



PACIFIC
ENVIRONMENTAL
GROUP, INC.

ENVIRONMENTAL
PROTECTION
96 JUL 30 PM 3: 12

July 25, 1996
Project 330-084.5C

Ms. Sue Jenne
East Bay Municipal Utility District
P.O. Box 24055
Oakland, California 94623-1055

Re: Final Groundwater Monitoring Report - Permit 502-85611
Termination of Account
ARCO Service Station 0374
6407 Telegraph Avenue at Alcatraz Avenue
Oakland, California

Dear Ms. Jenne:

On behalf of ARCO Products Company (ARCO) and in response to your letter dated July 2, 1996, Pacific Environmental Group, Inc. (PACIFIC) has prepared this final groundwater monitoring report for the site referenced above. PACIFIC became current consultant for this site as of September 1, 1995. ARCO requested termination of the EBMUD discharge permit on June 14, 1996; a summary of the groundwater extraction (GWE) system operational performance through that date is presented below:

<i>Current Treatment System Status:</i>	<i>Deactivated</i>
<i>Reporting Period:</i>	10/01/95 - 06/14/96
<i>Period Average Flow Rate:</i>	0.07 gallon per minute
<i>Period Starting Totalizer Reading:</i>	91532 gallons
<i>Period Ending Totalizer Reading:</i>	94017 gallons
<i>Period Volume Discharged:</i>	2,485 gallons
<i>Volume Discharged To Date:</i>	94,017 gallons
<i>Field Data Sheets:</i>	Attached
<i>Certified Analytical Reports:</i>	Attached

The GWE system at this site was deactivated on October 13, 1995. A subsequent visit to the site resulted in a totalizer reading which was reported to be 28 gallons over the October 13, 1995 reading. Since the GWE system was not operated for any reason after

October 13, 1995, the slight discrepancy is assumed to be due to the lapse in time between the totalizer reading and the actual GWE system shutdown on October 13, 1995. A "Do Not Operate" sign has been posted on the GWE system's control panel to insure that the system will not be reactivated while the system remains in place. All wastewater generated at the site as a result of groundwater monitoring since October 13, 1995 to present has been collected into a mobile tank and removed from the site for proper disposal. The above procedure will be followed during all future groundwater monitoring events at the site.

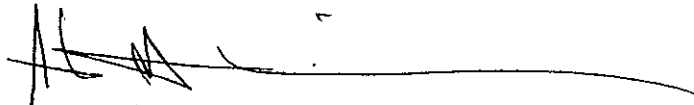
The certified analytical report and chain-of-custody documentation for the final sampling event on October 2, 1995 are included as Attachment A, and field data sheets for the reporting period are included as Attachment B. Operational and analytical data are presented in Tables 1 through 3. If you have any questions or require further information, please do not hesitate to call our office.

Sincerely,

Pacific Environmental Group, Inc.



Suzanne McClurkin-Nelson
Staff Scientist



Shaw Garakani
Project Engineer

Attachments: Table 1 - Groundwater Extraction System Performance Data
Table 2 - Treatment System Metered Volume
Table 3 - Groundwater Extraction System Analytical Data -
Total Petroleum Hydrocarbons (TPPH as Gasoline
and BTEX Compounds)
Attachment A - Certified Analytical Report and Chain-of-Custody
Documentation
Attachment B - Field Data Sheets

cc: Mr. Michael Whelan, ARCO Products Company
Ms. Susan Hugo, Alameda County Health Care Services #
Mr. Kevin Graves, Regional Water Quality Control Board - S.F. Bay Region

Table 1
Groundwater Extraction System Performance Data

ARCO Service Station 0374
6407 Telegraph Avenue at Alcatraz Avenue
Oakland, California

Sample I.D.	Date Sampled	Totalizer Reading (gallons)	Net Volume (gallons)	Average Flow Rate (gpm)	TPPH			Benzene			Primary Carbon Loading (percent)
					Influent Concentration (µg/L)	Net Removed (lbs)	Removed to Date (lbs)	Influent Concentration (µg/L)	Net Removed (lbs)	Removed to Date (lbs)	
INFL	12/21/93 a	22	22	0.21	NS	0.00	0.00	NS	0.000	0.00	0.0
INFL	12/23/93 a	4,855	4,833	1.6	9,300	0.38	0.38	1,200	0.024	0.02	0.5
INFL	12/27/93 a	6,871	2,016	0.36	5,700	0.13	0.51	820	0.017	0.04	0.6
INFL	12/29/93 a	7,192	321	0.13	5,800	0.02	0.53	950	0.002	0.04	0.7
INFL	01/03/94 a	7,925	733	0.10	6,500	0.01	0.54	860	0.006	0.05	0.7
INFL	01/05/94 a	8,162	237	0.08	5,200	0.01	0.55	970	0.002	0.05	0.7
INFL	01/11/94 a	8,907	745	0.08	6,300	0.03	0.58	900	0.006	0.06	0.7
INFL	01/13/94 a	9,175	268	0.09	8,600	0.02	0.60	950	0.002	0.06	0.7
INFL	01/24/94 a	9,306	131	0.08	NS	0.01	0.60	NS	0.001	0.06	0.8
INFL	02/24/94 a	14,555	5,249	0.21	4,200	0.28	0.88	520	0.011	0.07	1.1
INFL	03/24/94 a	23,723	9,168	0.24	6,200	0.40	1.40	1,100	0.062	0.13	1.8
INFL	04/26/94 b	29,543	5,820	0.12	6,400	0.15	1.55	1,400	0.061	0.19	1.9
INFL	05/24/94 c	35,082	5,539	0.14	NS	0.20	1.75	NS	0.043	0.24	2.2
INFL	11/17/94 d,e	35,507	425	N/A	2,100	0.00	1.75	460	0.001	0.24	2.2
INFL	01/10/95 f	36,493	986	0.01	1,100	0.01	1.76	180	0.003	0.24	2.2
INFL	02/07/95 g	41,399	4,906	0.12	3,500	0.09	1.86	370	0.011	0.25	2.3
INFL	03/03/95 h	53,290	11,891	0.34	NS	0.22	2.08	NS	0.035	0.29	2.6
INFL	04/03/95	62,582	9,292	0.21	5,000	0.19	2.27	1,000	0.039	0.32	2.8
INFL	05/01/95	69,809	7,227	0.18	580	0.17	2.44	40	0.031	0.36	3.0
INFL	06/09/95	75,254	5,445	0.10	1,400	0.04	2.48	420	0.010	0.37	3.1
INFL	07/05/95	81,540	6,286	0.17	750	0.06	2.54	41	0.012	0.38	3.2
INFL	08/10/95	86,868	5,328	0.10	610	0.03	2.57	29	0.002	0.38	3.2
INFL	09/18/95	91,532	4,664	0.08	600	0.02	2.59	10	0.001	0.38	3.2
INFL	10/02/95	92,918	1,386	0.07	790	0.01	2.60	52	0.000	0.38	3.3
INFL	10/13/95 h	94,017 j	1,099	0.07	NS	0.01	2.61	NS	0.000	0.38	3.3

REPORTING PERIOD: 09/18/95 - 06/14/96 †

TOTAL POUNDS REMOVED:	2.61	0.38
TOTAL GALLONS REMOVED:	0.43	0.05
PERIOD POUNDS REMOVED:	0.01	0.00
PERIOD GALLONS REMOVED:	0.00	0.00
TOTAL GALLONS EXTRACTED:	94,017	
PERIOD GALLONS EXTRACTED:	2,485	
PERIOD AVERAGE FLOW RATE (gpm):	0.07	
PRIMARY BED CAPACITY REMAINING:	96.7%	

TPPH = Total purgeable petroleum hydrocarbons	c. Last site visit by RESNA on 5/24/94.
gpm = Gallons per minute	d. Pacific Environmental Group, Inc became consultant for the site 9/1/94.
µg/L = Micrograms per liter	e. System operated for two days in 4th quarter 1994; system down due to extensive repairs required for system and compound.
lbs = Pounds	f. System started on January 10, 1995.
NS = Not sampled (prior concentrations assumed)	g. System auto shutdown 2/14/95; shut down 3/3/95 for repairs.
N/A = Not available or not applicable	h. GWE system deactivated 10/13/95.
† = Termination of the permit was requested 6/14/96.	i. Correct final totalizer reading obtained at a later date.
a. All data prior to 9/1/94 provided by prior consultant.	
b. Samples taken 4/21/94; totalizer reading from 4/26/94.	

System operation began December 21, 1993, under RESNA Industries, Inc.; system shut down 4/27/94 - 11/17/94.
Pounds of hydrocarbons removed to date through March 24, 1994 provided by prior consultant.
Benzene mass removal from 12/21/93 through 4/27/94 estimated from data provided by prior consultant.
Prior to June 1995, TPH was reported as "TPH calculated as Gasoline".
Mass removed is an approximation calculated using averaged concentrations.
Carbon loading assumes an 8 percent isotherm See certified analytical reports for detection limits

**Table 2
Treatment System Metered Volume**

ARCO Service Station 0374
6407 Telegraph Avenue at Alcatraz Avenue
Oakland, California

Date Sampled	Totalizer Reading (gallons)	Net Volume (gallons)	Cumulative System Discharge (gallons)	Average Flow Rate (gpm)	Average Flow Rate (gpd)
12/21/93 a	22	22	22	0.2	NR
12/23/93	4,855	4,833	4,855	1.6	2,417
12/27/93	6,871	2,016	6,871	0.4	504
12/29/93	7,192	321	7,192	0.1	161
01/03/94	7,925	733	7,925	0.1	147
01/05/94	8,162	237	8,162	0.1	118
01/11/94	8,907	745	8,907	0.1	124
01/13/94	9,175	268	9,175	0.1	134
01/24/94	9,306	131	9,306	0.1	12
02/24/94	14,555	5,249	14,555	0.2	169
03/24/94	23,723	9,168	23,723	0.2	327
04/26/94	29,543	5,820	29,543	0.1	176
05/24/94 b	35,082	5,539	35,082	0.1	198
11/17/94 c	35,507	425	35,507	N/A	N/A
01/10/95 d	36,493	986	36,493	0.0	18
02/07/95	41,399	4,906	41,399	0.1	175
03/03/95	53,290	11,891	53,290	0.3	495
04/03/95	62,582	9,292	62,582	0.2	300
05/01/95	69,809	7,227	69,809	0.2	258
06/09/95	75,254	5,445	75,254	0.1	140
07/05/95	81,540	6,286	81,540	0.2	242
08/10/95	86,868	5,328	86,868	0.1	148
09/18/95	91,532	4,664	91,532	0.1	120
10/02/95	92,918	1,386	92,918	0.1	99
10/13/95 e	94,017 f	1,099	94,017	0.1	100

gpm = Gallons per minute
gpd = Gallons per day
NR = Not reported
N/A = Not available or not applicable
† = Average flow calculated from 1/10/95 to 10/13/95

a. All data prior to 9/1/94 provided by prior consultant.
b. Last site visit by RESNA on 5/24/94.
c. Pacific Environmental became site consultant 9/1/94.
d. GWE system re-started 1/10/95.
e. GWE system shut down 10/13/95.
f. Correct final totalizer reading obtained at a later date.

System operation began December 21, 1993, under RESNA.
System shut down 4/27/94 - 11/17/94

Table 3
Groundwater Extraction System Analytical Data
 Total Petroleum Hydrocarbons
 (TPPH as Gasoline and BTEX Compounds)

ARCO Service Station 0374
 6407 Telegraph Avenue at Alcatraz Avenue
 Oakland, California

Sample I.D.	Date Sampled	TPPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Xylenes (µg/L)
Influent Samples						
SP-105	01/10/94	1,100	180	2.7	26	51
SP-105	02/07/94	3,500	370	120	67	230
SP-105	04/03/95	5,000	1,000	41	88	300
INFL	05/01/95	580	40	ND	1.2	17
SP-105	06/09/95	1,400	420	7	10	20
SP-105	07/05/95	750	41	ND	2.8	17
SP-105	08/10/95	610	29	0.64	3.4	16
SP-105	09/18/95	600	10	ND	ND	20
105	10/02/95	790	52	ND	8.4	67
Midpoint-1 Samples						
SP-106	01/10/94	ND	ND	ND	ND	ND
SP-106	02/07/94	ND	ND	ND	ND	ND
SP-106	04/03/95	ND	ND	ND	ND	ND
MID-1	05/01/95	ND	ND	ND	ND	ND
SP-106	06/09/95	ND	ND	ND	ND	ND
SP-106	07/05/95	ND	ND	ND	ND	ND
SP-106	08/10/95	ND	ND	ND	ND	ND
SP-106	09/18/95	ND	ND	ND	ND	ND
106	10/02/95	ND	ND	ND	ND	ND
Midpoint-2 Samples						
MID-2	11/17/94	ND	ND	ND	ND	ND
SP-107	01/10/94	ND	ND	ND	ND	ND
SP-107	02/07/94	ND	ND	ND	ND	ND
SP-107	04/03/95	ND	ND	ND	ND	ND
SP-107	06/09/94	ND	ND	ND	ND	ND
SP-107	09/18/95	ND	ND	ND	ND	ND
Effluent Samples						
SP-108	01/10/94	ND	ND	ND	ND	ND
SP-108	02/07/94	ND	ND	ND	ND	ND
SP-108	04/03/95	ND	ND	ND	ND	ND
EFFL	05/01/95	ND	ND	ND	ND	ND
SP-108	06/09/95	79	ND	ND	ND	ND
SP-108	07/05/95	ND	ND	ND	ND	ND
SP-108	08/10/95	ND	ND	ND	ND	ND
SP-108	09/18/95	ND	ND	ND	ND	ND
108	10/02/95	ND	ND	ND	ND	ND
TPPH = Total purgeable petroleum hydrocarbons µg/L = Micrograms per liter ND = Not detected above detection limits System startup on 12/21/93 by RESNA Industries, Inc. PACIFIC became consultant 9/01/94; system restarted on 11/17/94. Prior to June, 1995 TPPH results were reported as TPH as gasoline. See certified analytical reports for individual detection limits.						

ATTACHMENT A

**CERTIFIED ANALYTICAL REPORT
AND CHAIN-OF-CUSTODY DOCUMENTATION**



Sequoia Analytical

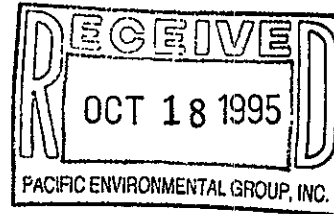
680 Chesapeake Drive
404 N. Wiget Lane
819 Striker Avenue, Suite 8

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

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

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

Pacific Environmental Group
2025 Gateway Place, Suite 440
San Jose, CA 95110
Attention: Maree Doden



Project: 330-084.5B/0374, Alameda

Enclosed are the results from samples received at Sequoia Analytical on October 4, 1995.
The requested analyses are listed below:

<u>SAMPLE #</u>	<u>SAMPLE DESCRIPTION</u>	<u>DATE COLLECTED</u>	<u>TEST METHOD</u>
9510025 -01	LIQUID, 108	10/02/95	TPHGBW Purgeable TPH/BTEX
9510025 -02	LIQUID, 106	10/02/95	TPHGBW Purgeable TPH/BTEX
9510025 -03	LIQUID, 105	10/02/95	TPHGBW Purgeable TPH/BTEX

Please contact me if you have any questions. In the meantime, thank you for the opportunity to work with you on this project.

Very truly yours,

SEQUOIA ANALYTICAL

Brucie Fletcher
Project Manager

Quality Assurance Department



Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Proj. ID: 330-084.5B/0374, Alameda Sample Descript: 108 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510025-01	Sampled: 10/02/95 Received: 10/04/95 Analyzed: 10/09/95 Reported: 10/13/95
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QC Batch Number: GC100995BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	72

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher

Brucie Fletcher
Project Manager





Pacific Environmental Group	Client Proj. ID: 330-084.5B/0374, Alameda	Sampled: 10/02/95
2025 Gateway Place, Suite 440	Sample Descript: 106	Received: 10/04/95
San Jose, CA 95110	Matrix: LIQUID	
Attention: Maree Doden	Analysis Method: 8015Mod/8020	Analyzed: 10/09/95
	Lab Number: 9510025-02	Reported: 10/13/95

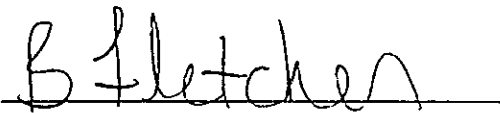
QC Batch Number: GC100995BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	70

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

SEQUOIA ANALYTICAL - ELAP #1210


Brucie Fletcher
Project Manager





Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Proj. ID: 330-084.5B/0374, Alameda Sample Descript: 105 Matrix: LIQUID Analysis Method: 8015Mod/8020 Lab Number: 9510025-03	Sampled: 10/02/95 Received: 10/04/95 Analyzed: 10/09/95 Reported: 10/13/95
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QC Batch Number: GC100995BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	500	790
Benzene	5.0	52
Toluene	5.0	N.D.
Ethyl Benzene	5.0	8.4
Xylenes (Total)	5.0	67
Chromatogram Pattern:		Gas

Surrogates	Control Limits %	% Recovery
Trifluorotoluene	70 130	70

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

SEQUOIA ANALYTICAL - ELAP #1210

Brucie Fletcher
Project Manager





Pacific Environmental Group 2025 Gateway Place, Suite 440 San Jose, CA 95110 Attention: Maree Doden	Client Project ID: 330-084.5B/0374, Alameda Matrix: LIQUID Work Order #: 9510025 01-03	Reported: Oct 16, 1995
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QUALITY CONTROL DATA REPORT

Analyte:	Benzene	Toluene	Ethyl Benzene	Xylenes
QC Batch#:	GC100995BTEX06A	GC100995BTEX06A	GC100995BTEX06A	GC100995BTEX06A
Analy. Method:	EPA 8020	EPA 8020	EPA 8020	EPA 8020
Prep. Method:	EPA 5030	EPA 5030	EPA 5030	EPA 5030

Analyst:	G. Garcia	G. Garcia	G. Garcia	G. Garcia
MS/MSD #:	9509J5001	9509J5001	9509J5001	9509J5001
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Prepared Date:	10/9/95	10/9/95	10/9/95	10/9/95
Analyzed Date:	10/9/95	10/9/95	10/9/95	10/9/95
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
Result:	9.3	9.3	9.4	28
MS % Recovery:	93	93	94	93
Dup. Result:	7.9	7.9	8.0	24
MSD % Recov.:	79	79	80	80
RPD:	16	16	16	15
RPD Limit:	0-50	0-50	0-50	0-50

LCS #:	BLK100995	BLK100995	BLK100995	BLK100995
Prepared Date:	10/9/95	10/9/95	10/9/95	10/9/95
Analyzed Date:	10/9/95	10/9/95	10/9/95	10/9/95
Instrument I.D.#:	GCHP6	GCHP6	GCHP6	GCHP6
Conc. Spiked:	10 µg/L	10 µg/L	10 µg/L	30 µg/L
LCS Result:	7.9	7.8	7.9	23
LCS % Recov.:	79	78	79	77

MS/MSD LCS Control Limits	71-133	72-128	72-130	71-120
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Please Note:

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

SEQUOIA ANALYTICAL

B. Fletcher
 Brucie Fletcher
 Project Manager

** MS=Matrix Spike, MSD=MS Duplicate, RPD=Relative % Difference

9510025.PPP <1>



ARCO Facility no. 0374 City (Facility) Alameda CA Project manager (Consultant) Shawn Gorkani
 ARCO engineer Mike Whelan Telephone no. (ARCO) Telephone no. (Consultant) (408)441-7500 Fax no. (Consultant) 441 7539
 Consultant name Pacific Environmental Group Address (Consultant) 2025 Gateway Place Suite 440 San Jose CA 9510

Laboratory name Sequoia
 Contract number

Sample I.D.	Lab no.	Container no.	Matrix			Preservation		Sampling date	Sampling time	BTEX EPA 8020	BTEX/TPH EPA 8620/8020/8015	TPH Modified 8015 Gas Diesel	Oil and Grease 413.1 413.2	TPH EPA 418.1/SM503E	EPA 801/8010	EPA 624/6240	EPA 625/6270	TCLP Metals VOA VOA	Semi Metals VOA VOA	CAMP Metals EPA 6010/7000	TLC STLC	Lead Org./DHS Lead EPA 7420/7421	
			Soil	Water	Other	Ice	Acid																
108	1	3		X		X	X	10-2-95	1250		X												
106	2	3		X		X	X	↓	1255		X												
105	3	3		X		X	Y	↓	100		X												

Method of shipment 9510025

Special detection Limit/reporting

Special QA/QC

Remarks

001 4 12 95

Lab number

Turnaround time
 Priority Rush 1 Business Day
 Rush 2 Business Days
 Expedited 5 Business Days
 Standard 10 Business Days

Condition of sample: Relinquished by sampler Paul Priebe Date 10-4-95 Time 9:45
 Relinquished by M Doden Date 10/4/95 Time 11:10 AM
 Relinquished by SR Date 10/4/95 Time 12:30

Temperature received: Received by M Doden Date 10/4/95 Time 09:45
 Received by SR Date 11:10 AM Time 10/4/95
 Received by laboratory Tony McMahon Date 10/4/95 Time 12:37

ATTACHMENT B
FIELD DATA SHEETS

FIELD SERVICES / ROUTINE O&M REQUEST

Identification
 Project # 330-084.5B
 Station # 0374
 Site Address: 6407 Telegraph Avenue
@ Alcatraz Avenue
 County: Alameda
 Project Manager: Shaw Garakani
 Requestor: Steve Johnston
 Client: ARCO
 Client P.O.C.: Mike Whelan
 Revision Date: June 1, 1995
 Laboratory: Sequoia Analytical

Request Frequency: Monthly

	Initials	Date
F/S	<u>RJ</u>	<u>10-5-95</u>
Copy/Dist.	<u>RJ</u>	<u>↓</u>

Site Remedial Technologies:

Groundwater Extraction (GWE)

Complete attached Data Sheets as prescribed in the following table:

Scheduling Table

Data Sheet Section(s) / Part(s)	To be Completed	Budgeted Hrs	Actual Hrs	Mob-Is Mob	Completed
GWE(A, B, C, D, F)	monthly †		7.5	15	X
GWE(A,B,C,D,E,F,G)	quarterly †				

† = sampling to be performed

Definition of frequencies:

- weekly = N/A
- semi-monthly = N/A
- monthly = once every month on week 1
- quarterly = once every quarter in months 3, 6, 9, 12 on week 1
- semi-annually = N/A

Field Technician Response:

Completed by: PJP Date: 10-2-95
 Arrival time: 11:00 Departure time: 1:30
 Sample this visit?: yes Engineer contacted? _____

Date: 10-2-95

Groundwater Extraction & Treatment System
ARCO Service Station 0374
6407 Telegraph Avenue
330-084.5B
June 1, 1995

System Description:

Groundwater Pumps

Well	Type	Size	Control	Set Depth (TOB)
W-2	pneumatic	4"		26'

Carbon Vessels: Three SunAg GAC Transfer Pump: ORCA
 Filter: 6-18-1P-1-150-CBNB, PE-25 P85

PART A: SYSTEM DATA

System on upon arrival? yes (if no, specify reason in comments)

ELECTRIC METER READING (kw hrs)	<u>03326</u>	AIR COMPRESSOR HOURS (hrs)	<u>307</u>
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MEASUREMENT	ON ARRIVAL	ON DEPARTURE
TOTALIZER (gallons)	<u>92887</u>	<u>92918</u>
FILTER INLET PRESSURE (psig)	<u>8</u>	(ideal range 8 psig) <u>8</u>
CARBON #1 INLET PRESSURE (psig)	<u>3.5</u>	(ideal range 7 to 8 psig) <u>3.5</u>
CARBON #2 INLET PRESSURE (psig)	<u>1</u>	(ideal range 3 to 5 psig) <u>1</u>
CARBON #3 INLET PRESSURE (psig)	<u>0</u>	(ideal range 1 to 3 psig) <u>0</u>
DISCHARGE PRESSURE (psig)	<u>No Sage</u> <u>1.5</u> <u>AA</u> <u>AA</u> <u>#0</u>	(ideal range 0 to 1 psig)
TRANSFER PUMP FLOWRATE (gpm)	<u>5</u>	(ideal range 4 to 5 gpm) <u>5</u>

PART B: COMMENTS

PART C: WELL DATA

*** ALLOW SYSTEM TO RUN 1 HOUR BEFORE OBTAINING DTW READINGS**

EXTRACTION WELL	DTW (TOB)	REGULATOR PRESSURE
W-2	1160	60

WELL	DTW (TOB)	WELL	DTW (TOB)	WELL	DTW (TOB)
W-1		MW-2		MW-4	1058

PART D: SAMPLING I

SAMPLE	ANALYSIS	COMPLETED
SP 105 (Influent)	TPH-gasoline/BTEX compounds	<input checked="" type="checkbox"/>
SP 108 (Effluent)	TPH-gasoline/BTEX compounds	<input checked="" type="checkbox"/>
SP 106 (Mid 1)	TPH-gasoline/BTEX compounds	<input checked="" type="checkbox"/>

PART E: SAMPLING & READINGS II

SAMPLE	ANALYSIS	COMPLETED
SP 107 (Mid 2)	TPH-gasoline, BTEX compounds	<input type="checkbox"/>

PART F: SYSTEM MAINTENANCE I

NUMBER OF SPARE FILTERS ON SITE?	12	CHANGE FILTERS? (if necessary)	ok
TEST IRRIGATION SYSTEM	ok	ADD CHLORINE TO HOLDING TANK	ok
INSPECT HOLDING TANK	ok	WATER POTTED PLANTS MANUALLY	ok H ₂ O Shot off
TEST PARAFAX	ok		

PART G: SYSTEM MAINTENANCE II

TEST ALARM SWITCHES		CLEAN HOLDING TANK	
BACKFLUSH CARBON VESSELS		CHANGE COMPRESSOR OIL	
PULL PUMP AND CLEAN/INSPECT			

SITE INFORMATION FORM

Identification

Project # 330085B

Station # 0374

Site Address: 6407 TELEGRAPH AVE, OAKLAND CA

County:

Project Manager: S.G.

Requestor: D.N.

Client: ARCO

Project Type

- 1st Time Visit
- Quarterly
 - 1st 2nd 3rd 4th
- Monthly
- Semi-Monthly
- Weekly
- One time event
- Other: _____

Client P.O.C.: _____

Date of Request _____

Ideal field date(s): _____

Check Appropriate Category

Budget Hrs. _____

Actual Hrs. 2.0

Mob de Mob .5

Field Tasks: For General Description

circle one: Priority: 1. (emergency, must be done within 24 hrs); 2. (next visit); 3. (when available)

SECONDARY CONTAINMENT IS OVERFLOWING

- PLEASE TROUBLE SHOOT PROBLEM (MOST LIKELY SUMP IS PLUGGED OR SUMP PUMP NOT WORKING)
- GET SUMP WORKING AND DRAIN SECONDARY CONTAINMENT
- CLEAN UP ENCLOSURE / COMPLETE A DATA SHEET / CALL ENGINEER
- SHUT DOWN COMPRESSOR (FOR GWE PUMPS) EFFECTIVELY SHUTTING DOWN GWE SYSTEM. MAKE SURE SUMP / SUMP PUMP WILL STILL DRAIN PAD OF WATER AND PUMP WATER THROUGH CARBONS (IMPORTANT DURING RAINY SEASON)

ADD @ 2 GALLONS OF 1% H₂O₂ TO MW-3 / MW-3 / IS IN STREET SO USE PROPER SAFETY PRECAUTIONS AND BARRICADES. ALSO WEAR GOGGLES AND NEOPRENE GLOVES WHEN HANDLING H₂O₂. VOID PER D.N.

Comments, remarks, etc. from Field Staff (include problems encountered and out-of-scope work)

* BEFORE ADDING 1% H₂O₂ SOLUTION TO WELL MEASURE D.O. IN WATER IN WELL USING PRAEGER TUBES. AFTER ADDING SOLUTION MEASURE D.O. AGAIN. Shut down Air compressor - drained Air/Water from TANK. Breaker TURNED OFF.

- Samples taken Samples not required Soil Vapor Groundwater
- Weekly Semi-Monthly Monthly Quarterly Semi-Annual

Completed by: [Signature] Date: 10/13/95

Checked by: _____

PACIFIC ENVIRONMENTAL GROUP, INC.