23	5.0	30	-	-	-	-	-	0	-	0
10/29/01 10:30	-	-	-	-	175	23	8.0	60	-	-	-	-	-	0	-	0
10/29/01 10:36	-	5.0	-	-	135	23	12	15	-	-	-	-	-	0	-	0
10/29/01 10:45	-	8.0	-	-	105	23	15	110	-	-	-	-	-	-	-	-
10/29/01 10:50	-	8.0	-	-	53	23	20	490	-	-	-	-	-	-	-	-
10/29/01 10:56	-	6.0	-	-	6.0	23	25	13,450	3.4	-	-	-	-	-	-	-
10/29/01 11:07	-	6.0	-	-	6.0	23	24	13,450	-	-	-	-	-	0	-	0.10
10/29/01 11:48	-	6.0	-	-	107	30	15	60	-	-	-	-	-	-	-	-
10/29/01 12:10	-	-	-	-	1,353	5.0	24.5	-	-	-	-	-	-	-	-	-
Well MW-2 Step Vacuum Test																
10/29/01 12:20	9.0	-	-	-	204	2.0	5.0	150	0	-	-	-	-	-	0.01	0.01
10/29/01 12:30	4.0	-	-	-	101	2.0	15	40	0	-	-	-	-	-	0.02	0.01
10/29/01 12:40	9.0	-	-	-	9.0	2.0	25	1,300	0	-	-	-	-	-	0.06	0.02
10/29/01 12:46	-	-	-	-	-	-	-	-	-	-	-	-	23.50	-	-	-
10/29/01 12:50	6.0	-	-	-	197	23	5.0	30	0	-	-	-	-	-	0.04	0.02
10/29/01 13:00	8.0	-	-	-	78	23	15	30	0	-	-	-	-	-	0.03	0.01
10/29/01 13:10	16	-	-	-	16	23	25	100	minimal	-	-	-	-	-	0.02	0
10/29/01 13:30	10	-	-	-	186	25	5.0	30	0	-	-	-	-	-	0.03	0
10/29/01 13:40	9.0	-	-	-	60	25	15	20	0	-	-	-	-	-	0.03	0
10/29/01 13:45	6.0	-	-	-	60	25	25	60	minimal	-	-	-	-	-	0.01	0
10/29/01 13:50	9.0	-	-	-	186	30	5.0	20	0	-	-	-	-	-	0.03	0
10/29/01 13:55	4.0	-	-	-	60	30	15	0	0	-	-	-	-	-	0.04	0
10/29/01 14:00	6.0	-	-	-	16	30	25	40	minimal	-	-	-	-	-	0.01	-
Well EX-1 Step Vacuum Test																
10/29/01 14:20	-	-	6.0	-	173	5.0	5.0	380	0	-	-	-	-	0.14	0.12	-
10/29/01 14:30	-	-	10	-	127	5.0	10	1,110	0	-	-	-	-	0.02	0.21	-
10/29/01 14:40	-	-	4.0	-	53	5.0	15	2,280	0	-	-	-	-	0.02	0.35	-
10/29/01 14:50	-	-	9.0	-	25	5.0	20	4,650	0	-	-	-	-	0	0.48	-
10/29/01 15:00	-	-	20	-	60	5.0	25	13,500	minimal	-	-	-	-	0.01	0.62	-
10/29/01 15:15	-	-	8.0	-	197	24	5.0	60	0	-	-	-	-	0	0.16	-
10/29/01 15:25	-	-	4.0	-	110	24	15	910	-	-	-	-	-	0.1	0.19	-
10/29/01 15:35	-	-	31	-	25	24	25	13,470	-	-	-	-	-	0.1	0.45	-
10/29/01 15:40	-	-	6.0	-	210	30	5.0	80	-	-	-	-	-	0.1	0.31	-
10/29/01 15:50	-	-	8.0	-	109	30	15	90	-	-	-	-	-	0	0.40	-
10/29/01 16:00	-	-	28	-	9.0	30	25	13,470	-	-	-	-	-	0.1	0.19	-

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Table 2. Dual Phase Extraction Step Vacuum Test Summary
BP Oil Site No. 11117
7210 Bancroft Avenue, Oakland, California

Date and Time	Flowrate					Stinger Depth	Applied Vacuum	Well Influent Concentration	Estimated Water Extraction Rate	Water Level				Pressure/Vacuum Readings		
	MW-2	MW-4	EX-1	EX-2	System					MW-2	MW-4	EX-1	EX-2	MW-2	MW-4	EX-1
	(cfm)	(cfm)	(cfm)	(cfm)	(cfm)	(feet bgs)	(inches of Hg)	(ppmv)	(gpm)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(inches of water)	(inches of water)	(inches of water)
Well EX-2 Step Vacuum Test																
10/29/01 16:30	-	-	-	10	190	5.0	5.0	50	0	-	-	-	-	-	0.02	0.10
10/29/01 16:40	-	-	-	22	88	5.0	15	40	0	-	-	-	-	-	0.01	0.06
10/29/01 16:45	-	-	-	43	45	5.0	24	80	0	-	-	-	-	-	0	0.04
10/29/01 16:50	-	-	-	10	190	24	5.0	20	-	-	-	-	-	-	0	0.04
10/29/01 17:00	-	-	-	8.0	88	24	15	10	-	-	-	-	-	-	0	0.03
10/29/01 17:05	-	-	-	6.0	49	24	24	50	1.5	-	-	-	-	-	0.04	0.01
10/29/01 17:25	-	-	-	10	199	30	5.0	10	-	-	-	-	-	-	0.05	0.02
10/29/01 17:30	-	-	-	4.0	88	30	15	10	-	-	-	-	-	-	0.01	0
10/29/01 17:30	-	-	-	6.0	69	30	25	50	-	-	-	-	-	-	0.01	0
10/29/01 18:00	-	-	-	-	-	-	-	-	-	22.8	22.9	29.9	25.7	-	-	-

Notes and Abbreviations

cfm = cubic feet per minute
feet bgs = feet below ground surface
inches of Hg = inches of mecury
ppmv = parts per million by volume
gpm = gallons per minute

* separate phase hydrocarbon sheen noted

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Table 3a. Dual Phase Extraction Constant Vacuum Test - Well MW-4
BP Oil Site No. 11117
7210 Bancroft Avenue, Oakland, California

Date and Time	Flowrate		Stinger Depth	Applied Vacuum	Well Influent Concentration	Estimated Water Extraction Rate	Water Level					Pressure/Vacuum Reading		
	MW-4	System					MW-2	MW-4	MW-7	EX-1	EX-2	MW-2	MW-7	EX-1
	(cfm)	(cfm)	(feet bgs)	(inches of Hg)	(ppmv)	(gpm)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(inches of water)	(inches of water)	(inches of (i water)
10/30/01 6:30	31	31	23	25.5	8,690	-	22.71	22.74	23.45	26.18	23.40	-	-	-
10/30/01 6:45	-	-	-	-	-	-	-	-	-	-	-	0	0	0.13
10/30/01 7:00	25	25	23	25.5	12,890	-	-	-	-	-	-	0	0	0.12
10/30/01 7:15	-	-	-	-	-	-	-	-	-	-	-	0.01	0	0.14
10/30/01 7:30	16	16	23	25	13,160	-	-	-	-	-	-	0	0	0.11
10/30/01 7:45	-	-	-	-	-	-	-	-	-	-	-	0.01	0	0.12
10/30/01 8:00	25	25	23	25	13,250	-	-	-	-	-	-	0	0	0.12
10/30/01 8:15	-	-	-	-	-	-	-	-	-	-	-	0	0	0.12
10/30/01 8:30	16	16	23	25	13,130	-	-	-	-	-	-	0.01	0	0.13
10/30/01 8:45	-	-	-	-	-	-	-	-	-	-	-	0.01	0	0.12
10/30/01 9:00	18	18	23	25	13,260	-	-	-	-	-	-	0.01	0	0.12
10/30/01 9:15	-	-	-	-	-	-	-	-	-	-	-	0.01	0	0.13
10/30/01 9:30	16	16	23	24.5	13,310	-	-	-	-	-	-	0.01	0	0.13
10/30/01 10:00	9.0	9.0	23	24	13,200	-	-	-	-	-	-	0.01	0	0.16
10/30/01 10:30	9.0	9.0	23	24	13,160	-	-	-	-	-	-	0.01	0.02	0.21
10/30/01 11:00	9.0	9.0	23	24	13,000	-	-	-	-	-	-	0.01	0.02	0.34
10/30/01 11:30	25	25	23	23.5	13,000	-	-	-	-	-	-	0.01	0	0.43
10/30/01 11:45	-	-	-	-	-	-	22.80	-	-	25.80	-	-	-	-
10/30/01 11:50	-	-	-	-	-	-	-	-	23.45	-	23.40	-	-	-
10/30/01 12:00	36	36	23	23	12,590	-	-	-	-	-	-	0	0	0.32
10/30/01 12:30	41	41	23	22.5	12,460	-3.0	-	-	-	-	-	0.02	0	0.34
10/30/01 12:50	-	-	-	-	-	-	22.80	-	-	25.65	-	-	-	-
10/30/01 13:00	10	10	23	22.5	12,530	-	-	-	-	-	-	0.20	0.03	0.34
10/30/01 13:30	9.0	9.0	23	22.4	12,390	-	22.85	-	-	25.55	-	0.04	0	0.34
10/30/01 13:35	-	-	-	-	-	-	-	-	23.43	-	23.33	-	-	-
10/30/01 14:00	16	16	23	22	12,410	-	-	-	-	-	-	0.75	0	0.34
10/30/01 14:30	36	36	23	22	12,400	-	-	-	-	-	-	0.01	0	0.36
10/30/01 15:00	36	36	23	22	12,340	-	-	-	-	-	-	0.01	0	0.36
10/30/01 15:30	41	41	23	22	12,300	-	-	-	-	-	-	0.02	0	0.41
10/30/01 16:00	36	36	23	22	12,300	-	-	-	-	-	-	0.03	0	0.42
10/30/01 16:30	41	41	23	22	11,960	-	22.90	25.60	23.42	25.25	23.33	0.02	0	0.43
Distance from Extraction Well (feet)							35	-	134	34	86	35	134	34

Notes and Abbreviations

cfm = cubic feet per minute
feet bgs = feet below ground surface
inches of Hg = inches of mecury
ppmv = parts per million by volume
gpm = gallons per minute

Table 3b. Dual Phase Extraction Constant Vacuum Test - Well MW-4
BP Oil Site No. 11117
7210 Bancroft Avenue, Oakland, California

Date and Time	Flowrate		Stinger Depth	Applied Vacuum	Well Influent Concentration	Estimated Water Extraction Rate	Water Level					Pressure/Vacuum Readings		
	MW-4	System					MW-2	MW-4	MW-7	EX-1	EX-2	MW-2	MW-7	EX-1
	(cfm)	(cfm)	(feet bgs)	(inches of Hg)	(ppmv)	(gpm)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(inches of water)	(inches of water)	(inches of water)
10/31/01 6:30	6.0	6.0	23	26	11,520	-	22.83	22.74	23.74	24.14	23.30	0	0	0
10/31/01 6:45	-	-	-	-	-	-	-	-	-	-	-	0	0	0.25
10/31/01 7:00	6.0	6.0	23	25.5	11,850	4.5	-	-	-	-	-	0	0	0.27
10/31/01 7:30	6.0	6.0	23	25.5	11,440	-	-	-	-	-	-	0.01	0.04	0.24
10/31/01 7:45	-	-	-	-	-	-	-	-	-	-	-	0.02	0.04	0.23
10/31/01 8:00	6.0	6.0	23	25.5	11,600	-	-	-	-	-	-	0.02	0.06	0.25
10/31/01 8:15	-	-	-	-	-	-	-	-	-	-	-	0.01	0	0.26
10/31/01 8:30	7.0	7.0	23	25	11,700	-	-	-	-	-	-	0	0	0.28
10/31/01 8:45	-	-	-	-	-	3.0	-	-	-	-	-	0	0.01	0.30
10/31/01 9:00	9.0	9.0	23	24	11,660	-	-	-	-	-	-	0.01	0.01	0.32
10/31/01 9:15	-	-	-	-	-	-	-	-	-	-	-	0	0.02	0.32
10/31/01 9:30	9.0	9.0	23	24	11,720	-	-	-	-	-	-	0.00	0	0.32
10/31/01 9:45	-	-	-	-	-	-	-	-	-	-	-	0.01	0	0.33
10/31/01 10:00	9.0	9.0	23	24	11,800	-	-	-	-	-	-	0	0	0.33
10/31/01 10:30	9.0	9.0	23	23	11,410	2.0	22.86	-	23.50	24.30	23.35	0.01	0	0.35
10/31/01 11:00	9.0	9.0	25	23	11,260	3.0	-	-	-	-	-	0	0	0.33
10/31/01 11:30	10	10	25	22.4	11,360	-	22.87	-	23.50	24.00	23.32	0.02	0.01	0.33
10/31/01 12:00	16	16	25	22	11,310	-	-	-	-	-	-	0	0	0.33
10/31/01 12:20	-	-	-	-	-	-	22.87	-	23.50	23.97	23.34	-	-	-
10/31/01 12:30	25	25	25	22	11,230	-	-	-	-	-	-	0	0	0.37
10/31/01 12:45	-	-	-	-	-	2.7	-	-	-	-	-	-	-	-
10/31/01 13:00	9.0	9.0	27	22	10,730	3.0	-	-	-	-	-	0.01	0	0.34
10/31/01 13:30	9.0	9.0	27	22	10,780	-	22.86	-	23.50	23.93	23.29	0	0	0.37
10/31/01 14:00	8.0	8.0	27	22	10,650	-	-	-	-	-	-	0.01	0	0.3
10/31/01 14:30	9.0	9.0	27	22	10,740	-	-	-	-	-	-	0.01	0.01	0.36
10/31/01 15:00	9.0	9.0	27	22	10,690	-	-	-	-	-	-	0.01	0	0.34
10/31/01 15:30	9.0	9.0	27	22.4	10,760	-	-	-	-	-	-	0	0	0.32
10/31/01 16:00	14	14	27	22.4	10,800	-	-	-				0.01	0	0.36
10/31/01 16:30	9.0	9.0	27	22.5	10,650	2.93	22.93	27.90	23.46	23.82	23.30	0	0	0.36
Distance from Extraction Well (feet)							35	-	134	34	86	35	134	34

Notes and Abbreviations

cfm = cubic feet per minute
feet bgs = feet below ground surface
inches of Hg = inches of mecury
ppmv = parts per million by volume
gpm = gallons per minute

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Table 3c. **Dual Phase Extraction Constant Vacuum Test - Wells EX-1, MW-2, MW-4**
BP Oil Site No. 11117
7210 Bancroft Avenue, Oakland, California

Date and Time	Flowrate				Stinger Depth	Applied Vacuum	Well Influent Concentration	Estimated Water Extraction Rate	Water Level					Pressure/Vacuum Readings				
	MW-2	MW-4	EX-1	System					MW-2	MW-4	MW-7	EX-1	EX-2	MW-2	MW-4	MW-7	EX-1	EX-2
	(cfm)	(cfm)	(cfm)	(cfm)	(feet bgs)	(inches of Hg)	(ppmv)	(gpm)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(inches of water)	(inches of water)	(inches of water)	(inches of water)	(inches of water)
Well EX-1 Vacuum Test																		
11/1/01 6:30	-	-	15	15	24	25	13,030	-	22.66	22.98	23.51	23.52	23.39	0	0.70	0	-	0.01
11/1/01 6:45	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	0.72	0	-	0.02
11/1/01 7:00	-	-	10	10	24	25	13,040	-	-	-	-	-	-	0.01	0.72	0	-	0.02
11/1/01 7:15	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	0.73	0	-	0.02
11/1/01 7:30	-	-	10	10	24	25	13,050	-	-	-	-	-	-	0.01	0.72	0	-	0.01
11/1/01 7:45	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	0.72	0	-	0.01
11/1/01 8:00	-	-	15	15	38	24.5	12,830	-	-	-	-	-	-	0.01	0.80	0	-	0
11/1/01 8:15	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	0.67	0	-	0
11/1/01 8:30	-	-	15	15	38	24.5	13,020	-	-	-	-	-	-	0.01	0.68	0	-	0.01
11/1/01 8:45	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	0.72	0	-	0.01
11/1/01 9:00	-	-	15	15	38	24	13,030	-	-	-	-	-	-	0.01	0.75	0	-	0.02
11/1/01 9:15	-	-	-	-	-	-	-	-	-	-	-	-	-	0.01	0.77	0	-	0.01
11/1/01 9:30	-	-	15	15	38	24.5	12,540	-	-	-	-	-	-	0.01	0.80	0	-	0.01
11/1/01 9:45	-	-	-	-	-	-	-	-	-	-	-	-	-	0.02	0.80	0	-	0.01
11/1/01 10:00	-	-	15	15	38	24	12,480	-	-	-	-	-	-	0.02	0.80	0	-	0.01
11/1/01 10:30	-	-	25	25	38	23	12,000	-	-	-	-	-	-	0.03	0.84	0	-	0.01
11/1/01 11:00	-	-	31	31	38	22.5	11,820	-	-	-	-	-	-	0.03	0.90	0.01	-	0.02
11/1/01 11:30	-	-	31	31	38	22	11,670	-	-	-	-	-	-	0.01	0.84	0	-	0.02
11/1/01 12:00	-	-	36	36	38	21.8	11,480	-	-	-	-	-	-	0.01	0.80	0	-	0
11/1/01 12:30	-	-	41	41	38	21.5	11,380	-	-	-	-	-	-	0.01	0.80	0	-	0
11/1/01 13:00	-	-	45	45	38	21.5	11,320	0.10	-	-	-	-	-	0.01	0.80	0	-	0
11/1/01 13:10	-	-	-	-	-	-	-	10	-	-	-	-	-	-	-	-	-	-
11/1/01 13:30	-	-	45	45	38	21.5	11,290	-	-	-	-	-	-	0.01	0.80	0	-	0
11/1/01 14:00	-	-	16	16	38	21.8	11,370	-	-	-	-	-	-	0.01	0.75	0	-	0
11/1/01 14:30	-	-	16	16	38	21.5	10,000	-	22.95	-	-	-	-	0	0.80	0	-	0
Distance from Extraction Well (feet)									5.6	34	103	-	53	5.6	34	103		53
Well MW-2 Vacuum Test																		
11/1/01 15:00	-	-	-	-	-	-	-	-	-	-	-	-	-	0	0	0	0.11	0
11/1/01 15:30	6.0	-	-	6.0	38.5	22	660	-	-	-	-	-	-	0	0	0	0.10	0
11/1/01 15:40	6.0	-	-	6.0	38.5	22	630	-	-	-	-	-	-	0	0	0	0.10	0
11/1/01 15:50	6.0	-	-	6.0	38.5	22	580	3.3	-	-	-	-	-	-	-	-	-	-
Distance from Extraction Well (feet)									-	35	100	6	52	-	35	100	6	52
Well MW-4 Vacuum Test																		
11/1/01 16:00	-	6.0	-	6.0	23	22.5	10,460	-	-	-	-	-	-	-	0.04	0.02	0.02	0.01
11/1/01 16:30	-	14	-	14	23	22.4	10,910	-	24.98	26.34	23.45	36.06	23.4	-	0.03	0.01	0.01	0.02
Distance from Extraction Well (feet)									35	-	134	34	86	35	-	134	34	86

Notes and Abbreviations

cfm = cubic feet per minute
feet bgs = feet below ground surface
inches of Hg = inches of mecury
ppmv = parts per million by volume
gpm = gallons per minute

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Table 3d. Dual Phase Extraction Constant Vacuum Test - Well MW-4
BP Oil Site No. 11117
7210 Bancroft Avenue, Oakland, California

Date and Time	Flowrate		Stinger Depth	Applied Vacuum	Well Influent Concentration	Estimated Water Extraction Rate	Water Level					Pressure/Vacuum Readings		
	MW-4	System					MW-2	MW-4	MW-7	EX-1	EX-2	MW-2	MW-7	EX-1
	(cfm)	(cfm)	(feet bgs)	(inches of Hg)	(ppmv)	(gpm)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(feet bgs)	(inches of water)	(inches of water)	(inches of (in water)
11/2/01 4:00	6.0	6.0	23	25.5	10,120	-	22.85	22.90	23.50	33.60	23.46	0	-	0.23
11/2/01 4:30	6.0	6.0	23	25.5	10,470	-	-	-	-	-	-	0	-	0.24
11/2/01 5:00	6.0	6.0	23	25.5	10,080	-	-	-	-	-	-	0	-	0.25
11/2/01 5:30	8.0	8.0	26	25.5	9,930	-	-	-	-	-	-	0	-	0.25
11/2/01 6:00	8.0	8.0	26	25.5	10,120	-	-	-	-	-	-	0	-	0.25
11/2/01 6:30	8.0	8.0	26	25	10,140	-	-	-	-	-	-	0	-	0.25
11/2/01 7:00	8.0	8.0	26	25	10,160	-	-	-	-	-	-	0	0	0.25
11/2/01 7:30	7.0	7.0	26	25	9,460	-	-	-	-	-	-	0	-	0.25
11/2/01 8:00	8.0	8.0	28	25	9,900	-	-	-	-	-	-	0	-	0.25
11/2/01 8:30	6.0	6.0	28	24	9,580	-	-	-	-	-	-	0	-	0.24
11/2/01 9:00	20	20	30	23	9,730	-	-	-	-	-	-	0	-	0.29
11/2/01 9:30	20	20	30	22.5	9,810	-	-	-	-	-	-	0	-	0.29
11/2/01 10:00	31	31	30	22	9,840	-	-	-	-	-	-	0	0	0.28
11/2/01 10:30	34	34	30	22	9,860	-	-	-	-	-	-	0	0	0.29
11/2/01 11:00	9.0	9.0	33	22.4	9,490	-	-	-	-	-	-	0	-	0.30
11/2/01 11:30	24	24	33	22.4	9,670	-	-	-	-	-	-	0	-	0.30
11/2/01 12:00	24	24	33	22.5	9,690	-	-	-	-	-	-	0	-	0.30
11/2/01 12:30	36	36	33	22	9,600	-	-	-	-	-	-	0	0	0.32
11/2/01 13:00	41	41	33	22	9,660	-	-	-	-	-	-	0	-	0.30
11/2/01 13:30	31	31	33	22	9,470	-	-	-	-	-	-	0	-	0.28
11/2/01 14:00	31	31	33	22	9,350	2.52	22.97	-	23.54	32.70	23.44	-	-	-
Distance from Extraction Well (feet)							35	-	134	34	86	35	134	34

Notes and Abbreviations

cfm = cubic feet per minute
feet bgs = feet below ground surface
inches of Hg = inches of mecury
ppmv = parts per million by volume
gpm = gallons per minute

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Table 4. Soil-Vapor Analytical Results
BP Oil Site No. 11117
7210 Bancroft Avenue, Oakland, California

Extraction Well	Sample No.	Date	Time	OVA Reading (ppmv)	TPHg (ppmv)	Benzene (ppmv)	Toluene (ppmv)	Ethylbenzene (ppmv)	Xylenes (ppmv)	MTBE (ppmv)	Oxygen (%)	Carbon Dioxide (%)	Me (
		Analytical Method:			TO-3	TO-3	TO-3	TO-3	TO-3	TO-3	3C	3C	
MW-4	MW-4-INF-AM	10/29/01	12:10	-	11,000	170	540	91	316	280	15	10	
MW-4	MW-4-INF-PM	10/29/01	16:00	13,470	8,400	150	390	56	182	290	--	--	
MW-4	MW-4-INF-AM	10/30/01	12:00	12,590	14,000	190	680	160	570	360	--	--	
MW-4	MW-4-INF-PM	10/30/01	14:35	12,400	12,000	160	580	140	510	300	--	--	
MW-4	MW-4-INF-AM	10/31/01	11:15	11,260	9,600	170	550	130	460	340	--	--	
MW-4	MW-4-INF-PM	10/31/01	14:00	10,650	9,300	140	470	150	470	260	--	--	
MW-4	MW-4-INF-AM	11/2/01	4:30	10,470	11,000	190	570	110	440	390	--	--	
MW-4	MW-4-INF-PM	11/2/01	13:35	9,470	7,500	160	460	120	410	340	16	10	<
EX-1	EX-1-AM-IN	11/1/01	14:00	11,370	8,600	120	430	90	365	160	--	--	
MW-4	MW-4-PM-EFF	10/29/01	16:00	-	2.5	<0.10	0.18	0.17	0.91	<0.10	--	--	
MW-4	MW-4-PM-EFF	11/2/01	13:35	-	20	0.11	1.1	0.98	2.7	<0.10	--	--	

MTBE = Methyl tert buty ether
OVA = Organic vapor analyzer
ppmv = parts per million by volume
<n = less than method reporting limit

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
EX-1															
05/04/2004	P	--	16.29	--	--	12,000	2,300	430	740	1,100	2,500	--	SEQM	6.8	h
08/31/2004	P	--	19.39	--	--	13,000	2,500	95	650	1,500	2,100	--	SEQM	6.7	h
11/23/2004	P	--	17.90	--	--	13,000	2,700	94	460	1,700	3,000	--	SEQM	6.9	
01/18/2005	P	--	14.20	--	--	16,000	2,100	390	570	2,500	2,200	--	SEQM	6.6	
06/29/2005	P	--	14.22	--	--	6,400	1,100	52	280	790	1,400	--	SEQM	7.2	
09/01/2005	P	--	17.22	--	--	7,900	2,000	94	400	870	2,000	--	SEQM	6.7	
11/03/2005	P	--	19.92	--	--	22,000	3,200	640	550	3,300	3,000	0.88	SEQM	6.8	
02/14/2006	P	--	15.40	--	--	3,500	<25	<25	<25	74	1,100	--	SEQM	6.8	
5/30/2006	P	--	13.43	--	--	8,600	1,400	120	490	1,300	1,400	--	SEQM	6.8	
8/29/2006	--	--	17.74	--	--	22,000	2,900	210	1,400	3,600	2,500	--	TAMC	6.9	
11/29/2006	P	--	20.25	--	--	15,000	4,000	110	770	2,700	2,700	0.61	TAMC	6.86	
2/20/2007	P	--	16.75	--	--	10,000	2,500	<50	550	1,300	920	1.15	TAMC	7.14	
5/25/2007	P	--	17.04	--	--	8,600	2,100	88	700	1,400	890	2.96	TAMC	6.95	
8/9/2007	**NP**	**--**	**19.76**	**--**	**--**	**4,800**	**870**	**40**	**230**	**460**	**530**	**0.26**	**TAMC**	**7.01**	
EX-2															
05/04/2004	P	--	16.65	--	--	<50	0.63	<0.50	<0.50	0.66	46	--	SEQM	6.7	h
08/31/2004	P	--	19.90	--	--	<250	<2.5	<2.5	<2.5	<2.5	130	--	SEQM	6.9	h
11/23/2004	P	--	18.36	--	--	<50	0.74	<0.50	0.83	3.0	5.8	--	SEQM	6.6	
01/18/2005	P	--	14.67	--	--	<50	<0.50	<0.50	<0.50	0.69	6.5	--	SEQM	6.5	
06/29/2005	P	--	14.60	--	--	<50	<0.50	<0.50	<0.50	0.50	24	--	SEQM	6.8	s
09/01/2005	P	--	17.28	--	--	<50	<0.50	1.4	<0.50	1.4	55	--	SEQM	7.0	
11/03/2005	P	--	20.42	--	--	<50	0.50	<0.50	<0.50	1.4	39	0.77	SEQM	6.9	
02/14/2006	P	--	14.54	--	--	220	<0.50	3.2	7.5	33	0.72	--	SEQM	7.0	
5/30/2006	P	--	13.35	--	--	<50	<0.50	<0.50	<0.50	0.70	7.8	--	SEQM	6.9	
8/29/2006	--	--	17.92	--	--	66	0.67	<0.50	0.79	1.9	94	--	TAMC	6.9	
11/29/2006	P	--	20.63	--	--	<50	<0.50	<0.50	<0.50	<0.50	4.4	--	TAMC	7.73	
2/20/2007	P	--	17.58	--	--	<50	<0.50	<0.50	<0.50	2.0	12	1.41	TAMC	7.77	
5/25/2007	P	--	17.23	0.01	--	<50	<0.50	<0.50	<0.50	<0.50	10	2.99	TAMC	7.30	
8/9/2007	**P**	**--**	**20.40**	**--**	**--**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**27**	**1.14**	**TAMC**	**7.19**	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-1															
1/5/1992	--	49.80	33.16	--	16.64	57,000	2,400	1,000	1,100	3,100	--	--	--	--	
1/10/1992	--	49.80	33.16	--	16.64	--	--	--	--	--	--	--	--	--	
6/5/1992	--	49.80	29.01	--	20.79	31,000	2,800	2,100	800	2,300	--	--	--	--	
7/24/1992	--	49.80	29.45	--	20.35	--	--	--	--	--	--	--	--	--	
7/27/1992	--	49.80	29.45	--	20.35	--	--	--	--	--	--	--	--	--	
9/15/1992	--	--	--	--	--	36,000	3,800	3,400	1,400	3,800	--	--	ANA	--	d
9/15/1992	--	49.80	30.53	--	19.27	40,000	3,400	3,000	1,300	3,400	--	--	ANA	--	c
12/15/1992	--	49.80	31.26	--	18.54	27,000	1,700	580	700	1,900	--	--	ANA	--	c
12/15/1992	--	--	--	--	--	22,000	1,500	440	510	1,300	--	--	ANA	--	d
3/15/1993	--	49.80	24.80	--	25.00	17,000	1,700	1,200	590	1,800	--	--	PACE	--	l
3/15/1993	--	--	--	--	--	15,000	1,100	860	440	1,400	--	--	PACE	--	d, l
6/7/1993	--	49.80	25.01	--	24.79	750	0.8	0.8	<0.5	<0.5	--	--	PACE	--	l
6/7/1993	--	--	--	--	--	720	0.7	0.7	<0.5	<0.5	--	--	PACE	--	d, l
9/23/1993	--	49.80	28.70	--	21.10	40,000	4,000	500	920	3,000	6,619	--	PACE	--	e, l
12/27/1993	--	--	--	--	--	21,000	1,700	380	830	2,400	9,219	--	PACE	--	e,l, d
12/27/1993	--	49.80	28.66	--	21.14	27,000	2,000	400	940	2,600	13,558	--	PACE	--	e, l
4/5/1994	--	--	--	--	--	29,000	3,700	1,000	1,000	3,100	9,672	1.3	PACE	--	e,l, d
4/5/1994	--	49.80	26.37	--	23.43	27,000	3,400	930	950	2,900	8,595	--	PACE	--	e,l,
7/22/1994	--	49.80	26.54	--	23.26	1,700	220	2.3	2	3.4	262	2.0	PACE	--	e,l
10/13/1994	--	49.80	27.46	--	22.34	1,200	250	21	<0.5	3.2	321	2.6	PACE	--	e,l
1/25/1995	--	49.80	20.96	--	28.84	1,000	420	8	13	4	--	--	ATI	--	
4/19/1995	--	49.80	19.59	--	30.21	5,200	420	51	230	340	--	6.0	ATI	--	
7/5/1995	--	49.80	19.61	--	30.19	320	4.2	<0.50	<0.50	<1.0	--	4.6	ATI	--	
10/5/1995	--	49.80	24.40	--	25.40	5,800	1,000	40	31	180	7,800	2.3	ATI	--	
1/12/1996	--	49.80	25.44	--	24.36	370	<0.50	<0.50	<0.50	<1.0	<5.0	3.7	ATI	--	
4/22/1996	--	49.80	18.02	--	31.78	<50	<0.5	<1	<1	<1	<10	3.9	SPL	--	
7/2/1996	--	49.80	19.72	--	30.08	--	--	--	--	--	--	--	--	--	
7/3/1996	--	49.80	--	--	--	<250	<2.5	<5	<5	<5	<50	3.6	SPL	--	
11/8/1996	--	49.80	19.98	--	29.82	<50	<0.5	<1.0	<1.0	<1.0	<10	4.3	SPL	--	
1/3/1997	--	49.80	19.49	--	30.31	<50	<0.5	14	<1.0	<1.0	<10	4.6	SPL	--	
4/28/1997	--	49.80	20.20	--	29.60	<50	<0.5	<1.0	<1.0	<1.0	<10	3.9	SPL	--	

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Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-1 Cont.															
7/1/1997	--	49.80	22.53	--	27.27	<50	<0.5	<1.0	<1.0	<1.0	<10	3.9	SPL	--	
10/2/1997	--	49.80	24.27	--	25.53	<50	<0.5	<1.0	<1.0	<1.0	<10	4.6	SPL	--	
1/9/1998	--	49.80	21.07	--	28.73	<50	<0.5	<1.0	<1.0	<1.0	<10	4.2	SPL	--	
5/6/1998	--	49.80	14.94	--	34.86	60	<0.5	<1.0	<1.0	<1.0	<10	3.8	SPL	--	
7/21/1998	--	49.80	15.11	--	34.69	70	<0.5	<1.0	<1.0	<1.0	<10	3.8	SPL	--	
12/30/1998	--	49.80	19.95	--	29.85	--	--	--	--	--	--	--	--	--	
2/2/1999	--	49.80	19.12	--	30.68	420	<1.0	<1.0	<1.0	<1.0	390	--	SPL	--	
5/10/1999	--	49.80	15.51	--	34.29	--	--	--	--	--	--	--	--	--	
9/23/1999	--	49.80	21.65	--	28.15	440	49	<1.0	<1.0	<1.0	910	--	SPL	--	
12/23/1999	--	49.80	22.32	--	27.48	--	--	--	--	--	--	--	--	--	
3/27/2000	--	49.80	15.72	--	34.08	2,500	230	3	83	36	4,400	--	PACE	--	
5/22/2000	--	49.80	16.92	--	32.88	--	--	--	--	--	--	--	--	--	
8/31/2000	--	49.80	20.12	--	29.68	1,700	18	5.5	7.9	5	510	--	PACE	--	
12/11/2000	--	49.80	20.72	--	29.08	--	--	--	--	--	--	--	--	--	
3/20/2001	--	49.80	15.91	--	33.89	880	38.2	<0.5	24.1	<1.5	391	--	PACE	--	
6/19/2001	--	49.80	18.38	--	31.42	--	--	--	--	--	--	--	--	--	
9/20/2001	--	49.80	21.23	--	28.57	3,200	400	19.8	42	32.5	2,510	--	PACE	--	
12/27/2001	--	49.80	16.72	--	33.08	750	70.1	0.536	4.74	3.76	649	--	PACE	--	
2/28/2002	--	49.80	15.25	--	34.55	<50	<0.5	<0.5	<0.5	<1.0	8.7	--	PACE	--	
6/28/2002	--	49.80	16.57	--	33.23	110	0.977	<0.5	0.818	<1.0	8.35	--	PACE	--	
9/12/2002	--	49.80	18.41	--	31.39	98	2.7	1.5	1.5	5.4	48	--	SEQ	6.9	
12/12/2002	--	49.80	20.26	--	29.54	210	1.9	<0.50	<0.50	<0.50	32	--	SEQ	6.8	
3/10/2003	--	49.80	16.22	--	33.58	<50	<0.50	<0.50	<0.50	<0.50	3.2	--	SEQ	6.9	
5/12/2003	--	49.80	14.30	--	35.50	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	SEQ	7.1	
8/27/2003	--	49.80	18.15	--	31.65	<50	<0.50	<0.50	<0.50	<0.50	4.2	--	SEQ	7.1	n
11/10/2003	P	49.80	19.24	--	30.56	<50	<0.50	<0.50	<0.50	<0.50	0.51	--	SEQM	6.8	
02/03/2004	P	49.80	14.84	--	34.96	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.0	
05/04/2004	P	49.80	14.67	--	35.13	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.1	
08/31/2004	P	49.80	17.75	--	32.05	<50	<0.50	<0.50	<0.50	<0.50	0.50	--	SEQM	7.1	
11/23/2004	--	49.80	16.03	--	33.77	--	--	--	--	--	--	--	--	--	
01/18/2005	P	49.80	12.47	--	37.33	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.9	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-1 Cont.															
06/29/2005	--	49.80	12.65	--	37.15	--	--	--	--	--	--	--	--	--	
09/01/2005	--	49.80	15.79	--	34.01	--	--	--	--	--	--	--	--	--	
11/03/2005	--	49.80	18.55	--	31.25	--	--	--	--	--	--	--	--	--	
02/14/2006	P	49.80	12.29	--	37.51	51	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.0	w
5/30/2006	--	49.80	12.15	--	37.65	--	--	--	--	--	--	--	--	--	
8/29/2006	--	49.80	16.37	--	33.43	--	--	--	--	--	--	--	--	--	
11/29/2006	--	49.80	18.73	--	31.07	--	--	--	--	--	--	--	--	--	
2/20/2007	P	49.80	14.71	--	35.09	110	<0.50	<0.50	0.58	<0.50	<0.50	3.52	TAMC	7.51	
5/25/2007	--	49.80	15.59	--	34.21	--	--	--	--	--	--	--	--	--	
8/9/2007	--	**49.80**	**18.38**	--	**31.42**	--	--	--	--	--	--	--	--	--	
MW-2															
1/5/1992	--	51.07	--	--	--	--	--	--	--	--	--	--	--	--	r
1/10/1992	--	51.07	--	--	--	--	--	--	--	--	--	--	--	--	r
6/5/1992	--	51.07	30.05	--	21.02	11,000	2,000	180	490	1,900	--	--	--	--	
7/24/1992	--	51.07	30.72	--	20.35	--	--	--	--	--	--	--	--	--	
7/27/1992	--	51.07	30.52	--	20.55	--	--	--	--	--	--	--	--	--	
9/15/1992	--	51.07	31.56	--	19.51	75,000	2,000	6,500	2,300	13,000	--	--	ANA	--	c
12/15/1992	--	51.07	32.40	--	18.67	34,000	6,200	8,900	2,000	7,900	--	--	ANA	--	c
3/15/1993	--	51.07	26.14	--	24.93	150,000	12,000	18,000	3,200	22,000	82,000	--	PACE	--	e
6/7/1993	--	51.07	26.38	--	24.69	--	--	--	--	--	--	--	--	--	f
9/23/1993	--	51.07	31.43	1.92	17.72	--	--	--	--	--	--	--	--	--	f
12/27/1993	--	51.07	34.07	1.07	15.93	--	--	--	--	--	--	--	--	--	f
4/5/1994	--	51.07	30.44	3.30	17.33	--	--	--	--	--	--	--	--	--	f
7/22/1994	--	51.07	28.51	0.80	21.76	--	--	--	--	--	--	--	--	--	f
10/13/1994	--	51.07	29.33	0.70	21.04	--	--	--	--	--	--	--	--	--	f
1/25/1995	--	51.07	25.55	4.25	21.27	--	--	--	--	--	--	--	--	--	f
4/19/1995	--	51.07	19.78	0.12	31.17	--	--	--	--	--	--	--	--	--	f
7/5/1995	--	51.07	20.88	0.09	30.10	140,000	14,000	30,000	3,500	26,000	--	--	ATI	--	
10/5/1995	--	51.07	24.68	0.10	26.29	--	--	--	--	--	--	--	--	--	f
1/12/1996	--	51.07	25.72	0.06	25.29	--	--	--	--	--	--	--	--	--	f

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-2 Cont.															
4/22/1996	--	51.07	19.33	0.08	31.66	--	--	--	--	--	--	--	--	--	
7/2/1996	--	51.07	20.01	0.04	31.02	--	--	--	--	--	--	--	--	--	f
11/8/1996	--	51.07	20.28	0.01	30.78	--	--	--	--	--	--	--	--	--	f
1/3/1997	--	51.07	19.87	0.02	31.18	--	--	--	--	--	--	--	--	--	f
4/28/1997	--	51.07	20.59	0.01	30.47	560,000	1,200	1,300	290	2,310	6,100	3.9	SPL	--	f
7/1/1997	--	--	--	--	--	150,000	14,000	13,000	1,800	14,200	57,000	--	SPL	--	
7/1/1997	--	51.07	22.90	0.01	28.16	24,000	15,000	16,000	4,900	24,400	63,000	3.7	SPL	--	d
10/2/1997	--	51.07	24.65	0.02	26.40	--	--	--	--	--	--	--	--	--	
10/3/1997	--	51.07	--	--	--	250,000	32,000	39,000	6,000	42,000	160,000	4.5	SPL	--	
1/9/1998	--	--	--	--	--	300,000	20,000	25,000	5,200	37,000	84,000	--	SPL	--	
1/9/1998	--	51.07	21.22	0.01	29.84	420,000	23,000	29,000	5,800	43,000	75,000	4.0	SPL	--	d
2/2/1998	--	51.07	20.11	--	30.96	410,000	27,000	43,000	6,700	50,000	20,000	--	SPL	--	
5/6/1998	--	51.07	15.10	0.01	35.96	180,000	25,000	26,000	3,400	22,900	35,000	3.7	SPL	--	
7/21/1998	--	51.07	15.31	0.01	35.75	270,000	21,000	20,000	2,700	18,800	34,000	3.8	SPL	--	
12/30/1998	--	51.07	21.10	0.10	29.87	300,000	22,000	24,000	4,200	26,000	89000/95000	--	SPL	--	j
5/10/1999	--	51.07	16.68	--	34.39	220,000	20,000	20,000	2,800	20,000	100,000	--	SPL	--	
9/23/1999	--	51.07	22.50	--	28.57	160,000	21,000	24,000	2,900	20,000	44,000	--	SPL	--	
12/23/1999	--	51.07	22.64	--	28.43	170,000	25,000	41,000	3,100	24,000	40,000	--	PACE	--	k
3/27/2000	--	51.07	16.88	--	34.19	140,000	15,000	25,000	3,400	21,000	19,000	--	PACE	--	
5/22/2000	--	51.07	17.75	--	33.32	150,000	18,000	31,000	3,500	22,000	26,000	--	PACE	--	
8/31/2000	--	51.07	21.97	--	29.10	200,000	16,000	26,000	2,500	16,000	38,000	--	PACE	--	
12/11/2000	--	51.07	22.05	--	29.02	130,000	18,600	30,000	3,250	20,600	21,700	--	PACE	--	
3/20/2001	--	51.07	17.75	--	33.32	140,000	15,900	24,800	3,700	22,100	12,900	--	PACE	--	
6/19/2001	--	51.07	20.15	--	30.92	130,000	15,100	19,500	3,300	21,400	20,300	--	PACE	--	
9/20/2001	--	51.07	22.14	--	28.93	110,000	12,400	12,600	2,230	13,000	39,500	--	PACE	--	
12/27/2001	--	51.07	18.17	--	32.90	150,000	17,500	26,000	3,050	19,500	27,500	--	PACE	--	
2/28/2002	--	51.07	17.42	--	33.65 1	120,000	13,900	18,800	3,030	19,600	17,300	--	PACE	--	
6/28/2002	--	51.07	17.04	--	34.03 2	3,700	190	23.3	139	287	826	--	PACE	--	n
9/12/2002	--	51.07	19.52	--	31.55 3	100,000	13,000	22,000	3,600	20,000	18,000	--	SEQ	6.6	
12/12/2002	--	51.07	21.08	--	29.99 4	120,000	13,000	21,000	4,400	25,000	16,000	--	SEQ	6.6	
3/10/2003	--	51.07	17.84	--	33.23 5	100,000	17,000	21,000	3,400	20,000	4,400	--	SEQ	6.8	

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Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-2 Cont.															
5/12/2003	--	51.07	16.66	--	34.41 6	150,000	16,000	24,000	3,500	22,000	3,600	--	SEQ	7.1	
8/27/2003	--	51.07	19.65	--	31.42 7	120,000	14,000	12,000	3,900	20,000	5,100	--	SEQ	6.9	n
11/10/2003	P	51.07	20.80	--	30.27 8	97,000	12,000	9,500	3,600	15,000	4,200	--	SEQM	6.7	
02/03/2004	P	51.07	16.82	--	34.25 9	130,000	14,000	19,000	3,400	20,000	1,900	--	SEQM	6.8	
05/04/2004	P	51.07	16.19	--	34.88 10	120,000	12,000	16,000	3,700	22,000	2,500	--	SEQM	6.7	
08/31/2004	P	51.07	19.50	--	31.57 11	99,000	10,000	13,000	3,700	18,000	3,400	--	SEQM	6.8	
11/23/2004	P	51.07	18.20	--	32.87 12	110,000	8,200	17,000	4,000	23,000	2,400	--	SEQM	6.7	s
01/18/2005	P	51.07	14.91	--	36.16 13	96,000	6,500	14,000	3,500	21,000	3,700	--	SEQM	6.6	
06/29/2005	P	51.07	13.98	--	37.09 14	54,000	6,200	4,900	3,300	12,000	3,600	--	SEQM	7.3	
09/01/2005	P	51.07	17.00	--	34.07 15	58,000	6,300	6,000	3,300	15,000	5,100	--	SEQM	7.0	
11/03/2005	P	51.07	20.25	--	30.82 16	63,000	7,400	3,700	3,300	10,000	3,700	0.66	SEQM	6.7	
02/14/2006	P	51.07	13.72	--	37.35 17	97,000	7,500	11,000	4,300	16,000	3,400	--	SEQM	6.9	
5/30/2006	P	51.07	13.50	--	37.57 18	28,000	5,200	2,500	1,500	3,300	2,300	--	SEQM	6.7	
8/29/2006	--	51.07	18.16	--	32.91 19	65,000	7,200	4,500	3,200	11,000	13,000	--	TAMC	6.7	
11/29/2006	P	51.07	20.06	--	31.01 20	46,000	8,500	4,600	3,300	10,000	11,000	0.56	TAMC	6.91	
2/20/2007	P	51.07	16.43	--	34.64 21	78,000	9,700	12,000	4,100	16,000	10,000	1.08	TAMC	7.11	
5/25/2007	P	51.07	16.80	SHEEN	34.27 22	62,000	7,400	9,500	4,100	15,000	3,400	0.10	TAMC	6.83	
8/9/2007	**P**	**51.07**	**19.55**	**SHEEN**	**31.52 23**	**58,000**	**7,400**	**5,000**	**3,800**	**12,000**	**4,100**	**0.72**	**TAMC**	**7.01**	
MW-3															
1/5/1992	--	49.95	33.69	--	16.26	7,400	790	23	210	40	--	--	--	--	
1/10/1992	--	49.95	33.74	--	16.21	--	--	--	--	--	--	--	--	--	
6/5/1992	--	49.95	29.65	--	20.30	2,000	130	5.3	93	20	--	--	--	--	
7/24/1992	--	49.95	30.14	--	19.81	--	--	--	--	--	--	--	--	--	
7/27/1992	--	49.95	30.14	--	19.81	--	--	--	--	--	--	--	--	--	
9/15/1992	--	49.95	31.07	--	18.88	450	55	3.1	34	7.1	--	--	ANA	--	
12/15/1992	--	49.95	31.93	--	18.02	12,000	940	<50	310	120	--	--	ANA	--	c
3/15/1993	--	49.95	25.71	--	24.24	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	l
6/7/1993	--	49.95	25.80	--	24.15	150	3.6	<0.5	0.9	1.3	--	--	PACE	--	l
9/23/1993	--	49.95	29.18	--	20.77	--	--	--	--	--	--	--	--	--	
9/24/1993	--	49.95	--	--	--	160	8.4	<0.5	3.7	1.3	15.3	--	PACE	--	l

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						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-3 Cont.															
12/27/1993	--	49.95	29.25	--	20.70	9,400	1,100	48	530	120	2,871	--	PACE	--	c,l
4/5/1994	--	49.95	26.84	--	23.11	7,000	860	19	330	52	10,414	2.0	PACE	--	l
7/22/1994	--	49.95	26.90	--	23.05	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.1	PACE	--	l
10/13/1994	--	49.95	27.83	--	22.12	<50	<0.5	<0.5	<0.5	<0.5	<5.0	2.6	PACE	--	l
1/25/1995	--	49.95	21.65	--	28.30	<50	<0.5	<0.5	<0.5	<1	--	--	ATI	--	
4/19/1995	--	49.95	19.33	--	30.62	2,400	170	8	130	27	--	5.0	ATI	--	
7/5/1995	--	49.95	20.27	--	29.68	<50	<0.50	<0.50	<0.50	<1.0	--	4.4	ATI	--	
10/5/1995	--	49.95	23.73	--	26.22	2,300	210	3.1	10	5.1	2,400	4.2	ATI	--	
1/12/1996	--	49.95	24.84	--	25.11	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.1	ATI	--	
4/22/1996	--	49.95	18.60	--	31.35	<50	<0.5	<1	<1	<1	<10	4.4	SPL	--	
7/2/1996	--	49.95	18.88	--	31.07	<50	<0.5	<1	<1	<1	<10	4.2	SPL	--	
11/8/1996	--	49.95	19.14	--	30.81	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	SPL	--	
1/3/1997	--	49.95	18.72	--	31.23	<50	<0.5	<1.0	<1.0	<1.0	<10	4.6	SPL	--	
4/28/1997	--	49.95	19.38	--	30.57	<50	<0.5	<1.0	<1.0	<1.0	<10	4.2	SPL	--	
7/1/1997	--	49.95	21.65	--	28.30	<50	<0.5	<1.0	<1.0	<1.0	<10	3.8	SPL	--	
10/2/1997	--	49.95	23.45	--	26.50	<50	<0.5	<1.0	<1.0	<1.0	<10	4.5	SPL	--	
1/9/1998	--	49.95	20.10	--	29.85	<50	<0.5	<1.0	<1.0	<1.0	<10	4.1	SPL	--	
5/6/1998	--	49.95	15.57	--	34.38	<50	<0.5	<1.0	<1.0	<1.0	<10	3.8	SPL	--	
7/21/1998	--	--	--	--	--	60	<0.5	<1.0	<1.0	<1.0	<10	--	SPL	--	d
7/21/1998	--	49.95	15.88	--	34.07	51	<0.5	<1.0	<1.0	<1.0	<10	3.8	SPL	--	
12/30/1998	--	49.95	20.30	--	29.65	--	--	--	--	--	--	--	SPL	--	
2/2/1999	--	49.95	19.75	--	30.20	<50	<1.0	<1.0	<1.0	<1.0	<10	--	SPL	--	
5/10/1999	--	49.95	16.17	--	33.78	--	--	--	--	--	--	--	--	--	
9/23/1999	--	49.95	22.05	--	27.90	--	--	--	--	--	--	--	--	--	
12/23/1999	--	49.95	22.55	--	27.40	--	--	--	--	--	--	--	--	--	
3/27/2000	--	49.95	16.40	--	33.55	350	22	<0.5	<0.5	<0.5	580	--	PACE	--	
5/22/2000	--	49.95	9.49	--	40.46	--	--	--	--	--	--	--	--	--	t
8/31/2000	--	49.95	13.02	--	36.93	--	--	--	--	--	--	--	--	--	t
12/11/2000	--	49.95	13.30	--	36.65	--	--	--	--	--	--	--	--	--	t
3/20/2001	--	49.95	16.49	--	33.46	1,000	66.4	0.597	6.96	<1.5	398	--	PACE	--	
6/19/2001	--	49.95	18.82	--	31.13	--	--	--	--	--	--	--	--	--	

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Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-3 Cont.															
9/20/2001	--	49.95	21.59	--	28.36	230	<0.5	0.593	<0.5	<1.5	289	--	PACE	--	
12/27/2001	--	49.95	17.37	--	32.58	--	--	--	--	--	--	--	--	--	
2/28/2002	--	49.95	15.81	--	34.14	<50	<0.5	<0.5	<0.5	<1.0	0.58	--	PACE	--	
6/28/2002	--	49.95	17.09	--	32.86	--	--	--	--	--	--	--	--	--	
9/12/2002	--	49.95	18.80	--	31.15	52	3.3	8.6	1.7	12	11	--	SEQ	7.0	
12/12/2002	--	49.95	20.57	--	29.38	--	--	--	--	--	--	--	--	--	
3/10/2003	--	49.95	16.68	--	33.27	<50	<0.50	<0.50	<0.50	<0.50	<2.5	--	SEQ	7.0	
5/12/2003	--	49.95	14.72	--	35.23	--	--	--	--	--	--	--	--	--	
8/27/2003	--	49.95	18.50	--	31.45	<50	<0.50	<0.50	<0.50	0.5	<0.50	--	--	7.1	n
11/10/2003	--	49.95	19.66	--	30.29	--	--	--	--	--	--	--	--	--	
02/03/2004	P	49.95	15.33	--	34.62	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.0	
08/31/2004	P	49.95	18.13	--	31.82	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.1	
11/23/2004	--	49.95	16.48	--	33.47	--	--	--	--	--	--	--	--	--	
01/18/2005	P	49.95	13.06	--	36.89	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.9	
06/29/2005	--	49.95	13.00	--	36.95	--	--	--	--	--	--	--	--	--	
09/01/2005	--	49.95	16.00	--	33.95	--	--	--	--	--	--	--	--	--	
11/03/2005	--	49.95	18.91	--	31.04	--	--	--	--	--	--	--	--	--	
02/14/2006	P	49.95	12.90	--	37.05	86	<0.50	<0.50	<0.50	0.55	<0.50	--	SEQM	7.3	
5/30/2006	--	49.95	12.55	--	37.40	--	--	--	--	--	--	--	--	--	
8/29/2006	--	49.95	16.68	--	33.27	--	--	--	--	--	--	--	--	--	
11/29/2006	--	49.95	19.10	--	30.85	--	--	--	--	--	--	--	--	--	
2/20/2007	P	49.95	15.29	--	34.66	56	<0.50	<0.50	<0.50	<0.50	0.89	2.27	TAMC	7.59	
5/25/2007	--	49.95	15.94	--	34.01	--	--	--	--	--	--	--	--	--	
8/9/2007	--	49.95	18.70	--	31.25	--	--	--	--	--	--	--	--	--	
MW-4															
7/24/1992	--	50.76	30.02	--	20.74	42,000	3,200	3,600	1,400	4,100	--	--	--	--	
7/27/1992	--	50.76	30.02	--	20.74	--	--	--	--	--	--	--	--	--	
9/15/1992	--	50.76	31.14	--	19.62	55,000	7,600	13,000	2,800	9,500	--	--	ANA	--	c
12/15/1992	--	50.76	31.98	--	18.78	36,000	3,700	4,700	1,200	4,000	--	--	ANA	--	c
3/15/1993	--	50.76	25.34	--	25.42	69,000	7,600	15,000	2,500	11,000	--	--	PACE	--	l

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						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-4 Cont.															
6/7/1993	--	50.76	25.67	--	25.09	73,000	10,000	19,000	3,400	14,000	--	--	PACE	--	l
9/23/1993	--	50.76	29.37	--	21.39	--	--	--	--	--	--	--	--	--	
9/24/1993	--	50.76	--	--	--	68,000	11,000	2,100	8,600	990	390	--	PACE	--	l
9/24/1993	--	--	--	--	--	59,000	5,300	10,000	2,200	8,400	309	--	PACE	--	d
12/27/1993	--	50.76	29.40	--	21.36	32,000	2,500	4,400	1,300	4,400	387	--	PACE	--	l
4/5/1994	--	50.76	27.09	--	23.67	64,000	6,500	14,000	1,900	9,600	413	1.4	PACE	--	l
7/22/1994	--	--	--	--	--	85,000	11,000	21,000	3,300	14,000	435	--	PACE	--	d, l
7/22/1994	--	50.76	27.33	--	23.43	85,000	10,000	20,000	3,200	13,000	796	0.8	PACE	--	l
10/13/1994	--	--	--	--	--	51,000	7,400	13,000	2,100	9,100	773	--	PACE	--	d, l
10/13/1994	--	50.76	28.25	--	22.51	51,000	7,100	13,000	2,100	8,900	506	2.9	PACE	--	c,l
1/25/1995	--	--	--	--	--	28,000	4,200	12,000	1,500	7,800	--	--	ATI	--	d, l
1/25/1995	--	50.76	21.85	--	28.91	26,000	3,600	9,600	1,200	6,400	--	--	ATI	--	
4/19/1995	--	50.76	19.44	--	31.32	89,000	12,000	24,000	3,500	18,000	--	5.1	ATI	--	
4/19/1995	--	--	--	--	--	100,000	12,000	26,000	3,800	21,000	--	--	ATI	--	d
7/5/1995	--	50.76	20.52	--	30.24	130,000	13,000	29,000	3,300	25,000	--	4.3	ATI	--	
10/5/1995	--	50.76	24.23	--	26.53	110,000	10,000	23,000	3,600	17,000	34,000	2.1	ATI	--	
1/12/1996	--	--	--	--	--	40,000	3,500	9,000	1,200	8,700	4,300	--	ATI	--	d
1/12/1996	--	50.76	25.34	--	25.42	46,000	3,500	8,300	1,100	8,000	3,000	3.3	ATI	--	
4/22/1996	--	50.76	19.13	--	31.63	40,000	5,100	9,600	980	11,800	29,000	3.2	SPL	--	
4/22/1996	--	--	--	--	--	61,000	8,300	16,000	1,600	15,200	36,000	--	SPL	--	d
7/2/1996	--	--	--	--	--	78,000	9,800	21,000	1,900	15,300	42,000	--	SPL	--	d
7/2/1996	--	50.76	20.67	--	30.09	74,000	9,800	21,000	2,100	16,600	41,000	3.4	SPL	--	
11/8/1996	--	--	--	--	--	110,000	9,100	20,000	3,000	15,400	39,000	--	SPL	--	d
11/8/1996	--	50.76	20.95	--	29.81	100,000	7,900	16,000	2,500	13,700	37,000	3.7	SPL	--	
1/3/1997	--	--	--	--	--	66,000	12,000	19,000	2,900	15,000	69,000	--	SPL	--	d
1/3/1997	--	50.76	20.54	--	30.22	99,000	17,000	30,000	4,300	22,700	79,000	4.2	SPL	--	
4/28/1997	--	--	--	--	--	110,000	11,000	26,000	3,200	18,200	34,000	--	SPL	--	d
4/28/1997	--	50.76	21.28	--	29.48	130,000	12,000	28,000	3,800	21,000	37,000	3.9	SPL	--	
7/1/1997	--	50.76	23.61	--	27.15	110,000	16,000	25,000	4,900	24,400	37,000	3.6	SPL	--	
10/2/1997	--	50.76	25.39	--	25.37	--	--	--	--	--	--	--	--	--	
10/3/1997	--	--	--	--	--	71,000	8,600	8,700	2,900	13,500	84,000	--	SPL	--	d

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-4 Cont.															
10/3/1997	--	50.76	--	--	--	66,000	8,200	8,600	2,700	13,400	80,000	4.4	SPL	--	
1/9/1998	--	50.76	21.25	--	29.51	100,000	9,700	3,200	1,500	4,700	92,000	3.8	SPL	--	
5/6/1998	--	--	--	--	--	440,000	8,000	39,000	14,000	70,000	<5000	--	SPL	--	d
5/6/1998	--	50.76	15.96	--	34.80	430,000	6,900	31,000	11,000	56,000	<5000	3.9	SPL	--	
7/21/1998	--	--	--	--	--	210,000	11,000	27,000	5,600	26,800	29,000	--	SPL	--	d
7/21/1998	--	50.76	16.10	--	34.66	250,000	11,000	26,000	5,500	26,900	29,000	3.7	SPL	--	
12/30/1998	--	50.76	20.91	--	29.85	370,000	11,000	22,000	8,500	40,000	90000/92000	--	SPL	--	j
2/2/1999	--	50.76	20.13	--	30.63	190,000	4,100	19,000	4,800	32,000	28,000	--	SPL	--	
5/10/1999	--	50.76	16.63	--	34.13	2,700	23	7.1	8.1	25	120	--	SPL	--	
9/23/1999	--	50.76	22.48	--	28.28	180,000	11,000	29,000	7,000	38,000	12,000	--	SPL	--	
12/23/1999	--	50.76	22.94	--	27.82	66,000	6,300	5,200	2,200	7,800	35,000	--	PACE	--	k
3/27/2000	--	50.76	16.84	--	33.92	120,000	8,700	12,000	3,800	16,000	27,000	--	PACE	--	
5/22/2000	--	50.76	17.85	--	32.91	110,000	7,600	16,000	4,400	20,000	25,000	--	PACE	--	
8/31/2000	--	50.76	21.71	--	29.05	110,000	8,800	7,600	3,400	14,000	18,000	--	PACE	--	
12/11/2000	--	50.76	22.05	--	28.71	70,000	4,580	3,480	2,550	9,220	24,400	--	PACE	--	
3/20/2001	--	50.76	17.68	--	33.08	100,000	7,100	4,530	2,540	9,370	63,100	--	PACE	--	
6/19/2001	--	50.76	19.40	--	31.36	180,000	7,430	14,600	5,400	25,300	36,100	--	PACE	--	
9/20/2001	--	50.76	22.01	0.03	28.75	--	--	--	--	--	--	--	--	--	f, m
12/27/2001	--	50.76	17.96	--	32.80	120,000	6,880	9,030	2,840	14,600	32,300	--	PACE	--	
2/28/2002	--	50.76	17.06	--	33.70 1	80,000	4,920	5,450	2,220	12,300	35,900	--	PACE	--	
6/28/2002	--	50.76	17.76	--	33.00 2	48,000	2,780	2,770	1,530	6,790	25,100	--	PACE	--	
9/12/2002	--	50.76	19.45	--	31.31 3	46,000	4,500	6,800	2,600	10,000	9,100	--	SEQ	6.8	
12/12/2002	--	50.76	21.29	--	29.47 4	36,000	5,200	3,400	2,000	6,500	12,000	--	SEQ	6.7	
3/10/2003	--	50.76	17.16	--	33.60 5	70,000	7,000	4,800	3,300	13,000	29,000	--	SEQ	6.7	
5/12/2003	--	50.76	14.51	--	36.25 6	75,000	7,600	3,700	3,400	13,000	26,000	--	SEQ	6.8	
8/27/2003	--	50.76	19.32	--	31.44 7	77,000	7,500	1,300	2,100	4,000	32,000	--	SEQ	6.8	
11/10/2003	P	50.76	20.36	--	30.40 8	110,000	7,100	3,100	2,100	5,800	25,000	--	SEQM	6.6	n, s
02/03/2004	P	50.76	16.51	--	34.25 9	160,000	8,400	9,700	5,000	23,000	26,000	--	SEQM	6.7	
05/04/2004	P	50.76	16.47	--	34.29 10	110,000	8,100	7,500	4,300	17,000	<250	--	SEQM	6.7	
08/31/2004	P	50.76	19.16	--	31.60 11	91,000	6,600	8,400	3,700	14,000	14,000	--	SEQM	6.7	
11/23/2004	P	50.76	18.02	--	32.74 12	7,400,000	20,000	150,000	320,000	1,400,000	23,000	--	SEQM	6.6	s

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Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-4 Cont.															
01/18/2005	P	50.76	14.21	--	36.55 13	170,000	5,400	14,000	6,900	33,000	8,800	--	SEQM	6.5	s
06/29/2005	P	50.76	13.86	--	36.90 14	640,000	3,500	25,000	24,000	110,000	1,700	--	SEQM	7.2	
09/01/2005	P	50.76	16.89	--	33.87 15	100,000	3,800	11,000	4,900	33,000	1,100	--	SEQM	6.7	
11/03/2005	P	50.76	19.33	--	31.43 16	490,000	4,700	11,000	10,000	49,000	1,500	0.5	SEQM	6.6	
02/14/2006	P	50.76	13.55	--	37.21 17	970,000	60,000	7,000	36,000	140,000	38,000	--	SEQM	6.8	s
5/30/2006	P	50.76	13.52	--	37.24 18	140,000	3,000	6,600	6,200	29,000	560	--	SEQM	6.6	
8/29/2006	--	50.76	17.52	--	33.24 19	52,000	4,700	2,500	3,500	12,000	1,800	--	TAMC	6.7	
11/29/2006	--	50.76	19.93	0.11	30.91 20	--	--	--	--	--	--	--	--	--	f
2/20/2007	P	50.76	16.14	SHEEN	34.62 21	68,000	8,400	2,600	4,100	13,000	15,000	1.03	TAMC	6.95	
5/25/2007	P	50.76	16.65	SHEEN	34.11 22	37,000	5,100	1,200	2,800	6,900	3,500	1.13	TAMC	6.82	
8/9/2007	**P**	**50.76**	**19.29**	**--**	**31.47 23**	**180,000**	**5,600**	**7,700**	**5,700**	**21,000**	**2,900**	**0.72**	**TAMC**	**7.02**	**y (XYLENES)**
MW-6															
7/24/1992	--	50.32	30.63	--	19.69	--	1.6	--	--	--	--	--	--	--	
7/27/1992	--	50.32	30.63	--	19.69	--	--	--	--	--	--	--	--	--	
9/15/1992	--	50.32	31.52	--	18.80	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	
12/15/1992	--	50.32	32.42	--	17.90	58	1.3	<0.5	<0.5	<0.5	--	--	ANA	--	
3/15/1993	--	50.32	26.29	--	24.03	<50	<0.5	0.6	<0.5	0.7	--	--	PACE	--	l
6/7/1993	--	50.32	26.33	--	23.99	<50	<0.5	<0.5	<0.5	1.5	--	--	PACE	--	l
9/23/1993	--	50.32	29.64	--	20.68	--	--	--	--	--	--	--	--	--	
9/24/1993	--	50.32	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	28.5	--	PACE	--	l
12/27/1993	--	50.32	29.75	--	20.57	<50	<0.5	<0.5	<0.5	<0.5	55.4	--	PACE	--	e,l
4/5/1994	--	50.32	27.26	--	23.06	<50	<0.5	<0.5	<0.5	<0.5	295	1.7	PACE	--	e,l
7/22/1994	--	50.32	27.34	--	22.98	350	<0.5	<0.5	<0.5	<0.5	419	4.5	PACE	--	e,l
10/13/1994	--	50.32	--	--	--	--	--	--	--	--	--	--	--	--	g
1/25/1995	--	50.32	22.16	--	28.16	240	6	<0.5	<0.5	<1	--	--	ATI	--	
4/19/1995	--	50.32	--	--	--	--	--	--	--	--	--	--	--	--	g
7/5/1995	--	50.32	20.80	--	29.52	180	<0.50	<0.50	<0.50	<1.0	--	4.9	ATI	--	
10/5/1995	--	50.32	24.20	--	26.12	860	<5.0	<5.0	<5.0	<10	3,600	2.8	ATI	--	
1/12/1996	--	50.32	25.30	--	25.02	860	<5.0	<5.0	<5.0	<10	2,800	4.2	ATI	--	
4/22/1996	--	50.32	19.13	--	31.19	<50	<0.5	<1	<1	<1	470	4.3	SPL	--	

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Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-6 Cont.															
7/2/1996	--	50.32	20.66	--	29.66	100	<0.5	<1	<1	<1	1,100	4.2	SPL	--	
11/8/1996	--	50.32	20.98	--	29.34	1,100	<5	<10	<10	<10	1,500	4.3	SPL	--	
1/3/1997	--	50.32	20.53	--	29.79	<50	<0.5	<1.0	<1.0	<1.0	450	4.5	SPL	--	
4/28/1997	--	50.32	21.25	--	29.07	1,400	<0.5	<1.0	<1.0	<1.0	3,500	4.4	SPL	--	
7/1/1997	--	50.32	23.40	--	26.92	6,100	<0.5	<1.0	<1.0	<1.0	9,100	3.9	SPL	--	
10/2/1997	--	50.32	25.16	--	25.16	--	--	--	--	--	--	--	--	--	
10/3/1997	--	50.32	--	--	--	330	<0.5	<1.0	<1.0	<1.0	2,600	4.4	SPL	--	
1/9/1998	--	50.32	21.13	--	29.19	<50	<0.5	<1.0	<1.0	<1.0	<10	4.3	SPL	--	
5/6/1998	--	50.32	16.11	--	34.21	410	<0.5	<1.0	<1.0	<1.0	500	3.6	SPL	--	
7/21/1998	--	50.32	16.33	--	33.99	4,300	<5	<10	<10	<10	3,800	4.0	SPL	--	
12/30/1998	--	50.32	20.89	--	29.43	--	--	--	--	--	--	--	--	--	
2/2/1999	--	50.32	20.20	--	30.12	--	--	--	--	--	--	--	--	--	
5/10/1999	--	50.32	16.75	--	33.57	--	--	--	--	--	--	--	--	--	
9/23/1999	--	50.32	22.55	--	27.77	<50	<1.0	<1.0	<1.0	<1.0	1,600	--	SPL	--	
12/23/1999	--	50.32	23.00	--	27.32	--	--	--	--	--	--	--	--	--	
3/27/2000	--	50.32	16.89	--	33.43	1,700	4.4	0.54	<0.5	1	14,000	--	PACE	--	
5/22/2000	--	50.32	18.02	--	32.30	--	--	--	--	--	--	--	--	--	
8/31/2000	--	50.32	21.62	--	28.70	1,200	<0.5	<0.5	<0.5	<0.5	3,900	--	PACE	--	
12/11/2000	--	50.32	21.81	--	28.51	--	--	--	--	--	--	--	--	--	
3/20/2001	--	50.32	16.97	--	33.35	3,300	<0.5	<0.5	<0.5	<1.5	3,760	--	PACE	--	
6/19/2001	--	50.32	19.30	--	31.02	--	--	--	--	--	--	--	--	--	
9/20/2001	--	50.32	22.00	--	28.32	2,200	2.04	8.1	3.62	13.7	2,460	--	PACE	--	
12/27/2001	--	50.32	17.85	--	32.47	830	0.59	<0.5	<0.5	<1.0	1,040	--	PACE	--	
2/28/2002	--	50.32	16.31	--	34.01	1,100	<0.5	<0.5	<0.5	<1.0	1,450	--	PACE	--	
6/28/2002	--	50.32	17.57	--	32.75	<50	<0.5	<0.5	<0.5	<1.0	1,020	--	PACE	--	
9/12/2002	--	50.32	19.27	--	31.05	190	1.9	4.6	1	7.3	480	--	SEQ	7.1	
12/12/2002	--	50.32	20.94	--	29.38	270	<2.5	<2.5	<2.5	<2.5	500	--	SEQ	6.9	
3/10/2003	--	50.32	17.11	--	33.21	110	<0.50	<0.50	<0.50	<0.50	190	--	SEQ	7.0	
5/12/2003	--	50.32	15.18	--	35.14	<50	<0.50	<0.50	<0.50	<0.50	36	--	SEQ	7.0	
8/27/2003	--	50.32	18.90	--	31.42	<50	<0.50	<0.50	<0.50	<0.50	8.9	--	SEQ	7.0	n
11/10/2003	P	50.32	20.13	--	30.19	<50	<0.50	<0.50	<0.50	<0.50	4.5	--	SEQM	6.8	

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Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-6 Cont.															
02/03/2004	NP	50.32	15.83	--	34.49	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.9	
05/04/2004	P	50.32	15.62	--	34.70	<50	<0.50	<0.50	<0.50	<0.50	24	--	SEQM	6.9	
08/31/2004	P	50.32	18.56	--	31.76	<50	<0.50	<0.50	<0.50	<0.50	27	--	SEQM	7.0	
11/23/2004	--	50.32	16.95	--	33.37	--	--	--	--	--	--	--	--	--	
01/18/2005	P	50.32	13.61	--	36.71	<50	<0.50	<0.50	<0.50	<0.50	13	--	SEQM	6.8	
06/29/2005	--	50.32	13.55	--	36.77	--	--	--	--	--	--	--	--	--	
09/01/2005	--	50.32	16.52	--	33.80	--	--	--	--	--	--	--	--	--	
11/03/2005	--	50.32	19.28	--	31.04	--	--	--	--	--	--	--	--	--	
02/14/2006	--	50.32	--	--	--	--	--	--	--	--	--	--	--	--	
5/30/2006	--	50.32	--	--	--	--	--	--	--	--	--	--	--	--	g
8/29/2006	--	50.32	17.15	--	33.17	--	--	--	--	--	--	--	--	--	g
11/29/2006	--	50.32	19.50	--	30.82	--	--	--	--	--	--	--	--	--	
2/20/2007	P	50.32	15.81	--	34.51	<50	<0.50	<0.50	<0.50	<0.50	24	1.59	TAMC	7.60	
5/25/2007	--	50.32	16.38	--	33.94	--	--	--	--	--	--	--	--	--	
8/9/2007	--	**50.32**	**19.15**	--	**31.17**	--	--	--	--	--	--	--	--	--	
MW-7															
1/25/1995	--	51.40	21.67	--	29.73	<50	<0.5	<0.5	<0.5	<1	--	7.0	ATI	--	
4/19/1995	--	51.40	25.27	--	26.13	<50	<0.5	<0.5	<0.5	<1	--	5.0	ATI	--	
7/5/1995	--	51.40	24.63	--	26.77	<50	<0.50	<0.50	<0.50	<1.0	--	4.2	ATI	--	
10/5/1995	--	51.40	28.21	--	23.19	83	<0.50	<0.50	<0.50	<1.0	77	4.5	ATI	--	
1/12/1996	--	51.40	29.29	--	22.11	63	<0.50	<0.50	<0.50	<1.0	120	4.8	ATI	--	
4/22/1996	--	51.40	23.11	--	28.29	<50	<0.5	<1	<1	<1	13	4.8	SPL	--	
7/2/1996	--	51.40	23.56	--	27.84	<50	<0.5	<1	<1	<1	<10	4.8	SPL	--	
11/8/1996	--	51.40	20.06	--	31.34	<50	<0.5	<1.0	<1.0	<1.0	<10	5.1	SPL	--	
1/3/1997	--	51.40	23.42	--	27.98	<50	<0.5	<1.0	<1.0	<1.0	<10	4.7	SPL	--	
4/28/1997	--	51.40	24.12	--	27.28	<50	<0.5	<1.0	<1.0	<1.0	<10	3.9	SPL	--	
7/1/1997	--	51.40	26.40	--	25.00	<50	<0.5	<1.0	<1.0	<1.0	<10	4.2	SPL	--	
10/2/1997	--	51.40	28.14	--	23.26	<50	<0.5	<1.0	<1.0	<1.0	<10	4.7	SPL	--	
1/9/1998	--	51.40	24.02	--	27.38	<50	<0.5	<1.0	<1.0	<1.0	<10	4.1	SPL	--	
5/6/1998	--	51.40	21.00	--	30.40	1,900	<0.5	<1.0	<1.0	<1.0	1,800	3.5	SPL	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-7 Cont.															
7/21/1998	--	51.40	21.17	--	30.23	50	<0.5	<1.0	<1.0	<1.0	<10	3.7	SPL	--	
12/30/1998	--	51.40	22.13	--	29.27	--	--	--	--	--	--	--	--	--	
2/2/1999	--	51.40	22.08	--	29.32	--	--	--	--	--	--	--	--	--	
5/10/1999	--	51.40	18.58	--	32.82	--	--	--	--	--	--	--	--	--	
9/23/1999	--	51.40	24.29	--	27.11	70	<1.0	<1.0	<1.0	<1.0	4,700	--	SPL	--	
12/23/1999	--	51.40	24.53	--	26.87	--	--	--	--	--	--	--	--	--	
3/27/2000	--	51.40	18.58	--	32.82	910	<0.5	<0.5	<0.5	<0.5	2,600	--	PACE	--	
5/22/2000	--	51.40	19.49	--	31.91	--	--	--	--	--	--	--	--	--	
8/31/2000	--	51.40	22.53	--	28.87	440	<0.5	<0.5	<0.5	<0.5	900	--	PACE	--	
12/11/2000	--	51.40	22.75	--	28.65	--	--	--	--	--	--	--	--	--	
3/20/2001	--	51.40	18.79	--	32.61	1,100	<0.5	<0.5	<0.5	<1.5	1,210	--	PACE	--	
6/19/2001	--	51.40	19.82	--	31.58	--	--	--	--	--	--	--	--	--	
9/20/2001	--	51.40	21.35	--	30.05	1,300	1.21	<0.5	<0.5	<1.5	1,550	--	PACE	--	
12/27/2001	--	51.40	20.36	--	31.04	510	<0.5	<0.5	<0.5	<1.0	643	--	PACE	--	
2/28/2002	--	51.40	21.86	--	29.54	250	<0.5	<0.5	<0.5	<1.0	317	--	PACE	--	
6/28/2002	--	51.40	22.64	--	28.76	<50	<0.5	<0.5	<0.5	<1.0	102	--	PACE	--	
9/12/2002	--	51.40	23.51	--	27.89	<50	<0.5	<0.5	<0.5	1	14	--	SEQ	7.5	
12/12/2002	--	51.40	23.75	--	27.65	<50	<0.5	<0.5	<0.5	<0.5	<2.5	--	SEQ	7.5	
3/10/2003	--	51.40	21.25	--	30.15	61	<0.50	<0.50	<0.50	<0.50	99	--	SEQ	7.6	
5/12/2003	--	51.40	21.44	--	29.96	<100	<1.0	<1.0	<1.0	<1.0	120	--	SEQ	7.6	
8/27/2003	--	51.40	23.30	--	28.10	120	<0.50	<0.50	<0.50	<0.50	84	--	SEQ	7.6	n
11/10/2003	P	51.40	20.24	--	31.16	230	<1.0	<1.0	<1.0	<1.0	92	--	SEQM	6.7	o
02/03/2004	P	51.40	20.63	--	30.77	<250	<2.5	<2.5	<2.5	<2.5	91	--	SEQM	7.5	
05/04/2004	P	51.40	21.89	--	29.51	<250	<2.5	<2.5	<2.5	<2.5	190	--	SEQM	7.6	k
08/31/2004	P	51.40	23.16	--	28.24	<500	<5.0	<5.0	<5.0	<5.0	220	--	SEQM	7.3	
11/23/2004	P	51.40	21.65	--	29.75	590	<2.5	5.0	11	51	290	--	SEQM	7.1	
01/18/2005	P	51.40	16.28	--	35.12	<250	<2.5	<2.5	<2.5	2.5	92	--	SEQM	7.3	
06/29/2005	P	51.40	14.50	--	36.90	2,200	43	97	92	390	250	--	SEQM	8.0	
09/01/2005	P	51.40	20.41	--	30.99	<500	<5.0	<5.0	<5.0	<5.0	60	--	SEQM	7.5	
11/03/2005	P	51.40	21.00	--	30.40	130	<1.0	<1.0	<1.0	1.0	130	0.63	SEQM	7.2	w
02/14/2006	P	51.40	16.31	--	35.09	100	<0.50	<0.50	<0.50	0.87	62	--	SEQM	7.4	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-7 Cont.															
5/30/2006	P	51.40	17.58	--	33.82	<50	<0.50	<0.50	<0.50	<0.50	9.1	--	SEQM	7.2	
8/29/2006	--	51.40	18.64	--	32.76	100	<2.5	<2.5	<2.5	<2.5	140	--	TAMC	7.0	
11/29/2006	P	51.40	20.35	--	31.05	84	<2.5	<2.5	<2.5	<2.5	190	3.06	TAMC	7.65	
2/20/2007	P	51.40	17.09	--	34.31	160	<2.5	<2.5	<2.5	<2.5	170	1.77	TAMC	7.66	w
5/25/2007	P	51.40	17.20	--	34.20	70	<1.0	<1.0	<1.0	<1.0	93	1.13	TAMC	7.41	w
8/9/2007	**P**	**51.40**	**19.95**	**--**	**31.45**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**42**	**1.94**	**TAMC**	**7.55**	
MW-8															
1/25/1995	--	50.88	31.59	--	19.29	54	<0.5	<0.5	<0.5	<1	--	7.1	ATI	--	
4/19/1995	--	50.88	19.18	--	31.70	<50	<0.5	<0.5	<0.5	<1	--	5.1	ATI	--	
7/5/1995	--	50.88	19.03	--	31.85	<50	<0.50	<0.50	<0.50	<1.0	--	4.5	ATI	--	
10/5/1995	--	50.88	24.40	--	26.48	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.1	ATI	--	
1/12/1996	--	50.88	25.51	--	25.37	<50	<0.50	<0.50	<0.50	<1.0	<5.0	4.6	ATI	--	
4/22/1996	--	50.88	18.00	--	32.88	<50	<0.5	<1	<1	<1	<10	4.8	SPL	--	
7/2/1996	--	50.88	19.83	--	31.05	<50	<0.5	<1	<1	<1	<10	4.5	SPL	--	
11/8/1996	--	50.88	20.09	--	30.79	<50	<0.5	<1.0	<1.0	<1.0	<10	4.7	SPL	--	
1/3/1997	--	50.88	19.72	--	31.16	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	SPL	--	
4/28/1997	--	50.88	20.44	--	30.44	<50	<0.5	<1.0	<1.0	<1.0	<10	4.1	SPL	--	
7/1/1997	--	50.88	22.72	--	28.16	<50	<0.5	<1.0	<1.0	<1.0	<10	3.8	SPL	--	
10/2/1997	--	50.88	24.51	--	26.37	<50	<0.5	<1.0	<1.0	<1.0	<10	4.2	SPL	--	
1/9/1998	--	50.88	21.17	--	29.71	<50	<0.5	<1.0	<1.0	<1.0	<10	3.5	SPL	--	
5/6/1998	--	50.88	18.34	--	32.54	<50	<0.5	<1.0	<1.0	<1.0	<10	3.6	SPL	--	
7/21/1998	--	50.88	18.55	--	32.33	90	<0.5	<1.0	<1.0	<1.0	<10	3.3	SPL	--	
12/30/1998	--	50.88	20.40	--	30.48	--	--	--	--	--	--	--	--	--	
2/2/1999	--	50.88	19.28	--	31.60	--	--	--	--	--	--	--	--	--	
5/10/1999	--	50.88	15.62	--	35.26	--	--	--	--	--	--	--	--	--	
9/23/1999	--	50.88	21.74	--	29.14	--	--	--	--	--	--	--	--	--	
12/23/1999	--	50.88	22.83	--	28.05	--	--	--	--	--	--	--	--	--	
3/27/2000	--	50.88	16.25	--	34.63	<50	<0.5	<0.5	<0.5	<0.5	<0.5	--	PACE	--	
5/22/2000	--	50.88	17.06	--	33.82	--	--	--	--	--	--	--	--	--	
8/31/2000	--	50.88	21.72	--	29.16	--	--	--	--	--	--	--	--	--	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-8 Cont.															
12/11/2000	--	50.88	22.03	--	28.85	--	--	--	--	--	--	--	--	--	
3/20/2001	--	50.88	16.23	--	34.65	<50	<0.5	<0.5	<0.5	<1.5	0.991	--	PACE	--	
6/19/2001	--	50.88	19.35	--	31.53	--	--	--	--	--	--	--	--	--	
9/20/2001	--	50.88	21.95	--	28.93	--	--	--	--	--	--	--	--	--	
12/27/2001	--	50.88	16.98	--	33.90	--	--	--	--	--	--	--	--	--	
2/28/2002	--	50.88	15.38	--	35.50	<50	<0.5	<0.5	<0.5	<1.0	<0.5	--	PACE	--	
6/28/2002	--	50.88	16.97	--	33.91	--	--	--	--	--	--	--	--	--	
9/12/2002	--	50.88	19.47	--	31.41	--	--	--	--	--	--	--	--	--	
12/12/2002	--	50.88	20.84	--	30.04	--	--	--	--	--	--	--	--	--	
3/10/2003	--	50.88	16.56	--	34.32	<50	<0.50	<0.50	<0.50	<0.50	3	--	SEQ	7.1	
5/12/2003	--	50.88	13.63	--	37.25	--	--	--	--	--	--	--	--	--	
8/27/2003	--	50.88	18.90	--	31.98	--	--	--	--	--	--	--	--	--	
11/10/2003	--	50.88	19.68	--	31.20	--	--	--	--	--	--	--	--	--	n
02/03/2004	P	50.88	14.76	--	36.12	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.5	
05/04/2004	--	50.88	14.69	--	36.19	--	--	--	--	--	--	--	--	--	
08/31/2004	--	50.88	18.08	--	32.80	--	--	--	--	--	--	--	--	--	
11/23/2004	NP	50.88	15.77	--	35.11	--	--	--	--	--	--	--	--	--	
01/18/2005	P	50.88	12.04	--	38.84	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.0	
06/29/2005	--	50.88	--	--	--	--	--	--	--	--	--	--	--	--	v
09/01/2005	--	50.88	16.12	--	34.76	--	--	--	--	--	--	--	--	--	
11/03/2005	--	50.88	19.42	--	31.46	--	--	--	--	--	--	--	--	--	
02/14/2006	P	50.88	12.43	--	38.45	<50	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	7.0	
5/30/2006	--	50.88	12.40	--	38.48	--	--	--	--	--	--	--	--	--	
8/29/2006	--	50.88	17.16	--	33.72	--	--	--	--	--	--	--	--	--	
11/29/2006	--	50.88	19.35	--	31.53	--	--	--	--	--	--	--	--	--	
2/20/2007	P	50.88	14.57	--	36.31	<50	<0.50	<0.50	<0.50	<0.50	<0.50	4.28	TAMC	7.65	
5/25/2007	--	50.88	16.11	--	34.77	--	--	--	--	--	--	--	--	--	
8/9/2007	--	**50.88**	19.25	--	31.63	--	--	--	--	--	--	--	--	--	
MW-9															
1/25/1995	--	51.05	22.32	--	28.73	<50	<0.5	<0.5	<0.5	<1	--	7.4	ATI	--	

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Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-9 Cont.															
4/19/1995	--	51.05	19.86	--	31.19	<50	<0.5	<0.5	<0.5	<1	--	5.2	ATI	--	
7/5/1995	--	51.05	20.78	--	30.27	<50	<0.50	<0.50	<0.50	<1.0	--	4.4	ATI	--	
10/5/1995	--	--	--	--	--	52	<0.50	<0.50	<0.50	<1.0	160	--	ATI	--	d
10/5/1995	--	51.05	24.33	--	26.72	<50	<0.50	<0.50	<0.50	<1.0	--	2.3	ATI	--	
1/12/1996	--	51.05	25.44	--	25.61	<50	<0.50	<0.50	<0.50	<1.0	<5.0	3.2	ATI	--	
4/22/1996	--	51.05	18.01	--	33.04	<50	<0.5	<1	<1	<1	11	3.5	SPL	--	
7/2/1996	--	51.05	19.70	--	31.35	<50	<0.5	<1	<1	<1	<10	3.3	SPL	--	
11/8/1996	--	51.05	19.96	--	31.09	<50	<0.5	<1.0	<1.0	<1.0	<10	3.7	SPL	--	
1/3/1997	--	51.05	19.52	--	31.53	<250	<2.5	<5.0	<5.0	<5.0	<50	4.4	SPL	--	
4/28/1997	--	51.05	20.22	--	30.83	<50	<0.5	<1.0	<1.0	<1.0	<10	4.0	SPL	--	
7/1/1997	--	51.05	22.59	--	28.46	<50	<0.5	<1.0	<1.0	<1.0	<10	3.9	SPL	--	
10/2/1997	--	51.05	24.33	--	26.72	--	--	--	--	--	--	--	--	--	
10/3/1997	--	51.05	--	--	--	<50	<0.5	<1.0	<1.0	<1.0	<10	4.4	SPL	--	
1/9/1998	--	51.05	21.11	--	29.94	<50	<0.5	<1.0	<1.0	<1.0	<10	3.9	SPL	--	
5/6/1998	--	51.05	18.26	--	32.79	<50	<0.5	<1.0	<1.0	<1.0	<10	4.0	SPL	--	
7/21/1998	--	51.05	18.46	--	32.59	70	<0.5	<1.0	<1.0	<1.0	<10	3.7	SPL	--	
12/30/1998	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
2/2/1999	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
5/10/1999	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
9/23/1999	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
12/23/1999	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
3/27/2000	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
5/22/2000	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
8/31/2000	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
12/11/2000	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
3/20/2001	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
6/19/2001	--	51.05	--	--	--	--	--	--	--	--	--	--	--	--	g
9/20/2001	--	51.05	22.20	--	28.85	6,300	2.87	<0.5	<0.5	<1.5	8,640	--	PACE	--	
12/27/2001	--	51.05	18.92	--	32.13	--	--	--	--	--	--	--	--	--	
2/28/2002	--	51.05	17.22	--	33.83	19,000	1,560	61.3	84	111	20,200	--	PACE	--	
6/28/2002	--	51.05	18.20	--	32.85	--	--	--	--	--	--	--	--	--	

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Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-9 Cont.															
9/12/2002	--	51.05	19.92	--	31.13	5,100	570	180	<25	220	6,400	--	SEQ	6.8	
12/12/2002	--	51.05	21.78	--	29.27	--	--	--	--	--	--	--	--	--	
3/10/2003	--	51.05	18.25	--	32.80	26,000	2,500	<100	<100	<100	33,000	--	SEQ	6.9	
5/12/2003	--	51.05	16.29	--	34.76	--	--	--	--	--	--	--	SEQ	--	
8/27/2003							830	<50	<50	<50	6,300	--			n

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Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-10 Cont.															
3/27/2000	--	--	18.83	--	--	1,900	<0.5	<0.5	<0.5	<0.5	28,000	--	PACE	--	h
5/22/2000	--	--	19.47	--	--	--	--	--	--	--	--	--	--	--	h
8/31/2000	--	--	22.64	--	--	1,700	<0.5	<0.5	<0.5	<0.5	13,000	--	PACE	--	h
12/11/2000	--	--	22.84	--	--	--	--	--	--	--	--	--	--	--	h
3/20/2001	--	--	19.57	--	--	16,000	<0.5	<0.5	<0.5	<1.5	11,900	--	PACE	--	h
6/19/2001	--	--	20.63	--	--	--	--	--	--	--	--	--	--	--	h
9/20/2001	--	--	23.07	--	--	5,800	<0.5	<0.5	<0.5	<1.5	8,160	--	PACE	--	h
12/27/2001	--	--	20.92	--	--	6,600	17.3	14.5	<12.5	<25	7,750	--	PACE	--	h
2/28/2002	--	--	18.52	--	--	3,600	10.8	<0.5	<0.5	<1.0	5,380	--	PACE	--	h
6/28/2002	--	--	18.41	--	--	<50	<0.5	<0.5	<0.5	<1.0	2,570	--	PACE	--	h
9/12/2002	--	--	20.57	--	--	660	<5.0	<5.0	<5.0	<5.0	3,300	--	SEQ	7.2	h
12/12/2002	--	--	22.80	--	--	1,400	<5.0	<5.0	<5.0	<5.0	3,300	--	SEQ	6.9	h
3/10/2003	--	--	19.26	--	--	1,700	<5.0	<5.0	5.3	15	2,800	--	SEQ	6.9	h
5/12/2003	--	--	17.90	--	--	1,500	<12	<12	<12	<12	2,200	--	SEQ	6.9	h
8/27/2003	--	--	20.82	--	--	4,100	<25	<25	<25	<25	2,800	--	SEQ	7.0	n, h
11/10/2003	P	--	21.92	--	--	<5,000	<50	<50	<50	<50	3,300	--	SEQM	6.8	
02/03/2004	P	--	18.52	--	--	5,100	<50	<50	<50	<50	2,300	--	SEQM	7.0	q
05/04/2004	P	--	17.63	--	--	<2,500	<25	<25	<25	<25	1,600	--	SEQM	6.8	
08/31/2004	P	--	20.67	--	--	<5,000	<50	<50	<50	<50	1,900	--	SEQM	7.0	
11/23/2004	P	--	19.79	--	--	2,600	<25	<25	<25	<25	2,300	--	SEQM	6.8	
01/18/2005	P	--	16.13	--	--	560	<5.0	<5.0	<5.0	<5.0	530	--	SEQM	6.9	
06/29/2005	P	--	15.56	--	--	110	1.9	4.6	4.2	17	71	--	SEQM	6.8	
09/01/2005	P	--	18.10	--	--	<250	<2.5	<2.5	<2.5	<2.5	280	--	SEQM	6.9	
11/03/2005	P	--	20.90	--	--	800	<5.0	<5.0	<5.0	7.0	770	0.71	SEQM	6.8	w
02/14/2006	P	--	15.58	--	--	600	<0.50	<0.50	<0.50	<0.50	400	--	SEQM	7.1	x
5/30/2006	P	--	14.70	--	--	95	<0.50	<0.50	<0.50	<0.50	<0.50	--	SEQM	6.7	
8/29/2006	--	--	18.69	--	--	250	<5.0	<5.0	<5.0	<5.0	490	--	TAMC	6.8	
11/29/2006	P	--	21.35	--	--	650	<5.0	<5.0	<5.0	<5.0	1,400	0.89	TAMC	7.19	w
2/20/2007	P	--	18.65	--	--	720	<5.0	<5.0	<5.0	<5.0	850	1.19	TAMC	7.32	
5/25/2007	P	--	18.15	--	--	130	<0.50	<0.50	<0.50	<0.50	170	0.51	TAMC	7.00	w
8/9/2007	**P**	**--**	**20.83**	**--**	**--**	**970**	**<10**	**<10**	**<10**	**<10**	**1,600**	**0.74**	**TAMC**	**7.24**	

Table 1. Summary of Ground-Water Monitoring Data: Relative Water Elevations and Laboratory Analyses

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	P/NP	TOC Elevation (feet msl)	Depth to Water (feet bgs)	Product Thickness (feet)	Water Level Elevation (feet msl)	Concentrations in (µg/L)						DO (mg/L)	Lab	pH	Comments
						GRO/ TPHg	Benzene	Toluene	Ethyl-Benzene	Total Xylenes	MTBE				
MW-10															
QC-2															
9/15/1992	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	i
12/15/1992	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	ANA	--	i
3/15/1993	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	i, l
6/7/1993	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	PACE	--	i, l
9/24/1993	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	i, l
12/27/1993	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	i, l
4/5/1994	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	i, l
7/22/1994	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	i, l
10/13/1994	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	<5.0	--	PACE	--	i, l
1/25/1995	--	--	--	--	--	<50	<0.5	2	0.6	1	--	--	ATI	--	i
4/19/1995	--	--	--	--	--	<50	<0.5	<0.5	<0.5	<0.5	--	--	ATI	--	i
7/5/1995	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	--	--	ATI	--	i
10/5/1995	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	i
1/12/1996	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	--	ATI	--	i
4/22/1996	--	--	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	i
7/2/1996	--	--	--	--	--	<50	<0.5	<1	<1	<1	<10	--	SPL	--	i

ABBREVIATIONS AND SYMBOLS:
< = Not detected at or laboratory reporting limit
--- = Not analyzed/applicable/measurable
µg/L = Micrograms per liter
ANA = Anamatrix, Inc.
ATI = Analytical Technologies, Inc.
DO = Dissolved oxygen
DTW = Depth to water in ft bgs
ft bgs = Feet below ground surface
ft MSL = Feet above mean sea level
GRO = Gasoline range organics
GWE = Groundwater elevation in ft MSL
mg/L = Milligrams per liter
MTBE = Methyl tert butyl ether
NP = Well not purged prior to sampling
P = Well purged prior to sampling
PACE = Pace, Inc.
SEQ/SEQM = Sequoia/Sequoia Morgan Hill Analytical
SPL = Southern Petroleum Laboratories
TOC = Top of casing in ft MSL
TPH-g = Total petroleum hydrocarbons as gasoline

FOOTNOTES:
c = Concentrations reported as diesel from MW-1, MW-2 and MW-4 are primarily due to the presence of a lighter petroleum product, possibly gasoline or kerosene.
d = Blind duplicate.
e = A copy of the documentation for this data is included in Appendix C of Alisto report 10-018-05-004.
f = Well not sampled due to presence of free product (FP).
g = Well inaccessible.
h = TOC not surveyed.
i = Travel blank.
j = EPA method by 8020\8260.
k = Samples ran outside of EPA recommended hold time.
l = A copy of the documentation for this data can be found in Blaine Tech Services report 010619-C-2. The MTBE data for the March 15, 1993 and June 7, 1993 events have been destroyed.
m = Thickness of SPH is only an estimate. The resulting GWE will not be used in contouring.
n = Samples analyzed by EPA Method 8260B for TPH-g, benzene, toluene, ethylbenzene, total xylenes, and fuel oxygenates.
o = Discrete peak @ C6-C7.
q = Discrete peak @ C5-C6.
r = Well was dry.
s = Sheen in well.
t = DTW and resulting GWE were anomalous and not used in groundwater contouring.
u = Anomalously low concentrations reported from Cambria. Do not appear to support historic trends.
v = Unable to locate well.
w = The hydrocarbon result for GRO was partly due to individual peaks in the quantitation range.
x = Initial analysis for MTBE within holding time but required dilution.
y = Sample > 4x spike concentration.

NOTES:
Casing elevations surveyed to the nearest 0.01 ft MSL.

GWE adjusted assuming a specific gravity of 0.75 for FP.

During the third quarter of 2002, URS Corporation assumed groundwater monitoring activities for BP.

Table 2. Summary of Fuel Additives Analytical Data

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
EX-1									
05/04/2004	<5,000	<1,000	2,500	<25	<25	38	<25	<25	
08/31/2004	<10,000	<2,000	2,100	<50	<50	<50	<50	<50	
11/23/2004	<5,000	<1,000	3,000	<25	<25	74	<25	<25	
01/18/2005	<5,000	<1,000	2,200	<25	<25	54	<25	<25	a
06/29/2005	<5,000	<1,000	1,400	<25	<25	30	<25	<25	
09/01/2005	<5,000	<1,000	2,000	<25	<25	46	<25	<25	
11/03/2005	<5,000	<1,000	3,000	<25	<25	87	<25	<25	
02/14/2006	<15,000	<1,000	1,100	<25	<25	<25	<25	<25	a
5/30/2006	<15,000	<1,000	1,400	<25	<25	37	<25	<25	a
8/29/2006	<15,000	<1,000	2,500	<25	<25	56	<25	<25	
11/29/2006	<30,000	<2,000	2,700	<50	<50	75	<50	<50	
2/20/2007	<30,000	<2,000	920	<50	<50	<50	<50	<50	
5/25/2007	<30,000	<2,000	890	<50	<50	<50	<50	<50	
8/9/2007	**<6,000**	**440**	**530**	**<10**	**<10**	**15**	**<10**	**<10**	
EX-2									
05/04/2004	<100	<20	46	<0.50	<0.50	<0.50	<0.50	<0.50	
08/31/2004	<500	<100	130	<2.5	<2.5	3.4	<2.5	<2.5	
11/23/2004	<100	<20	5.8	<0.50	<0.50	<0.50	<0.50	<0.50	
01/18/2005	<100	<20	6.5	<0.50	<0.50	<0.50	<0.50	<0.50	a
06/29/2005	<100	<20	24	<0.50	<0.50	<0.50	<0.50	<0.50	
09/01/2005	<100	<20	55	<0.50	<0.50	0.56	<0.50	<0.50	
11/03/2005	<100	<20	39	<0.50	<0.50	0.80	<0.50	<0.50	
02/14/2006	<300	<20	0.72	<0.50	<0.50	<0.50	<0.50	<0.50	a
5/30/2006	<300	<20	7.8	<0.50	<0.50	<0.50	<0.50	<0.50	
8/29/2006	<300	<20	94	<0.50	<0.50	0.98	<0.50	<0.50	
11/29/2006	<300	<20	4.4	<0.50	<0.50	<0.50	<0.50	<0.50	
2/20/2007	<300	<20	12	<0.50	<0.50	<0.50	<0.50	<0.50	
5/25/2007	<300	<20	10	<0.50	<0.50	<0.50	<0.50	<0.50	
8/9/2007	**<300**	**<20**	**27**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-1									

Table 2. Summary of Fuel Additives Analytical Data

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-1 Cont.									
8/27/2003	<100	<20	4.2	<0.50	<0.50	<0.50	--	--	
11/10/2003	<100	<20	0.51	<0.50	<0.50	<0.50	--	--	
02/03/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
05/04/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/31/2004	<100	<20	0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
01/18/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/14/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
2/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
MW-2									
8/27/2003	<25,000	1 <5,000	5,100	<120	<120	140	--	--	
11/10/2003	<50,000	2 <10,000	4,200	<250	<250	<250	--	--	
02/03/2004	<100,000	3 <20,000	1,900	<500	<500	<500	<500	<500	
05/04/2004	<50,000	4 <10,000	2,500	<250	<250	<250	<250	<250	
08/31/2004	<50,000	5 <10,000	3,400	<250	<250	<250	<250	<250	
11/23/2004	<50,000	6 <10,000	2,400	<250	<250	<250	<250	<250	
01/18/2005	<20,000	7 <4,000	3,700	<100	<100	<100	<100	<100	
06/29/2005	<10,000	8 <2,000	3,600	<50	<50	72	<50	<50	a
09/01/2005	<20,000	9 <4,000	5,100	<100	<100	100	<100	<100	
11/03/2005	<20,000	10 <4,000	3,700	<100	<100	100	<100	<100	
02/14/2006	<60,000	11 <4,000	3,400	<100	<100	<100	<100	<100	
5/30/2006	<60,000	12 <4,000	2,300	<100	<100	<100	<100	<100	a
8/29/2006	<60,000	13 <4,000	13,000	<100	<100	100	<100	<100	
11/29/2006	<75,000	14 <5,000	11,000	<120	<120	120	<120	<120	
2/20/2007	<60,000	15 <4,000	10,000	<100	<100	<100	<100	<100	
5/25/2007	<120,000	16 <8,000	3,400	<200	<200	<200	<200	<200	
8/9/2007	**<60,000**	**17 <4,000**	**4,100**	**<100**	**<100**	**<100**	**<100**	**<100**	
MW-3									
8/27/2003	<100	<20	<0.50	<0.50	<0.50	<0.50	--	--	
02/03/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
08/31/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2. Summary of Fuel Additives Analytical Data

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-3 Cont.									
01/18/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
02/14/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
2/20/2007	<300	<20	0.89	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4									
8/27/2003	<50,000	1 <10,000	32,000	<250	<250	250	--	--	
11/10/2003	<100,000	2 <20,000	25,000	<500	<500	<500	--	--	
02/03/2004	<100,000	3 <20,000	26,000	<500	<500	<500	<500	<500	
05/04/2004	<50,000	4 <10,000	<250	<250	<250	<250	<250	<250	
08/31/2004	<50,000	5 <10,000	14,000	<250	<250	<250	<250	<250	
11/23/2004	<500,000	6 <100,000	23,000	<2,500	<2,500	<2,500	<2,500	<2,500	
01/18/2005	<50,000	7 <10,000	8,800	<250	<250	<250	<250	<250	
06/29/2005	<50,000	10 <10,000	1,700	<250	<250	<250	<250	<250	a
09/01/2005	<100,000	11 <20,000	1,100	<500	<500	<500	<500	<500	
11/03/2005	<100,000	12 <20,000	1,500	<500	<500	<500	<500	<500	
02/14/2006	<300,000	13 <20,000	38,000	<500	<500	1,000	<500	<500	
5/30/2006	<300,000	14 <20,000	560	<500	<500	<500	<500	<500	a
8/29/2006	<300,000	15 <20,000	1,800	<500	<500	<500	<500	<500	
2/20/2007	<150,000	16 <10,000	15,000	<250	<250	<250	<250	<250	
5/25/2007	<120,000	17 <8,000	3,500	<200	<200	<200	<200	<200	
8/9/2007	**<60,000**	18 **4,100**	**2,900**	**<100**	**<100**	**<100**	**<100**	**<100**	
MW-6									
8/27/2003	<100	<20	8.9	<0.50	<0.50	<0.50	--	--	
11/10/2003	<100	<20	4.5	<0.50	<0.50	<0.50	--	--	
02/03/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
05/04/2004	<100	<20	24	<0.50	<0.50	<0.50	<0.50	<0.50	a
08/31/2004	<100	<20	27	<0.50	<0.50	<0.50	<0.50	<0.50	
01/18/2005	<100	<20	1.3	<0.50	<0.50	<0.50	<0.50	<0.50	
2/20/2007	<300	<20	24	<0.50	<0.50	<0.50	<0.50	<0.50	a
MW-7									
8/27/2003	<100	<20	84	<0.50	<0.50	<0.50	--	--	

Table 2. Summary of Fuel Additives Analytical Data

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-7 Cont.									
11/10/2003	<200	<40	92	<1.0	<1.0	<1.0	–	–	
02/03/2004	<500	<100	91	<2.5	<2.5	<2.5	<2.5	<2.5	
05/04/2004	<500	<100	190	<2.5	<2.5	<2.5	<2.5	<2.5	
08/31/2004	<1,000	<200	220	<5.0	<5.0	<5.0	<5.0	<5.0	
11/23/2004	<500	<100	290	<2.5	<2.5	<2.5	<2.5	<2.5	
01/18/2005	<500	<100	92	<2.5	<2.5	<2.5	<2.5	<2.5	
06/29/2005	<500	<100	250	<2.5	<2.5	<2.5	<2.5	<2.5	a
09/01/2005	<1,000	<200	60	<5.0	<5.0	<5.0	<5.0	<5.0	
11/03/2005	<200	<40	130	<1.0	<1.0	<1.0	<1.0	<1.0	
02/14/2006	<300	<20	62	<0.50	<0.50	<0.50	<0.50	<0.50	a
5/30/2006	<300	<20	9.1	<0.50	<0.50	<0.50	<0.50	<0.50	
8/29/2006	<1,500	<100	140	<2.5	<2.5	<2.5	<2.5	<2.5	
11/29/2006	<1,500	<100	190	<2.5	<2.5	<2.5	<2.5	<2.5	
2/20/2007	<1,500	<100	170	<2.5	<2.5	<2.5	<2.5	<2.5	
5/25/2007	<600	<40	93	<1.0	<1.0	<1.0	<1.0	<1.0	
8/9/2007	**<300**	**<20**	**42**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-8									
02/03/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
01/18/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
02/14/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
2/20/2007	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a
MW-9									
8/27/2003	<10,000	<2,000	6,300	<50	<50	<50	–	–	
02/03/2004	<10,000	<2,000	2,100	<50	<50	<50	<50	<50	
08/31/2004	<5,000	<1,000	1,500	<25	<25	<25	<25	<25	a
01/18/2005	<500	150	130	<2.5	<2.5	<2.5	<2.5	<2.5	
09/01/2005	<5,000	2,700	240	<25	<25	<25	<25	<25	a
02/14/2006	<15,000	<1,000	2,200	<25	<25	<25	<25	<25	
8/29/2006	<15,000	2,100	<25	<25	<25	<25	<25	<25	a
2/20/2007	<600	380	3.2	<1.0	<1.0	<1.0	<1.0	<1.0	

Table 2. Summary of Fuel Additives Analytical Data

Station #11117, 7210 Bancroft Ave., Oakland, CA

Well and Sample Date	Concentrations in (µg/L)								Comments
	Ethanol	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	
MW-9 Cont.									
8/9/2007	**<300**	**790**	**1.4**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	**<0.50**	
MW-10									
8/27/2003	<5,000	<1,000	2,800	<25	<25	<25	--	--	
11/10/2003	<10,000	<2,000	3,300	<50	<50	<50	--	--	
02/03/2004	<10,000	<2,000	2,300	<50	<50	<50	<50	<50	a
05/04/2004	<5,000	<1,000	1,600	<25	<25	<25	<25	<25	
08/31/2004	<10,000	<2,000	1,900	<50	<50	<50	<50	<50	
11/23/2004	<5,000	<1,000	2,300	<25	<25	<25	<25	<25	
01/18/2005	<1,000	<200	530	<5.0	<5.0	<5.0	<5.0	<5.0	
06/29/2005	<100	<20	71	<0.50	<0.50	<0.50	<0.50	<0.50	a
09/01/2005	<500	<100	280	<2.5	<2.5	<2.5	<2.5	<2.5	
11/03/2005	<1,000	<200	770	<5.0	<5.0	<5.0	<5.0	<5.0	
02/14/2006	<300	34	400	<0.50	<0.50	1.2	<0.50	<0.50	
5/30/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	a, b
8/29/2006	<3,000	<200	490	<5.0	<5.0	<5.0	<5.0	<5.0	
11/29/2006	<3,000	<200	1,400	<5.0	<5.0	5.8	<5.0	<5.0	
2/20/2007	<3,000	<200	850	<5.0	<5.0	<5.0	<5.0	<5.0	
5/25/2007	<300	<20	170	<0.50	<0.50	0.69	<0.50	<0.50	
8/9/2007	**<6,000**	**<400**	**1,600**	**<10**	**<10**	**<10**	**<10**	**<10**	

ABBREVIATIONS AND SYMBOLS:
-- = Not analyzed/applicable/measurable
< = Not detected above reported detection limit
1,2-DCA = 1,2-Dichloroethane
µg/L = Micrograms per Liter
DIPE = Di-isopropyl ether
EDB = 1, 2-Dibromoethane
ETBE = Ethyl tert-butyl ether
MTBE = Methyl tert-butyl ether
TAME = tert-Amyl methyl ether
TBA = tert-Butyl alcohol

FOOTNOTES:
a = The continuing calibration verficiation for ethanol was outside of client contractual acceptance limits. However, it was within method acceptance limits. The data should still be useful for its intended purpose.
b = Initial analysis for MTBE within holding time but required dilution.

NOTES:
All volatile organic compounds analyzed using EPA Method 8260B.

Note: The data within this table collected prior to April 2006 was provided to Broadbent & Associates, Inc. by Atlantic Richfield Company and their previous consultants. Broadbent & Associates, Inc. has not verified the accuracy of this information.

Water Technologies

PV® Series Liquid Phase Adsorbers

PV-500, PV-1000, PV-2000

SIEMENS

APPLICATIONS

The PV® Series adsorbers are designed for use in a wide range of low/high flow and pressure applications.

- Groundwater remediation
- Wastewater filtration
- Tank rinse water treatment
- Pilot testing
- Underground storage tank clean up
- Leachate treatment
- Dechlorination
- Spill cleanup
- Hydrotesting

INSTALLATION, STARTUP AND OPERATION

Siemens can provide a total service package that includes utilizing OSHA trained personnel providing on-site carbon changeouts, packaging and transportation of spent carbon for recycling at our reactivation facilities.

At the time of purchase or rental of the adsorbers, arrangements should be made for the reactivation of the spent carbon. Siemens will provide instructions and assistance on how to obtain acceptance of the spent carbon at our reactivation facilities. Spent carbon cannot be accepted for reactivation until the acceptance process is completed.

BENEFITS & DESIGN FEATURES

- Durable, carbon steel construction includes internally/externally welded seams.
- SSPC-SP5 sandblasted, baked epoxy interior coating; urethane exterior finish.
- Approved for the transport of hazardous spent carbon.
- Top and side manways permit easy access and inspection of vessels internals and linings.
- Skid-mounted for easy handling and installation.
- Optimized underdrain system for low pressure drop operation.

PIPING MANIFOLD (OPTIONAL)

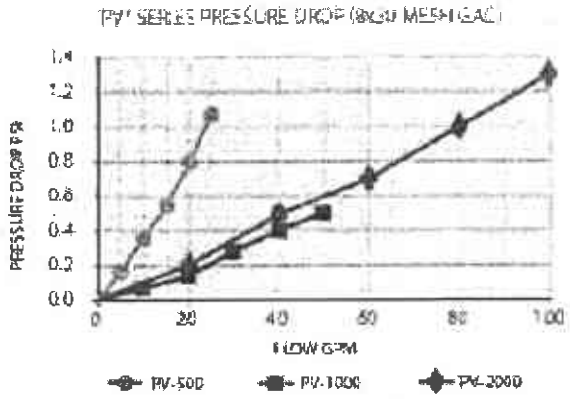
- 2"/3" sch 80 PVC piping and valves that allow either adsorber to be used in the lead or lag position (optional carbon steel and stainless steel piping).
- Series or parallel operation.
- Clean utility water connection for manual backflush.
- Sampling ports and pressure gauges.
- Flexible hoses with Kamlock fittings allow easy installation and removal during service exchange operations.
- Available for purchase or rental.

SPECIFICATIONS/TYPICAL PROPERTIES			
	PV®-500	PV®-1000	PV®-2000
Dimensions (Dia. x Overall Height – Approx.)	30" x 5'7"	48" x 5'7"	48" x 8'8"
Inlet Connection, (Top)	2"	3" NPT (Female)	3" NPT (Female)
Outlet Connection, (Bottom)	2"	3" NPT (Male)	3" NPT (Male)
Manway, Top & Lower Side	11" X 15" (top only)	11" X 15"	11" X 15"
Internal Piping	PVC	PVC	PVC
Interior Coating (All Units)	Epoxy	Epoxy	Epoxy
Exterior Coating (All Units)	Epoxy/Urethane	Epoxy/Urethane	Epoxy/Urethane
Carbon Fill Volume (Cu.ft.)	18.5	34	68
Vessel Weight (lbs.):			
Shipping (With Carbon)	1050	1910	3200
Operating (Approx.)	1750	4300	7500
Flow, GPM (Nominal)	25	50	100
Pressure, PSIG (Maximum)1	75	75	75
Temperature °F. (Maximum)	140	140	140
Pounds Of Activated Carbon	500	1000	2000
Contact Time @ Max Flow/Min	5	5	5
Backwash Rates (GPM) @ 55°F	30	75	75

1The PV® Series adsorbers are not ASME code stamped. Pressure rating applies to liquid only.
For detailed dimensional information or drawings, contact your local Siemens sales representative.
For information on the HP® Series ASME code stamped adsorbers, contact your local Siemens representative.

Safety Note: Wet activated carbon readily adsorbs atmospheric oxygen. Dangerously low oxygen levels may exist in closed vessels or poorly ventilated storage areas. Workers should follow all applicable state and federal safety guidelines for entering oxygen depleted areas.

All information presented herein is believed reliable and in accordance with accepted engineering practice. Siemens makes no warranties as to completeness of information. Users are responsible for evaluating individual product suitability for specific applications. Siemens assumes no liability whatsoever for any special, indirect or consequential damages arising from the sale, resale or misuse of its products.



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Water Technologies

Environmental Services
2430 Rose Place
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800.525.0658 phone

information.water@siemens.com
WS-PV2-DS-1206

LIQUID PHASE ISOTHERM DESIGN PARAMETERS

Water Flow Rate 10.00000 gpm

LIQUID PHASE DESIGN

Component Name	Concentration	Q [Wt %]	#GAC/1000 gallons of water	Suitability
GASOLINE (CC601)	170.0000 ppmw	51.4292	2.7558	In Range
BENZENE	11.0000 ppmw	11.5147	0.7964	In Range
MTBE	14.0000 ppmw	1.5972	7.3078	In Range
TBA	10.0000 ppmw	0.6518	12.7906	In Range

Total Carbon Usage Estimated at Breakthrough

595.9945 #GAC/day

41.3885 #GAC/1000 gallons of water

(Both totals have been multiplied by a factor of 1.75)

The above carbon usage estimates are based on both experimental data as well as predictive models. Actual carbon usage rates observed at various stages of breakthrough depend on many factors, and may therefore differ from the above estimates. Please contact Westates Carbon Products for further assistance.

LIQUID PHASE ISOTHERM DESIGN PARAMETERS

Water Flow Rate 5.00000 gpm

LIQUID PHASE DESIGN

Component Name	Concentration	Q [Wt %]	#GAC/1000 gallons of water	Suitability
GASOLINE (CC601)	170.0000 ppmw	51.4292	2.7558	In Range
BENZENE	11.0000 ppmw	11.5147	0.7964	In Range
MTBE	14.0000 ppmw	1.5972	7.3078	In Range
TBA	10.0000 ppmw	0.6518	12.7906	In Range

Total Carbon Usage Estimated at Breakthrough

297.9972 #GAC/day

41.3885 #GAC/1000 gallons of water

(Both totals have been multiplied by a factor of 1.75)

The above carbon usage estimates are based on both experimental data as well as predictive models. Actual carbon usage rates observed at various steges of breakthrough depend on many factors, and may therefore differ from the above estimates. Please contact Westates Carbon Products for further assisitance.