RO 239

Wild as to County



March 20, 2006

Mr. Don Hwang Alameda County Environmental Health (ACEH) 1131 Harbor Bay Parkway, Suite 250 Alameda, CA 94502

Re:

First Quarter 2006 Groundwater Monitoring Report

Former BP Service Station # 11124

3315 High Street Oakland, California

ACEH Case No. RO0000239

Dear Mr. Hwang:

On behalf of Atlantic Richfield Company, a BP affiliated company, URS Corporation (URS) is submitting the *First Quarter 2006 Groundwater Monitoring Report* for the Former BP Service Station #11124, located at 3315 High Street, Oakland, California.

If you have any questions regarding this submission, please call me at (510) 874-1758.

Sincerely,

URS CORPORATION

Lynelle T. Onishi Project Manager Barbara J. Jakub, P.G.

Senior Geologist

Enclosure:

First Quarter 2006 Groundwater Monitoring Report

cc:

Mr. Paul Supple, Atlantic Richfield Company (RM), copy uploaded to ENFOS

Ms. Shelby Lathrop, ConocoPhillips, copy uploaded to URS ftp server

Mr. Rob Miller, Broadbent & Associates, Inc., electronic copy uploaded to ENFOS

BARBARA J JAKUB No. 7304



FIRST QUARTE

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S. Map	, QQ ~	Date:	March 20, 2006
Snylonne.	ي وي	Quarter:	1Q 06
FIRST QUARTER	96 GRÓT	UNDWATER MONITORING 315 High Street, Oakland, CA Paul Supple	REPORT
RM Environmental Business Manager:	<u>, F</u>	Paul Supple	
Consulting Co./Contact Person:	τ	JRS Corporation / Lynelle Onis	hi
Primary Agency:	A	Alameda County Environmental	Health (ACEH)
ACEH Case No.:	F	RO0000239	

WORK PERFORMED THIS QUARTER

(First - 2006):

- 1. Performed the first quarter 2006 groundwater monitoring event on February 24, 2006.
- 2. Prepared and submitted this First Quarter 2006 Groundwater Monitoring Report.
- 3. Completed the on-site subsurface investigation on February 20 and 21, 2006.

WORK PROPOSED FOR NEXT QUARTER (Second - 2006):

- 1. Perform the second quarter 2006 groundwater monitoring event.
- 2. Prepare and submit the Subsurface Investigation Report documenting field activities conducted on February 20 and 21, 2006
- 3. Prepare and submit the Second Quarter 2006 Quarterly Monitoring Report.

SITE SUMMARY:

Current Phase of Project:	GW monitoring/sampling
Frequency of Groundwater Sampling:	Quarterly: Wells MW-1, MW-2, and MW-4
Frequency of Groundwater Monitoring:	Quarterly
Is Free Product Present On-Site:	No
Current Remediation Techniques:	None
Approximate Depth to Groundwater:	7.86 (MW-4) to 10.42 (MW-1) feet
Groundwater Gradient (direction):	Southeast
Groundwater Gradient (magnitude):	0.01

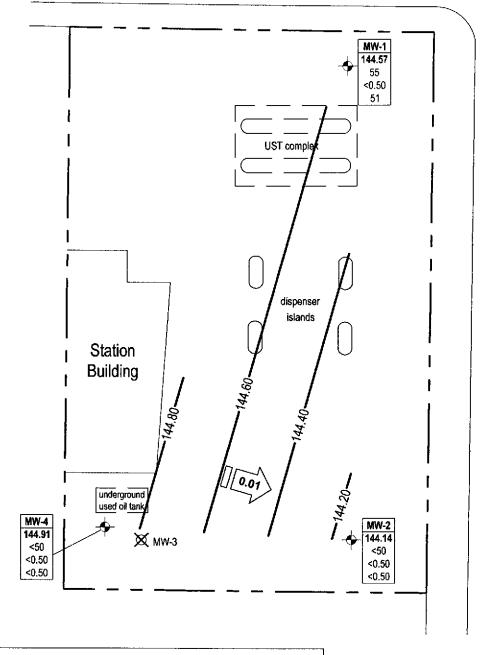
DISCUSSION:

Gasoline range organics and methyl tert-butyl ether were detected at or above their respective laboratory reporting limits in one of the three wells sampled (MW-1) at concentrations of 55 micrograms per liter (µg/L) and 51 µg/L, respectively. No other fuel components were detected at or above their respective laboratory reporting limits in any of the wells sampled this quarter.

ATTACHMENTS:

- Figure 1- Groundwater Elevation Contour and Analytical Summary Map February 24, 2006
- Table 1 Groundwater Elevation and Analytical Data
- Table 2 Fuel Additives Analytical Data
- Attachment A Field Procedures and Field Data Sheets
- Attachment B Laboratory Procedures, Certified Analytical Reports, and Chain-of-Custody Records
- Attachment C Error Check Reports and EDF/Geowell Submittal Confirmations

PORTER STREET



HIGH STREET

EXPLANATION

Groundwater monitoring well

Abandoned monitoring well

- 144.20 Groundwater elevation (ft MSL)

< Not detected at or above

Well — Well Designation

ELEV — Groundwater elevation (ft MSL)

GRO
Benzene
MTBE — GRO, Benzene & MTBE concentrations (µg/L)

laboratory reporting limits

Groundwater flow direction

and gradient (ft/ft)

NOTE: SITE MAP ADAPTED FROM ALISTO ENGINEERING FIGURES. SITE DIMENSIONS AND FIGURES FACILITY LOCATIONS NOT VERIFIED.



URS

Project No. 38487647

Former BP Service Station #11124 3315 High Street Oakland, California GROUNDWATER ELEVATION CONTOUR AND ANALYTICAL SUMMARY MAP First Quarter 2006 (February 24, 2006)

FIGURE

1

Table 1

Groundwater Elevation and Analytical Data

Former BP Station #11124 3315 High St., Oakland, CA

Well No.	Date	P/ NP	TOC (ft MSL)	DTW (ft bgs)	Product Thickness (feet)	GWE (ft MSL)	GRO/ TPH-g (µg/L)	Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	MTBE (µg/L)	DO (mg/L)	Lab	рН	Comments
MW-1	10/19/2004	Р	154.99	10.50		144.49	<50	<0.50	<0.50	<0.50	<0.50	14	0.96	SEQM	6.9	
	01/13/2005	Р	154.99	9.00		145.99	<50	<0.50	<0.50	<0.50	<0.50	33	2.5	SEQM	6.4	
	02/24/2006	Р	154.99	10.42		144.57	55	<0.50	<0.50	<0.50	<0.50	51		SEQM	6.8	c
MW-2	10/19/2004		152.02	9,45	**	142.57		-								b
	01/13/2005	Р	152.02	6.43		145.59	<50	<0.50	<0.50	<0.50	<0.50	<0.50	1,47	SEQM	6.4	, ,
	02/24/2006	Р	152.02	7.88		144,14	<50	<0.50	<0.50	<0.50	<0.50	<0.50		SEQM	6.7	
MW-4	10/19/2004	Р	152.77	9.55		143.22	<50	<0.50	<0.50	<0.50	<0.50	<0.50	0.82	SEQM	7.0	
	01/13/2005		152.77				**									а
	02/24/2006	Р	152.77	7.86	_	144.91	<50	<0.50	<0.50	<0.50	<0.50	<0.50		SEQM	7.1	

Table 1

Groundwater Elevation and Analytical Data

Former BP Station #11124 3315 High St., Oakland, CA

ABBREVIATIONS AND SYMBOLS:

--- = Not analyzed/measured/applicable

< = Not detected at or above laboratory reporting limit

DO = Dissolved oxygen

ft bgs = Feet below ground surface

ft MSL = Feet above mean sea level

DTW = Depth to water in ft bgs

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

TOC = Top of casing in ft MSL

TPH-g = Total petroleum hydrocarbons as gasoline

µg/L = Micrograms per liter

SEQM = Sequoia Analytical Morgan Hill (Laboratory)

FOOTNOTES:

a = Well inaccessible.

b = Well is dry.

c = Hydrocarbon result for GRO partly due to individual peak(s) in quantitative range.

NOTES:

Beginning in the fourth quarter 2003, the laboratory modified the reported analyte list. TPH-g was changed to GRO. The resulting data may be impacted by the potential of non-TPH-g analytes within the requested fuel range resulting in a higher concentration being reported.

Beginning in the second quarter 2004, the carbon range for GRO was changed from C6-C10 to C4-C12.

Values for DO and pH were obtained through field measurements.

The data within this table collected prior to August 2002 was provided to URS by RM and their previous consultants. URS has not verified the accuracy of this information.

Table 2

Fuel Additives Analytical Data

Former BP Station #11124 3315 High St., Oakland, CA

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)	Footnotes/ Comments
MW-1	10/19/2004	<100	<20	14	<0.50	<0.50	<0.50	<0.50	<0.50	
	01/13/2005	<100	<20	33	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/24/2006	<300	<20	51	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-2	01/13/2005	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/24/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
MW-4	10/19/2004	<100	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	
	02/24/2006	<300	<20	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	

Table 2

Fuel Additives Analytical Data

Former BP Station #11124 3315 High St., Oakland, CA

ABBREVIATIONS AND SYMBOLS:
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-Dibromomethane
µg/L = micrograms per liter
< = Not detected at or above laboratory reporting limit

NOTES:

All fuel oxygenate compounds are analyzed using EPA Method 8260B.

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 TeflonTM 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.

06/2774~MD	WELL GAUGING DATA	A		
066224-MD Project # 2/2406	_ Date 2/24/06	Client	A Arcola	11124
·	7	_		
Site 3315 Nigh	st, oaklund			

Well ID	Well Size (in.)	Sheen / Odor	Depth to Immiscible Liquid (ft.)			Depth to well bottom (ft.)	Survey Point: TOE	
MW-1	2							
MW-1 MW-2 MW-4	2				7.88 7.86	9,62		
NW 4	2				7.86	30,29	1	
		·						
			- Andrews					
	_							

Blaine Tech Services, Inc. 1680 Rogers Ave., San Jose, CA 95112 (408) 573-0555

ARCO / BP WELL MONITORING DATA SHEET

BTS#:	OGC	124-	-M/2	Station #	(//24		-
Sampler	W)	.uD	Date: 고 고	1/600		_
Well I.D	.: 6	32.10	M(X)-1	Well Diameter	: D 3 4	6 8	
Total We	ell Depth:	32.	(0	Depth to Wate	r: 10,42		
Depth to	Free Prod)	Thickness of F	ree Product (fee	et):	· •
Referenc		PVC	Grade	D.O. Meter (if	reg'd):	YSI HACH	
	Well Diam L" 2" 3"	iler	Multiplier <u>y</u> 0.04 0.16 0.37	Vell Diameter 6 4" 6"	Autiplier 0.65 1.47 as² + 0.163		
Purge Meth	od:	Bailer		Sampling Method:		·	
	Æ	isposable Bail	ler		Disposable Bailer		
		ve Air Displac			Extraction Port		
		ctric Submers		Other:			
		Extraction Pur	ıp				
							
Top of Scre	en:		If well is listed as a	no-purge, confirm	that water level is b	elow the top	
			of screen. Otherwi	se, the well must be	purged.	•	
	3,	5	x3	<u> </u>), 5 Gals.		
	1 Case Voi	ume (Gals.)	Specified Vo	lumes Cale	culated Volume		
Time	Temp (°F)		Conductivity				
	remp (r)	pН	(mS or (aS)	Gals. Removed	Observations		
1018	67.8	7.3	330	3.5	cloudy		
1000	686	6.9	337	チ	/		
1025	69.0	6,8	349	10.5	V		
· · · · · · · · · · · · · · · · ·							
Did well	dewater?	Yes C	No	Gallons actuall	y evacuated:	10.5	-
Sampling	Time:	Attor	1030	Sampling Date	: 2/24/0G	<i>t</i> .	
Sample I.	D.:	MW-	·	Laboratory:	Pace Sequoia	Other_	
Analyzed	for: o	ROO BTEX MT	BE DRO ONY 1,2-DO		Other:	· · · · · · · · · · · · · · · · · · ·	
D.O. (if re	eq'd):		Pre-purge:	mg/L	Post-purge:	п	¹⁶ /L
O.R.P. (if	-		Pre-purge:	mV	Post-purge:	n	ıV
Blaine T	ech Serv	ices. Inc	. 1680 Rogers	Ave San le		/400\ ==== 400	لت

ARCO / BP WELL MONITORING DATA SHEET

BTS#:	Oca	224-	MD)	Station #	11/74		•		
Sampler		ai	0	Date:	7/16/	<i>0</i> 6			
Well I.D	.: N	W-2		Well Diamete	 	*-	6	8	
Total We	ell Depth:	96	2_	Depth to Wate		88			
Depth to	Free Prod	uct:	·	Thickness of l		ict (fee	+)·	 -	· · · · · · · · · · · · · · · · · · ·
Referenc	ed to:	(PVC)	Grade	D.O. Meter (if					
Purge Meth	Well Diams 1" 2" 3"	Bailer		Well Diamster 4" 6" Other radi	<u>Multiplier</u> 0.65 1.47 lus ² * 0.163		YSI	I	HACH
•		isposable Bai	ier	Sampling Method	~	-			
		ve Air Displac		1	Disp osable				
		ctric Submers		Other	Extraction				
		xtraction Pun	np	Oute	·				
	Other:								
Top of Scree	en:	· · · · · · · · · · · · · · · · · · ·	If well is listed as a of screen. Otherw	a no-purge, confirm ise, the well must be	that water le	vel is be	low th	e top	
,		. ~	· —		7 6				7
	1 Case Vol	ume (Gals.)	XSpecified Vo	lumes Cal	culated Volum	Gats.			
			Conductivity		CONTROL A DIGHT	16			
Time	Temp (°F)	pН	(mS or (S))	Gals. Removed	Observat	ions			
100	63.5	6.8	570	0.3	do	ar			
045	63.3	6.7	593	0.6					
1050	63.4	6.7	595	0.9	V				
Did well c		Yes	(No)	Gallons actual	y evacuate	ed: ().9		,
Sampling	Time:	Many 1	100	Sampling Date	: 2/29	1106			
Sample I.I	D.: M	M2-5	-	Laboratory:	Pace Seq	ioi	Oth	er	~~ ~~
Analyzed	for: GR	DETEX MIT	BE DRO Oxy's (2-DO		Other:				
D.O. (if re	q'd):		Pre-purge:	mg/L	Post-r	ourge:			mg/L
O.R.P. (if			Pre-purge:	mV	Post -				
Blaine To	ech Servi	ces, Inc.	. 1680 Rogers	Ave., San Jo	se, CA 9	5112	(408)	573	3-0555

ARCO / BP WELL MONITORING DATA SHEET

BTS#:	0602	24-1	M)Z	Station #	11124		<u></u>		<u> </u>
Sampler:		mo		Date: 2	24/OC			7	
Well I.D.		MW-c		Well Diameter	: 23 3	4	6	8	
Total We	ll Depth:	30.2	9	Depth to Water	r: 7,	86	 		=
Depth to	Free Produ	uct:		Thickness of F	ree Produc	t (fee	 t):		
Referenc	ed to:	Pye	Grade.	D.O. Meter (if	rea'd):	,	/SI	HAC	
	Well Diame l" 2" 3"	lor	Multiplier y 0.04 0.16 0.37	Vell Diameter N 4" 0 6" 1	<u>fultiplier</u> 0.65 1.47 1.4 ² • 0.163				
Purge Meth		Bailer		Sampling Method:	Bailer			•	
		isposable Bai			Disposable E	Bailer			
		ve Air Displac			Extraction !				
		xtraction Pun		Other:					
			·ħ						
Top of Scree			If well is listed as a	no-purge, confirm	that water lev	el is be	low th	e top	
			of screen. Otherwi	se, the well must be	purged.			···	
	1 Case Vol	ume (Gals.)	X Specified Vo	lumes Calc	Ulated Volume	als.			
			Conductivity						
Time	Temp (°F)	pН	(mS of aS)	Gals. Removed	Observati	ons			
1105	64.3	7.2	476	3.6	cle				
1110	64.2	7.1	496	7.2	1				
1115	642	7.1	499	10.8	į	1			-
							•		
Did well	dewater?	Yes	No	Gallons actuall	y evacuate	:d:	0.8		-
Sampling	Time:	117.2	5	Sampling Date	: 2/2	4/00	9	7	
Sample I.	D.:	MY		Laboratory:	Pace Sequ	ioja	Oth	er	
Analyzed	for: 6	RO STEX MT	BE DRO Oxy) (1.2-DO	A Suba Ethampt	Other:				
D.O. (if r			Pre-purge:	mg/L	Post-p	urge:			mg/L
O.R.P. (if	req'd):		Pre-purge:	mV	Post-p	urge:			mV
Blaine T	ech Serv	ices. Inc	. 1680 Rogers			- 1	1466		

BP GEM OIL COMPANY TYPE A BILL OF LADING

RECORD SOURCE 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 PLAINE 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; from a BP GEM facility to the designated destination point via another BP GEM facility; from a BP GEM 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:

11124	
Station #	\
3315 High 8ty	, outland
Station Address	
Total Gallons Collected From Gro	oundwater Monitoring Wells:
added equip.	any other
rinse water	adjustments
TOTAL GALS. RECOVERED 22	loaded onto BTS vehicle # 57
BTS event #	time date
_060224-MD	- 5/24/0e 5/54/0e
signature S	
	00
* * * * * * * * * * * * * * * * * * *	******
REC'D AT	time date
unloaded by signature	1300 Z,2405

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 RM have been reviewed and verified by that laboratory.



15 March, 2006

Lynelle Onishi URS Corporation [Arco] 1333 Broadway, Suite 800 Oakland, CA 94612

RE: BP Heritage #11124, Oakland ,CA

Work Order: MPC0074

Enclosed are the results of analyses for samples received by the laboratory on 02/27/06 17:55. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Lisa Race

Senior Project Manager

CA ELAP Certificate #1210

The results in this laboratory report pertain only to the samples tested in the laboratory. The analyses contained in this report were performed in accordance with the BPGCLN Technical Specifications, applicable Federal, State, local regulations and certification requirements as well as the methodologies as described in laboratory SOPs reviewed by the BPGCLN. This entire report was reviewed and approved for release.





Project:BP Heritage #11124, Oakland ,CA
Project Number:G099D-0008
Project Manager:Lynelle Onishi

MPC0074 Reported: 03/15/06 14:44

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-1	MPC0074-01	Water	02/24/06 10:30	02/27/06 17:55
MW-2	MPC0074-02	Water	02/24/06 11:00	02/27/06 17:55
MW-4	MPC0074-03	Water	02/24/06 11:20	02/27/06 17:55
TB-11124-02242006	MPC0074-04	Water	02/24/06 00:00	02/27/06 17:55

The carbon range for the TPH-GRO has been changed from C6-C10 to C4-C12. The carbon range for TPH-DRO has been changed from C10-C28 to C10-C36. EPA 8015B has been modified to better meet the requirements of California regulatory agencies. These samples were received with no custody seals.





Project:BP Heritage #11124, Oakland ,CA Project Number:G099D-0008 Project Manager:Lynelle Onishi MPC0074 Reported: 03/15/06 14:44

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-1 (MPC0074-01) Water Sampled: (02/24/06 10:30	Received:	02/27/06 1	7:55					
tert-Amyl methyl ether	ND	0.50	ug/l	1	6C09030	03/09/06	03/10/06	EPA 8260B	
Benzene	ND	0.50	"	**	11	"	**	u	
tert-Butyl alcohol	ND	20	n	***	"	"	"	H	
Di-isopropyl ether	ND	0.50	17	11	11	**	**	H	
1,2-Dibromoethane (EDB)	ND	0.50	**	**	**	•	**	п	
1,2-Dichloroethane	ND	0.50	"	**	78	•	**	н	
Ethanol	ND	300	**	**	**	н	**	ii.	
Ethyl tert-butyl ether	ND	0.50	*	"	"	H	н	п	
Ethylbenzene	ND	0.50	•	"	••	"	n	п	
Methyl tert-butyl ether	51	0.50	"	17	11	ŧr	17	II.	
Toluene	ND	0.50		**	*	H	**	11	
Xylenes (total)	ND	0.50		H	**	H	**	II .	
Gasoline Range Organics (C4-C12)	55	50	b	**	71	н	"	n	PV
Surrogate: 1,2-Dichloroethane-d4		103 %	60-13	5	"	"	"	"	
Surrogate: Toluene-d8		103 %	70-12	0	"	"	"	"	
Surrogate: Dibromofluoromethane		112 %	65-13	0	,,	**	"	"	
Surrogate: 4-Bromofluorobenzene		93 %	70-12	0	"	"	m	,,	
MW-2 (MPC0074-02) Water Sampled: (02/24/06 11:00	Received:	02/27/06 13	7:55					
tert-Amyl methyl ether	ND	0.50	цg/l	1	6C09030	03/09/06	03/10/06	EPA 8260B	
Benzene	ND	0.50	,,	60	**	H	н	**	
tert-Butyl alcohol	ND	20	**	**	**	**	Ħ	"	
Di-isopropyl ether	ND	0.50	"	**	**	**	н		
1,2-Dibromoethane (EDB)	ND	0.50		**	**	#	l)	Ħ	
1,2-Dichloroethane	ND	0.50	**		**	п	п	Ħ	
Ethanol	ND	300	"	tr	**	11	II .	n	
Ethyl tert-butyl ether	ND	0.50	**	H	**	11	n	н	
Ethylbenzene	ND	0.50	п	н	H	п	п	n	
Methyl tert-butyl ether	ND	0.50	*1	Ħ	rr ·	li .	1)	"	
Toluene	ND	0.50	II .	п	н	lj.	lt .	*	
Xylenes (total)	ND	0.50	II .	п	п	II .	н	"	
Gasoline Range Organics (C4-C12)	ND	50	ш	11	п	п	и	11	
Surrogate: 1,2-Dichloroethane-d4		105 %	60-13	5	"	"	"	"	
Surrogate: Toluene-d8		99 %	70-12	0	**	n	"	"	
Surrogate: Dibromofluoromethane		108 %	65-13	0	**	,,	"	п	
om rogue. Dioromojino omemune									





Project:BP Heritage #11124, Oakland ,CA Project Number:G099D-0008 Project Manager:Lynelle Onishi MPC0074 Reported: 03/15/06 14:44

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
MW-4 (MPC0074-03) Water	Sampled: 02/24/06 11:20	Received:	02/27/06	17:55					
tert-Amyl methyl ether	ND	0.50	ug/l	1	6C09030	03/09/06	03/10/06	EPA 8260B	
Веплепе	ND	0.50	"	70	**	"	n	*	
tert-Butyl alcohol	ND	20	"	**	H	U	II	**	
Di-isopropyl ether	ND	0.50	"	11	Ħ	"	ч	н	
1,2-Dibromoethane (EDB)	ND	0.50	н	**	"	н	11	*	
1,2-Dichloroethane	ND	0.50	"	**	*1	н	п	**	
Ethanol	ND	300	н	**	n	н	II	ų	
Ethyl tert-butyl ether	ND	0.50	"	**	**	,	Ü	н	
Ethylbenzene	ND	0.50	н	**	**	н	II	H	
Methyl tert-butyl ether	ND	0.50	'n	••	H	н	II	**	
Toluene	ND	0.50	II .	"	H	11	1)	**	
Xylenes (total)	ND	0.50	"	**	"	"	н	Ħ	
Gasoline Range Organics (C4-C1	.2) ND	50	0	**	"	11	н	H	
Surrogate: 1,2-Dichloroethane-d	4	99 %	60-	135	r	"	"	"	
Surrogate: Toluene-d8		99 %	70-	120	rr	"	"	*	
Surrogate: Dibromofluorometha	1e	106 %	65-	130	n	"	"	"	
Surrogate: 4-Bromofluorobenzen	e	97 %	70-	120	T†	"	"	"	





Project:BP Heritage #11124, Oakland ,CA Project Number:G099D-0008 Project Manager:Lynelle Onishi MPC0074 Reported: 03/15/06 14:44

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
Batch 6C09030 - EPA 5030B P/T	/ EPA 8260B									
Blank (6C09030-BLK1)				Prepared a	& Analyze	d: 03/09/	06			
tert-Amyl methyl ether	ND	0.50	ug/l							
Benzene	ND	0.50	*1							
tert-Butyl alcohol	ND	20	•							
Di-isopropyl ether	ND	0.50	#							
1,2-Dibromoethane (EDB)	ND	0.50	H							
1,2-Dichloroethane	ND	0.50	**							
Ethanol	ND	300	n							
Ethyl tert-butyl ether	ND	0.50	71							
Ethylbenzene	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	11							
Toluene	ND	0.50	11*							
Xylenes (total)	ND	0.50	"							
Gasoline Range Organics (C4-C12)	ND	50	77							
Surrogate: 1,2-Dichloroethane-d4	4.83		n	5.00		97	60-135			
Surrogate: Toluene-d8	5.22		"	5.00		104	70-120			
Surrogate: Dibromofluoromethane	5.40		ti	5.00		108	65-130			
Surrogate: 4-Bromofluorobenzene	4.62		n	5.00		92	70-120			
Laboratory Control Sample (6C09036)-BS1)			Prepared a	& Analyze	d: 03/09/	06			
tert-Amyl methyl ether	15.0	0.50	ug/l	16.3		92	80-115			
Benzene	5.45	0.50	II .	5.04		108	65-115			
tert-Butyl alcohol	159	20	**	169		94	75-150			
Di-isopropyl ether	15.4	0.50	**	16.2		95	75-125			
1,2-Dibromoethane (EDB)	16.1	0.50	ti	16.6		97	85-120			
1,2-Dichloroethane	13.8	0.50	"	15.5		89	85-130			
Ethanol	146	300	11	165		88	70-135			
Ethyl tert-butyl ether	15.5	0.50	"	16.4		95	75-130			
Ethylbenzene	6.17	0.50	"	7.28		85	75-135			
Methyl tert-butyl ether	7.15	0.50		7.84		91	65-125			
Toluene	34.8	0.50	"	38.0		92	85-120			
Xylenes (total)	37.5	0.50	n	40.8		92	85-125			
Gasoline Range Organics (C4-C12)	445	50	n	440		101	60-140			
Surrogate: 1,2-Dichloroethane-d4	4.78		"	5.00		96	60-135			
Surrogate: Toluene-d8	5.51		"	5.00		110	70-120			
Surrogate: Dibromofluoromethane	5.10		"	5.00		102	65-130			
Surrogate: 4-Bromofluorobenzene	5.01		#	5.00		100	70-120			

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.





Project:BP Heritage #11124, Oakland ,CA Project Number:G099D-0008 Project Manager:Lynelle Onishi

MPC0074 Reported: 03/15/06 14:44

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
		Linitt	Olms	TOACI	Nesuit	/BREC	Tunitz	KFD	Limit	Notes
Batch 6C09030 - EPA 5030B P/T / E	EPA 8260B									
Matrix Spike (6C09030-MS1)	Source: M	IPB1066-01		Prepared	& Analyze	d: 03/09/	06			
tert-Amyl methyl ether	726	25	ug/l	816	26	86	80-115			
Benzene	268	25	H	252	ND	106	65-115			
tert-Butyl alcohol	7380	1000	**	8440	ND	87	75-120			
Di-isopropyl ether	746	25	tr	812	23	89	75-125			
1,2-Dibromoethane (EDB)	807	25	н	832	ND	97	85-120			
1,2-Dichloroethane	704	25	17	776	9.0	90	85-130			
Ethanol	8270	15000	**	8240	440	95	70-135			
Ethyl tert-butyl ether	750	25	**	820	24	89	75-130			
Ethylbenzene	321	25	,,	364	11	85	75-135			
Methyl tert-butyl ether	337	25	ti	392	16	82	65-125			
Toluene	1750	25	4	1900	14	91	85-120			
Xylenes (total)	1960	25	11	2040	40	94	85-125			
Gasoline Range Organics (C4-C12)	21300	2500	11	22000	ND	97	60-140			
Surrogate: 1,2-Dichloroethane-d4	3.17		,,	5.00		63	60-135			
Surrogate: Toluene-d8	5. 3 9		"	5.00		108	70-120			
Surrogate: Dibromofluoromethane	4.95		"	5.00		99	65-130			
Surrogate: 4-Bromofluorobenzene	5.23		"	5.00		105	70-120			
Matrix Spike Dup (6C09030-MSD1)	Source: M	PB1066-01		Prepared a	& Analyze	d: 03/09/	06			
tert-Amyl methyl ether	688	25	ug/l	816	26	81	80-115	5	15	
Benzene	249	25	н	252	ND	99	65-115	7	20	
tert-Butyl alcohol	8040	1000	H	8440	ND	95	75-120	9	25	
Di-isopropyl ether	686	25	l)	812	23	82	75-125	8	15	
1,2-Dibromoethane (EDB)	749	25	п	832	ND	90	85-120	7	15	
1,2-Dichloroethane	640	25	"	776	9.0	81	85-130	10	20	L
Ethanol	8820	15000	"	8240	440	102	70-135	6	35	
Ethyl tert-butyl ether	690	25	11	820	24	81	75-130	8	25	
Ethylbenzene	310	25	**	364	11	82	75-135	3	15	
Methyl tert-butyl ether	318	25	**	392	16	77	65-125	6	20	
Toluene	1570	25	**	1900	14	82	85-120	11	20	Lì
Xylenes (total)	1840	25	**	2040	40	88	85-125	6	20	
Gasoline Range Organics (C4-C12)	19700	2500	**	22000	ND	90	60-140	8	25	
Surrogate: 1,2-Dichloroethane-d4	4.64		n	5.00		93	60-135			
Surrogate: Toluene-d8	5.14		"	5.00		103	70-120			
Surrogate: Dibromofluoromethane	4.72		"	5.00		94	65-130			
Surrogate: 4-Bromofluorobenzene	5.01		,,	5.00		100	70-120			

Sequoia Analytical - Morgan Hill

The results in this report apply to the samples analyzed in accordance with the chain of custody document. Unless otherwise stated, results are reported on a wet weight basis. This analytical report must be reproduced in its entirety.





URS Corporation [Areo] Project:BP Heritage #11124, Oakland ,CA
1333 Broadway, Suite 800 Project Number:G099D-0008
Oakland CA, 94612 Project Manager:Lynelle Onishi

MPC0074 Reported: 03/15/06 14:44

Notes and Definitions

PV Hydrocarbon result partly due to individ. peak(s) in quant. range

LN MS and/or MSD below acceptance limits. See Blank Spike(LCS).

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit or MDL, if MDL is specified

NR Not Reported

dry Sample results reported on a dry weight basis

RPD Relative Percent Difference

	8
TO SERVICE SER	48

Chain of Custody Record

Analytical for SSI sampling

BP BU/AR Region/Enfos Segment:

Project Name:

BP > Americas > West Coast > Retail > WCBU >

CA > Central > 11124 > HistoricalBL

State or Lead Regulatory Agency: California Regional Water Quality Control Board - San Fra

Requested Due Date (mm/dd/yy):

	Page of
On-site Time:	Temp: 60
Off-site Time:	Temp: 🥕
Sky Conditions:	V
Meteorological Events:	
Wind Speed:	Direction:

Lab Name: Sequoia	BP/AR Facility No.: 11124	Consultant/Contractor: URS
Address: 885 Jarvis Drive	BP/AR Facility Address: 3315 High St., Oakland, CA	Address: 1333 Broadway, Suite 800
Morgan Hill, CA 95037	Site Lat/Long: 37.785719 / -122.196	Oakland, CA 94612
Lab PM; Lisa Race/ Katt Min	California Global ID No.: T0600100919	Consultant/Contractor Project No.: 38487131
Tele/Fax: 408.782.8156 / 408.782.6308	Enfos Project No.: G099D-0008	Consultant/Contractor PM: Lynelle Onishi
BP/AR PM Contact: Kyle Christie	Provision or RCOP: RCOP	Tele/Fax: 510.874.1758 / 510.874.3268
Address: 4 Centerpointe Drive		Report Type & QC Level: Level 1 with EDF
La Palma, CA 90623-1066		E-mail EDD To: Donna Cosper@urscorp.com
Tele/Fax: 714.670,5303 / 714.670.5195		Invoice to: Atlantic Richfield Company
Lab Bottle Order No: Matrix	Preservative Requ	ested Analysis
Item Samble Description Time Date Water/Liquid Water/Liquid	PA No. of Containers Unpreserved H ₂ SO ₄ HNO ₃ HCI Methanol Methanol SIDE, TBA (8260) SIDE, TBA (8260)	Sample Point Lat/Long and Comments
1 MW- 100 2/24/46 17	6) 3	
2 MW-2 100 1 X	W 3 K XXXX	
	13 3 XXXX	
	<u> </u>	
4 TB-1/24-02242506 - PENJOS K	64 Z X X X	anhold
5		
6		
		and the same of th
7	╣╼╼┈╼═┈╟╌╽┈╎═╞┈╎╒╒ ┥	
8		
9		
10		
Sampler's Name: John Deboug	Relipquished By / Affiliation Date Time	Accepted By / Affiliation Date Time
Sampler's Company: R15	2/24/66 1356	SHAPLE CLERESTAN Z/29/2 1356
Shipment Date:	STAVE OR TOWN TO USE	Werter Veres 1650
Shipment Method:	MMM 2/21 1755	Z-27× 17155
Shipment Tracking No:		
Special Instructions:		
Custody Seals In Place Yes No Temp Bla	nk Yes No_ Cooler Temperature on Recei	pt 6.0 %C Trip Blank Yes NoNo
	MASS-usia Diale Cald Ca / Diale Const. Committent/Controltor	DD COC Dett. 4 10/1/04

SECUCIA ANALYTICAL SAMPLE RECEIPT LOG

CLIENT NAME: REC. BY (PRINT) WORKORDER:	BP 1/124 L.P. HPCBO	74		DATE REC'D AT LAB: TIME REC'D AT LAB: DATE LOGGED IN:	17:55	3		-	DRINKING WASTE WA	
CIRCLE THE APPRO	OPRIATE RESPONSE	LAB SAMPLE#	DASH #	CLIENT ID	CONTAINER DESCRIPTION	PRESERV ATIVE	рН	SAMPLE MATRIX	DATE SAMPLED	REMARKS: CONDITION (ETC.)
	- (142)	SAMPLE #	A-C	mw-1	Vac-3	HEL		0	7-24-2	2-20 10:30
1. Custody Seal(s)	Present / Absent	w		2	. /	1	1	<i></i>		11:00
o Ob-t- of Custodia	Present Absent	03	1	9						11:20
Chain-of-Custody Traffic Reports or	1 (0001177 100017	12	AB	TB-11124-022#2006	VOX-2	 	7	并	<u> </u>	
Packing List:	Present Absent						· ·	<u> </u>		
4. Airbill:	Airbill / Sticker,			· · · · · · · · · · · · · · · · · · ·			 -	 		
-7. Futbilli	Present Absent		<u> </u>			-	•	 		
5. Airbill #:		· ·						 		
6. Sample Labels:	Present / Absent					 	·	·		
7. Sample IDs:	Listed / Not Listed	<u> </u>	 							
	on Chain-of-Custody	 	 	,		1 -		/		
8. Sample Condition:	Intaot / Broken* /-		-							
	Leaking*			·						
9. Does information o	n chain-oi-custouy,		 			1		<u> </u>	<u> </u>	
traffic reports and	Yes No					1.00				
agree? 10. Sample received wit					/ /	4/				
10. Sample received with hold time?	76\$ / No*				100	4	├ -	 	<u> </u>	
11. Adequate sample vo					1/6/_		╂──∸	 	ļ	
received?	Yes / No*				<u> </u>				 	
12. Proper preservative	s used? Yes/No*			 	1		+	 		
13/Trip Blank / Temp B	llank Received?		4	 	 	-			Ī-	
(circle which, if yes)	Yes / No*	· · ·		·		-		,		
14. Read Temp:	<u> 3.4c </u>					-				
Corrected Temp:	3.4C				1					
Is corrected temp 4	+/-2°C? (Pes) No**		+	1						
Michaeontance range for sample	es requiring thermal pres.)	 	1							
**Exception (if any): M	ETALS / DFF ON ICE		+==				Course girpon Fig. 2000			4.50.50/2.025-2.50/2.50/2.50
or Problem COC				CONTACT PROJECT	MANAGER AN	D ATTACH	RECO	RD OF RE	SOLUTION	

SRL Revision 7
Rapiacas Rev 5 (07/13/04)

ATTACHMENT C

ERROR CHECK REPORTS AND EDF/GEOWELL SUBMITTAL CONFIRMATIONS

Main Menu | View/Add Facilities | Upload EDD | Check EDD

SUCCESSFUL GEO_WELL CHECK - NO ERRORS

ORGANIZATION NAME:

URS Corporation-Oakland Office

USER NAME:

URSCORP-OAKLAND

DATE CHECKED:

3/16/2006 3:31:20 PM

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UPLOADING A GEO_WELL FILE

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

Submittal Title:

1Q 2006 BP/ARCO 11124

GEOWELL

Submittal Date/Time: 3/16/2006 3:32:36 PM

Confirmation

Number:

4132169961

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SUCCESSFUL EDF CHECK - NO ERRORS

ORGANIZATION NAME:

URS Corporation-Oakland

Office

USER NAME: DATE CHECKED: **URSCORP-OAKLAND**

3/16/2006 3:34:38 PM

GLOBAL ID:

T0600100919

FILE UPLOADED:

BP#11124-EDF-MPC0074.zip

No errors were found in your EDF upload file.

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When you complete the submittal process, you will be given a confirmation number for your submittal.

Click here to view the detections report for this upload.

BP

Regional Board - Case #: 01-0996

3315 HIGH ST OAKLAND, CA 94619 SAN FRANCISCO BAY RWQCB (REGION 2)

Local Agency (lead agency) - Case #: 1075

ALAMEDA COUNTY LOP - (RWS)

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED

3 1

WATER

0

FIELD POINTS WITH DETECTIONS

FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL SAMPLE MATRIX TYPES

METHOD QA/QC REPORT

METHODS USED

8260FA Υ

TESTED FOR REQUIRED ANALYTES? LAB NOTE DATA QUALIFIERS

TECHNICAL HOLDING TIME VIOLATIONS

Υ

0

QA/QC FOR 8021/8260 SERIES SAMPLES

METHOD HOLDING TIME VIOLATIONS 0 LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT 0 LAB BLANK DETECTIONS 0 DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING? - LAB METHOD BLANK - MATRIX SPIKE Υ - MATRIX SPIKE DUPLICATE Υ - BLANK SPIKE Υ - SURROGATE SPIKE Υ

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-Υ MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% Υ SURROGATE SPIKES % RECOVERY BETWEEN 85-115% Υ BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130%

MATRIX SPIKE / MATRIX 135%	SPIKE DUPLICATE(S) % RE	COVERY BETWEEN 65-	n/a
	SPIKE DUPLICATE(S) RPD L RECOVERY BETWEEN 70-12		n/a n/a
BLANK SPIKE / BLANK SF 130%	PIKE DUPLICATES % RECOV	ERY BETWEEN 70-	n/a
FIELD QC SAMPLES	<u> </u>		
FIELD QC SAMPLES	COLLECTED	DETECTIONS >	REPOL
	-	DETECTIONS > 0	REPDL
	COLLECTED	DETECTIONS > 0 0	REPDL

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.

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Confirmation Number: 3783080458

Date/Time of Submittal: 3/16/2006 3:35:38 PM

Facility Global ID: T0600100919

Facility Name: BP

Submittal Title: 1Q 2006 BP/ARCO 11124 EDF

Submittal Type: GW Monitoring Report

Click here to view the detections report for this upload.

BP Regional Board - Case #: 01-0996

3315 HIGH ST SAN FRANCISCO BAY RWQCB (REGION 2)
OAKLAND, CA 94619 Local Agency (lead agency) - Case #: 1075

ALAMEDA COUNTY LOP - (RWS)

 CONF #
 TITLE
 QUARTER

 3783080458
 1Q 2006 BP/ARCO 11124 EDF
 Q1 2006

SUBMITTED BY SUBMIT DATE STATUS

Srijesh Thapa 3/16/2006 PENDING REVIEW

SAMPLE DETECTIONS REPORT

FIELD POINTS SAMPLED

FIELD POINTS WITH DETECTIONS

FIELD POINTS WITH WATER SAMPLE DETECTIONS ABOVE MCL

SAMPLE MATRIX TYPES

WATER

METHOD QA/QC REPORT

TECHNICAL HOLDING TIME VIOLATIONS

METHODS USED 8260FA
TESTED FOR REQUIRED ANALYTES? Y
LAB NOTE DATA QUALIFIERS Y

QA/QC FOR 8021/8260 SERIES SAMPLES

METHOD HOLDING TIME VIOLATIONS

LAB BLANK DETECTIONS ABOVE REPORTING DETECTION LIMIT

O
LAB BLANK DETECTIONS

DO ALL BATCHES WITH THE 8021/8260 SERIES INCLUDE THE FOLLOWING?

- LAB METHOD BLANK

- MATRIX SPIKE

- MATRIX SPIKE
- Y

BLANK SPIKE

- SURROGATE SPIKE

WATER SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% Y
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% Y
SURROGATE SPIKES % RECOVERY BETWEEN 85-115% Y
BLANK SPIKE / BLANK SPIKE DUPLICATES % RECOVERY BETWEEN 70-130% Y

SOIL SAMPLES FOR 8021/8260 SERIES

MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) % RECOVERY BETWEEN 65-135% n/a
MATRIX SPIKE / MATRIX SPIKE DUPLICATE(S) RPD LESS THAN 30% n/a
SURROGATE SPIKES % RECOVERY BETWEEN 70-125% n/a

	KE DUPLICATES % RECOVERY	BETWEEN 70-130% n/a
FIELD QC SAMPLES		
SAMPLE	COLLECTED	<u>DETECTIONS > REPDI</u>
QCTB SAMPLES	N	0
QCEB SAMPLES	N	0
QCAB SAMPLES	N	n

Logged in as URSCORP-OAKLAND (CONTRACTOR)

CONTACT SITE ADMINISTRATOR.