



Alameda County
OCT 1 2003
Environmental Health

October 3, 2003

Ms. Susan Hugo
Alameda County Health Care Services
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

**Re: Third Quarter 2003 Groundwater Monitoring Report
ARCO Service Station #0374
6407 Telegraph Avenue
Oakland, California
URS Project #38486310**

Dear Ms. Hugo:

On behalf of Atlantic Richfield Company (ARCO – an affiliated company of the Group Environmental Management Company), URS Corporation (URS) is submitting the *Third Quarter 2003 Groundwater Monitoring Report* for ARCO Service Station #0374, located at 6407 Telegraph Avenue, Oakland, California.

If you have any questions regarding this submission, please call (510) 874-3280.

Sincerely,

URS CORPORATION

Scott Robinson
Project Manager

James F. Durkin, C.Hg.
Senior Geologist



Enclosure: Third Quarter 2003 Groundwater Monitoring Report

cc: Mr. Chuck Headlee, California Regional Water Quality Control Board 1515
Clay Street, Suite 1400 Oakland, CA 94612
Mr. Paul Supple, ARCO, (electronic copy uploaded to ENFOS)

R E P O R T

**THIRD QUARTER 2003
GROUNDWATER MONITORING**

ARCO SERVICE STATION #0374
6407 TELEGRAPH AVENUE
OAKLAND, CALIFORNIA

Alameda County
OCT 15 2003
Environmental Health

Prepared for
Atlantic Richfield Company

October 3, 2003

URS

URS Corporation
500 12th Street, Suite 200
Oakland, California 94607

38486310

Date: October 3, 2003
Quarter: 3Q 03

ATLANTIC RICHFIELD COMPANY QUARTERLY GROUNDWATER MONITORING REPORT

Facility No.: 0374 Address: 6407 Telegraph Avenue, Oakland CA
Atlantic Richfield Co. Environmental Engineer: Paul Supple
Consulting Co./Contact Person: URS Corporation / Scott Robinson
Consultant Project No.: 38486310
Primary Agency Alameda County Health Care Services Agency (ACHCSA)

WORK PERFORMED THIS QUARTER (Third – 2003):

1. Performed third quarter groundwater monitoring event on September 4, 2003.
3. Prepared and submitted third quarter 2003 groundwater monitoring report.

WORK PROPOSED FOR NEXT QUARTER (Fourth – 2003):

1. Perform fourth quarter 2003 groundwater monitoring event.
2. Prepare and submit fourth quarter 2003 groundwater monitoring report.

Current Phase of Project: GW monitoring/sampling
Frequency of Groundwater Sampling: Quarterly: MW-5
Semi-Annually (2nd & 4th quarters): MW-3, MW-4
Annually (2nd quarter): MW-1, MW-2, MW-6
Frequency of Groundwater Monitoring: Quarterly
Is Free Product (FP) Present On-Site: No
Current Remediation Techniques: ORC Socks (MW-3 and MW-4)
Approximate Depth to Groundwater: 4.31 (MW-6) to 7.31 (MW-5) feet
Groundwater Gradient (direction): Southwest
Groundwater Gradient (magnitude): 0.033 feet per foot

DISCUSSION:

TPH-g, BTEX and MTBE were not detected above their respective reporting limits in the only well sampled this quarter (MW-5).

RECOMMENDATIONS:

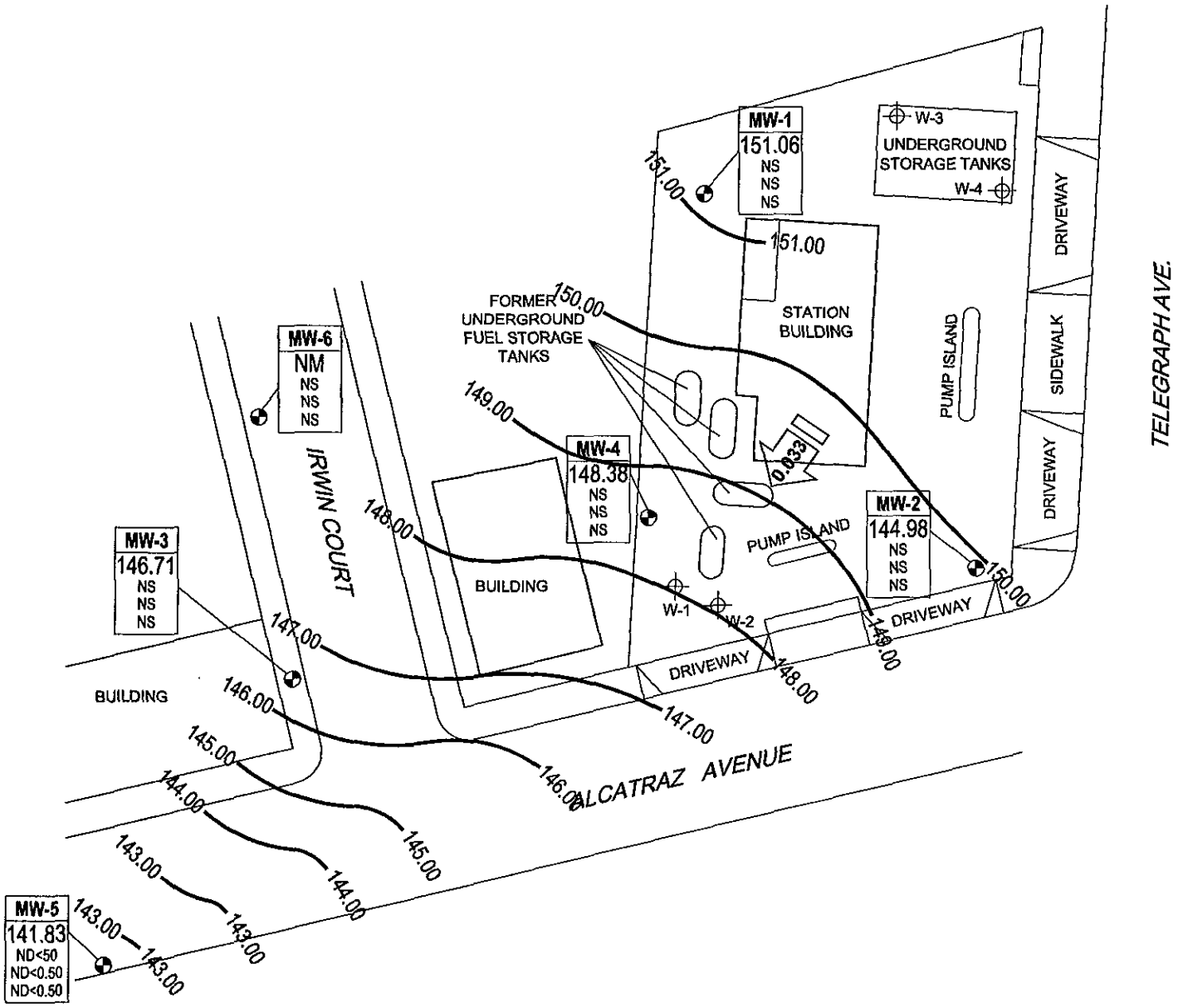
We recommend increasing the sampling frequency of the following wells due to consistent detections of MTBE: MW-1 from annually to quarterly and MW-2 from annually to semi-annually.

We further recommend changing the sampling frequency of well MW-5 from quarterly to annually and well MW-3 from semi-annually to annually. These two downgradient wells have consistently had low to non-detect concentrations for the constituents of concern. We will continue to gauge water levels quarterly to calculate groundwater flow.




ATTACHMENTS:

- Figure 1 – Groundwater Elevation Contour and Analytical Summary Map – September 4, 2003
- Table 1 – Groundwater Elevation and Analytical Data
- Table 2 – Groundwater Flow Direction and Gradient
- Table 3 – Fuel Oxygenate Analytical Data
- Attachment A – Field Procedures and Field Data Sheets
- Attachment B – Laboratory Procedures, Certified Analytical Reports, and Chain-of-Custody Records
- Attachment C – Historic Groundwater Data
- Attachment D – EDCC Report and EDF/Geowell Submittal Confirmation

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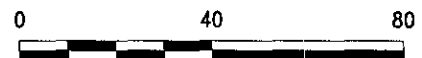


LEGEND

-  MONITORING WELL LOCATION
-  TANK PIT MONITORING WELL LOCATION
- Well** — WELL DESIGNATION
- ELEV** — GROUNDWATER ELEVATION
- TPH-g** — TPH-g, BENZENE & MTBE CONCENTRATIONS IN GROUNDWATER (µg/L)
- Benzene**
- MTBE**
- ND<** — NOT DETECTED AT OR ABOVE LABORATORY LIMITS
- NS** — NOT SAMPLED
-  APPROXIMATE GROUNDWATER FLOW AND DIRECTION (FT/FT)
- 150.00** — GROUNDWATER ELEVATION CONTOUR (FT ABOVE MSL)



NORTH



SCALE IN FEET

NOTE: SITE MAP ADAPTED FROM IT CORPORATION FIGURES.
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED.



Project No. 38486310

Arco Service Station #0374
6407 Telegraph Avenue
Oakland, California

**GROUNDWATER ELEVATION CONTOUR
AND ANALYTICAL SUMMARY MAP**
Third Quarter 2003 (September 4, 2003)

FIGURE

1

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #0374
6407 Telegraph Avenue
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethylbenzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen ^c (mg/L)	pH Level ^c
MW-1	06/20/00	158.91	6.86	152.05	NS	NS	NS	NS	NS	NS	NM	NM
	09/28/00		7.50	151.41	NS	NS	NS	NS	NS	NS	NM	NM
	12/17/00		7.49	151.42	NS	NS	NS	NS	NS	NS	NM	NM
	03/23/01		5.90	153.01	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	2,710	NA	NA
	06/21/01		7.45	151.46	NS	NS	NS	NS	NS	NS	NM	NM
	09/23/01		8.46	150.45	NS	NS	NS	NS	NS	NS	NM	NM
	12/31/01		5.50	153.41	NS	NS	NS	NS	NS	NS	NM	NM
	03/21/02		4.71	154.2	ND<5,000	ND<50	ND<50	ND<50	ND<50	2,000	NA	NA
	04/17/02		5.54	153.37	NS	NS	NS	NS	NS	NS	NM	NM
	08/12/02		7.77	151.14	NS	NS	NS	NS	NS	NS	NM	NM
	12/06/02		7.65	151.26	NS	NS	NS	NS	NS	NS	NM	NM
	01/29/03 ^b		5.88	153.03	NS	NS	NS	NS	NS	NS	NM	NM
	05/23/03		5.62	153.29	ND<10,000	ND<100	ND<100	ND<100	ND<100	1,600	1.3	7.1
	09/04/03		7.85	151.06	NS	NS	NS	NS	NS	NS	NM	NM
MW-2	06/20/00	157.92	7.67	150.25	NS	NS	NS	NS	NS	NS	NM	NM
	09/28/00		8.51	149.41	NS	NS	NS	NS	NS	NS	NM	NM
	12/17/00		8.14	149.78	NS	NS	NS	NS	NS	NS	NM	NM
	03/23/01		7.21	150.71	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA
	06/21/01		7.99	149.93	NS	NS	NS	NS	NS	NS	NM	NM
	09/23/01		8.52	149.4	NS	NS	NS	NS	NS	NS	NM	NM
	12/31/01		6.01	151.91	NS	NS	NS	NS	NS	NS	NM	NM
	03/21/02		5.95	151.97	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	45	NA	NA
	04/17/02		6.45	151.47	NS	NS	NS	NS	NS	NS	NM	NM
	08/12/02		8.08	149.84	NS	NS	NS	NS	NS	NS	NM	NM
	12/06/02		8.29	149.63	NS	NS	NS	NS	NS	NS	NM	NM
	01/29/03 ^b		7.22	150.70	NS	NS	NS	NS	NS	NS	NM	NM
	05/23/03		6.85	151.07	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	55	1.4	7.2
	09/04/03		7.94	149.98	NS	NS	NS	NS	NS	NS	NM	NM

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #0374
6407 Telegraph Avenue
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen ^c (mg/L)	pH Level ^c	
MW-3	06/20/00	153.64	6.42	147.22	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10	NA	NA	
	09/28/00		7.31	146.33	NS	NS	NS	NS	NS	NS	NM	NM	
	12/17/00		6.45	147.19	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	03/23/01		6.01	147.63	NS	NS	NS	NS	NS	NS	NM	NM	
	06/21/01		6.80	146.84	110	5.5	ND<0.5	5.4	4.1	2.5	NA	NA	
	09/23/01		7.32	146.32	NS	NS	NS	NS	NS	NS	NM	NM	
	12/31/01		4.48	149.16	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	4.9	NA	NA	
	03/21/02		4.36	149.28	NS	NS	NS	NS	NS	NS	NM	NM	
	04/17/02		5.31	148.33	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	8.7	NA	NA	
	08/12/02		7.00	146.64	NS	NS	NS	NS	NS	NS	NM	NM	
	12/06/02		7.32	146.32	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	6.2	1.4	6.7	
	01/29/03 ^b		6.07	147.57	NS	NS	NS	NS	NS	NS	NM	NM	
	05/23/03		6.45	147.19	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.6	0.9	7.7	
	09/04/03		6.93^d	146.71	NS	NS	NS	NS	NS	NS	NS	NM	NM
	MW-4		06/20/00	156.53	7.50	149.03	20,000	5,100	440	1,000	1,700	ND<250	NA
09/28/00		8.20	148.33		NS	NS	NS	NS	NS	NS	NM	NM	
12/17/00		8.11	148.42		4,320	1,240	ND<20	27.2	249	ND<100	NA	NA	
03/23/01		6.69	149.84		NS	NS	NS	NS	NS	NS	NM	NM	
06/21/01		8.01	148.52		2,800	470	16	19	160	130	NA	NA	
09/23/01		8.91	147.62		NS	NS	NS	NS	NS	NS	NM	NM	
12/31/01		4.42	152.11		4,600	1,500	100	160	210	160	NA	NA	
03/21/02		4.98	151.55		NS	NS	NS	NS	NS	NS	NM	NM	
04/17/02		6.23	150.30		7,100	2,200	110	290	450	ND<250	NA	NA	
08/12/02		8.24	148.29		NS	NS	NS	NS	NS	NS	NM	NM	
12/06/02		8.42	148.11		1,500 ^a	410	6.8	20	29	43	1.1	6.7	
01/29/03 ^b		7.20	149.33		NS	NS	NS	NS	NS	NS	NM	NM	
05/23/03		7.18	149.35		ND<5,000	1,300	89	210	260	ND<50	1.4	6.9	
09/04/03		8.15^d	148.38		NS	NS	NS	NS	NS	NS	NS	NM	NM

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #0374
6407 Telegraph Avenue
Oakland, California

Well Number	Date Sampled	Top of Riser Elevation (ft)	Depth to Groundwater (ft)	Groundwater Elevation (ft)	TPH as Gasoline (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	Dissolved Oxygen ^c (mg/L)	pH Level ^c	
MW-5	06/20/00	151.33	7.84	143.49	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<1.0	ND<10	NA	NA	
	09/28/00		8.37	142.96	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	NA	NA	
	12/17/00		8.36	142.97	ND<50	ND< 0.5	ND< 0.5	ND< 0.5	ND< 0.5	ND<2.5	NA	NA	
	03/23/01		7.55	143.78	ND<50	ND< 0.5	ND< 0.5	ND< 0.5	ND< 0.5	ND<2.5	NA	NA	
	06/21/01		8.20	143.13	ND<50	ND< 0.5	ND< 0.5	ND< 0.5	ND< 0.5	ND<2.5	NA	NA	
	09/23/01		8.68	142.65	ND<50	ND<0.5	ND< 0.5	ND< 0.5	ND< 0.5	ND<2.5	NA	NA	
	12/31/01		7.57	143.76	ND<50	ND<0.5	ND< 0.5	ND< 0.5	ND< 0.5	ND<2.5	NA	NA	
	03/21/02		6.12	145.21	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	3.2	NA	NA	
	04/17/02		6.61	144.72	ND<50	ND<0.5	ND< 0.5	ND< 0.5	ND< 0.5	ND<2.5	NA	NA	
	08/12/02		8.14	143.19	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	4.1	7.6	
	12/06/02		8.65	142.68	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<2.5	1.1	6.8	
	01/29/03 ^b		7.22	144.11	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	ND<0.5	1.0	6.6
	05/23/03		7.31	144.02	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	1.1	6.6
	09/04/03		9.50	141.83	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	3.2	6.7
MW-6	06/20/00	153.84	4.79	149.05	NS	NS	NS	NS	NS	NS	NM	NM	
	09/28/00		5.39	148.45	NS	NS	NS	NS	NS	NS	NM	NM	
	12/17/00		4.71	149.13	NS	NS	NS	NS	NS	NS	NM	NM	
	03/23/01		4.69	149.15	ND<50	ND< 0.5	ND< 0.5	ND< 0.5	ND< 0.5	ND<2.5	NA	NA	
	06/21/01		5.22	148.62	NS	NS	NS	NS	NS	NS	NM	NM	
	09/23/01		5.40	148.44	NS	NS	NS	NS	NS	NS	NM	NM	
	12/31/01		3.95	149.89	NS	NS	NS	NS	NS	NS	NM	NM	
	03/21/02		2.94	150.9	ND<50	ND<0.5	ND<0.5	ND<0.5	ND<0.5	5.2	NA	NA	
	04/17/02		5.11	148.73	NS	NS	NS	NS	NS	NS	NM	NM	
	08/12/02		5.23	148.61	NS	NS	NS	NS	NS	NS	NM	NM	
	12/06/02		5.29	148.55	NS	NS	NS	NS	NS	NS	NM	NM	
	01/29/03 ^b		4.79	149.05	NS	NS	NS	NS	NS	NS	NM	NM	
	05/23/03		4.31	149.53	ND<50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	9.4	1.0	6.7	
	09/04/03^e		NM	NM	NS	NS	NS	NS	NS	NS	NS	NM	NM

Table 1
Groundwater Elevation and Analytical Data

ARCO Service Station #0374
6407 Telegraph Avenue
Oakland, California

TPH	= Total Petroleum Hydrocarbons
MTBE	= Methyl tertiary butyl ether analyzed by EPA Method 8021B unless otherwise noted (prior to 01/29/03)
µg/L	= Micrograms per liter
mg/L	= Milligram per liter
NM	= Not measured
NS	= Not sampled
ND<	= Not detected at or above the laboratory reporting limit.
NA	= Not Available
NM	= Not Measured
a	= Chromatogram Pattern: Gasoline C6-C10
b	= Beginning this quarter, groundwater samples were analyzed by EPA method 8260B for TPH-g, BTEX, and fuel oxygenates.
c	= Dissolved oxygen and pH level are field measurements.
d	= Wells gauged with ORC sock in well.
e	= Well inaccessible

Source: The data within this table collected prior to August 2002 was provided to URS by Group Environmental Management Company and its previous consultants. URS has not verified the accuracy of this information.

Table 2
Groundwater Flow Direction and Gradient

ARCO Service Station #0374
6407 Telegraph Avenue
Oakland, California

Date Measured	Average Flow Direction	Average Hydraulic Gradient
1/31/96	Southwest	0.04
4/10/96	Southwest	0.04
7/16/96	Southwest	0.03
10/14/96	Southwest	0.03
3/27/97	Southwest	0.04
5/27/97	Southwest	0.03
8/12/97	Southwest	0.04
11/17/97	Southwest	0.03
3/16/98	Southwest	0.03
5/12/98	Southwest	0.04
07/27/98	Southwest	0.04
10/15/98	Southwest	0.02
02/18/99	Southwest	0.05
05/24/99	Southwest	0.03
08/27/99	Southwest	0.03
10/26/99	Southwest	0.03
02/03/00	Southwest	0.047
06/20/00	Southwest	0.035
09/28/00	Southwest	0.034
12/17/00	Southwest	0.032
03/23/01	Southwest	0.034
06/21/01	Southwest	0.032
09/23/01	Southwest	0.029
12/31/01	Southwest	0.043
03/21/02	Southwest	0.038
04/17/02	Southwest	0.031
08/12/02	Southwest	0.032
12/06/02	Southwest	0.020
01/29/03	Southwest	0.027
05/23/03	Southwest	0.039
09/04/03	Southwest	0.033

Note:

The data within this table collected prior to August 2002 was provided to URS by Group Environmental Management Company and its previous consultants. URS has not verified the accuracy of this information.

Table 3
Fuel Oxygenate Analytical Data

ARCO Service Station #0374
6407 Telegraph Avenue
Oakland, California

Well Number	Date Sampled	Ethanol (µg/L)	TBA (µg/L)	MTBE (µg/L)	DIPE (µg/L)	ETBE (µg/L)	TAME (µg/L)	1,2-DCA (µg/L)	EDB (µg/L)
MW-1	05/23/03	ND<20,000	ND<4,000	1,600	ND<100	ND<100	ND<100	NA	NA
MW-2	05/23/03	ND<100	ND<20	55	ND<0.50	ND<0.50	0.53	NA	NA
MW-3	05/23/03	ND<100	ND<20	1.6	ND<0.50	ND<0.50	ND<0.50	NA	NA
MW-4	05/23/03	ND<10,000	ND<2,000	ND<50	ND<50	ND<50	ND<50	NA	NA
MW-5	01/29/03	ND<40	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	05/23/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	NA	NA
	09/04/03	ND<100	ND<20	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50	ND<0.50
MW-6	05/23/03	ND<100	ND<20	9.4	ND<0.50	ND<0.50	ND<0.50	NA	NA

Note: All fuel oxygenate compounds analyzed using EPA Method 8260B
TBA = tert-Butyl alcohol
MTBE = Methyl tert-butyl ether
DIPE = Di-isopropyl ether
ETBE = Ethyl tert butyl ether
TAME = tert-Amyl methyl ether
1,2-DCA = 1,2-Dichloroethane
EDB = 1,2-Dibromoethane
µg/L = micrograms per liter
ND< = Not detected at or above the laboratory reporting limit
NA = Not analyzed

ATTACHMENT A
FIELD PROCEDURES AND FIELD DATA SHEETS

FIELD PROCEDURES

Sampling Procedures

The sampling procedure for each well consists first of measuring the water level and depth to bottom, and checking for the presence of free phase petroleum product (free product), using either an electronic indicator and a clear Teflon™ bailer or an oil-water interface probe.

Wells not containing free product are purged approximately three casing volumes of water (or until dewatered) using a centrifugal pump, gas displacement pump, or bailer. Equipment and purging method used for the current sampling event is noted on the attached field data sheets. During purging, temperature, pH, and electrical conductivity are monitored to document that these parameters are stable prior to collecting samples. After purging, water levels are allowed to partially (approximately 80%) recover. Groundwater samples (both purge and no purge) are collected using a Teflon bailer, placed into appropriate Environmental Protection Agency- (EPA) approved containers, labeled, logged onto chain-of-custody records, and transported on ice to a California State-certified laboratory. Wells with free product are not sampled and free product is removed according to California Code of Regulation, Title 23, Div. 3, Chap. 16, Section 2655, UST Regulations.

WELL GAUGING DATA

Project # 070904-MMI Date 9/4/03 Client Arco 374

Site 6407 Telegraph Ave., Oakland

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)	Thickness of Immiscible Liquid (ft.)	Volume of Immiscibles Removed (ml)	Depth to water (ft.)	Depth to well bottom (ft.)	Survey Point: TOB or TOE		
Mw-1	4					7.85	26.70	TDC		
Mw-2	4					7.94	26.35			
Mw-3	4	gauged with ORC				6.93	26.70			
Mw-4	4	gauged with ORC				8.15	26.85			
Mw-5	4					9.50	23.05		(S)	
Mw-6	4	(unable to gauge b/c parked over)					14.55		↓	
		gauged with ORC in well								

WELLHEAD INSPECTION CHECKLIST

Client Ac 374 Date 9/4/03

Site Address 6407 Telegraph Ave., Oakland

Job Number 030904-MH1 Technician MM

Well ID	Well Inspected - No Corrective Action Required	Water Bailed From Wellbox	Wellbox Components Cleaned	Cap Replaced	Lock Replaced	Other Action Taken (explain below)	Well Not Inspected (explain below)	Repair Order Submitted
MW-1								X
MW-2								X
MW-3								X
MW-4								
MW-5								X
MW-6							X	
		(MW-6: parked over)						

NOTES: _____



Chain of Custody Record

Project Name 374 GWM

BP BU/GEM CO Portfolio Retail

BP Laboratory Contract Number: Atlantic Richfield Company

Requested Due Date (mm/dd/yy) 14 day TAT

Date: 9/4/03

On-site Time: 9:25 Temp: 65
 Off-site Time: 11:05 Temp: 70
 Sky Conditions: Blue Skies
 Meteorological Events:
 Wind Speed: SW Direction: S

Send To:	BP/GEM Facility No.: <u>ARCO 374</u>	Consultant/Contractor: <u>URS</u>
Lab Name: <u>SEQUOIA</u>	BP/GEM Facility Address: <u>6407 TELEGRAPH AVE, OAKLAND, CA</u>	Address: <u>500 12th St, Ste. 200</u>
Lab Address: <u>885 Jarvis Dr.</u>	Site ID No. <u>ARCO 374</u>	<u>Oakland, CA 94609-4014</u>
<u>Morgan Hill, CA 95037</u>	Site Lat/Long:	e-mail EDD: <u>donna.casper@URSCorp.com</u>
	California Global ID #: <u>T0600100106</u>	Consultant/Contractor Project No.: <u>J5-00000374.01 00427</u>
Lab PM <u>Theresa Allen</u>	BP/GEM PM Contact: <u>PAUL SUPPLE</u>	Consultant Tele/Fax: <u>510-893-3600/510-874-3268</u>
Tele/Fax: <u>408-776-9600 / 408-782-6308</u>	Address: <u>P.O. Box 6549</u>	Consultant/Contractor PM: <u>Scott Robinson</u>
Report Type & QC Level: <u>1 Send EDF Reports</u>	<u>Moraga, CA 94570</u>	Invoice to: <u>Consultant/Contractor of BP/GEM</u> (Circle or)
BP/GEM Account No.:	Tele/Fax: <u>925-299-8891/925-299-8872</u>	BP/GEM Work Release No: <u>INTRIM -50419</u>

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives				Requested Analysis							Sample Point Lat/Long and Comments
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	ICI	TPH-G / BTEX (8015/8021/8260)	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE DPE, TBA (8260)	1,2-DCA & EDB (8260)	Ethanol (8260)	
1	<u>MW-5</u>	<u>1042</u>	X				<u>3</u>					X				X				
2	<u>Temp Blank</u>		X				<u>1</u>													
3	<u>Trip Blank</u>		X				<u>2</u>													<u>"ON HOLD"</u>
4																				
5																				
6																				
7																				
8																				
9																				
10																				

Sampler's Name: <u>MIKE McNAMARA</u>	Relinquished By: <u>[Signature]</u> Affiliation: <u>BTS</u>	Date:	Time:	Accepted By / Affiliation:	Date:	Time:
Sampler's Company: <u>Blaine Tech Services</u>						
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						

Special Instructions: Address Invoice to BP/GEM but send to URS for approval

Custody Seals In Place Yes No Temperature Blank Yes No Cooler Temperature on Receipt °F/C Trip Blank Yes No

BP GEM OIL COMPANY TYPE A BILL OF LADING

SOURCE RECORD BILL OF LADING FOR NON-HAZARDOUS PURGEWATER RECOVERED FROM GROUNDWATER WELLS AT BP GEM OIL COMPANY FACILITIES IN THE STATE OF CALIFORNIA. THE NON-HAZARDOUS PURGE- WATER WHICH HAS BEEN RECOVERED FROM GROUND- WATER WELLS IS COLLECTED BY THE CONTRACTOR, MADE UP INTO LOADS OF APPROPRIATE SIZE AND HAULED BY DILLARD ENVIRONMENTAL TO THE ALTAMONT LANDFILL AND RESOURCE RECOVERY FACILITY IN LIVERMORE, CALIFORNIA.

The contractor performing this work is BLAINE TECH SERVICES, INC. (BTS), 1680 Rogers Avenue, San Jose, CA 95112 (phone [408] 573-0555). Blaine Tech Services, Inc. is authorized by BP GEM OIL COMPANY to recover, collect, apportion into loads the Non-Hazardous Well Purgewater that is drawn from wells at the BP GEM Oil Company facility indicated below and deliver that purgewater to BTS. Transport routing of the Non-Hazardous Well Purgewater may be direct from one BP GEM facility to the designated destination point; from one BP GEM facility to the designated destination point via another BP GEM facility; from a BP GEM facility to the designated destination point via the contractor's facility, or any combination thereof. The Non-Hazardous Well Purgewater is and remains the property of BP GEM Oil Company.

This Source Record BILL OF LADING was initiated to cover the recovery of Non-Hazardous Well Purgewater from wells at the BP GEM Oil Company facility described below:

Arlo 374

Station #

6407 Telegraph Ave., Oakland

Station Address

Total Gallons Collected From Groundwater Monitoring Wells:

27

added equip. 3
rinse water

any other adjustments

TOTAL GALS. RECOVERED 30

loaded onto BTS vehicle # 22

BTS event #

time date

030904-MM1

1110

9/4/03

signature

[Handwritten Signature]

REC'D AT

time

date

BTS

unloaded by signature

[Handwritten Signature]

9/4/03

ATTACHMENT B

**LABORATORY PROCEDURES,
CERTIFIED ANALYTICAL REPORTS,
AND CHAIN-OF-CUSTODY RECORDS**

LABORATORY PROCEDURES

Laboratory Procedures

The groundwater samples were analyzed for the presence of the chemicals mentioned in the chain of custody using standard EPA methods. The methods of analysis for the groundwater samples are documented in the certified analytical report. The certified analytical reports and chain-of-custody record are presented in this attachment. The analytical data provided by the laboratory approved by Group Environmental Management Company have been reviewed and verified by that laboratory.



19 September, 2003

Scott Robinson
URS Corporation [Arco]
500 12th Street, Suite 200
Oakland, CA 94607

RE: ARCO #374, Oakland, CA
Work Order: MMI0161

Enclosed are the results of analyses for samples received by the laboratory on 09/05/03 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Theresa Allen
Project Manager

CA ELAP Certificate #1210

URS Corporation [Arco] 500 12th Street, Suite 200 Oakland CA, 94607	Project: ARCO #374, Oakland, CA Project Number: INTRIM-50419 Project Manager: Scott Robinson	MMI0161 Reported: 09/19/03 17:09
---	--	---

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-5	MMI0161-01	Water	09/04/03 10:42	09/05/03 17:00
Trip Blank	MMI0161-02	Water	09/04/03 00:00	09/05/03 17:00

There were custody seals received with this project.

URS Corporation [Arco]
500 12th Street, Suite 200
Oakland CA, 94607

Project: ARCO #374, Oakland, CA
Project Number: INTRIM-50419
Project Manager: Scott Robinson

MMI0161
Reported:
09/19/03 17:09

**Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting		Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
		Limit								
MW-5 (MMI0161-01) Water Sampled: 09/04/03 10:42 Received: 09/05/03 17:00										
Ethanol	ND	100		ug/l	1	3I12001	09/12/03	09/12/03	EPA 8260B	
tert-Butyl alcohol	ND	20		"	"	"	"	"	"	O-09
Methyl tert-butyl ether	ND	0.50		"	"	"	"	"	"	
Di-isopropyl ether	ND	0.50		"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	0.50		"	"	"	"	"	"	
tert-Amyl methyl ether	ND	0.50		"	"	"	"	"	"	
1,2-Dichloroethane	ND	0.50		"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50		"	"	"	"	"	"	
Benzene	ND	0.50		"	"	"	"	"	"	
Toluene	ND	0.50		"	"	"	"	"	"	
Ethylbenzene	ND	0.50		"	"	"	"	"	"	
Xylenes (total)	ND	0.50		"	"	"	"	"	"	
Gasoline Range Organics (C6-C10)	ND	50		"	"	"	"	"	"	
<i>Surrogate: 1,2-Dichloroethane-d4</i>		108 %		78-129		"	"	"	"	

URS Corporation [Arco]
 500 12th Street, Suite 200
 Oakland CA, 94607

 Project: ARCO #374, Oakland, CA
 Project Number: INTRIM-50419
 Project Manager: Scott Robinson

 MMI0161
 Reported:
 09/19/03 17:09

**Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3I12001 - EPA 5030B P/T
Blank (3I12001-BLK1)

Prepared & Analyzed: 09/12/03

Ethanol	ND	100	ug/l							
tert-Butyl alcohol	ND	20	"							
Methyl tert-butyl ether	ND	0.50	"							
Di-isopropyl ether	ND	0.50	"							
Ethyl tert-butyl ether	ND	0.50	"							
tert-Amyl methyl ether	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C6-C10)	ND	50	"							
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.92		"	5.00		98.4	78-129			

Laboratory Control Sample (3I12001-BS1)

Prepared & Analyzed: 09/12/03

Ethanol	227	100	ug/l	200		114	31-186			
tert-Butyl alcohol	52.3	20	"	50.0		105	0-206			
Methyl tert-butyl ether	10.4	0.50	"	10.0		104	63-137			
Di-isopropyl ether	9.72	0.50	"	10.0		97.2	76-130			
Ethyl tert-butyl ether	9.66	0.50	"	10.0		96.6	61-141			
tert-Amyl methyl ether	9.72	0.50	"	10.0		97.2	56-140			
1,2-Dichloroethane	10.2	0.50	"	10.0		102	77-136			
1,2-Dibromoethane (EDB)	10.4	0.50	"	10.0		104	77-132			
Benzene	9.88	0.50	"	10.0		98.8	78-124			
Toluene	9.86	0.50	"	10.0		98.6	78-129			
Ethylbenzene	10.4	0.50	"	10.0		104	84-117			
Xylenes (total)	31.2	0.50	"	30.0		104	83-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	4.99		"	5.00		99.8	78-129			

URS Corporation [Arco]
 500 12th Street, Suite 200
 Oakland CA, 94607

 Project: ARCO #374, Oakland, CA
 Project Number: INTRIM-50419
 Project Manager: Scott Robinson

 MMI0161
 Reported:
 09/19/03 17:09

**Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3I12001 - EPA 5030B P/T
Laboratory Control Sample (3I12001-BS2)

Prepared & Analyzed: 09/12/03

Gasoline Range Organics (C6-C10)	341	50	ug/l	440		77.5	70-113			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.30</i>		"	<i>5.00</i>		<i>106</i>	<i>78-129</i>			

Laboratory Control Sample Dup (3I12001-BS1)

Prepared & Analyzed: 09/12/03

Ethanol	191	100	ug/l	200		95.5	31-186	17.2	37	
tert-Butyl alcohol	57.9	20	"	50.0		116	0-206	10.2	22	
Methyl tert-butyl ether	10.8	0.50	"	10.0		108	63-137	3.77	13	
Di-isopropyl ether	10.7	0.50	"	10.0		107	76-130	9.60	9	QR-02
Ethyl tert-butyl ether	10.6	0.50	"	10.0		106	61-141	9.28	9	QR-02
tert-Amyl methyl ether	10.2	0.50	"	10.0		102	56-140	4.82	12	
1,2-Dichloroethane	11.0	0.50	"	10.0		110	77-136	7.55	13	
1,2-Dibromoethane (EDB)	10.9	0.50	"	10.0		109	77-132	4.69	9	
Benzene	10.0	0.50	"	10.0		100	78-124	1.21	12	
Toluene	9.94	0.50	"	10.0		99.4	78-129	0.808	10	
Ethylbenzene	10.3	0.50	"	10.0		103	84-117	0.966	10	
Xylenes (total)	30.2	0.50	"	30.0		101	83-125	3.26	11	
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.44</i>		"	<i>5.00</i>		<i>109</i>	<i>78-129</i>			

Matrix Spike (3I12001-MS1)

Source: MMI0116-01

Prepared & Analyzed: 09/12/03

Ethanol	23400	10000	ug/l	20000	ND	117	31-186			
tert-Butyl alcohol	7480	2000	"	5000	ND	150	0-206			
Methyl tert-butyl ether	4410	50	"	1000	3300	111	63-137			
Di-isopropyl ether	1040	50	"	1000	ND	104	76-130			
Ethyl tert-butyl ether	1120	50	"	1000	ND	112	61-141			
tert-Amyl methyl ether	1080	50	"	1000	ND	108	56-140			
1,2-Dichloroethane	1160	50	"	1000	ND	116	77-126			
1,2-Dibromoethane (EDB)	1160	50	"	1000	ND	116	77-132			
Benzene	1060	50	"	1000	ND	106	78-124			
Toluene	1000	50	"	1000	ND	100	78-129			
Ethylbenzene	1020	50	"	1000	10	101	84-117			
Xylenes (total)	3040	50	"	3000	ND	101	83-125			
<i>Surrogate: 1,2-Dichloroethane-d4</i>	<i>5.45</i>		"	<i>5.00</i>		<i>109</i>	<i>78-129</i>			

URS Corporation [Arco]
 500 12th Street, Suite 200
 Oakland CA, 94607

 Project: ARCO #374, Oakland, CA
 Project Number: INTRIM-50419
 Project Manager: Scott Robinson

 MMI0161
 Reported:
 09/19/03 17:09

**Volatile Organic Compounds by EPA Method 8260B - Quality Control
Sequoia Analytical - Morgan Hill**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC Limits	RPD	RPD Limit	Notes
Batch 3I12001 - EPA 5030B P/T									
Matrix Spike (3I12001-MS2)	Source: MMI0128-02			Prepared: 09/12/03		Analyzed: 09/13/03			
Gasoline Range Organics (C6-C10)	7760	1000	ug/l	8800	850	78.5	70-113		
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.34		"	5.00		107	78-129		
Matrix Spike Dup (3I12001-MSD1)	Source: MMI0116-01			Prepared & Analyzed: 09/12/03					
Ethanol	20900	10000	ug/l	20000	ND	104	31-186	11.3	37
tert-Butyl alcohol	6980	2000	"	5000	ND	140	0-206	6.92	22
Methyl tert-butyl ether	4220	50	"	1000	3300	92.0	63-137	4.40	13
Di-isopropyl ether	1060	50	"	1000	ND	106	76-130	1.90	9
Ethyl tert-butyl ether	1070	50	"	1000	ND	107	61-141	4.57	9
tert-Amyl methyl ether	1040	50	"	1000	ND	104	56-140	3.77	12
1,2-Dichloroethane	1120	50	"	1000	ND	112	77-126	3.51	13
1,2-Dibromoethane (EDB)	1120	50	"	1000	ND	112	77-132	3.51	9
Benzene	1040	50	"	1000	ND	104	78-124	1.90	12
Toluene	977	50	"	1000	ND	97.7	78-129	2.33	10
Ethylbenzene	1000	50	"	1000	10	99.0	84-117	1.98	10
Xylenes (total)	2990	50	"	3000	ND	99.7	83-125	1.66	11
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.42		"	5.00		108	78-129		
Matrix Spike Dup (3I12001-MSD2)	Source: MMI0128-02			Prepared: 09/12/03		Analyzed: 09/13/03			
Gasoline Range Organics (C6-C10)	8100	1000	ug/l	8800	850	82.4	70-113	4.29	9
<i>Surrogate: 1,2-Dichloroethane-d4</i>	5.24		"	5.00		105	78-129		

URS Corporation [Arco]
500 12th Street, Suite 200
Oakland CA, 94607

Project: ARCO #374, Oakland, CA
Project Number: INTRIM-50419
Project Manager: Scott Robinson

MMI0161
Reported:
09/19/03 17:09

Notes and Definitions

- O-09 The result was reported with a possible high bias due to the continuing calibration verification falling outside acceptance criteria.
- QR-02 The RPD result exceeded the control limits; however, both percent recoveries were acceptable. Sample results for the QC batch were accepted based on percent recoveries and completeness of QC data.
- DET Analyte DETECTED
- ND Analyte NOT DETECTED at or above the reporting limit
- NR Not Reported
- dry Sample results reported on a dry weight basis
- RPD Relative Percent Difference



Chain of Custody Record

Project Name 374 GWM
 BP BU/GEM CO Portfolio Retail
 BP Laboratory Contract Number: Atlantic Richfield Company

HME6141

Date: 9/15/03

Requested Due Date (mm/dd/yyyy) 14 days TAT

On-site Time: 9:25 Temp: 65
 Off-site Time: 11:05 Temp: 70
 Sky Conditions: Blue Skies
 Meteorological Events:
 Wind Speed: SW Direction: S

Send To:	BP/GEM Facility No.: <u>ARCO 374</u>	Consultant/Contractor: <u>URS</u>
Lab Name: <u>SEQUOIA</u>	BP/GEM Facility Address: <u>6407 TELEGRAPH AVE, OAKLAND, CA</u>	Address: <u>500 12th St., Ste. 200</u>
Lab Address: <u>885 Jarvis Dr.</u>	Site ID No. <u>ARCO 374</u>	<u>Oakland, CA 94609-4014</u>
<u>Morgan Hill, CA 95037</u>	Site Lat/Long:	e-mail EDD: <u>donna.casper@URSCorp.com</u>
	California Global ID #: <u>T0600100106</u>	Consultant/Contractor Project No.: <u>J5-00000374.01 00427</u>
Lab PM Theresa Allen	BP/GEM PM Contact: <u>PAUL SUPPLE</u>	Consultant Tele/fax: <u>510-893-3600/510-874-3268</u>
Tele/Fax: <u>408-776-9600 / 408-782-8308</u>	Address: <u>P.O. Box 6549</u>	Consultant/Contractor PM: <u>Scott Robinson</u>
Report Type & QC Level: <u>1 Serial EDF Reports</u>	<u>Moraga, CA 94570</u>	Invoice to: <u>Consultant/Contractor of BP/GEM (circle one)</u>
BP/GEM Account No:	Tele/Fax: <u>925-299-8891/925-299-8872</u>	BP/GEM Work Release No: <u>INTRIM-50419</u>

Item No.	Sample Description	Time	Matrix				Laboratory No.	No. of containers	Preservatives			Requested Analysis						Sample Point Lat/Long and Comments	
			Soil/Solid	Water/Liquid	Sediments	Air			Unpreserved	H ₂ SO ₄	HNO ₃	HCl	TPH-G / BTEX (801.5/8021/8260)	TPH-D (8015)	MTBE (8021)	MTBE (8260)	MTBE, TAME, ETBE DPE, TBA (8260)		1,2-DCA & EDB (8260)
1	<u>ML-5</u>	<u>1042</u>		X			<u>3</u>						X						
2	<u>Temp Blank</u>			X			<u>1</u>												
3	<u>Trip Blank</u>			X			<u>2</u>												<u>"ON HOLD"</u>
4																			
5																			
6																			
7																			
8																			
9																			
10																			

Sampler's Name: <u>Nike McNamee</u>	Relinquished By / Affiliation: <u>[Signature]</u>	Date: <u>9/15/03</u>	Time: <u>1342</u>	Accepted By / Affiliation: <u>[Signature]</u>	Date: <u>9/15/03</u>	Time: <u>1342</u>
Sampler's Company: <u>Blaine Tech Services</u>						
Shipment Date:						
Shipment Method:						
Shipment Tracking No:						

Special Instructions: Address Invoice to BP/GEM but send to URS for approval

Seals In Place Yes No
 Temperature Blank Yes No
 Cooler Temperature on Receipt No
 Trip Blank Yes No

Distribution: White Copy - Laboratory / Yellow Copy - BP/GEM / Pink Copy - Consultant/Contractor

SEQUOIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: URS
 REC. BY (PRINT) EB
 WORKORDER: MNL 0141

DATE REC'D AT LAB: 9-5-03
 TIME REC'D AT LAB: 1750
 DATE LOGGED IN: 9-6-03

Drinking water for regulatory purposes: YES NO
 Wastewater for regulatory purposes: YES NO

CIRCLE THE APPROPRIATE RESPONSE	LAB SAMPLE #	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERVATIVE	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
1. Custody Seal(s) <input checked="" type="checkbox"/> Present / <input type="checkbox"/> Absent <input checked="" type="checkbox"/> Intact / <input type="checkbox"/> Broken*			MW-5	3 hours	Acc.	L	9-4-03	3776070
2. Chain-of-Custody <input checked="" type="checkbox"/> Present / <input type="checkbox"/> Absent*			TD	2 hours	L	L	L	L
3. Traffic Reports or Packing List: <input type="checkbox"/> Present / <input checked="" type="checkbox"/> Absent								
4. Airbill: <input type="checkbox"/> Airbill / <input type="checkbox"/> Sticker <input type="checkbox"/> Present / <input checked="" type="checkbox"/> Absent								
5. Airbill #:								
6. Sample Labels: <input checked="" type="checkbox"/> Present / <input type="checkbox"/> Absent								
7. Sample IDs: <input checked="" type="checkbox"/> Listed / <input type="checkbox"/> Not Listed on Chain-of-Custody.								
8. Sample Condition: <input checked="" type="checkbox"/> Intact / <input type="checkbox"/> Broken* / <input type="checkbox"/> Leaking*								
9. Does information on custody reports, traffic reports and sample labels agree? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*								
10. Sample received within hold time: <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*								
11. Proper Preservatives used: <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No*								
12. Temp Rec. at Lab: Is temp 4 +/- 2°C? <input checked="" type="checkbox"/> Yes / <input type="checkbox"/> No**								
(Acceptance range for samples requiring thermal pres.)								
**Exception (if any): Metals / DFP (Direct From Field) or Problem COC								

***IF CIRCLED, CONTACT PROJECT MANAGER AND ATTACH RECORD OF RESOLUTION.**

ATTACHMENT C

HISTORIC GROUNDWATER DATA

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 0374
6407 Telegraph Avenue, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-1	01/31/96	158.91	6.34	152.57	Not Sampled: Well Sampled Annually							
MW-1	04/10/96	158.91	5.82	153.09	Not Sampled: Well Sampled Annually							
MW-1	07/16/96	158.91	7.23	151.68	<50	<0.5	<0.5	<0.5	<0.5	340	NM	
MW-1	10/14/96	158.91	8.34	150.57	Not Sampled: Well Sampled Annually							
MW-1	03/27/97	158.91	6.37	152.54	Not Sampled: Well Sampled Annually							
MW-1	05/27/97	158.91	7.30	151.61	Not Sampled: Well Sampled Annually							
MW-1	08/12/97	158.91	8.22	150.69	<50	<0.5	<0.5	<0.5	<0.5	620	NM	
MW-1	11/17/97	158.91	7.98	150.93	Not Sampled: Well Sampled Annually							
MW-1	03/16/98	158.91	4.94	153.97	Not Sampled: Well Sampled Annually							
MW-1	05/12/98	158.91	5.28	153.63	Not Sampled: Well Sampled Annually							
MW-1	07/27/98	158.91	6.84	152.07	<500	<5	<5	<5	<5	580	0.6	P
MW-1	10/15/98	158.91	7.32	151.59	Not Sampled: Well Sampled Annually							
MW-1	02/18/99	158.91	6.28	152.63	Not Sampled: Well Sampled Annually							
MW-1	05/24/99	158.91	6.45	152.46	<50	<0.5	<0.5	<0.5	<0.5	1,300	2.0	NP
MW-1	08/27/99	158.91	7.86	151.05	<50	<0.5	<0.5	<0.5	<0.5	1,500	1.65	NP
MW-1	10/26/99	158.91	8.43	150.48	Not Sampled: Well Sampled Annually							
MW-1	02/03/00	158.91	7.28	151.63	<50	<0.5	<0.5	<0.5	<1	4,000	1.0	NP
MW-2	01/31/96	157.92	6.51	151.41	Not Sampled: Well Sampled Annually							
MW-2	04/10/96	157.92	6.94	150.98	Not Sampled: Well Sampled Annually							
MW-2	07/16/96	157.92	7.73	150.19	<50	1.2	<0.5	<0.5	<0.5	33	NM	
MW-2	10/14/96	157.92	8.35	149.57	Not Sampled: Well Sampled Annually							
MW-2	03/27/97	157.92	7.40	150.52	Not Sampled: Well Sampled Annually							
MW-2	05/27/97	157.92	7.82	150.10	Not Sampled: Well Sampled Annually							
MW-2	08/12/97	157.92	8.29	149.63	<50	<0.5	<0.5	<0.5	<0.5	23	NM	
MW-2	11/17/97	157.92	8.05	149.87	Not Sampled: Well Sampled Annually							
MW-2	03/16/98	157.92	6.45	151.47	Not Sampled: Well Sampled Annually							

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 0374
6407 Telegraph Avenue, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-2	05/12/98	157.92	6.93	150.99	Not Sampled: Well Sampled Annually							
MW-2	07/27/98	157.92	7.39	150.53	<50	<0.5	<0.5	<0.5	<0.5	<3	0.85	NP
MW-2	10/15/98	157.92	7.67	150.25	Not Sampled: Well Sampled Annually							
MW-2	02/18/99	157.92	6.63	151.29	Not Sampled: Well Sampled Annually							
MW-2	05/24/99	157.92	7.43	150.49	<50	6.3	<0.5	0.7	<0.5	29	3.0	P
MW-2	08/27/99	157.92	8.22	149.70	<50	<0.5	<0.5	<0.5	<0.5	<3	0.95	NP
MW-2	10/26/99	157.92	8.46	149.46	Not Sampled: Well Sampled Annually							
MW-2	02/03/00	157.92	7.75	150.17	<50	<0.5	<0.5	<0.5	<1	<3	1.0	NP
MW-3 *	01/31/96	153.64	7.02	146.62	140	20	0.87	11	14	NA	NM	
MW-3 *	04/10/96	153.64	7.82	145.82	84	2.4	<0.5	1.9	1.1	NA	NM	
MW-3 *	07/16/96	153.64	6.80	146.84	<50	2.2	<0.5	<0.5	<0.5	<2.5	NM	
MW-3 *	10/14/96	153.64	7.67	145.97	<50	1.2	<0.5	<0.5	0.81	2.9	NM	
MW-3 *	03/27/97	153.64	7.62	146.02	<50	0.94	<0.5	0.9	0.63	<2.5	NM	
MW-3 *	05/27/97	153.64	6.72	146.92	Not Sampled: Well Sampled Semiannually							
MW-3 *	08/12/97	153.64	8.20	145.44	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NM	
MW-3 *	11/17/97	153.64	7.64	146.00	Not Sampled: Well Sampled Semiannually							
MW-3 *	03/18/98	153.64	5.14	148.50	<50	<0.5	<0.5	<0.5	<0.5	<3	4.0	P
MW-3 *	05/12/98	153.64	5.53	148.11	Not Sampled: Well Sampled Semiannually							
MW-3 *	07/27/98	153.64	7.63	146.01	74	<0.5	<0.5	<0.5	<0.5	<3	1.7	NP
MW-3 *	10/15/98	153.64	7.46	146.18	Not Sampled: Well Sampled Semiannually							
MW-3 *	02/18/99	153.64	5.85	147.79	Not Sampled							
MW-3 *	05/24/99	153.64	7.00	146.64	<50	<0.5	<0.5	<0.5	<0.5	4	6.0	NP
MW-3 *	08/27/99	153.64	7.16	146.48	<50	<0.5	<0.5	<0.5	<0.5	<3	16.57	NP
MW-3 *	10/26/99	153.64	7.79	145.85	<50	<0.5	<0.5	<0.5	<1	<3	14.86	NP
MW-3 *	02/03/00	153.64	7.11	146.53	<50	<0.5	<0.5	<0.5	<1	<3	1.0	NP

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 0374
6407 Telegraph Avenue, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)	
MW-4	01/31/96	156.53	5.64	150.89	230	23	2.2	3.7	32	NA	NM		
MW-4	04/10/96	156.53	6.66	149.87	7,300	1,600	350	350	830	NA	NM		
MW-4	07/16/96	156.53	7.73	148.80	5,600	1,100	160	240	520	150	NM		
MW-4	10/14/96	156.53	8.55	147.98	4,500	860	72	160	340	<62	NM		
MW-4	03/27/97	156.53	7.15	149.38	25,000	5,200	760	850	2,600	<250	NM		
MW-4	05/27/97	156.53	7.75	148.78	Not Sampled: Well Sampled Semiannually								
MW-4	08/12/97	156.53	8.46	148.07	4,800	950	40	140	210	170	NM		
MW-4	11/17/97	156.53	8.24	148.29	Not Sampled: Well Sampled Semiannually								
MW-4	03/16/98	156.53	5.32	151.21	<50	<0.5	<0.5	<0.5	<0.5	<3	1.5	P	
MW-4	05/12/98	156.53	6.38	150.15	Not Sampled: Well Sampled Semiannually								
MW-4	07/27/98	156.53	7.36	149.17	21,000	6,100	390	810	1,600	<300	0.5	NP	
MW-4 *	10/15/98	156.53	8.30	148.23	Not Sampled: Well Sampled Semiannually								
MW-4 *	02/18/99	156.53	4.39	152.14	Not Sampled								
MW-4 *	05/24/99	156.53	7.45	149.08	18,000	5,600	350	410	1,300	<300	1.0	NP	
MW-4 *	08/27/99	156.53	8.07	148.46	12,000	3,200	170	490	810	65	1.32	NP	
MW-4 *	10/26/99	156.53	8.72	147.81	12,000	3,100	130	450	680	12	1.39	NP	
MW-4 *	02/03/00	156.53	7.41	149.12	9,300	2,800	96	330	400	73	1.0	NP	
MW-5	01/31/96	151.33	8.64	142.69	<50	<0.5	<0.5	<0.5	<0.5	NA	NM		
MW-5	04/10/96	151.33	N/A	--	<50	<0.5	<0.5	<0.5	<0.5	NA	NM		
MW-5	07/16/96	151.33	8.15	143.18	<50	0.79	1.3	<0.5	<0.5	<2.5	NM		
MW-5	10/14/96	151.33	7.92	143.41	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NM		
MW-5	03/27/97	151.33	7.75	143.58	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NM		
MW-5	05/27/97	151.33	8.16	143.17	<50	<0.5	<0.5	<0.5	<0.5	<2.5	NM		
MW-5	08/12/97	151.33	Well Inaccessible										
MW-5	11/17/97	151.33	8.75	142.58	<50	<0.5	<0.5	<0.5	<0.5	<2.5	4.0	NP	
MW-5	03/16/98	151.33	6.90	144.43	<50	<0.5	<0.5	<0.5	<0.5	<3	1.5	P	

Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)

ARCO Service Station 0374
6407 Telegraph Avenue, Oakland, California

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MW-5	05/12/98	151.33	7.24	144.09	<50	<0.5	<0.5	<0.5	<0.5	<3	2.2	P
MW-5	07/27/98	151.33	7.91	143.42	<50	<0.5	<0.5	<0.5	<0.5	<3	1.3	P
MW-5	10/15/98	151.33	8.31	143.02	<50	<0.5	<0.5	<0.5	0.6	<3	3.0	P
MW-5	02/18/99	151.33	7.25	144.08	<50	<0.5	<0.5	<0.5	<0.5	<3	2.0	P
MW-5	05/24/99	151.33	7.52	143.81	<50	<0.5	<0.5	<0.5	<0.5	<3	2.0	NP
MW-5	08/27/99	151.33	8.31	143.02	<50	<0.5	<0.5	<0.5	<0.5	<3	2.28	P
MW-5	10/26/99	151.33	8.61	142.72	<50	<0.5	<0.5	<0.5	<1	<3	1.99	P
MW-5	02/03/00	151.33	10.09	141.24	<50	<0.5	<0.5	<0.5	<1	<3	1.0	NP
MW-6	01/31/96	153.84	5.15	148.69	Not Sampled: Well Sampled Annually							
MW-6	04/10/96	153.84	4.58	149.26	Not Sampled: Well Sampled Annually							
MW-6	07/16/96	153.84	4.96	148.88	<50	<0.5	<0.5	<0.5	<0.5	150	NM	
MW-6	10/14/96	153.84	6.15	147.69	Not Sampled: Well Sampled Annually							
MW-6	03/27/97	153.84	4.40	149.44	Not Sampled: Well Sampled Annually							
MW-6	05/27/97	153.84	4.90	148.94	Not Sampled: Well Sampled Annually							
MW-6	08/12/97	153.84	5.43	148.41	<50	<0.5	<0.5	<0.5	<0.5	39	NM	
MW-6	11/17/97	153.84	5.87	147.97	Not Sampled: Well Sampled Annually							
MW-6	03/16/98	153.84	4.52	149.32	Not Sampled: Well Sampled Annually							
MW-6	05/12/98	153.84	4.42	149.42	Not Sampled: Well Sampled Annually							
MW-6	07/27/98	153.84	4.75	149.09	<50	<0.5	<0.5	<0.5	<0.5	18	0.9	P
MW-6	10/15/98	153.84	5.75	148.09	Not Sampled: Well Sampled Annually							
MW-6	02/18/99	153.84	3.93	149.91	Not Sampled: Well Sampled Annually							
MW-6	05/24/99	153.84	4.32	149.52	<50	<0.5	<0.5	<0.5	<0.5	6	2.0	NP
MW-6	08/27/99	153.84	5.72	148.12	<50	<0.5	<0.5	<0.5	<0.5	8	1.02	NP
MW-6	10/26/99	153.84	5.94	147.90	Not Sampled: Well Sampled Annually							
MW-6	02/03/00	153.84	5.44	148.40	<50	<0.5	<0.5	<0.5	<1	<3	1.0	NP

**Table 1
Groundwater Elevation and Analytical Data
Total Purgeable Petroleum Hydrocarbons
(TPPH as Gasoline, BTEX Compounds, and MTBE)**

**ARCO Service Station 0374
6407 Telegraph Avenue, Oakland, California**

Well Number	Date Gauged/ Sampled	Well Elevation (feet, MSL)	Depth to Water (feet, TOC)	Groundwater Elevation (feet, MSL)	TPPH as Gasoline (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE (ppb)	Dissolved Oxygen (ppm)	Purged/ Not Purged (P/NP)
MSL	= Mean sea level.											
TOC	= Top of casing.											
TPPH	= Total purgeable petroleum hydrocarbons by modified EPA method 8015.											
BTEX	= Benzene, toluene, ethylbenzene, total xylenes by EPA method 8021B. (EPA method 8020 prior to 10/26/99).											
MTBE	= Methyl tert -Butyl Ether by EPA method 8021B. (EPA method 8020 prior to 10/26/99).											
ppb	= Parts per billion.											
ppm	= Parts per million.											
<	= Less than laboratory detection limit stated to the right.											
NA	= Not analyzed.											
NM	= Not measured.											
N/A	= Not available.											
*	= ORCs installed in well MW-3 beginning 11/14/95 and in well MW-4 beginning 09/29/98. Please refer to Appendix D for details.											

**Table 2
Groundwater Flow Direction and Gradient**

**ARCO Service Station 0374
6407 Telegraph Avenue, Oakland, California**

Date Measured	Average Flow Direction	Average Hydraulic Gradient
01-31-96	Southwest	0.04
04-10-96	Southwest	0.04
07-16-96	Southwest	0.03
10-14-96	Southwest	0.03
03-27-97	Southwest	0.04
05-27-97	Southwest	0.03
08-12-97	Southwest	0.04
11-17-97	Southwest	0.03
03-16-98	Southwest	0.03
05-12-98	Southwest	0.04
07-27-98	Southwest	0.04
10-15-98	Southwest	0.02
02-18-99	Southwest	0.05
05-24-99	Southwest	0.03
08-27-99	Southwest	0.03
10-26-99	Southwest	0.03
02-03-00	Southwest	0.047

Table D-1
Intrinsic Bioremediation Evaluation and Enhancement Data

ARCO Service Station 0374
6407 Telegraph Avenue, Oakland, California

Well	Date Sampled	<u>Field Analyses</u>					<u>Laboratory Analyses</u>										
		Groundwater Temperature (deg F)	pH (units)	Conductivity (umhos)	D.O. (mg/L)	Ferrous Iron (mg/L)	Total Alkalinity (mg CaCO3/L)	B.O.D. (mg/L)	Carbon Dioxide (mg/L)	C.O.D. (mg/L)	Methane (%)	Nitrate as Nitrate (mg/L)	Nitrite as Nitrite (mg/L)	Sulfate (mg/L)	TPH as Gasoline (ug/L)	Total BTEX (ug/L)	
MW-3	11/14/95	**	65.5*	6.76*	508*	7.17	N/A	NS	NS	NS	NS	NS	6.6	<1.0	NS	140	46
MW-3	06/06/96	**	66.2	7.38	700	12.28	N/A	NS	NS	NS	NS	NS	NS	NS	NS	84†	5.4†
MW-3	07/16/96		67.8	7.08	1,010	8.73	0.0	280	1.8	270	44	<0.020	<1.0	NS	78	<50	2.2
MW-3	01/21/97	**	59	N/A	N/A	11.15	0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-3	08/12/97	**	74.4	6.65	600	6.7	1.6	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-3	11/17/97		N/A	N/A	N/A	12.0	0.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW-3	03/16/98		68.5	7.75	806	4.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-3	05/12/98		NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	07/27/98		68.1	6.81	904	1.7	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	74	ND
MW-3	09/29/98	**	ORC installed														
MW-3	10/15/98		NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	02/18/99		NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-3	05/24/99		66.2	7.24	799	6.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-3	07/26/99	**	ORC installed														
MW-3	08/27/99		69.0	7.97	782	16.57	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-3	10/26/99		66.5	5.93	794	14.86	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-3	02/03/00		62.0	7.42	7,877	1.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-4	07/16/96		69.5	6.72	1,370	3.20	4.20	420	NS	470	NS	0.11	<1.0	NS	18	5,600	2,020
MW-4	03/16/98		66.2	6.89	1,411	1.50	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-4	05/12/98		NM	NM	NM	NM	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	07/27/98		70.5	6.34	1,434	0.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	21,000	8,900
MW-4	09/29/98	**	ORC installed														
MW-4	10/15/98		NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	02/18/99		NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-4	05/24/99		67.6	6.72	1,509	1.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	18,000	7,660
MW-4	07/26/99	**	ORC installed														

Table D-1
Intrinsic Bioremediation Evaluation and Enhancement Data

ARCO Service Station 0374
6407 Telegraph Avenue, Oakland, California

Well	Date Sampled	Field Analyses					Laboratory Analyses									
		Groundwater Temperature (deg F)	pH (units)	Conductivity (µmhos)	D.O. (mg/L)	Ferrous Iron (mg/L)	Total Alkalinity (mg CaCO ₃ /L)	B.O.D. (mg/L)	Carbon Dioxide (mg/L)	C.O.D. (mg/L)	Methane (%)	Nitrate as Nitrate (mg/L)	Nitrite as Nitrite (mg/L)	Sulfate (mg/L)	TPH as Gasoline (µg/L)	Total BTEX (µg/L)
MW-4	08/27/99	70.5	7.09	1,469	1.32	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12,000	4,670
MW-4	10/26/99	66.8	7.05	1,565	1.39	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	12,000	4,360
MW-4	02/03/00	64.1	7.27	1,506	1.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	9,300	3,626
MW-5	07/16/96	70.4	6.85	690	6.80	0.0	170	NS	180	NS	<0.020	<1.0	NS	35	<50	1.1
MW-5	03/16/98	69.5	7.19	584	1.5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-5	05/12/98	65.9	7.04	619	2.2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-5	07/27/98	73.6	7.39	569	1.3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-5	10/15/98	65.8	6.88	626	3.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	0.6
MW-5	02/18/99	63.4	6.98	616	2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-5	05/24/99	66.7	6.70	591	2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-5	08/27/99	72.6	7.10	624	2.28	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-5	10/26/99	70.4	5.95	601	1.99	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-5	02/03/00	62.1	7.31	6,072	1.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-6	06/06/96	N/A	N/A	N/A	3.47	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	03/16/98	N/A	N/A	N/A	N/A	N/A	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	05/12/98	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	07/27/98	70.3	6.67	638	0.9	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-6	10/15/98	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	02/18/99	NM	NM	NM	NM	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	05/24/99	65.5	6.62	713	2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-6	08/27/99	73.0	7.12	589	1.02	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND
MW-6	10/26/99	NM	NM	NM	2.51	NM	NS	NS	NS	NS	NS	NS	NS	NS	NS	NS
MW-6	02/03/00	61.7	7.32	5,091	1.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	ND	ND

**Table D-1
Intrinsic Bioremediation Evaluation and Enhancement Data**

**ARCO Service Station 0374
6407 Telegraph Avenue, Oakland, California**

Well	Date Sampled	<u>Field Analyses</u>					<u>Laboratory Analyses</u>									
		Groundwater Temperature (deg F)	pH (units)	Conductivity (µmhos)	D.O. (mg/L)	Ferrous Iron (mg/L)	Total Alkalinity (mg CaCO ₃ /L)	B.O.D. (mg/L)	Carbon Dioxide (mg/L)	C.O.D. (mg/L)	Methane (%)	Nitrate as Nitrate (mg/L)	Nitrite as Nitrite (mg/L)	Sulfate (mg/L)	TPH as Gasoline (µg/L)	Total BTEX (µg/L)
D.O.	= Dissolved oxygen					µg/L		= Micrograms per liter								
B.O.D.	= Biochemical oxygen demand					NM		= not measured								
C.O.D.	= Chemical oxygen demand					NS		= Not sampled								
TPPH	= Total purgeable petroleum hydrocarbons					ND		= Not detected								
BTEX	= Benzene, toluene, ethylbenzene, and xylenes					N/A		= Not available								
deg F	= Degrees Fahrenheit					*		Field measurements collected on November 2, 1995.								
µmhos	= Micromhos					**		ORC installed								
mg/L	= Milligrams per liter					†		From April 10, 1996 groundwater monitoring event.								

ATTACHMENT D

EDCC REPORT AND EDF/GEOWELL SUBMITTAL CONFIRMATION

Error Summary Log

09/24/03

EDF 1.2i All files present in deliverable.

Laboratory:	Sequoia Analytical Laboratories, Inc., Morgan Hill, CA
Project Name:	ARCO #374, Oakland, CA
Work Order Number:	MMI0161
Global ID:	T0600100106
Lab Report Number:	MMI0161091920031709

Report Summary

Labreport	Sampid	Labsampid	Mtrx	QC	Anncode	Exrncode	Logdate	Extdate	Anadate	Labiocctl	Run Sub
MMI01610919200	MW-5	MMI016101	W	CS	8260TPH	SW5030B	09/04/03	09/12/03	09/12/03	3112001	1
31709											
		MMI011601	W	NC	8260TPH	SW5030B	//	09/12/03	09/12/03	3112001	1
		MMI012802	W	NC	8260TPH	SW5030B	//	09/12/03	09/13/03	3112001	1
		3112001BSD1	WQ	BD1	8260TPH	SW5030B	//	09/12/03	09/12/03	3112001	1
		3112001BS1	WQ	BS1	8260TPH	SW5030B	//	09/12/03	09/12/03	3112001	1
		3112001BS2	WQ	BS2	8260TPH	SW5030B	//	09/12/03	09/12/03	3112001	1
		3112001BLK1	WQ	LB1	8260TPH	SW5030B	//	09/12/03	09/12/03	3112001	1
		3112001MS1	W	MS1	8260TPH	SW5030B	//	09/12/03	09/12/03	3112001	1
		3112001MS2	W	MS2	8260TPH	SW5030B	//	09/12/03	09/13/03	3112001	1
		3112001MSD1	W	SD1	8260TPH	SW5030B	//	09/12/03	09/12/03	3112001	1
		3112001MSD2	W	SD2	8260TPH	SW5030B	//	09/12/03	09/13/03	3112001	1

EDFSAMP: Error Summary Log

09/24/03

Error type	Logcode	Projname	Npdlwo	Sampid	Matrix
There are no errors in this data file					

EDFTEST: Error Summary Log

09/24/03

Error type	Labsampid	Qccode	Anmcode	Exmcode	Anadate	Run number
Warning: Dulicate QC code within the batch	MMI011601	NC	8260TPH	SW5030B	09/12/03	1
Warning: Dulicate QC code within the batch	MMI012802	NC	8260TPH	SW5030B	09/13/03	1

EDFRES: Error Summary Log

09/24/03

Error type	Labsampid	Qccode	Matrix	Anmcode	Pvccode	Anadate	Run number	Parlabel
There are no errors in this data file						//	0	

EDFQC: Error Summary Log

09/24/03

Error type	Lablotcti	Anmcode	Parlabel	Qccode	Labqcid
There are no errors in this data files					

EDFCL: Error Summary Log

09/24/03

Error type	Clevdate	Anmcode	Exmcode	Parlabel	Cicode
There are no errors in this data file	//				

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UPLOADING A GEO_WELL FILE

**Processing is complete. No errors were found!
Your file has been successfully submitted!**

Submittal Title: Third Quarter 03 Geowell for site #0374

Submittal Date/Time: 9/24/2003 6:08:05 PM

Confirmation Number: 5312336564

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Your EDF file has been successfully uploaded!

Confirmation Number: 1488102495

Date/Time of Submittal: 9/24/2003 6:04:52 PM

Facility Global ID: T0600100106

Facility Name: ARCO

Submittal Title: Third Quarter 03 Ground Water Monitoring Site #0374

Submittal Type: GW Monitoring Report

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