

# Report of Quarterly Sampling and Analysis Exxon Retail Site 7-0210 7840 Amador Valley Boulevard Dublin, California

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Prepared for

Exxon Company, U.S.A.

Prepared by

EA Engineering, Science, and Technology

#### Report of Quarterly Sampling and Analysis Exxon Retail Site 7-0210 7840 Amador Valley Boulevard Dublin, California

#### Prepared for

Exxon Company, U.S.A. 2300 Clayton Road, Suite 490 Concord, California 94520

#### Prepared by

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Hugh J\Miles, P.E. #C49427

Senior Business Leader, Petroleum Environ

Exp. 9/30/96

#### SITE CONTACTS

Site Name: Exxon Retail Site 7-0210

Site Address: 7840 Amador Valley Boulevard

Dublin, California

Site Business Owner: Shih Hsiung

Site Business Phone: (510) 829-7218

Exxon Project Manager: Marla D. Guensler

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#### 1. INTRODUCTION

Exxon Retail Site (RS) 7-0210 is an active service station located at 7840 Amador Valley Boulevard, Dublin, California, on the southeast corner of the intersection of Amador Valley Boulevard and Regional Street. The station has three operating underground storage tanks (USTs) located approximately 40 feet west of the pump islands. Three former underground storage tanks were located in between the current tank locations and the pump islands.

On 26 July 1994, groundwater in wells MW1-MW4 (Figure 1) was monitored for liquidphase hydrocarbons (LPH), using an optical interface probe. Groundwater samples were collected from the wells, and the samples were analyzed for petroleum hydrocarbons.

#### 2. SUMMARY OF RESULTS

On 26 July 1994, the depth to water in wells MW1-MW4 was measured. Gauging data and calculated groundwater elevations from 26 July are presented in boldface type in Table 1, along with previous gauging data. Groundwater elevations have fallen approximately 0.62 feet since the previous gauging of 16 April 1994. The calculated direction of the groundwater gradient is to the south-southeast (see Figure 1) at a magnitude of 0.005, which is consistent with previous gauging data. The field documents are included as Appendix A.

After the depths to water were determined, each well was purged with a 2-inch vacuum pump. Field parameters of temperature and electrical conductance of the purged water were measured for approximately every well casing volume during purging. When the field parameters were stable (less than 10 percent change from the previous reading for temperature and electrical conductance) and at least three casing volumes had been removed from each well, purging was stopped and samples collected. Samples were collected using factory-cleaned polyethylene disposable bailers that were tripled-rinsed prior to collecting each sample. The samples were poured into 40-ml VOA vials, which were then placed in an ice-filled sample cooler. A field-prepared sampling equipment rinse blank and a laboratory-prepared trip blank were stored and transported in the cooler with the groundwater samples. All samples were handled and transported under standard chain-of-custody procedures.

The samples were submitted to Pace Incorporated and were analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-g) by Cal EPA-modified EPA Method 8015 and for benzene, toluene, ethylbenzene, and xylenes (BTEX) by Method 8020. Analytical results indicated that none of the analytes were detected at or above the method detection limits, with the exception of TPH-g in well MW1. TPH-g was detected in the sample from well MW1 at a concentration of 130  $\mu$ g/L. The analytical results for the 26 July 1994 samples are presented in boldface type in Table 1, along with previous analytical results. The distribution of petroleum hydrocarbons is shown in Figure 1. The laboratory analytical report is included as Appendix B.

1

#### 3. WORK PROPOSED FOR NEXT QUARTER

Groundwater from MW1-MW4 will be sampled in October 1994, and the samples will be analyzed for TPH-g and BTEX by EPA Methods 8015 and 8020.

2



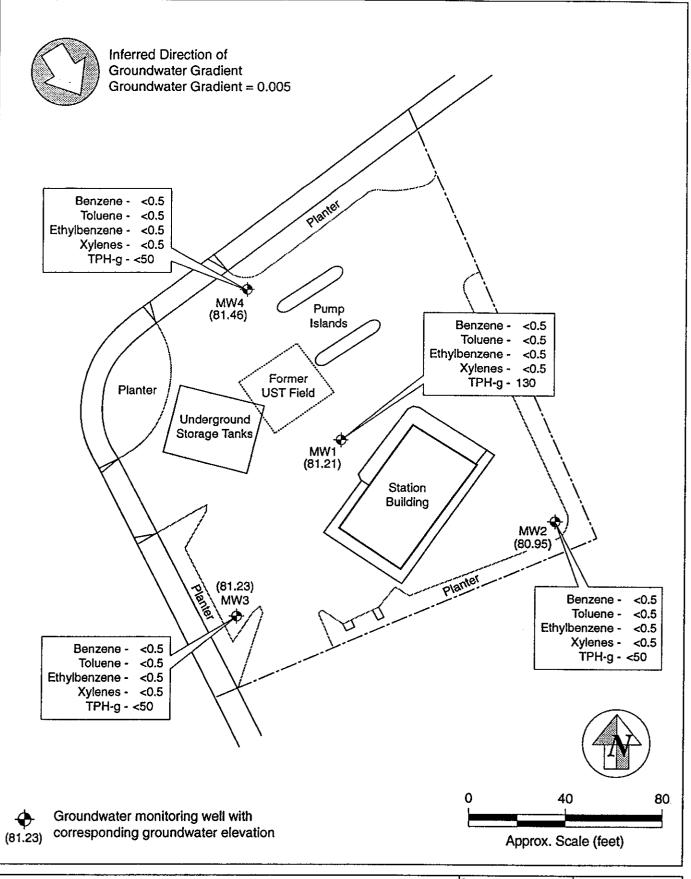


Figure 1. Site map showing locations of groundwater monitoring wells, direction of groundwater gradient, and concentrations (µg/L) of petroleum hydrocarbons in samples of groundwater, Exxon RS 7-0210, Dublin, California, 26 July 1994.

Drawn	MAW	Date	8/29/94
Reviewed		Date	
Rev		Date	
Final	Wh	Date	9/2/94

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TABLE I GAUGING DATA AND ANALYTICAL RESULTS, EXXON RS 7-0210, DUBLIN, CALIFORNIA, 1992-1994

Well		Casing	Depth	Groundwater	LPH			Concentration (	ıg/L)	
	D-4-	Elevation	to Water	Elevation	Thickness			Ethyl-		
No.	Date	(ft msl)	(ft)	(ft msl)	(ft)	Benzene	Toluene	benzene	Xylenes	TPH-g
MW1	05/21/92	96.32	14.45	81.87	0.00	<0.5	<0.5	<0.5	<0.5	-50
	02/10/93		12.22	84.10	0.00	3.1	<0.5	1.8	0.6	<50
	05/20/93		10.74	85.58	0.00	1.9	<0.5	1.8		2,600
	06/23/93		11.74	84.58	0.00	1.0	<0.5	1.6	<1.0	1,000
	08/23/93		12.72	83.60	0.00	<0.5	<0.5		<0.5	1,300
	10/25/93		13.99	82,33	0.00	<0.5		<0.5	0.8	80
	02/16/94		14.90	81.42	0.00	<0.5	<0.5	0.8	1.3	140
	04/16/94		14.49	81.83	0.00	<0.5	<0.5	<0.5	<0.5	<50
	07/26/94		15.11	81.21	0.00			<0.5	<0.5	190
	***************************************		13.11	01.21	0.00	<0.5	* <0.5	<0.5	<0.5	130
MW2	05/21/92	95.91	14.30	81.61	0.00	<0.5	<0.5	<0.5	<0.5	<50
	02/10/93		12.34	83.57	0.00	<0.5	<0.5	<0.5	<0.5	<50
	05/20/93		10.73	85.18	0.00	<0.5	<0.5	<0.5	<1.0	320
	06/23/93		11.74	84.17	0.00	<0.5	<0.5	<0.5	<0.5	130
	08/23/93		12.60	83.31	0.00	<0.5	<0.5	<0.5	1.1	140
	10/25/93		13.86	82.05	0.00	<0.5	<0.5	0.5	2.4	75
	02/16/94		14.73	81.18	0.00	<0.5	<0.5	<0.5	<0.5	<50
	04/16/94		14.33	81.58	0.00	<0.5	<0.5	<0.5	<0.5	<50
	07/26/94		14.96	80.95	0.00	<0.5	<0.5	< 0.5	<0.5	<50
MW3	05/21/92	97.95	16.05	81,90	0.00	<0.5	<0.5	<0.5	<0.5	<50
	02/10/93		13.77	84.18	0.00	<0.5	<0.5	<0.5	0.7	<50
	05/20/93		12.32	85.63	0.00	<0.5	<0.5	<0.5	<1.0	<50
	06/23/93		13.34	84.61	0.00	<0.5	<0.5	<0.5	<0.5	<50
	08/23/93		14.30	83.65	0.00	2.3	1,2	1.4	4.1	
	10/25/93		15.62	82.33	0.00	NS	NS			<50
	02/16/94		16.48	81.47	0.00	NS		NS	NS	NS
	04/16/94		16.61	81.34	0.00	NS NS	NS NS	NS	NS	NS
	07/26/94		16.72	81.23	0.00	NS <0.5	<0.5	NS <b>&lt;0.5</b>	NS <b>&lt;0.5</b>	NS <50

TABLE 1 (continued)

		Casing	Depth	Groundwater	LPH			Concentration (	ug/L)	
Well	_	Elevation	to Water	Elevation	Thickness			Ethyl-		
No.	Date	(ft msl)	(ft)	(ft msl)	(ft)	Benzene	Toluene	benzene	Xylenes	TPH-g
MW4	05/21/92	96.69	14.59	82.10	0.00	<0.5	<0.5	<0.5	<0.5	<50
	02/10/93		12.30	84.39	. 0.00	<0.5	<0.5	<0.5	<0.5	<b>&lt;</b> 50
	05/20/93		10.75	85.94	0.00	1.4	1.0	<0.5	1.8	<50
	06/23/93		11.78	84.91	0.00	<0.5	<0.5	<0.5	<0.5	<50
	08/23/93		12.82	83.87	0.00	<0.5	<0.5	<0.5	0.8	<50
	10/25/93		14.10	82.59	0.00	NS	NS	NS	NS	NS
	02/16/94		15.02	81.67	0.00	<0.5	<0.5	<0.5	<0.5	<50
	04/16/94		14.61	82.08	0.00	NS	NS	NS	NS	NS
	07/26/94		15.23	81.46	0.00	<0.5	<0.5	<0.5	<0.5	<50
Trip Blank	07/26/94					<0.5	<0.5	<0.5	<0.5	<50
Rinse Blank	07/26/94					<0.5	<0.5	<0.5	<0.5	<50

A peak eluting earlier than benzene, suspected to be methyl tertiary butyl ether (MTBE). Not sampled.

NS

## Appendix A Field Documents

#### -- . ONITORING WELL DATA FORM EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC. Project Number 83H0210.1468 Station Number [2\*\* 0N 7-0210 Client EXX ON Samplers Date Site Location 7840 Valley Dublin CA. ELEVATION ELEVATION APPARENT MONITORING DEPTH TO STICK DEPTH DEPTHITO TOP OF TOP OF PRODUCT WELL NUMBER UP (+) TO WATER PRODUCT CASING BOTTOM GROUNDWATER THICKNESS DOWN (-) MWI 15.11 23.66 MW2 14.96 25.12 MW3 16.72 27.64 MW4 15.23 24.99

EΔ			0444		20.5	Date: 7/	126/94
	OUNDWATE				(IVI		-
Project Name: A 83 A J 2		Well Numi	ber:	1.4			
Project Number:	7-0210	Personnel	:				
GAUGING DATA	_A. (-	0.				To	<i>C</i> ,
GAUGING DATA  Water Level Measuring Metho	d: water p	7.00		g Point De	scription:_	Casing	Total Region
1	epth To Water (feet)	Water Colum (feet)		luttiplier For sing Diamete	er 🗼	Volume (gal)	Purge Volun (gal)
VOLUME -	(=	)——	X 2	4	<del>(=)</del>		1.6
CALCULATION 23.66	15.11	8.55	0.16	0.64	1.44	5.5	16.4
PURGING DATA							
Purge Method:	niell	Purge	Depth:		Purge	Rate:	
Time	1395-1	347 13	48 13	352			
Volume Purged (gal)	0 7	年十10.		#17	•		
Temperature (°C)	25.0	24.0	23.3 2	26			
pH	8.0	7.98 7	.97 -	7.97			
Specific Conductivity (jumbos)	1.2	1.2		1.2			
Turbidity / Calor	100 dear	Cear	dear	dear			
Odor -	14	N	N	N		<u> </u>	
Casing Volumes Removed:	0	1	2	3			
. Dewatered?	N	N	$N \perp$	$N \perp$			
Comments/Observations:					· · · · · · · · · · · · · · · · · · ·		
,			<u></u>				
SAMPLING DATA Time S	Sampled: 1460	Δι	oprox. Depth	to Water (	During Sar	mpling:	19
Comments:	sampled			<u> </u>			
Sample : Number of Container	Volum Preservative (mi	e Filled orl) Turbidity	Color	Shipped Under Custod gr.4 C.D	y .	Analysis Method	• Соппены
MWI 3 YOA		m la	dens	У		BIEX/7948	/
TAVVI - I	1.			<u> </u>			
Total Ruma Valume: 17		Disposal/C	l Containment N	lethod:	divir	25	

		0	FOLINDA	WATED (	MBCE	AND CA	MDI E E	ORM	Date:	7/26/89
Project Na	me.	EXXON	7-0216	VAIER	Well Numi		MPLE FO Mw 2	·		
Project Nu	mber: _	83 <sub>7</sub> 0	210.14	8 ,	Personnel		YL			
GAUGING DA	ATA		•	÷		<u> </u>				
Water Leve	l Meas	uring Meth	iod: ಲತ್	la prol	lee_	_ Measu	ring Point (	Descriptio	on: To	<u></u>
WELL VOLUME CALCULATION	Tota (1	Depth (eet)	Depth To W (feet)	ater Wa	iter Column (leet)		Multiplier F Casing Diam		Casing Volume (gal)	Fotal Req'd Purge Volume (gal)
PURGING DA	ATA									
Purge Metho		vau	untr	edl.	_ Purge 0	Depth:		Pu	rge Rate:	
Time			143		<del></del>	432	1435			_
Volume Pur	jed (ga	I)	0	مسند	5 13.0		0525			
Temperature	e (°C)		22.	9 22		25	22.8			
pН			7.9	8 7.0	16 7	.96	7.94			
Specific Con	ductivil	ly (µmhos)	1.2	1.2	- 1	.2	1.2			
Turbidity / Co	alor		land	ear long	tear lo	Youar	lowgear			
Odor:			N	٨	. 1	N	7			
Casing Volu	mes Re	emoved:	0,	1		1.5	3			
Dewatered?			N	N		7	7			
Comments/C			Sampled:	1420	And	arox Dec	oth to Water	Durina S	Sampling:	20'
Comments	s:	Title	Sampleu	-117	^H	JOX. DEP			· ·	
■ Q2 = 5 × 1 × 1 × 1 × 1 ≥ 0 ■ Q2 × 2 × 1 × 1	mber of	Container. Type	Preservative	Volume Filled (ml oc.l)	Turbidity	Color	Cusk	les Chain of ody (Y/M)	Analysis Method	Сопичены
MW2 1	<b>43</b>	VOA	HW	foml	lan	de	У	-	BTEX/TPHS	
		-								
Total Purge Volume Weather Condition of We	tions: ell Box a	-	at Time of S	ampling: _	01		Method:	drun	S	
Well Head Con Problems Enco Comments:						r well box.	etc.):			

•

			HOOMD				AMPLE FO		•	
	ct Name:				Well Num		MW3		· · · · · · · · · · · · · · · · · · ·	
Projec	ct Number	83A	1210,10	108	Personne	l:	<u> </u>			
GAUGIN	IG DATA		<u> </u>							
Water	Level Mea	asuring Met	hod:ι	vala p	nolee	_ Meas	uring Point (	Descript	ion: T	<u> </u>
WELI	_	tal Depth (feet)	Depth To V (feet)	III III	later Colum (leet)		Multiplier F		Casing Volume (gal)	Tota Purge (g
CALCULA	TION _	27.64	16.7	2	30.4	0.10	<del></del>	6 1.44	15.07	-   /5
PURGIN	G DATA	· <del>11</del>		^						
Purge M	lethod:	Vawi	entre	W_	Purge (	Depth:		Pı	urge Rate:_	
Time			1401	140	2 14	704	1404			
Volume	Purged (g	al)		50.2		•	45.216	····•	·	
Temper	ature (°C)		23.5	7 24	1.12	2.6	23.0	-		
рН			8.0	8.		.0	8.0			
Specific	Conductiv	rity (µmhos)	1.23	3 1.2		23	1.23	<del></del>		
Turbidity	//Color:		lando	ar low	tay 6	dear	Joan			
Odor			N	1		V	N			
Casing \	/olumes:A	emoved	6			2	7			
Dewater	ed?		1	1\						
Assistant to the Both	<u>· × · · · · · · · · · · · · · · · · · ·</u>				1 1		14			
Commer	nts/Observ	ations:	-		·					
	•							·		
SAMPLIN Comm		Time S	Sampled:_	1415	Арр	rox. Dept	th to Water (	During S	Sampling:	17
Sample Number	feurment of	Container Type	Preservative	Volume Fried (mi or.i)	Turbidity	Color	Shipped Under Custod at 4 C ()	γ	Analysis	Comme
MW3	743	VOA	HU	40ml	ON	den		784J	BT∈X/794	2
	<del> </del>				2000	روي	<del> </del>		4	
	•				<del> </del>					
	<del>- i</del>									
Total Pumo	Volumet	16			<u> </u>			11/2	vne	-
Weather Co		pur	ny i	rug b	isposal/Con zo+	tainment i	Method:			
		and Casing a		· -	0/2					
	ocountered	Requiring Co	rection (loci	ks, damage	d casing or	Hell box.	alc.): <u>(</u>	2/	<del>-</del>	·······

	Date: 7/26/
GROUNDWATER PURGE AND SAMP	PLE FORM ——————
	W4.
Project Number: 8340240, 1468 Personnel:	
GAUGING DATA	
Water Level Measuring Method: wata purlee Measuring	Point Description:
VOLUME (leet) (leet) Casin	Itiplier For Casing Total Red Volume Purge Volume (gal) (gal)
CALCULATION $24997 / 15.23 7 9.76 7 0.16 7 $	4 6 6.25 18.7
PURGING DATA	
Purge Method: Vaconfiel Purge Depth:	Purge Rate:
Time 14 16 1417 1419 142	
2 · A :	F/g
Temperature (°C) 25.1 25.4 22.4 24.	.6
рн 7.99 7.98 7.96 7.9	97
Specific Conductivity (jumbos) 1.2 1.2 1.2	2
Turbidity / Colors Indear law lear law lear low	Tar
	V
Casing Volumes Removed 0 1 3	
Dewatered?' ####################################	
Comments/Observations:	
SAMPLING DATA Time Sampled: 1425 Approx. Depth to V	Water During Sampling: 22
Sumple restrict or Container Volume Filled	Cissody Analysis sit (C(Y/N) Metrod Controents
MW4 3 VOA HUL 40ml law close	Y BTEXPHY
otal Purge Volume: 19 Disposal/Containment Metho	d: drung
Veather Conditions:	
Vell Head Conditions Requiring Correction (locks, damaged casing or well box, etc.);	
roblems Encountered During Purging and Sampling:	

3/10/

## ...... Comercial, Cooks.

## P.O. Box 4415, Houston, TX 77210-4415

## CHAIN OF CUSTODY

Novato, CA, 11 Digital Drive, 94949 (415) 883-6100

Huntington Beach, CA, 5702 Bolsa Avenue, 92649

Sample Description  Collection Pate/Time 7/26/34  MW 1 1408 Walter HCL 3  MW 2 1415  MW 4 1425  MW 4 1425  MW 4 1425	949	5702 Bolsa Avenue, 92649	-2565	(4) 89	(7				<u> </u>	J -T-	(414	PIACE	ررد: . مررد:	- 083-C	heer	t Engi	Ex	Name:	Consultant's i
Project #: 83AO210.1468  Consultant Project #: 83AO210.1468 Consultant Work Release #: 1940725  Project Contact: Tracy Faulkner  Phone #: I to 283-7077 Fax #: 50 283-387 Laboratory Work Release #: 1940725  EXXON Contact: Roser D. Hicks EE C&M  Sampled by (print): Vocare Leurs  Sampler's Signature: Work  Shipment Method: Parce Pickup  Air Bill #: Shipment Date:  TAT: 24 hr 48 hr 72 hr Standard (5 day)  Sample Description  Collection Date/Time 7126/74  MAWA 1425  MWA 1425  MWA 1425	of	Page		<del></del> -			4	2109	Ch r	/\ !*t		00	B-	<del>3</del>	iabl	UT D	183	32	Address:
Project Contact: Tracy Faulker Phone #: J10 283-7077 Fax #: YD 283-357 Laboratory Work Release #: [940727]  EXXON Contact: Roger D. Hicks EE C&M Phone #: J10 283-7077 Fax #: YD 283-357 Laboratory Work Release #:  EXXON RAS #: 7 - 02 10  Sampled by (print): YOUNG Leving Sampler's Signature: YOUNG Fax #: EXXON RAS #: 7 - 02 10  Shipment Method: Pace Pickup Air Bill #: Shipment Date:  TAT: 24 hr 48 hr 72 hr Standard (5 day)  Sample Description Date; Time Table #: Sample Condition as Temperature *C: Cooler #: Inhound Scal Yes Outhound Scal Yes Outhound Scal Yes Area #: Comment Table #: Area #: Area #: EXXON RAS #: 7 - 02 10  Sample Description Date; Time Table #: Area #: Area #: Exxon Ras #: To 210  Sample Description Date; Time Table #: Area #: Area #: Exxon Ras #: To 210  Sample Condition as Temperature *C: Cooler #: Inhound Scal Yes Outhound Scal Yes #: Area #: Ar	, Dublin	O Amador Valley, I	ocation: 784	Site		14/	210			<u> </u>				<u>.</u>					
EXXON Contact: Roger D. Hicks EE C&M Phone #: 5N 246-87C8 Fax #: EXXON RAS #: 7-02 10  Sampled by (print): Young Learner Sampler's Signature: William Release #: EXXON RAS #: 7-02 10  Sampled by (print): Young Learner Sampler's Signature: William Release #: EXXON RAS #: 7-02 10  Sampled by (print): Young Learner Sampler's Signature: William Release #: EXXON RAS #: 7-02 10  Sample Description Pater Time Print Fax #: 6 f PACE Signature: William Release #: EXXON RAS #: 7-02 10  Sample Description Pater Time Print Fax #: 6 f PACE Signature: William Release #: EXXON RAS #: EXXON RAS #: 7-02 10  Sample Description Pater Time Print Fax #: 6 f PACE Signature: William Release #: EXXON RAS #: EXXON RAS #: 7-02 10  Sample Description Pater Time Print Fax #: 6 f PACE Signature: William Release #: EXXON RAS #: 7-02 10  Sample Description Pater Time Print Fax #: 6 f PACE Signature: William Release #: EXXON RAS #: 7-02 10  Sample Description Pater Time Print Fax #: 6 f PACE Signature: William Release #: EXXON RAS #: EXXON RAS #: 7-02 10  Sample Description Pater Time Print Fax #: 6 f PACE Signature: William Release #: EXXON RAS #: 6 f PACE Condition as fine print Fax #: 6 f PACE Signature: William Release #: 6 f PACE Signature: Signature: William Release #: 6 f PACE Signature: William Release #: 6 f PACE Signature: William Release #: 6 f PACE Signature: Signature: William Release #: 6 f PACE Signature: William Rele				1 000	<u>8</u>	1546		<u> </u>	<u>۔۔۔</u> ۱۶۳	rojeci .	suitint	Ply	·	·\	kne	Faul	racy	act:	Project Contac
Sampled by (print): Young Leaner Sampler's Signature: Sampler's Signature: Shipment Method: Pace Pickup Air Bill #: Shipment Date:  TAT: 24 hr 48 hr 72 hr Standard (5 day)  Sample Description Collection Pate/Time 726/94  Sample Description Pate/Time 726/94  Matrix Prsv of PACE Cont Pace Sample # Habit Hab					-38	70 58	Fax #:	<u> </u>	<u>/- 0</u>	(K) 24	16 W.	Phy		FF.	45 D	D.Hic	Roger	ntact:	EXXON Conta
TAT: 24 hr 48 hr 72 hr Standard (5 day)  ANALYSIS REQUIRED  Sample Condition as Temperature *C: Cooler #: Inbound Scal Yes Outhound Scal Yes Outhound Scal Yes Outhound Scal Yes Outhound Scal Yes Away   14-28   14-2	,,	7-0210	ON RAS #:	EXX		.) -	Fax #:	<u>~0</u>	$\frac{0}{}$		nier's S	San		8/	eun	nne L	Ϋ́νο		
TAT: 24 hr 48 hr 72 hr Standard (5 day)  ANALYSIS REQUIRED  Sample Condition as Temperature *C: Cooler #: Inbound Scal Yes Outhound Scal Yes Outhound Scal Yes Outhound Scal Yes Outhound Scal Yes AWA 1 1478    MW2 1448    MW3 1415    MW4 1425    M				<del>-</del>		1	2		-6	Kuninie				)	kup	- Pic	Pace		
Sample Description  Collection Date/Time 7/26/94  Matrix Soil/Water 7/26/94  MATRIX Soil/Water 7/26/94  MWZ. 1440		T	ent Date:	Ship		JIIIBED	SIS RE	ANAL		<del></del>			d (5 day)	Standar	B	72 hi	48 hr	24 hr	TAT: 24
MW2 1440 X  MW3 1415 X  MW4 425 X  RINSE 1440	No No	Inbound Seal Yes No Outbound Seal Yes No				Į į				ΥРН РА 418.1	PH/Diesel	PH/GAS/BTEX PA 8015/8020	PACE	# of		Matrix	Collection Pate/Time	ption	
MWZ 1440 X  MW3 1415 X  MW4 425 X  RINSE 1440		COMMENTS					<del></del>	<del> -</del>		<u> </u>	三田			3	Ha	watee	1400		NWI
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## Appendix B Laboratory Analytical Report



August 01, 1994

Ms. Tracy Faulkner EA Engineering 3468 Mt. Diablo Blvd., Suite Bl00 Lafayette, CA 94549

RE: PACE Project No. 440726.513

Client Reference: Exxon 7-0210 (EE)

Dear Ms. Faulkner:

Enclosed is the report of laboratory analyses for samples received July 26, 1994.

Please note a peak eluting earlier than Benzene and suspected to be methyl tert butyl ether was present in sample MW 1.

Footnotes are given at the end of the report.

ephanie matry

If you have any questions concerning this report, please feel free to contact us.

Sincerely.

Stephanie Matzo Project Manager

Enclosures



70 0360170

07/26/94

07/26/94

MW 1

EA Engineering 3468 Mt. Diablo Blvd., Suite Bl00 Lafayette, CA 94549

August 01, 1994

PACE Project Number: 440726513

Attn: Ms. Tracy Faulkner

Client Reference: Exxon 7-0210 (EE)

PACE Sample Number:
Date Collected:
Date Received:
Client Sample ID:

Parameter Units MDL DATE ANALYZED

#### ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS TOTAL FUEL HYDROCARBONS, (LIGHT): 07/27/94 Purgeable Fuels, as Gasoline (EPA 8015M) ug/L 50 130 HP 07/27/94 PURGEABLE AROMATICS (BTXE BY EPA 8020M): 07/27/94 Benzene 0.5 ug/L ND 07/27/94 Toluene 0.5 ug/L ND 07/27/94 Ethylbenzene 0.5 ug/L ND 07/27/94 Xylenes, Total ug/L 0.5 ND 07/27/94



Ms. Tracy Faulkner

Page

August 01, 1994

PACE Project Number: 440726513

Client Reference: Exxon 7-0210 (EE)

PACE Sample Number: Date Collected:

Date Received:

Client Sample ID: Parameter

70 0360188 07/26/94

07/26/94 MW 2

Units MDL DATE ANALYZED

ND

ND

ND

ND

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):
Purgeable Fuels, as Gasoline (EPA 8015M) ug/L PURGEABLE AROMATICS (BTXE BY EPA 8020M): Benzene

Toluene **Ethylbenzene** 

Xylenes, Total

ug/L 0.5 ug/L ug/L

ug/L

0.5 0.5

0.5

50

07/27/94 07/27/94 07/27/94 07/27/94

07/27/94

07/27/94 ND 07/27/94



Ms. Tracy Faulkner

Page 3

August 01, 1994

PACE Project Number: 440726513

Client Reference: Exxon 7-0210 (EE)

PACE Sample Number:

Date Collected:

Date Received:

Client Sample ID:

70 0360196

07/26/94

07/26/94 MW 3

<u>Parameter</u>

Units MDL

DATE ANALYZED

07/27/94

07/27/94

07/27/94

07/27/94

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT): Purgeable Fuels, as Gasoline (EPA 8015M) ug/L

Purgeable Fuels, as Gasoline (EPA 8015M)
PURGEABLE AROMATICS (BTXE BY EPA 8020M):
Benzene

Toluene Ethylbenzene

Xylenes, Total

g/L 50 ND g/L 0.5 ND

ND

ND

ug/L 0.5 ug/L 0.5 ug/L 0.5

ug/L

0.5

07/27/94 07/27/94

ND 07/27/94



Ms. Tracy Faulkner

Page 4

August 01, 1994

PACE Project Number: 440726513

Client Reference: Exxon 7-0210 (EE)

PACE Sample Number: Date Collected:

Date Received: Client Sample ID: 70 0360200 07/26/94 07/26/94

<u>Parameter</u>

Units

MW 4 DA

DATE ANALYZED

07/27/94

#### ORGANIC ANALYSIS

Xylenes, Total

PURGEABLE FUELS AND AROMATICS TOTAL FUEL HYDROCARBONS, (LIGHT): Purgeable Fuels, as Gasoline (EPA 8015M) PURGEABLE AROMATICS (BTXE BY EPA 8020M): Benzene Toluene	ug/L ug/L ug/L	50 0.5 0.5	ND ND ND ND	07/27/94 07/27/94 07/27/94 07/27/94 07/27/94
	<del>-</del> -			07/27/94 07/27/94 07/27/94

ug/L

0.5

ND



Ms. Tracy Faulkner

Page

August 01, 1994

PACE Project Number: 440726513

07/27/94

Client Reference: Exxon 7-0210 (EE)

PACE Sample Number: Date Collected:

Date Received: Client Sample ID:

Parameter

70 0360218 07/26/94 07/26/94

Rinse

MDL Units DATE ANALYZED

ug/L

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS TOTAL FUEL HYDROCARBONS, (LIGHT):

Purgeable Fuels, as Gasoline (EPA 8015M) ug/L PURĞEABLE AROMATICS (BTXE BY EPA 8020M): Benzene Toluene

Xylenes, Total

Ethylbenzene

07/27/94 50 ND 07/27/94 07/27/94 ug/L 0.5 ND 07/27/94

ug/L 0.5 ND 07/27/94 ug/L 0.5 ND 07/27/94

ND

0.5



Ms. Tracy Faulkner

Page 6

August 01, 1994

PACE Project Number: 440726513

Client Reference: Exxon 7-0210 (EE)

PACE Sample Number: Date Collected:

07/26/94 07/26/94

70 0360226

Date Received: Client Sample ID:

Parameter

Trip Units MDL \_\_\_\_\_

DATE ANALYZED

#### ORGANIC ANALYSIS

UKGANTO ANALTSIS				
PURGEABLE FUELS AND AROMATICS TOTAL FUEL HYDROCARBONS, (LIGHT):			_	07/27/94
Purgeable Fuels, as Gasoline (EPA 8015M) PURGEABLE AROMATICS (BTXE BY EPA 8020M):	ug/L	50	ND -	07/27/94 07/27/94
Benzene Toluene	ug/L ug/L	0.5 0.5	ND ND	07/27/94 07/27/94
Ethylbenzene	ug/L	0.5	ND	07/27/94
Xylenes, Total	ug/L	0.5	ND	07/27/94

These data have been reviewed and are approved for release.

Darrell C. Cain

Regional Director



Ms. Tracy Faulkner

FOOTNOTES

Page

for pages 1 through 6

August 01, 1994 PACE Project Number: 440726513

Client Reference: Exxon 7-0210 (EE)

HP

Hydrocarbons present do not match profile of laboratory standard. Method Detection Limit

MDL

ND

Not detected at or above the MDL.



Ms. Tracy Faulkner Page 8 QUALITY CONTROL DATA

August 01, 1994

PAČE Project Number: 440726513

Thos I roject han

Client Reference: Exxon 7-0210 (EE)

PURGEABLE FUELS AND AROMATICS

Batch: 70 32348

Samples: 70 0360170, 70 0360188, 70 0360196, 70 0360200, 70 0360218

70 0360226

#### **METHOD BLANK:**

Parameter TOTAL FUEL HYDROCARBONS, (LIGHT):	<u>Units</u>	MDL	Blank -
Purgeable Fuels, as Gasoline (EPA 8015M PURGEABLE AROMATICS (BTXE BY EPA 8020M)	ug/L	50	ND
Benzene Toluene Ethylbenzene	ug/L ug/L ug/L	0.5 0.5 0.5	ND ND ND
Xylenes, Total	ug/L	0.5	ND

#### SPIKE AND SPIKE DUPLICATE:

						Spike	
					Spike	Dupl	
Parameter	Units	MDL	700360072	Spike	Řecv	Recv	RPD
Benzene	<del>ug/L</del>	0.5	0.6	100	100%	96%	4%
Toluene	ug/L	0.5	ND	100	98%	94%	4%
Ethylbenzene	ug/L	0.5	ND	100	96%	92%	4%
Xylenes, Total	ug/L	0.5	ND	300	96%	91%	5%

#### LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

			Reference		Dupl
Parameter	Units	MDL	Value	Recv	Recv RPD
Benzene	ug/L	0.5	100	103%	101% 2%
Toluene	ug/L	0.5	100	102%	99% 3%
Ethylbenzene	ug/L	0.5	100	101%	98% 3%
Xylenes, Total	ug/L	0.5	300	101%	98% 3%



Ms. Tracy Faulkner

FOOTNOTES

Page

for page 8 August 01, 1994 PACE Project Number: 440726513

Client Reference: Exxon 7-0210 (EE)

MDL

Method Detection Limit

ND

Not detected at or above the MDL.

RPD

Relative Percent Difference

## PACE PORATED THE ASSURANCE OF QUALITY

## EXXON COMPANY, U.S.A.

P.O. Box 4415, Houston, TX 77210-4415 CHAIN OF CUSTODY 440726.513

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Novato, CA, 11 Digital Drive, 94949

Huntington Beach, CA, 5702 Bolsa Avenue, 92649 (714) 892-2565

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Project Contact: Tracy Faulkner  EXXON Contact: Roger D. Hick: FEE C&M  Sampled by (print): Yvonne Lewng  Shipment Method: Face Pickup						Phone #: 10 283-7077 Fax #:50 283-369								ort L	horato	ry Wor	k Relea	ise #:	
EXXON Contact: Roger D. Hicks DEE C&M						Phone #: 510 246-8758 Fax #:								E	EXXON RAS #: 7 - 02 10				
Sampled by (print): Yvonne Leung						Sampler's Signature:													
Shipment Method: Face Pickup						Air Bill #:								SI	Shipment Date:				
						ANALYSIS REQUIRED							RED		Sample Condition as I Temperature ° C:				
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	1					TPH/GAS/BTEX EPA 8015/8020	_										ĺ	Outbound Seal Yes No	
	0.11	Matrix	Prsv	# of	PACE	AS/)	TPH/Diesel EPA 8015	18.1									<u> </u>		
Sample Description	Collection Date/Time 7/26/94	Soil/Water	1134	Cont	Sample #	PH/C	PH/E	RPH PA 4								i		COMMENTS	
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