

GETTLER-RYAN INC.

RO344

TRANSMITTAL

MAY 1 6 2002

April 29, 2002 G-R #180109

TO:

Mr. David B. De Witt

Phillips 66 Company

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

FROM:

Deanna L. Harding

Project Coordinator

Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568 CC:

Mr. Tim Ripp

IT Corporation

1921 Ringwood Avenue

San Jose, California 95131

RE:

Tosco (Unocal) Service Station

#5760

376 Lewelling Boulevard

San Lorenzo, California

WE HAVE ENCLOSED THE FOLLOWING:

DATED	DESCRIPTION
oril 26, 2002	Groundwater Monitoring and Sampling Report First Semi-Annual - Event of March 18, 2002

COMMENTS:

This report is being sent to you for your review/comment, prior to being distributed on your behalf. If no comments are received by *May 13*, 2002, this report will be distributed to the following:

cc: Mr. Amir K. Gholami, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Alameda, CA 94501

Enclosure



April 26, 2002 G-R Job #180109

Mr. David B. De Witt Phillips 66 Company 2000 Crow Canyon Place, Suite 400 San Ramon, California 94583

RE: First Semi-Annual Event of March 18, 2002

Groundwater Monitoring & Sampling Report

Tosco (Unocal) Service Station #5760

376 Lewelling Boulevard San Lorenzo, California

Dear Mr. De Witt:

This report documents the most recent groundwater monitoring and sampling event performed by Gettler-Ryan Inc. (G-R) at the referenced site. All field work was conducted in accordance with G-R Standard Operating Procedure - Groundwater Sampling (attached).

Static groundwater levels were measured and all wells were checked for the presence of separate-phase hydrocarbons. Separate-phase hydrocarbons were not present in the wells. Static water level data and groundwater elevations are summarized in Table 1. Dissolved Oxygen Concentrations are summarized in Table 3. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells as specified by G-R Standard Operating Procedure - Groundwater Sampling (attached). The field data sheets are also attached. The samples were analyzed by Sequoia Analytical. Analytical results are summarized in Tables 1 and 2. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical reports are also attached.

Sincerely,

Deanna L. Harding

Project Coordinator

Hagop Kevork P.E. No. C55734

Figure 1: Potentiometric Map Figure 2: Concentration Map

Table 1: Groundwater Monitoring Data and Analytical Results
Table 2: Groundwater Analytical Results - Oxygenate Compounds

Table 3: Dissolved Oxygen Concentrations

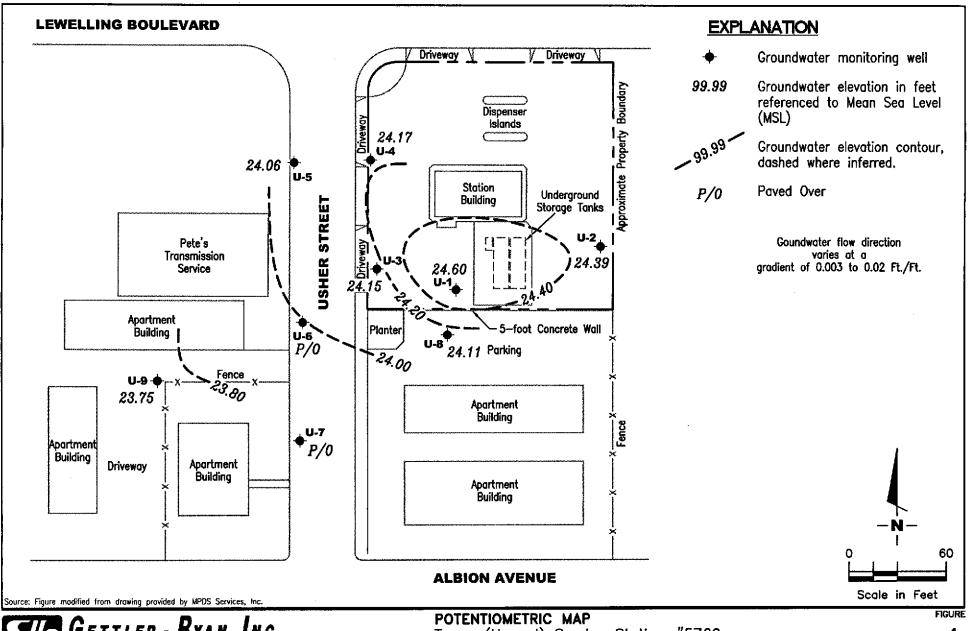
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Attachments: Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

5760.gml

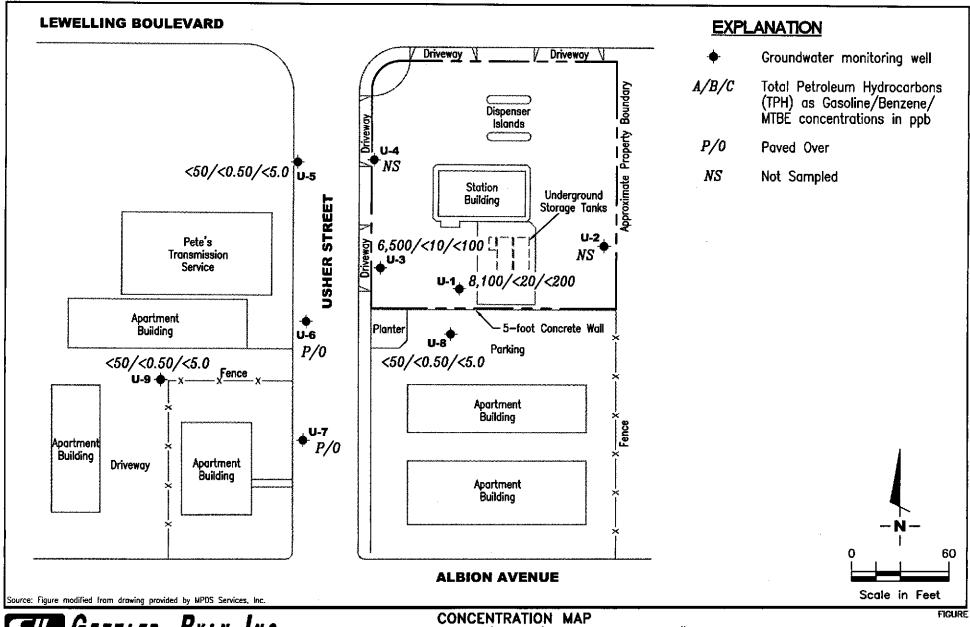




REVISED DATE

PROJECT NUMBER REVIEWED BY 180109

March 18, 2002





REVISED DATE

PROJECT NUMBER REVIEWED BY 180109

March 18, 2002

DATE

Table 1 Groundwater Monitoring Data and Analytical Results Tosco (Unocal) Service Station #5760

					Product						
WELL ID/	DATE	DTW	S.1.	GWE	Thickness	TPH-G	В	Т	E	X	MTBE
TOC*		(ft.)	(ft.bgs)	(msl)	(fi.)	(ppb)	(ррь)	(pph)	(ppb)	(ppb)	(ppb)
U-1	02/09/88		10.5-30.5		· 	93,000	3,600	11,000	1	20,000	
	03/20/90		10.5 50.5			36,000	2,100	5,500	1,900	9,300	
	06/05/90					46,000	2,300	5,500	2,500	11,000	
	08/24/90					27,000	1,200	1,800	1,400	5,500	
	12/05/90								F FREE PRODUCT		
	03/04/91								FREE PRODUCT		
	06/03/91								FREE PRODUCT		
	09/19/91								FREE PRODUCT		
	12/04/91								FREE PRODUCT		
	03/05/92			<u></u> ,					FREE PRODUCT		
	04/07/92								ALLED IN WELL		25 th
	08/06/92								FREE PRODUCT		
	11/20/92					NOT SAMPLE	D DUE TO THE	PRESENCE OF	FREE PRODUCT	_	
	02/12/93					70,000	2,200	8,400	3,100	18,000	
40.51	06/04/93	16.72		23.79	0.00	35,000	1,300	5,700	900	9,200	
	09/09/93	17.77		22.74	0.00	67,000	2,900	18,000	6,200	32,000	
40.20	12/02/93	18.36		21.84	<0.01	NOT SAMPLE	D DUE TO THE	E PRESENCE OF	FREE PRODUCT	ſ	
	03/09/94	17.20		23.00	0.00	45,000	930	4,100	2,000	11,000	
	06/09/94	17.42		22.78	0.00	59,000	5,200	1,300	5,200	15,000	
	09/07/94	18.17		22.03	0.00	41,000	1,600	6,200	3,100	16,000	
	12/05/94	16.67		23.53	0.00	1,300	55	20	16	330	
	03/09/95	15.82		24.38	0.00	49,000	860	3,200	1,900	10,000	1,500
	06/13/95	14.70		25.50	0.00	53,000	1,400	5,000	2,500	14,000	2,800
40.01**	09/12/95	16.77		23.24	0.00	43,000	910	2,700	1,700	9,600	1,400
40.20	12/14/95	INACCESSIB	LE - WELL CO	NNECTED 1	O REMEDIATI	ON SYSTEM W	HICH WAS NO	T RUNNING			
	03/20/96	INACCESSIB	LE - WELL CO	ONNECTED T	O REMEDIATI	ON SYSTEM W	HICH WAS NO	T RUNNING			
	03/22/96					13,000	200	590	640	4,000	790
	09/24/96	INACCESSIB	LE - WELL CO	ONNECTED T	O REMEDIATI	ON SYSTEM W	HICH WAS NO	T RUNNING			
	03/27/97	15.29		24.91	0.00	1,300	8.0	ND	ND	400	ND
	09/23/97	17.20		23.00	0.00	2,000	15	ND	ND	530	ND
	03/10/98	12.68		27.52	0.00	$2,200^6$	19	4.8	ND ⁷	980	38

Table 1
Groundwater Monitoring Data and Analytical Results

					Oun Doren	eo, Camonna					
					Product						
WELL ID/	DATE	DTW	S.I.	GWE	Thickness	TPH-G	В	T	E	X	MTBE
TOC*		(ft.)	(ft.bgs)	(msl)	(ft.)	(ррь)	(ppb)	(ppb)	(ppb)	(pph)	(ppb)
U-1	09/04/98	16.84	10.5-30.5	23.36	0.00	5,300 ⁸	53	ND^7	410	620	ND^7
(cont)	03/04/99	13.04	10.5 50.5	27.16	0.00	1,500	19	ND^7	56	110	310
(20.12)	09/13/99	17.14		23.06	0.00	5,850 ⁸	32.7	ND ⁷	520	925	ND ⁷
	03/21/00	14.36		25.84	0.00	4,820 ⁸	17.4	7,74	297	1,370	ND ⁷
	09/18/00	16.72		23.48	0.00	647 ⁹	6.44	ND ⁷	22.3	6.86	22.2
	10/13/00	16.85		23.35	0.00						/29 ¹⁰
	03/16/01	15.84		24.36	0.00	4,95011	1.73	1.77	429	536	613
	09/04/01	17.16		23.04	0.00	11,0009	25	<10	1,100	1,800	370
	03/18/02	15.60		24.60	0.00	8,100 ⁹	<20	<20	740	1,300	<200
				,		·				•	
						ND	N.D.	ND	ND	ND	
U-2	08/23/90		15.0-30.0	~-		ND	ND	ND		ND ND	
	12/05/90					ND	ND	ND	ND	2.6	
	03/04/91					ND	ND	0.9	ND	ND	
	06/03/91	••				ND	ND	ND ND	ND ND	ND ND	
	09/19/91					ND	ND	ND ND		ND ND	
	12/04/91					ND	ND	ND	ND	ND ND	
	03/05/92					ND	ND	0.36	ND ND	ND ND	
	04/07/92					ND	ND	ND	ND ND	ND ND	
	08/06/92					ND	ND	ND	ND ND	ND ND	••
	11/20/92	**				ND	ND	ND	ND ND	ND ND	
	02/12/93					ND	ND	ND	ND ND	ND ND	
41.62	06/04/93	17.59		24.03	0.00	ND	ND	ND		ND	
	09/09/93	18.68		22.94	0.00	ND	ND	ND	ND	ND	
41.26	12/02/93	19.23		22.03	0.00	ND	ND	ND	ND	9.7	
	03/09/94	18.05		23.21	0.00	62	1.1	5.4	1.1	9.7 ND	
	04/13/94	18.18		23.08	0.00	ND	ND	ND	ND		
	06/09/94	18.26		23.00	0.00	ND	ND	ND	ND	ND	
	09/07/94	19.28		21.98	0.00	ND	ND	0.63	ND	0.61	
	12/05/94	18.82		22.44	0.00	ND	ND	ND	ND	ND	AUTO
	03/09/95	16.96		24.30	0.00	ND	ND	ND	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5760

WELL ID/ FOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE
. <u>. </u>							•			41	
U-2	06/13/95	16.71	15.0-30.0	24.55	0.00	ND	ND	ND	ND	ND	ND
(cont)	09/12/95	17.80		23.46	0.00	ND	ND	ND	ND	ND	ND
	12/14/95	18.18		23.08	0.00	ND	ND	ND	ND	ND	ND
	03/20/96	15.02		26.24	0.00						
	09/24/96	17.90		23.36	0.00						
	03/27/97	16.45		24.81	0.00	ND	ND	ND	ND	ND	ND
	09/23/97	18.40		22.86	0.00						
	03/10/98	13.79		27.47	0.00	ND	ND	ND	ND	ND	ND
	09/04/98	17.98		23.28	0.00						
	03/04/99	14.96		26.30	0.00	ND	ND	ND	ND	ND	ND
	09/13/99	18.25		23.01	0.00	**					
	03/21/00	15.54		25.72	0.00	ND	ND	ND	ND	ND	ND
	09/18/00	17.55		23.71	0.00						
	03/16/01	17.06		24.20	0.00						
	09/04/01	18.39		22.87	0.00						
	03/18/02	16.87		24.39	0.00					• "	
Ј -3	08/23/90		15.0-25.0			110,000	4,400	13,000	2,800	17,000	
	12/05/90					69,000	1,900	3,500	1,600	9,800	
	01/18/91					51,000	1,700	3,100	1,500	7,500	
	03/04/91					84,000	1,400	10,000	2,900	17,000	
	06/03/91					130,000	5,800	19,000	4,600	24,000	
	09/19/91					61,000	3,300	9,700	2,800	15,000	
	12/04/91					75,000	2,500	6,100	1,900	11,000	
	03/05/92					160,000	5,300	15,000	5,400	26,000	
•	04/07/92			••		97,000	6,100	16,000	5,400	28,000	
	08/06/92					140,000	5,100	13,000	5,000	23,000	

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5760

WELL ID/ TOC*	DATE	DTW (fi.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	Т (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
								***	4.1		and the second of the second
U-3	11/20/92		15.0-25.0			50,000	3,200	4,700	1,900	10,000	
(cont)	02/12/93					80,000	3,700	9,400	3,700	18,000	
39.64	06/04/93	15.48		24.16	0.00	92,000	2,900	8,700	4,300	20,000	
	09/09/93	17.04		22.60	0.00	110,000	2,800	10,000	6,500	31,000	
39.26	12/02/93	17.55		21.71	0.00	110,000	3,200	7,700	5,600	26,000	
	03/09/94	16.35		22.91	0.00	120,000	4,500	8,300	5,600	28,000	
	06/09/94	16,60		22.66	0.00	$120,000^4$	3,300	6,100	5,200	26,000	
	09/07/94	17.61		21.65	0.00	100,000	2,400	4,900	4,200	21,000	
	12/05/94	17.08		22.18	0.00	140,000	3,100	5,100	4,900	21,000	
	03/09/95	15.20		24.06	0.00	100,000	2,300	3,300	4,800	21,000	54,000
	06/13/95	15.11		24.15	0.00	64,000	1,700	1,500	3,800	18,000	900
39.26**	09/12/95	16.11		23.15	0.00	69,000	1,700	820	4,000	19,000	29,000
	12/14/95	INACCESSIB	LE - WELL CO	NNECTED T	O REMEDIATIO	N SYSTEM WH	IICH WAS NO	T RUNNING			
	03/20/96	INACCESSIB	LE - WELL CO	NNECTED T	O REMEDIATIO	N SYSTEM WH	IICH WAS NO	T RUNNING			
	03/22/96					15,000	150	490	480	3,100	400
	09/24/96	INACCESSIB	LE - WELL CO	NNECTED T	O REMEDIATIO	N SYSTEM WE	IICH WAS NO	T RUNNING			
	03/27/97	14,77		24.49	0.00	110	ND	ND	ND	0.62	9.6
	09/23/97	16.74		22.52	0.00	ND	ND	ND	ND	ND	ND
	03/10/98	12.18		27.08	0.00	ND	ND	ND	ND	3.1	ND
	09/04/98	16.46		22.80	0.00	ND	ND	ND	1.2	2.3	ND
	03/04/99	13.48		25.78	0.00	ND	ND	ND	ND	ND	ND
	09/13/99	16.71		22.55	0.00	ND	ND	1.77	ND	1.06	9.08
	03/21/00	13.87		25.39	0.00	18,700 ⁸	ND^7	ND ⁷	1,290	4,770	ND^7
	09/18/00	16.12		23.14	0.00	ND	ND	ND	ND	ND	ND
	03/16/01	15.35		23.91	0.00	2,310 ¹²	ND	ND	184	618	ND
	09/04/01	16.71		22.55	0.00	340 ⁹	0.95	< 0.50	8.1	18	<5.0
	03/18/02	15.11		24.15	0.00	6,500 ⁹	<10	<10	390	1,400	<100

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #5760

					Product						
WELL ID/	DATE	DTW	S.I.	GWE	Thickness	TPH-G	В	Т	E	X	MTBE
TOC*		(ft.)	(fl.bgs)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
U-4	00 (00 (00		150000			1.15					
U-4	08/23/90		15.0-28.0			ND	ND	1.0	ND	1.8	
	12/05/90					ND	ND	ND	ND	ND	
	01/18/91					ND	ND	ND	ND	ND	
	03/04/91					ND	ND	ND	ND	ND	
	06/03/91					ND	ND	ND	ND	ND	
	09/19/91					ND.	ND	ND	ND	ND	
	12/04/91					ND	ND	ND	ND	ND	
	03/05/92				**	ND	ND	ND	ND	ND	
	04/07/92					ND	ND	ND	ND	ND	
	08/06/92					ND	ND	ND	ND	ND	
	11/20/92					ND	ND	2.5	ND	ND	
	02/12/93					ND	ND	ND	ND	ND	
40.53	06/04/93	16.73		23.80	0.00	ND	ND	ND	ND	ND	
	09/09/93	16.89		23.64	0.00	ND	ND	ND	ND	ND	
40.25	12/02/93	18.46		21.79	0.00	ND	ND	ND	ND	2.6	
	03/09/94	17.30		22.95	0.00	ND	1.4	4.7	1.1	8.1	
	04/13/94	17.44		22.81	0.00	ND	ND	ND	ND	ND	
	06/09/94	17.53		22.72	0.00	ND	ND	ND	ND	ND	
40.28	09/07/94	18.52		21.76	0.00	ND	ND	1.1	ND	1.0	
	12/05/94	18.08		22.20	0.00	ND	ND	ND	ND	ND	
	03/09/95	16.16		24.12	0.00	ND	ND	ND	ND	ND	ND
40.25	06/13/95	15.95		24.30	0.00	ND	ND	ND	ND	ND	2.7
	09/12/95	17.10		23.15	0.00	ND	ND	ND	ND	ND	ND
	12/14/95	17.43		22.82	0.00	ND	ND	ND	ND	ND	1.3
	03/20/96	14.93		25.32	0.00	·	••				
	09/24/96	17.19		23.06	0.00						
	03/27/97	15.66		24.59	0.00	ND	ND	ND	ND	ND	ND
	03/27/97	17.69		22.56	0.00						
	03/10/98	12.99		27.26	0.00	ND	ND	ND	ND	ND	ND
				27.20	0.00						
	09/04/98	17.28				AID.		ND	ND	ND	ND
	03/04/99	14.17		26.08	0.00	ND	ND	ND	ND	NU	NU

Table 1
Groundwater Monitoring Data and Analytical Results

						onzo, Camornia					
WELL ID/	DATE	DOTSE	61	Awn	Product	mace a					
TOC*	DAIL	DTW	S.I.	GWE	Thickness	TPH-G	В	T	E	X	MTBE
100		(Jr.)	(ft.bgs)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(pph)	(ppb)	(ppb)
U-4	09/13/99	17.55	15.0-28.0	22.70	0.00			••		. -	
(cont)	03/21/00	14.74		25.51	0.00	ND	ND	ND	ND	ND	ND
	09/18/00	16.88		23.37	0.00						
	03/16/01	16.32		23.93	0.00						
	09/04/01	17.70		22.55	0.00						
	03/18/02	16.08		24.17	0.00						
J -5	04/07/92		15.0-30.0		**	ND	ND	ND	ND	ND	
	08/06/92					ND	ND	ND	ND	ND	
	11/20/92					ND	ND	ND	ND	ND	
	02/12/93					ND	ND	ND	ND	ND	
9.61	06/04/93	16.05		23.56	0.00	ND	ND	ND	ND	ND	
	09/09/93	16.90		22.71	0.00	ND	ND	ND	ND	ND	
9.31	12/02/93	17.66		21.65	0.00	ND	ND	ND	ND	ND	
	03/09/94	16.45		22.86	0.00	71	1.7	6.3	1.5	10	
	04/13/94	16.64		22.67	0.00	ND	ND	ND	ND	ND	
	06/09/94	16.70		22.61	0.00	ND	ND	ND	ND	ND	
	09/07/94	17.73		21.58	0.00	ND	ND	0.73	ND	0.84	
	12/05/94	17.23		22.08	0.00	ND	ND	ND	ND	ND	
	03/09/95	15.35		23.96	0.00	ND	ND	ND	ND	ND	ND
	06/13/95	15.16		24.15	0.00	ND	ND	ND	ND	ND	0.87
	09/12/95	16.30		23.01	0.00	ND	ND	NĐ	ND	ND	ND
	12/14/95	16.56		22.75	0.00	ND	ND	ND	ND	ND	ND
	03/20/96	14.07		25.24	0.00						
	09/24/96	16.55		22.76	0.00						
	03/27/97	14.85		24.46	0.00	ND	ND	ND	ND	ND	ND
	09/23/97	16.90		22.41	0.00	SAMPLED ANN	IUALLY				
	03/10/98	12.21		27.10	0.00	ND	ND	ND	ND	ND	ND
	09/04/98	16.57		22.74	0.00						
	03/04/99	13.42		25.89	0.00	ND	ND	0.67	ND	ND	ND

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/	DATE	DTW	Ş.I.	GWE	Product Thickness	TPH-G	В	Т	E	X	МТВЕ
TOC*	DAIE	(ft.)	(ft.bgs)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	e (ppb)	A (pph)	(ppb)
		U*-7	(J. Ogs)	(37631)	(4)	(уро)	фро	(рро)	(рро)	(PP#)	урро)
U-5	09/13/99	17.02	15.0-30.0	22.29	0.00	r-					
cont)	03/21/00	13.93		25.38	0.00	ND	ND	ND	ND	ND	ND
	09/18/00	16.17		23.14	0.00						
	03/16/01	15.51		23.80	0.00	ND	ND	ND	ND	ND	ND
	09/04/01	16.88		22.43	0.00						
	03/18/02	15.25		24.06	0.00	<50	<0.50	<0.50	<0.50	<0.50	<5.0
U-6	04/07/92		13.0-28.0			6,600	90	ND	820	1,200	
0 0	08/06/92	44	13.0 20.0			9,200	160	ND	360	150	
	11/20/92	INACCESSIE	BLE								
	02/12/93					2,600	27	ND	120	51	
7.94	06/04/93	14.45		23.49	0.00	13,000	100	38	450	320	
	09/09/93	15.56		22.38	0.00	$6,300^3$	29	ND	120	34	
7.68	12/02/93	16.08		21.60	0.00	2,100	12	1.6	21	1.1	
	03/09/94	14.90		22.78	0.00	2,200	11	8.2	24	16	
	06/09/94	15.18		22.50	0.00	2,600 ⁴	16	NĎ	29	ND	~~
	09/07/94	16.20		21.48	0.00	16,004	ND	ND	ND	ND	
	12/05/94	15.60		22.08	0.00	450 ⁵	ND	ND	ND	ND	
	03/09/95	13.74		23.94	0.00	2,500	29	ND	70	120	320
	06/13/95	13.73		23.95	0.00	1,300	ND	ND	20	46	5,400
	09/12/95	14.85		22.83	0.00	ND	ND	ND	ND	ND	6,600
	12/14/95	14,89		22.79	0.00	760	ND	ND	7.0	8.4	1,100
	03/20/96	12,41		25.27	0.00	52	1.1	0.98	ND	0.75	1,200
	09/24/96	15.06		22.62	0.00	ND	ND	ND	ND	ND	750
	03/27/97	13.48		24.20	0.00	ND	ND	ND	ND	ND	150
	09/23/97	15.36		22.32	0.00	66	0.81	ND	ND	ND	150
	03/10/98	10.90		26.78	0.00	ND	ND	ND	ND	ND	18
	09/04/98	14.85		22.83	0.00	ND	ND	ND	ND	ND	ND
	03/04/99	12.10		25.58	0.00	ND	ND	ND	ND	ND	6.5
	09/13/99	INACCESSIE	BLE - PAVED C	VER							

Table 1
Groundwater Monitoring Data and Analytical Results

WELL ID/ TOC*	DATE	DTW (fl.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-6	03/21/00	INACCESSIE	BLE - PAVED C	WED							
(cont)	09/18/00		BLE - PAVED C								
	03/16/01		BLE - PAVED C			 					
	09/04/01		BLE - PAVED C								
	03/18/02		BLE - PAVED								
				J - 222	÷						
U-7	04/07/92		15.0-35.0			ND	ND	ND	ND	ND	
	08/06/92					ND	ND	ND	ND	ND	
	11/20/92					ND	ND	ND	ND	ND	
	02/12/93					ND	ND	ND	ND	ND	
37.49	06/04/93	14.17		23.32	0.00	ND	ND	ND	ND	ND	
	09/09/93	15.23		22.26	0.00	ND	ND	ND	ND	ND	
37.11	12/02/93	15.61		21.50	0.00	ND	ND	ND	ND	ND	
	03/09/94	14.45		22.66	0.00	ND	1.4	4.4	0.96	7.5	
	04/13/94	14.63		22.48	0.00	ND	ND	ND	ND	ND	
	06/09/94	14.70		22.41	0.00	ND	ND	ND	ND	ND	
	09/07/94	15.72		21.39	0.00	ND	ND	ND	ND	ND	
	12/05/94	15.10		22.01	0.00	ND	ND	ND	ND	ND	
	03/09/95	13.36		23.75	0.00	ND	ND	ND	ND	ND	ND
	06/13/95	13.33		23.78	0.00	ND	ND	ND	ND	ND	3.5
	09/12/95	14.40		22.71	0.00	ND	ND	ND	ND	ND	ND
	12/14/95	14.39		22.72	0.00	ND	ND	ND	ND	ND	1.4
	03/20/96	11.96		25.15	0.00						
	09/24/96	14.59		22.52	0.00						
	03/27/97	13.08		24.03	0.00	ND	ND	ND	ND	ND	ND
	09/23/97	14.90		22.21	0.00						
	03/10/98	10.46		26.65	0.00	ND	ND	ND	ND	ND	ND
	09/04/98	14.42		22.69	0.00						
	03/04/99	11.64		25.47	0.00	ND	ND	ND	ND	ND	6.6
	09/13/99	INACCESSIB	LE - PAVED O	VER		·					

Table 1 Groundwater Monitoring Data and Analytical Results

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (fl.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
U-7	03/21/00		BLE - PAVED O								
(солт)	09/18/00		BLE - PAVED O								
	03/16/01		BLE - PAVED O								
	09/04/01	INACCESSI	BLE - PAVED	OVER							••
U-8	04/07/92		15.0-30.0			NĐ	ND	ND	ND	ND	
	08/06/92					ND	ND	ND	ND	ND	
	02/12/93					ND	ND	ND	ND	ND	
38.94	06/04/93	15.26		23.68	0.00	ND	ND	ND	ND	ND	
	09/09/93	16.38		22.56	0.00	ND	ND	ND	ND	ND	
38.57	12/02/93	16.80		21.77	0.00	ND	ND	ND	ND	ND	
	03/09/94	15.62		22.95	0.00	ND	1.2	3.7	0.79	6.1	
	04/13/94	15.80		22.77	0.00	ND	ND	0.78	ND	0.98	
	06/09/94	15.86		22,71	0.00	ND	ND	ND	ND	ND	
	09/07/94	16.87		21.70	0.00	ND	ND	ND	ND	ND	
	12/05/94	16.32		22.25	0.00	ND	ND	ND	ND	ND	
	03/09/95	14.56		24.01	0.00	ND	ND	ND	ND	ND	ND
	06/13/95	14.40		24.17	0.00	ND	ND	ND	ND	ND	ND
	09/12/95	15.50		23.07	0.00	ND	ND	ND	ND	ND	ND
	12/14/95	15.67		22.90	0.00	ND	ND	ND	ND	ND	ND
	03/20/96	13.25		25.32	0.00						
	09/24/96	15.75		22.82	0.00	~-					
	03/27/97	14.18		24.39	0.00	ND	ND	ND	ND	ND	ND
	09/23/97	16.05		22.52	0.00	SAMPLED AN	NUALLY				
	03/10/98	11.63		26.94	0.00	ND	ND	ND	ND	ND	ИD
	09/04/98	15.81		22.76	0.00						
	03/04/99	12.81		25.76	0.00	ND	ND	ND	ND	ND	ND
	09/13/99	16.37		22.20	0.00						
	03/21/00	13.25		25.32	0.00	ND	ND	ND	ND	ND	ND
	09/18/00	15.31		23.26	0.00		- -				**

Table 1
Groundwater Monitoring Data and Analytical Results

	 				Dan Bore	nzo, Camonia					
WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE
			-								
U-8	03/16/01	14.71	15.0-30.0	23.86	0.00	ND	ND	ND	ND	ND	ND
(cont)	09/04/01	16.01		22.56	0.00						
	03/18/02	14.46		24.11	0.00	<50	<0.50	<0.50	<0.50	<0.50	<5.0
U-9											
37.88	06/04/93	14.67	13.0-28.0	23.21	0.00	$2,100^2$	ND	ND	ND	ND	
	09/09/93	15.79		22.09	0.00	1,200 ²	ND	ND	ND	ND ND	
37.31	12/02/93	15.93		21.38	0.00	ND	ND	ND	ND	ND ND	
	03/09/94	14.74		22.57	0.00	5,700 ⁴	ND	ND	ND	ND	
	04/13/94	14.96		22.35	0.00	ND	ND ND	ND	ND	ND ND	
	06/09/94	15.05		22.26	0.00	2,900 ⁵	ND	ND	ND	ND	
	09/07/94	16.06		21.25	0.00	2,700 ⁵	ND ND	ND ND	ND ND		
	12/05/94	15.43		21.88	0.00	3,700 ⁵	ND ND	ND	ND ND	ND ND	
	03/09/95	13.50		23.81	0.00	2,500 ⁵	ND ND				 5 000
	06/13/95	13.63		23.68	0.00	2,500 ND		ND	ND	ND	5,800
	09/12/95	14.73		22.58			ND ND	ND	ND	ND	1,200
					0.00	ND	ND	ND	ND	ND	1,600
	12/14/95	14.67		22.64	0.00	ND	ND	ND	ND	ND	4,400
	03/20/96	12.27		25.04	0.00	ND	ND	ND	ND	ND	480
	09/24/96	14.92		22.39	0.00	ND	ND	ND	ND	ND	ND
	03/27/97	13.36		23.95	0.00	ND	ND	ND	ND	ND	42
	09/23/97	15.28		22.03	0.00	ND	ND	ND	ND	ND	ND
	03/10/98	10.86		26.45	0.00	ND	ND	ND	ND	3.1	ND
	09/04/98	15.03		22.28	0.00	ND	ND	ND	ND	ND	ND
	03/04/99	11.95		25.36	0.00	ND	ND	ND	ND	ND	ND
	09/13/99	15.61		21.70	0.00	ND	ND	1.67	ND	1.01	7.85
	03/21/00	12.38		24.93	0.00	ND	ND	ND	ND	ND	ND
	09/18/00	14.87		22.44	0.00	ND	ND	1.42	ND	1.06	ND
	03/16/01	13.85		23.46	0.00	ND	ND	ND	ND	ND	ND
	09/04/01	15.22		22.09	0.00	SAMPLED ANN	IUALLY		•-		
	03/18/02	13.56		23.75	0.00	<50	<0.50	< 0.50	< 0.50	< 0.50	<5.0

Table 1 Groundwater Monitoring Data and Analytical Results Tosco (Unocal) Service Station #5760

WELL ID/ TOC*	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	Product Thickness (ft.)	TPH-G (ppb)	B (ppb)	T (pph)	E (ppb)	X (ppb)	MTBE (ppb)
Trip Blank											
TB-LB	03/10/98					ND	ND	ND	ND	ND	ND
	09/04/98					ND	ND	ND	ND	ND	ND
	03/04/99					ND	ND	ND	ND	ND	ND
	09/13/99					ND	ND	ND	ND	ND	ND
	03/21/00					ND	ND	ND	ND	ND	ND
	09/18/00					ND	ND	ND	ND	ND	ND
	10/13/00					ND	ND	ND	ND	ND	ND
	03/16/01					ND	ND	ND	ND	ND	ND
	09/04/01					<50	< 0.50	<0.50	< 0.50	< 0.50	<5.0
	03/18/02		•			<50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #5760 376 Lewelling Boulevard San Lorenzo, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to March 10, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing

TPH-G = Total Petroleum Hydrocarbons as Gasoline

ND = Not Detected

DTW = Depth to Water

B = Benzene

-- = Not Measured/Not Analyzed

(ft.) = Feet

T = Toluene

S.I. = Screen Interval

E = Ethylbenzene

(ft.bgs) = Feet Below Ground Surface

X = Xylenes

GWE = Groundwater Elevation

MTBE = Methyl tertiary butyl ether

(msl) = Mean sea level

(ppb) = Parts per billion

- * TOC elevations have been surveyed relative to msl. Prior to December 2, 1993, the DTW measurements were taken from the top of well covers.
- ** The PVC well casing was shortened in September 1995.
- Ethylbenzene and Xylenes were combined prior to March 1990.
- The concentration reported as gasoline is primarily due to the presence of a discrete hydrocarbon peak not indicative of standard gasoline.
- The concentration reported as gasoline is primarily due to the presence of a combination of gasoline and a discrete peak not indicative of gasoline.
- Laboratory report indicates the hydrocarbons detected appeared to be gasoline and non-gasoline mixture.
- Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- 6 Laboratory report indicates gasoline and unidentified hydrocarbons >C8.
- Detection limit raised. Refer to analytical reports.
- ⁸ Laboratory report indicates gasoline C6-C12.
- Laboratory report indicates weathered gasoline C6-C12.
- MTBE by EPA Method 8260.
- Laboratory report indicates gas range and late peaks.
- Laboratory report indicates gas pattern.

Table 2

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #5760 376 Lewelling Boulevard San Lorenzo, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	МТВЕ (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
U-1	10/13/00	ND	ND	29	ND	ND	ND	ND	ND

EXPLANATIONS:

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

1,2-DCA = 1,2-Dichloroethane

EDB = Ethylene dibromide

(ppb) = Parts per billion

ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3 Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #5760 376 Lewelling Boulevard San Lorenzo, California

WELL ID	DATE	Before Purging (mg/L)	After Purging (mg/L)
U-1	03/27/97	2.41	2.35
U-2	03/27/97	4.36	4.49
U-3	03/27/97	3.18	3.32
U-4	03/27/97	3.32	3.26
U-5	03/27/97	3.74	3.77
U-6	03/20/96 09/20/96	3.85 3.73	3.89 3.81
	03/27/97 09/23/97 03/10/98	4.43 	4.36 4.14 3.95
U-7	03/27/97	3.29	3.38
U-8	03/27/97	3.04	3.11
U-9	03/20/96 09/20/96	4.02 3.85	4.00 3.98
	03/27/97 09/23/97 03/10/98	3.65	3.57 3.80 3.62
	03/10/98		3.02

EXPLANATIONS:

Dissolved oxygen concentrations prior to March 10, 1998, were compiled from reports prepared by MPDS Services, Inc.

(mg/L) = Milligrams per liter

-- = Not Measured

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Gettler-Ryan Inc. field personnel adhere to the following procedures for the collection and handling of groundwater samples prior to analysis by the analytical laboratory. Prior to sample collection, the type of analysis to be performed is determined. Loss prevention of volatile compounds is controlled and sample preservation for subsequent analysis is maintained.

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, static water level measurements are collected with the interface probe and are also recorded in the field notes.

After water levels are collected and prior to sampling, temperature, pH and electrical conductivity are measured. If purging is to occur, each well is purged a minimum of three well casing volumes of water using pre-cleaned pumps (stack, suction, Grundfos), or polyvinyl chloride bailers. The measurements are taken a minimum of three times during the purging. Purging continues until these parameters stabilize.

및

Groundwater samples are collected using disposable bailers. The water samples are transferred from the bailer into appropriate containers. Pre-preserved containers, supplied by analytical laboratories, are used when possible. When pre-preserved containers are not available, the laboratory is instructed to preserve the sample as appropriate. Duplicate samples are collected for the laboratory to use in maintaining quality assurance/quality control standards. The samples are labeled to include the job number, sample identification, collection date and time, analysis, preservation (if any), and the sample collector's initials. The water samples are placed in a cooler, maintained at 4°C for transport to the laboratory. Once collected in the field, all samples are maintained under chain of custody until delivered to the laboratory.

The chain of custody document includes the job number, type of preservation, if any, analysis requested, sample identification, date and time collected, and the sample collector's name. The chain of custody is signed and dated (including time of transfer) by each person who receives or surrenders the samples, beginning with the field personnel and ending with the laboratory personnel.

A laboratory supplied trip blank accompanies each sampling set. For sampling sets greater than 20 samples, 5% trip blanks are included. The trip blank is analyzed for some or all of the same compounds as the groundwater samples.

As requested by Phillips 66 Company, the purge water and decontamination water generated during sampling activities is transported to Phillips 66 - San Francisco Refinery, located in Rodeo, California.

Client/ Facility# Tos	sco #5760		•	0109.85				
Address: 376	Lewelling Bly	/d		118/02		 -		
City:Sar	Lorenzo. CA		Sampler: _ <i>Va</i>	erthy				
Well ID	<u>U-1</u>	Well Conditi	, ,,			·		
Well Diameter	2 ((3) in.	Hydrocarbor Thickness: _	O. Selfeet)	Amount Bail		(Gallons)		
Total Depth Depth to Water	29.10 n. 15.60 n.	Volume Factor (VF)	2" = 0.17	· -	4" =	= 0.66		
Purge Equipment:	Purge Disposable Bailer Sampling							
Starting Time: Sampling Time: Purging Flow Rat Did well de-water	1710 1730 e: 1.5 ar	Water (om. Sedime	r Conditions: Color: nt Description: Time:	2.4	Odor: 4	lgal,)		
-1313 -	olume pH gal.) 7.36 10 7.17 15.5 7.18	Conductivity µmhos/cm 931 942	Temperature -F -F0.5 -F0.1 -69.8	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)		
		·	INFORMATION	·				
SAMPLE ID	3 X VOA VIAL	FRIG. PRESER	L SEQUO	-	TPH(G)/btex/	YSES		
<i>u-1</i>	J A VOG VIAL	HC.	5500					
COMMENTS:			. ,					

Client/ Facility <u>#_Tos</u>	acility# Tosco #5760			Job#: 180109.85				
Address: <u>376</u>	Lewelling Blv	1 D	ate: <u>3/1</u>	8/02	<u> </u>			
City:San	Lorenzo, CA	S	ampler: <u> </u>	Has				
Well ID	<u>U- 2</u>	Well Condition:	or					
Well Diameter	<u>2</u> (3) in.	Hydrocarbon Thickness:	Ai <u>グ, ひひ[feet]</u> (p	mount Bailed	>			
Total Depth	29.90 n.		= 0.17		(Gallons) 4* = 0.66			
Depth to Water	16.87 n	Factor (VF)	6° = 1.50					
	X VF	= X 3 (case volume) = Es	timated Purge Volum	ne:(<u>oal,)</u>			
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	Sampl Equipr	ment: Dispo Baile Press Grab	osable Bailer r sure Bailer Sample er:				
•	gom 7	Water Color: Sediment De	scription:	Odor:				
7 3114C	olume pH	Conductivity / / / / / / / / / / / / / / / / / / /	Temperature •F	D.O. OF (mg/L) (m				
		ABORATORY INFO	RMATION PE LABORA	TORY	ANALYSES			
SAMPLE ID		RIG. PRESERV. TY	SEQUOLA		/btex/mtbe			
	X VOA VIAL							
	X VOA VIAL							
	X VOA VIAL							

Client/ Facility# Tos	co #5760		Job#:	180109.85	
Address: 376	<u>Lewelling Bl</u>	vd.			·
City:San	Lorenzo, CA		Sampler:	Varthey	
Well ID	<u>U-3</u>	Well Condit	tion: <u>O</u>	h	
Well Diameter	$\frac{2}{3}$ in.	Hydrocarbo Thickness:	on D.O.D.	Amount Bai	
Total Depth	24.85 n.		2" = 0.17	3" = 0.38 5" = 1.50	4" = 0.66
Depth to Water		1F 0,38 = 3.70	2 X 3 (case volum	ne) = Estimated Pur	ge Volume: //-5 (gal.)
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		Samp ling Equipm ent:	Disposable Bai Bailer Pressure Bailer Grab Sample Other:	•
Starting Time: Sampling Time: Purging Flow Rate Did well de-water		Water	ent Descriptio	lea lea n:Volum	
1638.	lume pH (al.) 7.43 7.31 7.28	Conductivity µmhos/cm 905	Temperate *F 70, 3 69, 9	(mg/L)	ORP Alkalinity (ppm)
CAMPLE ID	(#) - CONTAINER F	LABORATORY EFRIG. PRESEI	INFORMATION TYPE		ANALYSES
SAMPLE ID U		Y HC	· · · · · · · · · · · · · · · · · · ·	EQUOIA	TPH(G)/btex/mtbe
				<u>, , , , , , , , , , , , , , , , , , , </u>	
COMMENTS:					

3) in. Hyd 1.90 ft. Ve	Il Condition drocarbon ckness: clume actor (VF)	0. 00 2° = 0.17	Amount (product) 6" = 1.50	nt Bailed t/water): 0.38 12*=	<i>→</i> 3'' = 5.80	(Gallons) 0.66
70, CA We 1.90 ft. Ve 70, CA We X VF	Il Condition drocarbon ckness: clume actor (VF)	0. 00 2° = 0.17	Amour <u>(leet)</u> (product 3" = 6" = 1.50	nt Bailed t/water): 0.38 12*=		
3) in. Hyd Thi 1.90 ft. Vo .08 ft.	drocarbon ckness: olume actor (VF)	0. 06 2* = 0.17	Amour <u> (produc</u> 3" = 6" = 1.50	0.38 12" =		
Ye X VF	ckness: olume actor (VF)	2° = 0.17	3" = 6" = 1.50	0.38 12" =		
.08 ft. Ve	olume actor (VF)	2° = 0.17	3" = 6" = 1.50	0.38		
X VF	_ = >	K 3 (case vol		 	5.80	
		C3 (case vol	ume) = Estimat			
s -		mpling pipment:	Disposeb Bailer Pressure Grab Sar	le Bailer Bailer nple		<u>(1891)</u>
gpm,	Water Co Sediment	lor: Descripti	on:	Odo		
		Tempera •F				Alkalinity (ppm)
		<u></u>				
		<u></u>		-		***
and the second s	ATORY IN	FORMAT		RY	ANALY	SES .
	HCL		SEQUQIA	TPH	(G)/btex/m	tbe
						
			_			
ronly						
	pH Con	Weather Water Co gom. Sediment If yes; pH Conductivity	Weather Conditions Water Color:	Equipment: Disposab Bailer Pressure Grab Sar Other:	Equipment: Disposable Bailer Bailer Pressure Bailer Grab Sample Other:	Equipment: Disposable Beiler Beiler Pressure Bailer Grab Sample Other: Weather Conditions: Water Color: Gom. Sediment Description: Hyes; Time: Volume: PH Conductivity Temperature FF (mg/L) (mV) LABORATORY INFORMATION AINER REFRIG. PRESERV. TYPE LABORATORY ANALYS

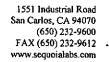
Client/ Facility# Tos	<u>co #5760</u>	, · , -	_ Job#:		0109.85		·
Address: <u>376</u>	Lewelling Blv	/d	_ Date:		118/0-		
City:San	Lorenzo, CA		_ Samp	ler: _ <i>Va</i>	other		
Well ID	<u>U-5</u>	Well Cond	lition: <u> </u>	<u>りん</u>	··-	<u> </u>	·
Well Diameter	<u>2/3</u> in.	Hydrocarb Thickness	on Oio	Dolfeet) I	Amount Bai	led 🖈	(Gallons)
Total Depth	28.55 ft.		2" = 0.	17		4'	= 0.66
Depth to Water			4				
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		X 3 (case Sampling Equipment	: Disi Bail Pre: Gra	oosable Bai	ler	/- (aal.)
Sampling Time: Purging Flow Rate	1600 1620 e:	Wate	r Color: nent Descrip	otion:	ea_	Odor:nc	
1607 . 2	pH gal.) 7.60 7.44 7 7.42	Conductivity µmhos/cm 86 3		9.8 9.5 9.2	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
SAMPLE ID		LABORATOR	Y INFORMA		RATORY	·ANAL	YSES
u-5 :	3 X VOA VIAL	Y	ICL	SEQUO1	A	TPH(G)/btex/	mtbe
						<i>\</i>	
COMMENTS:							

	client/ acility <u>#_Tosco_#5760</u>			Job#: 180109.85			
Address: <u>3</u>	76 Lewelling B	lvd.					
City:S	an Lorenzo, CA		Sampler:	Vathe	· · · · · · · · · · · · · · · · · · ·		
Well ID	U-6	Well Conditi	on: <i>Po</i>	rued Ove	ur		
Well Diameter	<u>©13</u> in	•		Amount B		(Gallons)	
Total Depth Depth to Water		Volume Factor (VF)	$2^{\circ} = 0.17$	3" = 0.38 5" = 1.50		= 0.66	
		VF =	X 3 (case volu	me) = Estimated Pu	urge Volume;	(.(sp).)	
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	E	ampling quipment:	Disposable Baller Baller Pressure Balle Grab Sample Other:	er		
Sampling Time: Purging Flow R	:	Water C	Color:	n:Volu	Odor:		
Sampling Time: Purging Flow R Did well de-wat	ate:	Water C	Color:	n:Volum	Odor:		
Sampling Time: Purging Flow R Did well de-wat	ter?	Water Conductivity	Color: nt Description Time:	vire D.O.	Odor:	Alkalinity (ppm)	
Sampling Time: Purging Flow R Did well de-wat	Volume (gal.)	Water Conductivity µmhos/cm	Temperate Temperate Temperate Temperate Temperate	Volument D.O. (mg/L)	Odor:	(Qal, Alkalinity (ppm)	
Sampling Time: Purging Flow R Did well de-wat	ter?	Water Conductivity µmhos/cm	Temperate Temperate INFORMATIO	Volument D.O. (mg/L)	Odor:	Alkalinity (ppm)	
Time	ter?	Conductivity µmhos/cm LABORATORY I REFRIG. PRESER	Temperate Temperate INFORMATIO	ON LABORATORY	Odor:	Alkalinity (ppm)	

Client/ Facility <u>#To</u> r	acility# Tosco #5760				0109.85			
Address: 370	<u>6 Lewelling B</u>	lvd.	Date	: <u>3/</u>	18/02			
City: Sal	n Lorenzo, CA		Sam	Date: 3/18/02 Sampler: Vastkas				
Well ID	<u>U-7</u>	We	ell Condition:	Pave	d Ove	<i>LF</i>		
Well Diameter	(2) 3 in		drocarbon ickness:		mount Ba		(Gallons)	
Total Depth Depth to Water		Y F:	olume 2" = 6 actor (VF)	0.17	3" = 0.38	-	= 0.66	
Depth to water	7	· • • • • • • • • • • • • • • • • • • •	_ = X 3 (case	e volume) = E	stimated Pur	ge Volume;	(<u>lsp)</u>	
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		Sampli ng Equipmen	Baild Pres Gral	osable Ba er sure Baile o Sample er:	r		
Sampling Time: Purging Flow Rat Did well de-water	e:		Water Color: Sediment Descr If yes; Time:	iption:				
7 11116	olume pH (gal.)			perature F	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)	
	<u> </u>						7	
		7		<u>/</u>			nerie .	
SAMPLE ID	(#) - CONTAINER	LABOR	ATORY INFORM PRESERV. TYPE	: .	ATORY	·ANAL	YSES -	
	X VOA VIAL	Y	HCL	SEQUOI	A	TPH(G)/btex/	mtbe	
					,			
COMMENTS:						· · · · · · · · · · · · · · · · · · ·	<u> </u>	
							*** <u>***</u>	

Client/ Facility# Tosco #5760								
Address: <u>37</u>	<u>6 Lewelling Bly</u>	d	Date: 3/18/02					
City:Sa	n Lorenzo. CA							
Well ID	<u>U-8</u>	Well Conditio	n: <u>ok</u>					
Well Diameter	(2)/3 in.	Hydrocarbon Thickness:	O. DO lifeet	Amount Bai	iled			
Total Depth	29.85 n	Volume	2" = 0.17	3" = 0.38		(Gallons) = 0.66		
Depth to Water	14.46 4	Factor (VF)	6° = 1	1.50	12" = 5.80			
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		mpling uipment: © B Pi	isposable Bai ailer ressure Bailer rab Sample other:	der	<u> </u>		
Starting Time: Sampling Time: Purging Flow Rat	1520 1540	_ Water Co _ Sedimen	Conditions:	Si }+	Odor:nَهُ			
Did well de-wate	r? <u>no</u>	_ If yes; '	Time:	Volum	ie:	<u>lasi.i</u>		
¥ 12:4-	folume pH (gal.) 7.61 5 7.46	Conductivity µmhos/cm 70 4 71/	Temperature 69,3 69.0	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)		
1528	8 7.43	747	68.9					
								
and the second		ABORATORY IN	TYPE LAB	ORATORY	.ΔΝΔ.	LYSES		
SAMPLE ID		Y HCL	SEQU		TPH(G)/btex/			
	ļ	ł	t		l			
				<u>-</u>				

Client/ Facility# Tos	sco_#5760		Job#:		0109.85		
Address: 376	<u>Lewelling Bl</u>	vd.	Date:		11862		
City:San	Lorenzo, CA		Sampl	er: <u><i>Va</i></u>	zfkos		
Well ID	<u>u-9</u>	Well Co	ndition: _೭	K_			·
Well Diameter	(2)/3 in.	Hydroca Thickne	rbon	Gleet	Amount Bail (product/water	led	(Gallons)
Total Depth	_28.25 h.	Volume	2" = 0.1	17	$3^* = 0.38$	4* :	= 0.66
Depth to Water	13.56 th	Factor (VF)	6" = 1.5	50	12" = 5.80 	
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:		49 × 3 (case v Sampling Equipment:	Dis Bail Pre Gra	posable Bail ler ssure Bailer ab Sample her:	e)	S (gal.)
Starting Time: Sampling Time: Purging Flow Rate Did well de-water		Wa	ether Conditio ter Color: liment Descrip es; Time: _	brotion:	sr#		
1448	olume pH 8al.) 7.71 7.58 7.5 7.53	Conducti	m 67 67		D.O. (mg/L)		Alkalinity (ppm)
		· · · · · · · · · · · · · · · · · · ·	<u> </u>			 	No. To
		LABORATO	RY INFORMA	TION	-		,
SAMPLE ID	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	REFRIG. PR	ESERV. TYPE	- LABO			YSES
U-9	3 X VOA VIAL	<u> </u>	HCL	SEQUO:	IA	TPH(G)/btex/	mtbe
•				<u> </u>		<u> </u>	
COMMENTS:						<u> </u>	





2 April, 2002

Deanna Harding Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin, CA 94568

RE: Tosco(1)

Sequoia Report: L203085

GETTLEK-KYAN INT.

DENERAL CONTRACTOR

Enclosed are the results of analyses for samples received by the laboratory on 03/18/02 18:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

•

Richard G. Yee For Wayne Stevenson Project Manager

CA ELAP Certificate #2360



1551 Industrial Road San Carlos CA 94070 (650) 232-9600 FAX (650) 232-9612 www.seguoialabs.com

Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco #5760, San Lorenzo

Project Manager: Deanna Harding

Reported: 04/02/02 15:01

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received	٦
TB-LB	L203085-01	Water	03/18/02 00:00	03/18/02 18:45	
U-1	L203085-02	Water	03/18/02 17:30	03/18/02 18:45	
U-3	L203085-03	Water	03/18/02 16:55	03/18/02 18:45	
U-5	L203085-04	Water	03/18/02 16:20	03/18/02 18:45	
U-8	L203085-05	Water	03/18/02 15:40	03/18/02 18:45	
U-9	L203085-06	Water	03/18/02 15:05	03/18/02 18:45	

Sequoia Analytical - San Carlos

Rully year

The results in this report apply to the samples analyzed in accordance with the chain of custody document. This analytical report must be reproduced in its entirety.



Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J

Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco #5760, San Lorenzo

Ртојесt Manager: Deanna Harding

Reported: 04/02/02 15:01

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (L203085-01) Water Sample	d: 03/18/02 00:00	Received: (03/18/02	18:45					
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	2030077	03/27/02	03/28/02	EPA 8021B	
Benzene	ND	0.50	н	17	TT	11	#	п.	
Toluene	ND	0.50	н	**	**	h	Ħ	н	
Ethylbenzene	ND	0.50	n	19	11	н	n	H	
Xylenes (total)	ND	0.50	н	ÌĪ	11	Ħ	н	0	
Methyl tert-butyl ether	ND	5.0	н	н	и	II .		₩	
Surrogate: a,a,a-Trifluorotoluene		105 %	70-	-130	•	**	н	,	
U-1 (L203085-02) Water Sampled:	03/18/02 17:30 Re	eceived: 03/1	8/02 18:	45					
Purgeable Hydrocarbons as Gasoline	8100	2000	ug/l	40	2030081	03/28/02	03/28/02	EPA 8021B	P-02
Benzene	ND	20	Ħ	•	*	n	н	н	
Toluene	ND	20	II	Ħ		n	н	H	
Ethylbenzene	740	20	R	•	"	n	н	Ţ	
Xylenes (total)	1300	20	H	Ħ	19	**	ır	•	
Methyl tert-butyl ether	ND	200	n	· · · · · · · · · · · · · · · · · · ·	н		9		
Surrogate: a,a,a-Trifluorotoluene		104 %	70-	-130	"	*	"	,,	
U-3 (L203085-03) Water Sampled: (03/18/02 16:55 Re	eceived: 03/1	8/02 18:	45					
Purgeable Hydrocarbons as Gasoline	6500	1000	ug/l	20	2030081	03/28/02	03/28/02	EPA 8021B	P-02
Benzene	ND	10	"	n	Ħ	n	II	n	
Toluene	ND	10	•	н		N	н		
Ethylbenzene	390	10	ч	N	11	Ħ	II.	*	
Xylenes (total)	1400	10	Ħ	II	n		n	ti	
Methyl tert-butyl ether	ND	100	#	*	н	17	*	"	
Surrogate: a,a,a-Trifluorotoluene		108 %	70-	-130	n	"	n	H	



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Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J

Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco #5760, San Lorenzo

Project Manager: Deanna Harding

Reported: 04/02/02 15:01

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B Sequoia Analytical - San Carlos

Analyta	Result	Reporting	11-4-	Dilecti	D-4-1	D			
Analyte	Kesun	Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
U-5 (L203085-04) Water Samp	led: 03/18/02 16:20	Received: 03/1	8/02 18:4	15					_
Purgeable Hydrocarbons as Gasoli	ne ND	50	ug/l	1	2030081	03/28/02	03/28/02	EPA 8021B	
Benzene	ND	0.50	п.	H	И	#	я	н	
Toluene	ND	0.50	н		н	•	#	n	
Ethylbenzene	ND	0.50	11	11	H	11	*	h	
Xylenes (total)	ND	0.50	•	11	и	#	п	н	
Methyl tert-butyl ether	ND	5.0	"	11	н	*		n .	
Surrogate: a,a,a-Trifluorotoluene		93.4 %	70-	130	н	11	#	#	
U-8 (L203085-05) Water Samp	led: 03/18/02 15:40	Received: 03/1	8/02 18:4	15					
Purgeable Hydrocarbons as Gasolii	ne ND	50	ug/l	1	2030081	03/28/02	03/28/02	EPA 8021B	
Benzene	ND	0.50		11	**	•		n	
Toluene	ND	0.50	ŧ	n	n		n	н	
Ethylbenzene	ND	0.50	n	11	11	•	11	'n	
Xylenes (total)	ND	0.50	н	**	Ħ	•	**	n	
Methyl tert-butyl ether	ND	5.0	н	"	ч			· H	
Surrogate: a,a,a-Trifluorotoluene		112 %	70-	130	"	"	"	"	-
U-9 (L203085-06) Water Sampl	led: 03/18/02 15:05	Received: 03/1	<u>8/02 18:4</u>	15					
Purgeable Hydrocarbons as Gasolii	ne ND	50	ug/l	1	2030081	03/28/02	03/28/02	EPA 8021B	····
Benzene	ND	0.50	n	H	11	11	a	н	
Toluene	ND	0.50	**	**	**	7	**	н	
Ethylbenzene	ND	0.50	श		u u	Ħ	11	Ħ	
Xylenes (total)	ND	0.50		#		h	11	n	
Methyl tert-butyl ether	ND	5.0	*		•	H		Ħ	
Surrogate: a,a,a-Trifluorotoluene		103 %	70-	130	"	"	,,	н	



Gettler-Ryan/Geostrategies(1)

Project: Tosco(1)

Project Number: Tosco #5760, San Lorenzo

Reported: 04/02/02 15:01

6747 Sierra Court, Suite J **Dublin CA**, 94568

Project Manager: Deanna Harding

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control Sequoia Analytical - San Carlos

Aπalyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2030077 - EPA 5030B (P/T)										
Blank (2030077-BLK1)				Prepared	& Analyze	ed: 03/2 7 /	02		<u></u>	
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l						,	
Benzene	ND	0.50	D							
Toluene	ND	0.50								
Ethylbenzene	ND	0.50	P							
Kylenes (total)	ND	0.50	n							
Methyl tert-butyl ether	ND	5.0	P							
Surrogate: a,a,a-Trifluorotoluene	8.81		n	10.0		88.1	70-130			
LCS (2030077-BS1)				Prepared	& Analyz	ed: 03/27/	02			
Benzene	11.6	0.50	ug/l	10.0		116	70-130			
l'oluene	10.6	0.50	"	10.0		106	70-130			
Ethylbenzene	10.1	0.50	17	10.0		101	70-130			
Kylenes (total)	30.3	0.50	n	30.0		101	70-130			
Surrogate: a,a,a-Trifluorotoluene	9.75		Ħ	10.0		97.5	70-130			
LCS (2030077-BS2)				Prepared	& Analyz	ed: 03/27/	02			
Purgeable Hydrocarbons as Gasoline	259	50	ug/l	250		104	70-130			
Surrogate: a,a,a-Trifluorotoluene	11.6		н	10.0	-	116	70-130			
Matrix Spike (2030077-MS1)	Source: L203063-14			Prepared	& Analyz					
Benzene	11.9	0.50	ug/l	10.0	ND	119	60-140			
l'oluene	10.9	0.50	"	10.0	ND	109	60-140			
Ethylbenzene	10.3	0.50	P	10.0	ND	103	60-140			
Kylenes (total)	30.5	0.50	•	30.0	ND	102	60-140			
Surrogate: a,a,a-Trifluorotoluene	10.6		1f	10.0		106	70-130			
Matrix Spike Dup (2030077-MSD1)	Source: L203063-14			Prepared	& Analyz		·			
Benzene	11.8	0.50	ug/l	10.0	ND	118	60-140	0.844	25	
Coluene	10.7	0.50	n	10.0	ND	107	60-140	1.85	25	
Ethylbenzene	10.2	0.50	41	10.0	ND	102	60-140	0.976	25	
(ylenes (total)	29.7	0.50	"	30.0	ND	99.0	60-140	2.66	25	
Surrogate: a,a,a-Trifluorotoluene	11.2		"	10.0		112	70-130			



Gettler-Ryan/Geostrategies(1)

6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco #5760, San Lorenzo

Project Manager: Deanna Harding

Reported: 04/02/02 15:01

Total Purgeable Hydrocarbon (C6-C12) by EPA 8015M and BTEX/MTBE by EPA 8021B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 2030081 - EPA 5030B (P/T)										
Blank (2030081-BLK1)				Prepared	& Analyze	ed: 03/28/	02			
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50	H							
Toluene	ND	0.50	н							
Ethylbenzene	ND	0.50	н							
Xylenes (total)	ND	0.50	н							
Methyl tert-butyl ether	ND	5.0	н							
Surrogate: a,a,a-Trifluorotoluene	9.82		н	10.0		98.2	70-130			<u></u>
LCS (2030081-BS1)		· · · · · · · · · · · · · · · · · · ·		Prepared	& Analyz	ed: 03/28/	02			
Benzene	9.03	0.50	ug/l	10.0		90.3	70-130			
Toluene	9.04	0.50	h	10.0		90.4	70-130			
Ethylbenzene	9.33	0.50	n	10.0		93.3	70-130			
Xylenes (total)	28.1	0.50	н	30.0		93.7	70-130			
Surrogate: a,a,a-Trifluorotoluene	10.1		,,	10.0		101	70-130			
LCS (2030081-BS2)				Prepared						
Purgeable Hydrocarbons as Gasoline	264	50	ug/l	250		106	70-130			
Surrogate: a,a,a-Trifluorotoluene	11.3		,	10.0		113	70-130			
Matrix Spike (2030081-MS1)	So	urce: L20308	3-04	Prepared	& Analyz	ed: 03/28/	02			
Purgeable Hydrocarbons as Gasoline	261	50	ug/l	250	ND	104	60-140			
Surrogate: a,a,a-Trifluorotoluene	10.9		"	10.0		109	70-130		-	
Matrix Spike Dup (2030081-MSD1)	So	urce: L20308	3-04	Prepared	& Analyz	ed: 03/28/	02			
Purgeable Hydrocarbons as Gasoline	259	50	ug/l	250	ND	104	60-140	0.769	25	
Surrogate: a,a,a-Trifluorotoluene	11.1		"	10.0		111	70-130			



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Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J

Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco #5760, San Lorenzo

Project Manager: Deanna Harding

Reported:

04/02/02 15:01

Notes and Definitions

P-02 Chromatogram Pattern: Weathered Gasoline C6-C12

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