GETTLER-RYAN INC.

TRANSMITTAL

Environmental Health

MAR 1 2 2003

February 21, 2003

G-R #180064

TO:

Mr. David B. De Witt

ConocoPhillips

2000 Crow Canyon Place, Suite 400

San Ramon, California 94583

CC: Mr. David Vossler

Gettler-Ryan Inc.

Petaluma, California

FROM:

Deanna L. Harding

Project Coordinator Gettler-Ryan Inc.

6747 Sierra Court, Suite J Dublin, California 94568

RE:

Tosco (Unocal) Service Station

#3538

411 West MacArthur Boulevard

Oakland, California

94609

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	February 21, 2003	Groundwater Monitoring and Sampling Report First Semi-Annual - Event of January 14, 2003

This report is being sent to you for your review/comment, prior to being distributed on your behalf. If no comments are received by March 7, 2003, this report will be distributed to the following:

cc: -Mr. Scott Seary, Alameda County Health Care Services, 1131 Harbor Bay Pkwy., Alameda, CA 94502

Enclosure

trans/3538-DBD



GETTLER-RYAN INC.

MAR 1 2 2003

Environmental Health February 21, 2003 G-R Job #180064

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

RE: First Semi-Annual Event of January 14, 2003

Groundwater Monitoring & Sampling Report Tosco (Unocal) Service Station #3538 411 West MacArthur Boulevard

Oakland, 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. A Potentiometric Map is included as Figure 1.

Groundwater samples were collected from the monitoring wells and submitted to a state certified laboratory for analyses. The field data sheets for this event are attached. Analytical results are presented in the table(s) listed below. A Concentration Map is included as Figure 2. The chain of custody document and laboratory analytical report are also attached.

Sincerely,

- FOR - Deanna L. Harding

Project Coordinator

Robert C. Mallory

Registered Geologist No. 7285

Figure 1:

Potentiometric Map

Figure 2:

Concentration Map

Aromarie Vireau

Table 1:

Groundwater Monitoring Data and Analytical Results

Table 2:

Groundwater Analytical Results

Table 3: Attachments:

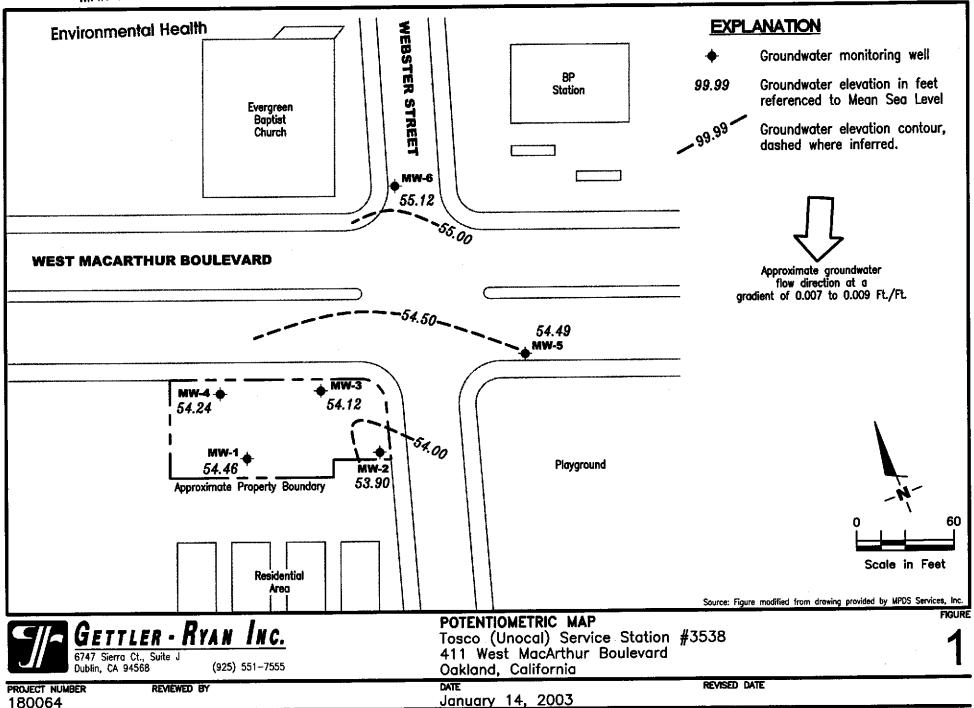
Groundwater Analytical Results - Oxygenate Compounds Standard Operating Procedure - Groundwater Sampling

Field Data Sheets

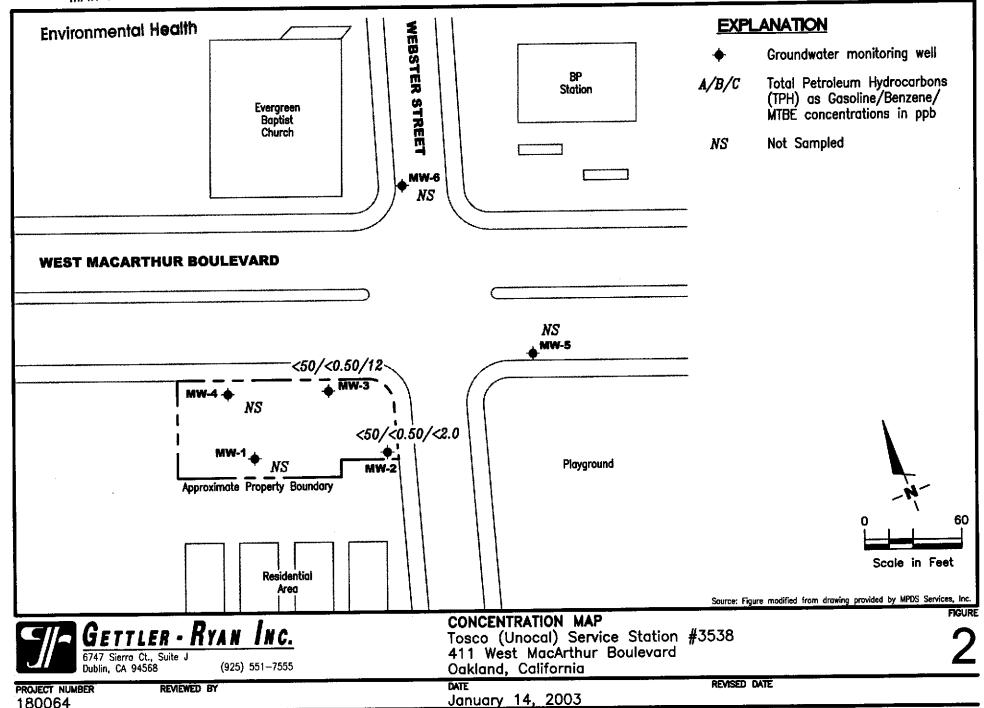
Chain of Custody Document and Laboratory Analytical Reports

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Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3538 411 West MacArthur Boulevard

Environmental Health

Oakland, California

WELL ID/	DATE	DTW	S.I.	GWE	TPH-G	В	T	E	X	MTBE.
TOC*(ft.)		(ft.)	(ft. bgs)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
en e										
MW-1	09/15/89		5.0-29.0		ND	ND	0.61	ND	ND	
	01/23/90				ND	1.5	2.3	ND	4.3	
	04/19/90				ND	ND	ND	ND	ND	
	07/17/90				ND	ND	ND	ND	ND	
	10/16/90				ND	ND	ND	ND	ND	
	01/15/91				ND	ND	ND	ND	ND	
	04/12/91				ND	ND	ND	ND	ND	
	07/15/91				ND	ND	ND	ND	ND	
	07/14/92				ND	ND	ND	ND	ND	
72.43	04/13/93	17.70		54.73	SAMPLED A					
	07/14/93	18.49		53.94	ND	2.2	2.1	1.1	6.2	
72.10	10/14/93	18.32		53.78						
	01/12/94	18.18		53.92						
	04/11/94	17.80		54.30				••		
	07/07/94	18.28		53.82	ND	ND	ND	ND	ND	
	10/05/94	18.55		53.55						
	01/09/95	17.90		54.20	~-			_		
	04/17/95	17.22		54.88						
	07/19/95	18.03		54.07	ND	ND	ND	ND	ND	
	10/26/95	18.67		53.43						
	01/16/95	17.20		54.90						
	04/15/96	17.40		54.70						
	07/11/96	18.03		54.07	ND	ND	ND	ND	ND	ND
	01/17/97	16.54		55.56						
	07/21/97	18.16		53.94	ND	ND	ND	ND	ND	ND
	01/14/98	16.05		56.05						
	07/06/985	16.46		55.64	ND	ND	ND	ND	ND	ND
	01/13/99	17.37		54.73				-		
72.12	08/31/99	17.00		55.12	· ND	ND	ND	ND	ND	ND
	01/21/00	17.04		55.08					. ••	
	07/10/005	18.10		54.02	ND	ND	ND	ND	ND	ND
	01/04/01	17.95		54,17						

Table 1 Groundwater Monitoring Data and Analytical Results

MAR 1 2 2003

Tosco (Unocal) Service Station #3538 411 West MacArthur Boulevard Oakland, California

Environmental Health

1	rijanojijijejij(0-	
WELL ID/	DATE	DTW	S.I.	GWE	TPH-G	В	T	E	X	MTBE
TOC*(ft.)		(ft.)	(ft. bgs)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
				44.00) III)	NID	ND	ND	ND	ND
MW-1	07/16/01	18.03	5.0-29.0	54.09	ND	ND			ND	
(cont)	01/28/02	17.31		54.81	SAMPLED A			<0.50	<0.50	<2.5
	07/12/02	18.15		53.97	<50	<0.50	<0.50	<0.50		
	01/14/03	17.66		54.46	SAMPLED A	ANNUALLY	-	-		-
MW-2	09/15/89	_	3.5-28.5		290	ND	12	ND	ND	-
143 44 -2	01/23/90		5.0 20.0		400	73	36	10	40	
	04/19/90				3,900	550	5.1	91	390	
	07/17/90	••			490	76	0.59	11	46	
	10/16/90				1,400	430	2.0	48	240	
	01/15/91				680	170	0.7	19	81	
	04/12/91	••			2,200	160	4.3	23	62	
	07/15/91	••			2,200	770	12	72	370	
	10/15/91				140	44	0.56	1.5	12	
	01/15/92				220	37	0.52	1.1	7	
	04/14/92				150	6.2	ND	ND	1.4	
	07/14/92				130	3.7	ND	ND	ND	
	10/12/92	••			370	3.4	0.56	ND	11	
	01/08/93				510 ¹	ND	ND	ND	ND	
71.63	04/13/93	17.86		53.77	410 ²	42	7.7	6.4	28	200
71.03	07/14/93	18.38		53.25	110 ¹	6.5	ND	ND	1.1	250
71.38	10/14/93	18.20		53.18	230 ¹	5.3	ND	ND	2.1	
71.56	01/12/94	18.08		53.30	300	7.8	3.8	1.8	10	
	04/09/94	17.97		53.41	120	10	0.88	1.1	4.9	
	04/11/94	17.88		53.50	••					
	07/07/94	17.81		53.57	110 ^t	4.4	ND	ND	ND	
	10/05/94	18.33		53.05	720¹	20	ND	ND	3.1	
	01/09/95	17.40		53.98	ND	ND	ND	ND	ND	
	04/17/95	17.50		53.88	93	5.6	0.62	1.7	5.5	
	07/19/95	18.01		53.37	77	32	0.58	1.7	4.1	
	10/26/95	18.21		53.17	54 ²	13	ND	ND	0.72	220
	01/16/96 ³	16.58		54.80	120	23	ND	ND	0.99	
	01/10/70	10.50								45

45

17.61

04/15/96

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340

53.77

ND

21

2.2

3.7

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Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3538 411 West MacArthur Boulevard Oakland, California

WELL ID/	DATE	DTW	S.I.	GWE	TPH-G	В	T	E	X	MTBE			
TOC*(fl.)		(ft.)	(fl. bgs)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	` (ppb)			
						-4	· ND	4.2	10	150			
MW-2	07/11/96	17.98	3.5-28.5	53.40	540	34	ND	4.3	12 26	260			
(cont)	01/17/97	17.08		54.30	320	63	2.4	9,4	26 1.6	180			
	07/21/97	18.06		53.32	160	13	ND	1.3		100			
	01/14/98	16.52		54.86	66	6.3	ND	ND	0.98	110			
	07/06/98	16.87		54.51	ND	2.3	ND	ND	ND				
	01/13/99	17.88		53.50	53	24	ND	0.52	0.98	120 21			
71.34	08/31/99	18.45		52.89	86 ¹⁰	14	ND	0.63	ND				
	01/21/00	17.73		53.61	ND	1.94	ND	ND	ND	10.1			
	07/10/00	18.14		53.20	ND	ND	ND	ND	ND	46.6			
	01/04/01	18.02		53.32	ND	0.925	ND	ND	ND	ND			
	07/16/01	18.02		53.32	ND	ND	ND	ND	ND	ND			
	01/28/02	17.57		53.77	<50	< 0.50	< 0.50	<0.50	< 0.50	<2.5			
-	07/12/02	18.05		53.29	<50	<0.50	< 0.50	<0.50	<0.50	<2.5			
	01/14/03	17.44		53.90	<50	< 0.50	<0.50	< 0.50	<0.50	<2.0			
MW-3	09/15/89		5.0-29.0		32	ND	ND	ND	ND				
	01/23/90				450	110	1.2	4.4	11				
	04/19/90				3,100	600	27	54	220				
	07/17/90			44	4,000	270	48	130	250				
	10/16/90				740	210	1.4	2.5	82				
	01/15/91				3,200	460	1.5	120	270				
	04/12/91			· 	880	170	1.1	34	110				
	07/15/91				9,200	1,300	230	490	1,900	'			
	10/15/91	_			3,100	390	34	150	390				
	01/15/92				3,000	590	14	310	750				
	04/14/92			••	14,000	660	48	560	2,000				
	07/14/92				21,000	890	200	1,200	4,300	••			
	10/12/92				3,200	160	10	230	540				
	01/08/93				$1,100^2$	48	0.99	0.9	93				
72.06	04/13/93	17.96		54.10	12,000 ²	290	38	760	2,300	1,400			
. 2.00	07/14/93	18.54		53.52	6,300	190	ND	430	1,000	860			
71.86	10/14/93	18.45		53.41	2,500	52	ND	110	250				
71.00	01/12/94	18.34	•	53.52	3,800	78	NĎ	180	390				
	VI/12/7*	10.57			2,000		- 1	- • •					

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Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3538 411 West MacArthur Boulevard Oakland, California

DATE	DTW	S.I.	GWE	TPH-G	В	Т	E	X	MTBE
grs a E Su	(ft.)	(ft. bgs)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
							140	200	
		5.0-29.0							
									
01/09/95									
04/17/95									
07/19/95	18.20								4.000
10/26/95	18.32								4,800
01/16/96 ³	17.95								
04/15/96	17.78		54.08						3,200
07/11/96	18.19		53.67	13,000					740
01/17/97	17.23		54.63	4,400					1,600
07/21/97	18.29		53.57	9,000					950
01/14/98	16.71		55.15	7,100					930
07/06/98	17.03		54.83	6,800 ⁶	39				370
01/13/99 ⁷	18.00		53.86	1,800	9.4	ND⁴	58	36	180
08/31/99	8								
01/21/00	17.58		53.82	ND	ND	ND			21.4
	18.05		53.35	ND	ND	ND	ND	ND	162
	17.82		53.58						180 ¹¹
			53.24	ND	ND	ND			193
			53.42	ND	ND	ND	ND		660
			53.56	<50	< 0.50	< 0.50	< 0.50		34
			53.53	<50	< 0.50	< 0.50	< 0.50	< 0.50	11/19 ¹¹
01/14/03	17.28		54.12	<50	<0.50	<0.50	<0.50	<0.50	12
09/15/89		5.0-29.0		ND	ND	ND	ND	ND	
01/23/90				ND	ND	0.4	ND	ND	
				ND	ND	0.48	ND	ND	·
				NĎ	ND	ND	ND	ND	
				ND	ND	ND	ND	ND	
					ND	ND		ND	
			**			ND	ND	ND	
	07/19/95 10/26/95 01/16/96 ³ 04/15/96 07/11/96 01/17/97 07/21/97 01/14/98 07/06/98 01/13/99 01/21/00 07/10/00 08/25/00 01/04/01 07/16/01 01/28/02 07/12/02 01/14/03	04/09/94 18.19 04/11/94 18.12 07/07/94 18.21 10/05/94 18.58 01/09/95 17.69 04/17/95 17.68 07/19/95 18.20 10/26/95 18.32 01/16/96³ 17.95 04/15/96 17.78 07/11/96 18.19 01/17/97 17.23 07/21/97 18.29 01/14/98 16.71 07/06/98 17.03 01/13/99² 18.00 08/31/99 -8 01/21/00 17.58 07/10/00 18.05 08/25/00 17.82 01/04/01 18.16 07/16/01 17.98 01/28/02 17.84 07/12/02 17.87 01/14/03 17.28	04/09/94 18.19 5.0-29.0 04/11/94 18.12 07/07/94 18.21 10/05/94 18.58 01/09/95 17.69 04/17/95 17.68 07/19/95 18.20 10/26/95 18.32 01/16/96³ 17.78 07/11/96 18.19 01/17/97 17.23 07/21/97 18.29 01/14/98 16.71 07/06/98 17.03 01/13/99² 18.00 08/31/99 8 01/21/00 17.58 07/10/00 18.05 08/25/00 17.82 01/04/01 18.16 07/16/01 17.98 01/28/02 17.84 07/12/02 17.87 01/14/03 17.28 01/14/03 17.28 09/15/89 5.0-29.0 01/15/91 01/15/91	04/09/94 18.19 5.0-29.0 53.67 04/11/94 18.12 53.74 07/07/94 18.21 53.65 10/05/94 18.58 53.28 01/09/95 17.69 54.17 04/17/95 17.68 54.18 07/19/95 18.20 53.66 10/26/95 18.32 53.54 01/16/96³ 17.95 53.91 04/15/96 17.78 54.08 07/11/96 18.19 53.67 01/17/97 17.23 54.63 07/21/97 18.29 53.57 01/14/98 16.71 55.15 07/06/98 17.03 54.83 01/13/99³ 18.00 53.86 08/31/99 8 01/21/00 17.58 53.82 07/10/00 18.05 53.35 08/25/00 17.82 53.58 01/28/02 17.84 53.56 07/12/02 17.87 53.53	(fL) (fL bgs) (msl) (ppb) 04/09/94 18.19 5.0-29.0 53.67 1,800 04/11/94 18.12 53.74 07/07/94 18.21 53.65 110¹ 10/05/94 18.58 53.28 ND 01/09/95 17.69 54.17 ND 04/17/95 17.68 54.18 3,700 07/19/95 18.20 53.66 15,000 10/26/95 18.32 53.54 14,000 01/16/96³ 17.95 53.91 920 04/15/96 17.78 54.08 9,700 07/11/96 18.19 53.67 13,000 01/17/97 17.23 54.63 4,400 07/21/97 18.29 53.57 9,000 01/14/98 16.71 55.15 7,100 07/06/98 17.03 54.83 6,800 ⁶ 01/13/99 ⁷ 18.00 53.86 1,800 08/31/99 -8	(fi.)	O4/09/94 18.19 S.0-29.0 S3.67 1.800 22 ND	04/09/94 18.19 5.0-29.0 53.67 1,800 22 ND 140 04/01/94 18.12 53.74 07/07/94 18.21 53.65 110¹ 4.5 ND ND ND 10/05/94 18.58 53.28 ND ND ND ND ND 01/09/95 17.69 54.17 ND 0.68 ND ND ND 04/17/95 17.68 54.18 3,700 80 10 271 290 38 ND 30 30 271 290 38 <td< td=""><td> 04/09/94</td></td<>	04/09/94

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Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3538 411 West MacArthur Boulevard Oakland, California

₩·	MIOIMIGING	Healin			Outriuna, cumom					
WELL ID/	DATE	DTW	S.I.	GWE	TPH-G	В	T	E	X	MTBE
TOC*(ft.)		(fL)	(ft. bgs)	(msl)	(ррб)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
				-					N.	NIPS
MW-1	07/16/01	18.03	5.0-29.0	54.09	ND	ND	ND	ND	ND	ND
(cont)	01/28/02	17.31		54.81	SAMPLED A					
•	07/12/02	18.15		53.97	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/14/03	17.66		54.46	SAMPLED A	NNUALLY			_	
MW-2	09/15/89	**	3.5-28.5		290	ND	12	ND	ND	
	01/23/90				400	73	36	10	40	
	04/19/90				3,900	550	5.1	91	390	
	07/17/90				490	76	0.59	11	46	
	10/16/90				1,400	430	2.0	48	240	
	01/15/91				680	170	0.7	19	81	
	04/12/91				2,200	160	4.3	23	62	
	07/15/91				2,200	770	12	72	370	
•	10/15/91				1 40	44	0.56	1.5	12	
	01/15/92				220	37	0.52	1.1	7	
	04/14/92	••			150	6.2	ND	ND	1.4	
	07/14/92				130	3.7	ND	ND	ND	
	10/12/92				370	3.4	0.56	ND	11	
	01/08/93				510 ¹	ND	ND	ND	ND	
71.63	04/13/93	17.86		53.77	410 ²	42	7.7	6.4	28	200
71.03	07/14/93	18.38		53.25	1101	6.5	ND	ND	1.1	250
71.38	10/14/93	18.20		53.18	230 ¹	5.3	ND	ND	2.1	
7120	01/12/94	18.08		53.30	300	7.8	3.8	1.8	10	
	04/09/94	17.97		53.41	120	10	0.88	1.1	4.9	
	04/11/94	17.88		53.50						
	07/07/94	17.81		53.57	110 ¹	4.4	ND	ND	ND	
	10/05/94	18.33		53.05	720¹	20	ND	ND	3.1	
	01/09/95	17.40		53.98	ND	ND	ND	ND	ND	
	04/17/95	17.50		53.88	93	5.6	0.62	1.7	5.5	
	07/19/95	18.01		53.37	77	32	0.58	1.7	4.1	
	10/26/95	18.21		53.17	54 ²	13	ND	ND	0.72	220
	01/16/96 ³	16.58		54.80	120	23	ND	ND	0.99	
	04/15/96	17.61		53.77	340	21	ND	2.2	3.7	45
	U4/ L3/7U	17.01		00111		· -				

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Table 1

Groundwater Monitoring Data and Analytical Results Tosco (Unocal) Service Station #3538

411 West MacArthur Boulevard Oakland, California

WELL ID/	DATE	DTW	S.I.	GWE	TPH-G	В	T	E	x	MTBE
TOC*(fL)		(ft.)	(fl. bgs)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
										
MW-4	07/15/91		5.0-29.0		ND	ND	ND	ND	ND	
(cont)	07/14/92				ND	1.3	2.5	ND	1.0	
71.98	04/13/93	17.67		54.31	SAMPLED A					
	07/14/93	18.31		53.67	ND	ND	ND	ND	ND	
71.64	10/14/93	18.08		53.56				-		
	01/12/94	17.97		53.67						
	04/11/94	17.70		53.94						
	07/07/94	17.80		53.84	ND	ND	ND	ND	ND	
	10/05/94	18.28		53.36				_		
	01/09/95	17.38		54.26						
	04/17/95	17.21		54.43	SAMPLED A	NNUALLY	**			
	07/19/95	17.82		53.82	ND	ND	ND	ND	ND	
	10/26/95	18.17		53.47						
	01/16/96	16.45		55.19						
	04/15/96	17.35		54.29						
	07/11/96	17.81		53.83	ND	ND	ND	ND	ND	ND
	01/17/97	16.73		54.91						
	07/21/97	17.91		53.73	ND	ND	ND	ND	ND	ND
	01/14/98	16.18		55.46						
	07/06/98	16.49		55.15	ND	ND	ND	ND	ND	ND
	01/13/99	17.29		54.35						
71.54	08/31/99	9								
	01/21/00	17.51		54.03						
	07/10/00	17.93		53.61	ND	ND	ND	ND	ND	ND
	01/04/01	18.10		53.44						***
	07/16/01	17.76		53.78	ND	ND	ND	ND	ND	ND
	01/28/02	17.20		54.34	SAMPLED A	NNUALLY				
	07/12/02	17.81		53.73	<50	< 0.50	<0.50	<0.50	< 0.50	<2.5
	01/14/03	17.30		54.24	SAMPLED A	NNUALLY	-	-		

Table 1 Groundwater Monitoring Data and Analytical Results

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Tosco (Unocal) Service Station #3538

411 West MacArthur Boulevard Oakland, California

WELL ID/	DATE	DTW	S.I.	GWE	TPH-G	В	T	E	х	MTBE
TOC*(ft.)		(fL)	(fL bgs)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-5	11/30/92		13.0-30.0		ND	ND	ND	ND	ND	
	01/08/93				ND	ND	ND	ND	ND	
71.51	04/13/93	17.49		54.02	ND	ND	ND	ND	ND	_
	07/14/93	18.02		53.49	ND	ND	0.57	ND	ND	-
71.23	10/14/93	17.82		53.41	ND	ND	ND	ND	ND	
	01/12/94	17.74		53.49	ND	ND	0.84	ND	1.6	
	04/11/94	17.56		53.67	SAMPLED A	NNUALLY				
	07/07/94	17.50		53.73	ND	ND	ND	ND	ND	
	10/05/94	17.98		53.25						
	01/09/95	17.13		54.10						
	04/17/95	17.05		54.18						
	07/19/95	17.59		53.64	ND	ND	ND	ND	ND	
	10/26/95	18.10		53.13						
	01/16/96	17.11		54.12			·			
	04/15/96	17.22		54.01						
	07/11/96	17.59		53.64	ND	ND	ND	ND	ND	ND
	01/17/97	16.75		54.48	SAMPLED A	NNUALLY				
	07/21/97	17.59		53.64	ND	ND	ND	ND	ND	ND
	01/14/98	16.16		55.07						
	07/06/98	16.52		54.71	ND	ND	ND	ND	ND	ND
	01/13/99	17.62		53.61	₩.			==		-
71.16	08/31/99	17.76		53.40	ND	ND	NĎ	ND	ND	ND
	01/21/00	16.83		54.33				- -		
	07/10/00	17.46		53.70	ND	ND	ND	ND	ND	ND
	01/04/01	17.51		53.65						
	07/16/01	17.32		53.84	ND	ND	ND	ND	ND	ND
	01/28/02	17.12		54.04	SAMPLED A	NNUALLY				-
	07/12/02	17.12		54.04	<50	< 0.50	<0.50	<0.50	<0.50	<2.5
	01/14/03	16.67		54.49	SAMPLED A	NNUALLY	_			

Table 1 Groundwater Monitoring Data and Analytical Results

MAR 1 2 2003

Environmental Health

Tosco (Unocal) Service Station #3538 411 West MacArthur Boulevard Oakland, California

WELL ID/	DATE	DTW	S.I.	GWE	TPH-G	В	Т	E	X	MTBE
TOC*(ft.)	DAIL	(fi.)	(ft. bgs)	(msl)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
100000		33. (J. /Zar <u>1932</u>	Us ogsj		Control of the Control				-	
MW-6	11/30/92		13.0-30.0		ND	ND	ND	ND	ND	
111 11 -0	01/08/93				ND	ND	ND	ND	ND	
71.79	04/13/93	11.94		59.85	ND	ND	ND	ND	ND	
,1.,,	07/14/93	17.20		54.59	ND	0.99	2.4	ND	1.9	
71.44	10/14/93	17.21		54.23	ND	ND	0.64	ND	ND	
71.44	01/12/94	17.44		54.00	ND	ND	1.2	ND	2.9	
	04/11/94	13.66		57.78	SAMPLED A	NNUALLY				
	07/07/94	14.05		57.39	ND	ND	ND	ND	ND	
	10/05/94	14.16		57.28						
	01/09/95	13.73		57.71						
	04/17/95	11.30		60.14						
	07/19/95	12,32		59.12	ND	ND	ND	ND	ND	
	10/26/95	17.88		53.56						
	01/16/96	16.38		55.06						
	04/15/96	14.00		57.44						
	07/11/96	13.58		57.86	ND	ND	ND	ND	ND	ND
	01/17/97	15.42		56.02						
	07/21/97	13.78		57.66	ND	ND	ND	ND	ND	ND
	01/14/98	13.65		57.79						
	07/06/98	13.90		57.54	ND	ND	ND	ND	ND	ND
	01/13/99	14.93		56.51				••		
71.37	08/31/99	15.81		55.56	ND	ND	ND	ND	ND	ND
, 1.0	01/21/00	16.13		55.24	SAMPLED A	ANNUALLY			<u></u>	
	07/10/00	16,95		54.42	ND	ND	ND	ND	ND	NĎ
	01/04/01	17.09		54.28						
	07/16/01	16,83		54.54	ND	ND	ND	ND	ND	ND
	01/28/02	14.58		56.79	SAMPLED A	ANNUALLY			-	
	07/12/02	16.76		54.61	<50	<0.50	<0.50	<0.50	< 0.50	<2.5
	01/14/03	16.25		55.12	SAMPLED A	ANNUALLY				-

MAR 1 2 2003

Table 1 Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3538

411 West MacArthur Boulevard

Environmental Health

Oakland, California

WELL ID/	DATE	DTW	S.I.	GWE	TPH-G	В	T	E	X	MTBE
TOC*(ft.)		(ft.)	(ft. bgs)	(msl)	(ррв)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
Trip Blank										
TB-LB	01/14/98			_	ND	ND	ND	ND	ND	ND
	07/06/98				ND	ND	ND	ND	ND	ND
	01/13/99				ND	ND	ND	ND	ND	ND
	08/31/99				ND	ND	1.5	ND	2.3	39
	01/21/00	==			ND	ND	ND	ND	ND	ND
	07/10/00			. 	ND	ND	ND	ND	ND	ND
	01/04/01				ND	ND	ND	ND	ND	ND
	07/16/01				ND	ND	ND	ND	ND	ND
	01/28/02				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
^ 4	07/12/02				<50	< 0.50	< 0.50	< 0.50	< 0.50	<2.5
QA	01/14/03				<50	<0.50	<0.50	<0.50	<0.50	<2.0

MAR 1 2 2003

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3538 411 West MacArthur Boulevard Oakland, California

Environmental Health

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to January 14, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing

TPH-G = Total Petroleum Hydrocarbons as Gasoline

(ppb) = Parts per billion

(ft.) = Feet

B = Benzene

ND = Not Detected

DTW = Depth to Water

T = Toluene

-- = Not Measured/Not Analyzed

S.I. = Screen Interval

E = Ethylbenzene

OA = Quality Assurance/Trip Blank

(ft. bgs) = Feet Below Ground Surface

X = Xylenes

GWE = Groundwater Elevation

MTBE = Methyl tertiary butyl ether

(msl) = Mean sea level

- TOC elevations are relative to msl, per the City of Oakland Benchmark #9NW10. (Elevation = 75.50 feet msl). Prior to October 14, 1994, the DTW measurements were taken from the top of well covers. On September 15, 1999, TOC elevations were resurveyed City of Oakland Benchmark being a square brass pin in the concrete gutter at the southwest corner of Webster & MacArthur. The stationing data is with reference to the back of sidewalk on MacArthur in front of the site. Benchmark (Elevation = 71.055 feet, msl)
- Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
- Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and a non-gasoline mixture. 2
- Laboratory report indicates the presence of MTBE at a level above or equal to the taste and odor threshold of 40 ppb.
- Detection limit raised. Refer to analytical reports.
- All EPA Method 8010 constituents were ND.
- Laboratory report indicates gasoline and unidentified hydrocarbons <C7.
- TOC measurement may have been altered due to damaged casing.
- Well was obstructed by a solid at 0.5 feet.
- Well was obstructed by a solid (concrete or soil) at 10.4 feet.
- Laboratory report indicates gasoline C6-C12.
- 11 MTBE by EPA Method 8260.

Table 2

Groundwater Analytical Results

Tosco (Unocal) Service Station #3538 411 West MacArthur Boulevard

411 West MacArthur Boulev Oakland, California

Alameda County

MAR 1 2 2003

Environmental Health

WELL ID	DATE	TPH-D (ppb)	TOG (ppb)	Tetrachloroethene ¹ <i>(ppb)</i>
		(Aha)		
MW-1	09/15/89	ND	ND	2.7
	01/23/90	ND	1.5	2.1
	04/19/90	ND	· ND	2.2
	07/17/90	ND	ND	1.7
	10/16/90	ND	ND	2.0
	01/15/91	ND	ND	2.1
	04/12/91	ND	ND	2.0
	07/15/91	ND	ND	1.8
	07/14/92	~~		1.4
	07/14/93			0.95
	07/07/94			0.83
	07/19/95		_	0.52
	07/11/96 ²			0.73
	07/21/97 ³			0.70
	08/31/99			ND
	07/16/014	P+	·	ND
	07/12/025	-	_	<0.60

EXPLANATIONS:

Groundwater laboratory analytical results prior to August 31, 2001, were compiled from reports prepared by MPDS Services, Inc.

TPH-D = Total Petroleum Hydrocarbons as Diesel

TOG = Total Oil and Grease

(ppb) = Parts per billion

ND = Not Detected

-- = Not Analyzed

- ¹ All other EPA Method 8010 constituents were ND.
- Chloroform was detected at a concentration of 0.96 ppb.
- Chloroform was detected at a concentration of 1.0 ppb.
- All EPA Method 8021B constituents were ND with a raised detection limit, except Chloroform was detected at a concentration of 45 ppb and Bromodichloromethane at 1.7 ppb.
- All EPA Method 8021B constituents were ND, except for Freon 113 was detected at 11 ppb and 1,1-Dichloroethene (1,1-DCA) was detected at 1.8 ppb.

MAR 1 2 2003

Table 3

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #3538

411 West MacArthur Boulevard Oakland, California

Environmental Health

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	МТВЕ <i>(ppb)</i>	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-3	08/25/00 07/12/02	 <500	ND ¹ <20	180 19	ND ¹ <2.0	ND ¹ <2.0	ND ¹ <2.0	ND ¹ <2.0	ND ¹ <2.0

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 = 1,2-Dibromoethane

(ppb) = Parts per billion

ND = Not Detected

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Detection limit raised. Refer to analytical reports.

MAR 1 2 2003

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

Environmental Health

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, all depth to water level measurements are collected with a static water level indicator and are also recorded in the field notes, prior to purging and sampling any wells.

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 disposable bailers. The measurements are taken a minimum of three times during the purging. Purging continues until these parameters stabilize.

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 and is labeled as QA. 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.



MAR 1 2 2003

WELL MONITORING/SAMPLING FIELD DATA SHEET

		FIEL	D DATA SE	166)				
то	sco #3538		Jo	ob Number:	1800	64		.
	W. MacArthu	r Blvd.	E	vent Date:	- (,	-14-03		_(inclusiv
			s	ampler:	_	500		_
City: Oa	kland, CA							
Well ID	MW-	Date M	nonitored:/	1-19-03	. W	ell Condition: _	0,10	
Well Diameter	2 in.		Volume	3/4"= 0.02	1"= 0 5"= 1.		3"= 0.38 12"= 5.60	\
Total Depth	23.33 ft.		Factor (VF)	4*= 0.66	5 = 1.	02 01		
Depth to Water	17.66 ft.			3 (case volume) =	Estimat	ed Purge Volume:	gal	l
	xVF		_=X			ne Started:		(2400 hrs)
n Fasiamanti		Samp	ling Equipment:	•	Tin	ne Bailed:		(2400 hrs)
Purge Equipment:		Dispos	sable Bailer		_ De	pth to Product:		',,]
Disposable Bailer Stainless Steel Bailer		Pressi	ure Baller		_ De	pth to Water: drocarbon Thickne	es. 19	ft
Startless Steel Dailer Stack Pump		Discre	te Bailer		- Hy	sual Confirmation/E	Description:	
Suction Pump		Other			-1			
Grundfos					SI	dimmer / Absorbant	i Sock (circle o Skimmer:	ua) gal
Other:					A	nt Removed from \	//eli:	gai
<u> </u>					P	roduct Transferred	to:	
Start Time (purge): Sample Time/Date				:		Odor:		
Purging Flow Rate	e gpm.		nt Description:					
Did well de-water	 :	If yes, Time	ə:	_ Volume:		gal.		
Time (2400 hr.)	Volume (gal.)	pH	Conductivity (u mhos/cm)	Temperatur (C/F)	e 	D.O. (mg/L)	ORP (mV)	_
					<u></u> ·			_
					<u> </u>			
		1 Δ	BORATORY IN	IFORMATION				
CA SADILE ID	(#) CONTAINER	REFRIG.	PRESERV. TYP	LABORA1	ORY		NALYSES	
SAMPLE ID	x voa vial	YES	HCL	SEQUO	AIC	TPH-G(8015)/BTE	X/M1BE(8021	' -
MW-	X VOA VII.II					HVOC'S(8010 list)80216	
								
	 	<u> </u>						
COMMENTS:	n. o.l							
								
Add/Repla	ced l ock.			Add/Replac	ed Plu	ıg:	Size:	
さいび ロゼリね	~~~							



WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #:	Tosco #3538		Job Number:	100004	
Site Address:	411 W. MacArth	ur Bl vd .	Event Date:	1-14-0	(inclusi
city:	Oakland, CA		Sampler:	- Jue	
Well ID	MW-2	Date Monitore	ed: 1-14-03	Well Condition:	o k
Well Diameter Fotal Depth Depth to Water	2 in. 24.26 ft. 17.44 ft.	Fac	ume 3/4*= 0.02 ttor (VF) 4*= 0.66	1"= 0.04 2"= 0.17 5"= 1.02 6"= 1.50	3°= 0.38 12°= 5.80
Deptil to Water	682 XVF	0.17 = 1.	x3 (case volume) =	Estimated Purge Volume:	
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump		Sampling Equipolisposable Bailer Pressure Bailer Discrete Bailer Other:	er	Time Started: Time Bailed: Depth to Product: Depth to Water: Hydrocarbon Thickne Visual Confirmation/I	(2400 hrs) ft ft ess:ft
Grundfos Other:				Skimmer / Absorbant Amt Removed from S Amt Removed from N Product Transferred	Skimmer: gal Well: gal
Start Time (purge Sample Time/Da Purging Flow Ra Did well de-wate	ate: 1428 //- ate: 6.5 gpm.		·	Odor:	<u>elew</u>
Time (2400 hr.)	Volume (gal.)	(allinoon		D.O. (mg/L)	ORP (mV)
415 217 428	2 3/5	7.91 3.60 7.92 4.5 7.67 4.5	63.0		
		LABORATO	RY INFORMATION		
SAMPLE ID	(#) CONTAINER	REFRIG. PRESER		~··· i	IALYSES
MW- 2		YES HO	CL SEQUOI	A TPH-G(8015)/BTE HVOC'S(8848 list)	
COMMENTS:					
Add/Repl	aced Lock:		Add/Replace	d Plug:	 Size:



GETTLER-RYAN INC.

Alameda County

MAR 1 2 2003

WELL MONITORING/SAMPLING FIFLD DATA SHEET

ite Address: 41	MW- 2 in. 27.17 ft. 17.28 ft. 9.89 xVF	Date N 8 . 1 7 Sample Dispose Presse Discre	Aonitored:	vent Date: sampler: - 14-07 3/4*= 0.02 4*= 0.66	Well Condition: 1'= 0.04 2'= 0.17 5'= 1.02 6'= 1.50 Estimated Purge Volum Time Started: Time Bailed: Depth to Water: Hydrocarbon Thick Visual Confirmation	3°= 0.38 12°= 5.80 e:
Vell ID Vell Diarneter Total Depth Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos	MW- 27 2 in. 27.17 ft. 17.28 ft.	Date N 8 . 1 7 Sample Dispose Presse Discre	Volume Factor (VF) = / / / x ling Equipment: sable Bailer ure Bailer	3/4"= 0.02 4"= 0.66	Well Condition: 1"= 0.04 2"= 0.17 5"= 1.02 6"= 1.50 Estimated Purge Volum Time Started: Time Bailed: Depth to Product: Depth to Water: Hydrocarbon Thick	3"= 0.38 12"= 5.80 e:
Vell ID Vell Diarneter Total Depth Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos	MW- ² / ₂ in. 27.17 ft. 17.28 ft.	Sampl Dispos Pressi Discre	Volume Factor (VF) - / / / / x ling Equipment: sable Bailer ure Bailer	3/4°= 0.02 4°= 0.66	Well Condition: 1"= 0.04 2"= 0.17 5"= 1.02 6"= 1.50 Estimated Purge Volum Time Started: Time Bailed: Depth to Product: Depth to Water: Hydrocarbon Thick	3"= 0.38 12"= 5.80 e:
Vell Diarneter Total Depth Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos	2 in. 27.17 ft. 17.28 ft.	Sampl Dispos Pressi Discre	Volume Factor (VF) = / / / / x ling Equipment: sable Bailer ure Bailer	3/4"= 0.02 4"= 0.66	1"= 0.04 2"= 0.17 5"= 1.02 6"= 1.50 Estimated Purge Volum Time Started:	3"= 0.38 12"= 5.80 e:
Total Depth Depth to Water Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundios	27.17 ft.	Sampl Dispos Pressi Discre	Factor (VF) = / . k 8 x ling Equipment: sable Bailer ure Bailer	4"= 0.66	5"= 1.02 6"= 1.50 Estimated Purge Volum Time Started:	e:
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos	17.28 ft.	Sampl Dispos Pressi Discre	ling Equipment: sable Bailer ure Bailer		Time Started: Time Bailed: Depth to Product: Depth to Water: Hydrocarbon Thick	(2400 hrs (2400 hrs ft t
Purge Equipment: Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos	9.89 xvF	Sampl Dispos Pressi Discre	ling Equipment: sable Bailer ure Bailer ele Bailer	3 (case volume) = E	Time Started:Time Bailed:Depth to Product:Depth to Water:Hydrocarbon Thick	(2400 hrs (2400 hrs ft t
Disposable Bailer Stainless Steel Bailer Stack Pump Suction Pump Grundfos		Dispos Pressi Discre	sable Bailer ure Bailer nte Bailer		Time Bailed: Depth to Product: Depth to Water: Hydrocarbon Thick	(2400 hrsft
Stainless Steel Bailer Stack Pump Suction Pump Grundfos		Pressi Discre	ure Bailer Ne Bailer		Depth to Water: Hydrocarbon Thick	ness: 6 t
Stainless Steel Bailer Stack Pump Suction Pump Grundfos		Discre	te Bailer		Hydrocarbon Thick	ness:ti
Suction Pump Grundfos			_		Visual Confirmation	n/Description:
Grundfos						
					Skimmer / Absorba	ant Sock (circle one)
Other:					Ami Removed from	n Skimmer: 98
					Amt Removed from	n Well:98
					Product Transferre	ed to:
Purging Flow Rater Did well de-water Time (2400 hr.) 1440 1446		pH 1.2/ 7.32 7.38	Conductivity 4 (umhos/cm) 5 (19 4 - 5 5 4 - 5 4	Volume:	- •	ORP (mV)
		LAI	BORATORY IN			and vece
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYP			ANALYSES
MW- 3	ラ x voa vial	YES	HCL	SEQUOI	A TPH-G(8015)/B	TEX/MTBE(8021) et)8021B
COMMENTS:						
					d Plug:	Size:



WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: To	sco #3538			Job Number:	180064	
	1 W. MacArth	ur Blvd.		Event Date:	1-14-03	(inclusiv
City: Oa	kland, CA			Sampler:	Soe	
Well ID	MW-4	Date	Monitored:	1-14-03	Well Condition:	0.1
Well Diameter	2 in.		Volume	3/4"= 0.02	1"= 0.04 2"= 0.17	3"= 0.38
Total Depth	24.82 H.		Factor (VI) 4"= 0.66	5*= 1.02 6*= 1.50	12'= 5.80
Depth to Water	<u>/ 7. 3 ወ ft.</u> xVF		_=	x3 (case volume) =	Estimated Purge Volume: _	gal.
					Time Started:	(2400 hrs)
Purge Equipment:			pling Equipment	L	Time Bailed: Depth to Product:	
Disposable Bailer		•	osable Bailer		Depth to Water:	rii.
Stainless Steel Bailer			sure Bailer	-	Hydrocarbon Thicknes	
Stack Pump	 .		rete Bailer		Visual Confirmation/De	
Suction Pump		Utne)r:)
Grundfos					Skimmer / Absorbant S	sock (circle one)
Other:					Amt Removed from W	
					Product Transferred to	
Sample Time/Date: Purging Flow Rate: Did well de-water?	gpm. Volume		ent Description	r: n: Volume: Temperature (C/F)		ORP (mV)
(2400 hr.)	(gal.)		(Diffilos/Citi)	(611)		· · · · · · · · · · · · · · · · · · ·
		·				
-7			BORATORY II	JEORMATION		
SAMPLEID	(#) CONTAINER	REFRIG.	PRESERV. TY		*** 1	LYSES
MW-	x voa vial	YES	HCL	SEQUOI	TPH-G(8015)/BTEX/	MTBE(8021)
19164	7 102 100				HVOC'S(8010 list)80)21B
COMMENTS:	m.only			<u></u>		
Add/Replace				Add/Replaced	i Pluo: S	ize:



MAR 1 2 2003

WELL MONITORING/SAMPLING FIELD DATA SHEET

		FIEL	ט אואט ט.	· · · · ·		
Client/Facility #:	Tosco #3538		J	lob Number:	180064	
	111 W. MacArth	ur Blvd.		Event Date:	1-14-03	(inclusi
	Dakland, CA			Sampler:	Joe	
					Mall Conditions	01/6
Well ID	<u>MW- ≶</u>	Date N	Monitored:	1-14-03	Well Condition:	
Well Diameter	2 in.		Volume	3/4"= 0.02 4"= 0.66	1"= 0.04 2"= 0.17 5"= 1.02 6"= 1.50	3"= 0.38 12"= 5.80
Total Depth	30.07 ft.		Factor (VF)	4 = 0.00	3 - 1.02	<u></u>
Depth to Water	16.67 ft.	:	_ =;	x3 (case volume) = E	Estimated Purge Volume: _	gal.
•					Time Started:	(2400 hrs)
Purge Equipment:		•	ling Equipment:		Time Bailed:	(2400 Ins)
Disposable Bailer		•	sable Bailer		Depth to Water	
Stainless Steel Bailer			ure Baller		Hydrocarbon Thickness	S:f1
Stack Pump			ete Bailer		Visual Confirmation/De	scription:
Suction Pump					Skimmer / Absorbant S	Sock (circle one)
Grundfos					Amt Removed from Sk	immer:gal
Other:					Amt Removed from We Product Transferred to	eli: yaii
			_			
			O			
Start Time (purge	e):	Weath			<u> </u>	
	ate:/	Codimo		:		
Purging Flow Ra		Seuline Time	yes, Time:		gal.	
Did well de-wate	er?	n yes, run	·			ORP
Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)	D.O. (mg/L)	(mV)
	- /- ·	1.4	BORATORY IN	IFORMATION		
SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYP	E LABORATO		ALYSES
MW-	x voa vial	YES	HCL	SEQUOI	A TPH-G(8015)/BTEX HVOC'S(8010 list)8	
					HVOC S(8010 list)6	0210
\\ \frac{\}{\}						
COMMENTS	m. suly					
		<u> </u>		Add/Poplace	d Plug: \$	Size:
Add/Rep	laced Lock:			Aud Hebiace	~ · · · · · · · · · · · · · · · · · · ·	



WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: To	sco #3538			lob Number:	180064	
	1 W. MacArth	ur Blvd.		Event Date:	1-14-03	(inclusiv
	akland, CA			Sampler:		
Well ID	MW-6	Date	Monitored:	1-14.03	Well Condition: 0.K	
Vell Diameter	2 in.		Volume	3/4"= 0.02	1"= 0.04 2"= 0.17 3"= 0.38	
Total Depth	30.05 ft.		Factor (VF)	4*± 0.66	5*± 1.02 6*= 1.50 12*= 5.8	<u></u>
Depth to Water	16.25 tt. xVF	:		x3 (case volume) =	Estimated Purge Volume:	_ gal.
_		_			Time Started:	
Purge Equipment:		-	pling Equipment:		Time Bailed: Depth to Product:	
Disposable Bailer		•	osable Bailer			
Stainless Steel Bailer			sure Bailer		Depth to Water:	ft
Stack Pump			ete Bailer r:		Visual Confirmation/Description	
Suction Pump Grundfos		Offic	· <u></u>	-	Skimmer / Absorbant Sock (circ	cle one)
Other:					Amt Removed from Skimmer:_	
Others.					Amt Removed from Well: Product Transferred to:	gal
			_		Product Transferred to:	
	<u></u>	Meath	ner Conditions			
Start Time (purge): Sample Time/Date		Weau				
Purging Flow Rate		Sedime	ent Description			·
Did well de-water		If yes, Tim	e:	_ Volume:	gal.	
Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)		4P (V)
			BORATORY IN		ORY ANALYSES	
SAMPLE ID	(#) CONTAINER	REFRIG.		SEQUO		021)
MW-	x voa vial	YES	HCL	SEGGO	HVOC'S(8010 list)80218	
 						
						Se e C e
COMMENTS:	na only					٤
Add/Panja				Add/Replace	ed Plug: Size:	

AN AND HONOR - CHARGESTAND CONTROL - SAND CONTROL OF SAND



29 January, 2003

Deanna L. Harding Gettler-Ryan - Dublin 6747 Sierra Court, Ste. J Dublin, CA 94568

RE: TOSCO 3538, Oakland, CA Sequoia Work Order: S301384 Mar Park Comment

GETTLER-RYAND TO

Enclosed are the results of analyses for samples received by the laboratory on 01/15/03 12:30. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew

Client Services Representative

CA ELAP Certificate #1624



MAR 1 2 2003

819 Striker Ave Ste 8 Sacramento, CA 95834 (916) 921-9600 FAX (916) 921-0100 www.sequoialabs.com

Gettler-Ryan - Dublin 6747 Sierra Court, Ste. J Dublin CA, 94568

Project: TOSCO 3538, Oakland Fivironmental Health S301384

Project Number: N/A

Project Manager: Deanna L. Harding

Reported: 01/29/03 17:01

ANALYTICAL REPORT FOR SAMPLES

Sample 1D	Laboratory ID	Matrix	Date Sampled	Date Received
QA .	S301384-01	Water	01/14/03 00:00	01/15/03 12:30
MW-2	S301384-02	Water	01/14/03 14:28	01/15/03 12:30
MW-3	S301384-03	Water	01/14/03 14:52	01/15/03 12:30



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Gettler-Ryan - Dublin 6747 Sierra Court, Ste. J Dublin CA, 94568 Project: TOSCO 3538, Oakland, CA

Project Number: N/A

Project Manager: Deanna L. Harding

S301384 Reported: 01/29/03 17:01

Gasoline (2-Methylpentane to 1,2,4-Trimethylbenzene) and BTEX by EPA 8015M and 8021B

Sequoia Analytical - Sacramento

		uvia Ana	J						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Note
QA (S301384-01) Water Sampl	ed: 01/14/03 00:00 Re	ceived: 01/1:	5/03 12:3	30					
Purgeable Hydrocarbons	ND	50	ug/l	1	3010419	01/24/03	01/25/03	EPA 8015/8021	
Benzene	ND	0.50	Ħ		*	Ħ	n	н	
Toluene	ND	0.50	**	"	**	11	'n	**	
Ethylbenzene	ND	0.50	**	11	16	"	"	71 10	
Xylenes (total)	ND	0.50		Ħ	17	tt	11	"	
Methyl tert-butyl ether	ND_	2.0	"				"		
Surrogate: a,a,a-Trifluorotoluene		76 %	60-	-140	#	tr	T T	*	
MW-2 (S301384-02) Water Sa	mpled: 01/1 <u>4/03</u> 14:28	Received: 0	1/15/03	12:30					
Purgeable Hydrocarbons	ND	50	սջ/l	1	3010419	01/24/03	01/25/03	EPA 8015/8021	
Benzene	ND	0.50	m	•		Ħ	**	Ħ	
Toluene	ND	0.50	**	11	**	н	н		
Ethylbenzene	ND	0.50	11	#	**	11	**	**	
Xylenes (total)	ND	0.50	ŧr	н	**	Ħ	*	11	
Methyl tert-butyl ether	ND_	2.0	"				**		
Surrogate: a,a,a-Trifluorotoluene	!	75 %	60	-140	*		"	"	
MW-3 (S301384-03) Water Sa	mpled: 01/14/03 14:52	Received:	01/15/03	12:30	··				
Purgeable Hydrocarbons	ND	50	ug/l	1	3010419	01/24/03	01/25/03	EPA 8015/8021	
Benzene	ND	0.50	#	"	H	n	•	**	
Toluene	ND	0.50	11	**	11	*	**	н	
Ethylbenzene	ND	0.50	"	и	И	*	"		
Xylenes (total)	ND	0.50	11		*	11	н	#1	
Methyl tert-butyl ether	12 _	2.0	11						
Surrogate: a,a,a-Trifluorotoluen	е	76 %	60	0-140	u	"	N	н	



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Gettler-Ryan - Dublin 6747 Sierra Court, Ste. J Dublin CA, 94568 Project: TOSCO 3538, Oakland, Project: TOSCO 3538, Oakland, Project: TOSCO 3538, Oakland, Project: Project: TOSCO 3538, Oakland, Project: TOSCO 3538, Oaklan

Project Number: N/A

Project Manager: Deanna L. Harding

S301384 Reported: 01/29/03 17:01

Gasoline (2-Methylpentane to 1,2,4-Trimethylbenzene) and BTEX by EPA 8015M and 8021B - Quality Contr Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3010419 - EPA 5030B (P/T)							•			
Blank (3010419-BLK1)				Prepared:	01/24/03	Analyzed	: 01/25/03			
rurgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	11							
Oluene	ND	0.50	n							
Sthylbenzene	ND	0.50			÷					
(ylenes (total)	ND	0.50	,,							
Methyl tert-butyl ether	ND	2.0	**							
Surrogate: a,a,a-Trifluorotoluene	7.63	- <u>-</u> .	#	10.0		76	60-140			
Blank (3010419-BLK2)				Prepared:	01/27/03	Analyzed	1: 01/28/03			
Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50								
Toluene .	ND	0.50	*							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	н							
Methyl tert-butyl ether	ND	2.0	•							
Surrogate: a,a,a-Trifluorotoluene	9.37		#	10.0		94	60-140			
Laboratory Control Sample (3010419-BS1)				Prepared	& Analyz	ed: 01/24	/03			
Benzene	7.96	0.50	ug/l	10.0		80	70-130		•	
Toluene	8.85	0.50	Ħ	10.0		88	70-130			
Ethylbenzene	8.54	0.50	"	10.0		85	70-130			
Xylenes (total)	26.3	0.50	#	30.0		88	70-130			
Methyl tert-butyl ether	7.04	2.0	•	10.0		70	70-130			
Surrogate: a,a,a-Trifluorotoluene	8.30		n	10.0	<u></u>	83	60-140			
Matrix Spike (3010419-MS1)	Se	ource: S3013	87-01	Prepared	l & Analy	zed: 01/24	/03			
Benzene	8.11	0.50	ug/l	10.0	ND	81	60-140			
Toluene	9.06	0.50		10.0	ND	91	60-140			
Ethylbenzene	9.01	0.50	"	10.0	ND	90	60-140			
Xylenes (total)	26.8	0.50		30.0	ND	89	60-140			
Methyl tert-butyl ether	7.56	2.0		10.0	ND	76	60-140			

Sequoia Analytical - Sacramento

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.



Gettler-Ryan - Dublin 6747 Sierra Court, Ste. J **Dublin CA, 94568**

Project: TOSCO 3538, Oakland, CA

Project Number: N/A

Project Manager: Deanna L. Harding

S301384 Reported: 01/29/03 17:01

Gasoline (2-Methylpentane to 1,2,4-Trimethylbenzene) and BTEX by EPA 8015M and 8021B - Quality Contr · Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3010419 - EPA 5030B (P/T)										
Matrix Spike (3010419-MS1)	So	urce: S30138	7-01	Prepared	& Analyz	ed: 01/24/	03			
Surrogate: a,a,a-Trifluorotoluene	8.16		ug/l	10.0		82	60-140			
Matrix Spike Dup (3010419-MSD1)	So	urce: S30138	37-01	Prepared	& Analyz	ed: 01/24/	03			
Benzene	8.21	0.50	ug/l	10.0	ND	82	60-140	1	25	
Toluene	9.15	0.50	11	10.0	ND	92	60-140	1	25	
Ethylbenzene	9.07	0.50	**	10.0	ND	91	60-140	0.7	25	
Xylenes (total)	27.0	0.50	H	30.0	ND	90	60-140	0.7	25	
Methyl tert-butyl ether	7.77	2.0	11	10.0	ND	78	60-140	3	25	
Surrogate: a,a,a-Trifluorotoluene	8.15		er	10.0	 -	82	60-140			

Sequoia Analytical

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Project: TOSCO 3538, Oakland, CA

Project Number: N/A

Project Manager: Deanna L. Harding

S301384 Reported: 01/29/03 17:01

Notes and Definitions

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