

GETTLER-RYAN INC.

DEC 0 4 2001

TRANSMITTAL

November 16, 2001 G-R #180225

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. Paul Blank

ERI. Inc.

73 Digital Drive, Suite 100

Novato, California

RE:

: Tosco 76 Service Station

#1156

4276 MacArthur Boulevard

Oakland, California

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	November 12, 2001	Groundwater Monitoring and Sampling Report Fourth Quarter - Event of October 3 and 5, 2001

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 *November 29*, 2001, this report will be distributed to the following:

cc: Ms. Eva Chu, Alameda County Health Care Services, 1131 Harbor Bay Parkway, Suite 250, Alameda, CA 94502 Mr. Bob Hale, Alameda County Public Works Agency, Water Resources Section, 951 Turner Court, Suite 300, Hayward, CA 94545

Enclosure

Need Wellinsbillation Port.

trans/1156-DBD



November 12, 2001 G-R Job #180225

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

RE: Fourth Quarter Event of October 3 and 5, 2001

Groundwater Monitoring & Sampling Report
Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

Dear Mr. De Witt:

This report documents the most recent well development and 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 any of 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 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, framarie Vercau

- FOR - Deanna L. Harding

Project Coordinator

Douglas J.Lee

Senior Geologist, R.G. No. 6882

Figure 1:

Potentiometric Map Concentration Map

Figure 2: Table 1:

Groundwater Monitoring Data and Analytical Results

Table 2:

Groundwater Analytical Results

Attachments:

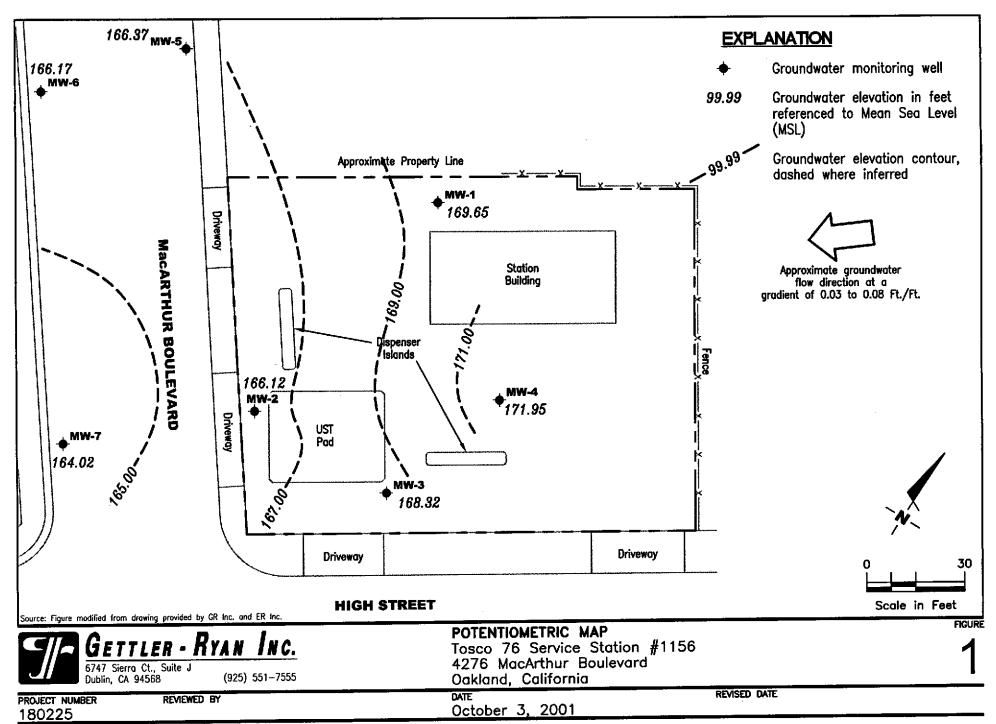
Standard Operating Procedure - Groundwater Sampling

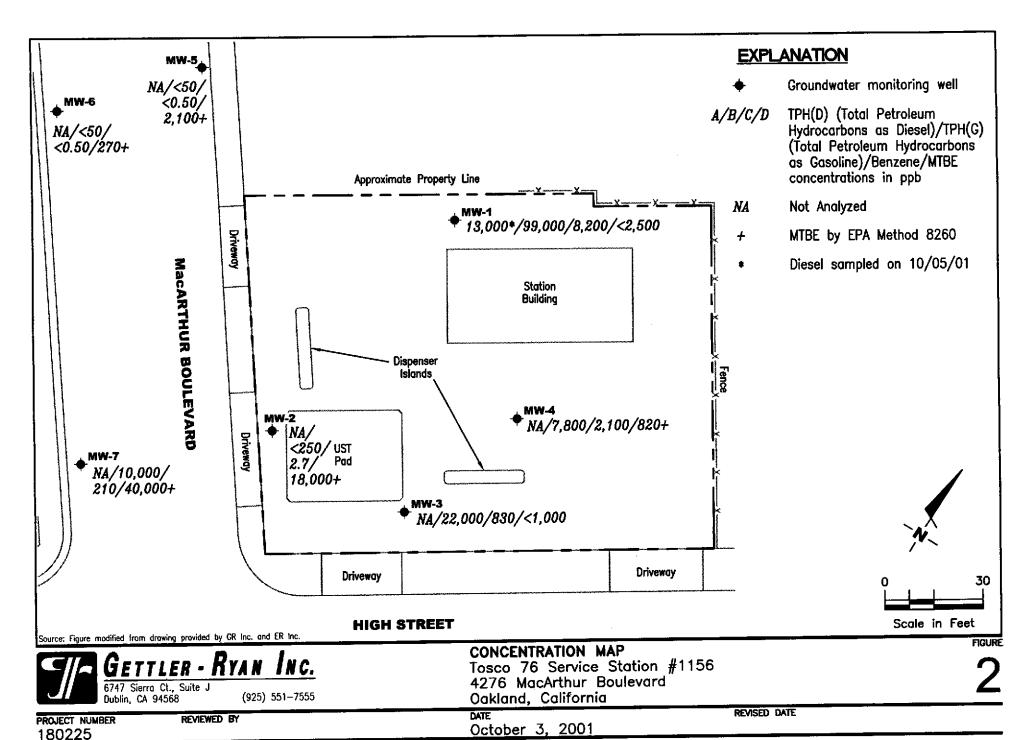
Field Data Sheets

Chain of Custody Document and Laboratory Analytical Reports

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No. 6882





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Table 1
Groundwater Monitoring Data and Analytical Results

					Product							
WELL ID/	DATE	DTW	S.I.	GWE	Thickness	TPH-D	TPH-G	В	Т	E	X	МТВЕ
TOC*		(ft.)	(ft, bgs)	(msl)	(ft.)	(ррь)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-1												
174.86	07/20/99 ⁵	7.50	5.0-25.0	167.36		16,000²	120,000	11,000	27,000	3,300	18,000	ND ¹
1700	09/28/99	8.75	0.0 20.0	166.11	<0.01	$2,410^2$	6,020 ⁶	1,030	1,040	68.5	412	321/333 ³
	01/07/00	9.05		165.83**	0.02	7,870 ^{2,4}	72,700 ⁶	7,410	13,900	2,070	9,620	ND ¹
	03/31/00	7.18		167.68	0.00	$3,600^2$	92,000 ⁶	10,000	23,000	3,200	14,000	ND ^I
	07/14/00	7.68		167.18	0.00	8,580 ²	108,000 ⁶	8,250	18,700	3,750	17,800	ND ¹
	10/03/00	7.99		166.87	0.00	9,260 ²	96,000 ⁶	8,760	20,000	3,350	15,600	ND ¹
	01/03/01	9.18		165.68	0.00	11,000 ⁸	37,000 ⁶	5,800	13,000	1,700	8,100	2,200
	04/04/01	8.05		166.81	0.00	14,000 ⁸	86,900 ⁶	7,780	18,500	2,470	11,800	¹ ND/481 ³
	07/17/01	7.01		167.85	0.00	2,2008	79,000 ⁶	5,600	11,000	2,800	12,000	¹ ND/230 ³
177.54	10/03/01	7.89		169.65	0.00		99,000 ⁶	8,200	18,000	3,000	16,000	<2,500
111654	10/05/01	7.91		169.63	0.00	13,000 ²				J,000		~2,500
				237.00	****	·						
MW-2							•	. 1	1	1	1	3.4
173.01	07/20/99	5,40	5.0-25.0	167.61			ND ¹	ND ¹	ND ¹	ND ¹	ND_1	4,500/11,000 ^{3,4}
	09/28/99	5.60		167.41	0.00		1,390 ⁶	124	ND ¹	62.9	43.1	5,280/6,150 ³
	01/07/00	5.92		167.09	0.00		1,450 ⁶	99.0	ND ¹	23.8	16.0	33,100
	03/31/00	5.23		167.78	0.00		ND^{t}	42	ND^1	ND ¹	ND ¹	17,000
	07/14/00	5.52		167.49	0.00		ND^1	44.7	ND^1	ND ¹	ND	66,500
	10/03/00	6.04		166.97	0.00		ND^1	56.7	ND^1	ND ¹	ND^1	57,500
	01/03/01	6.42		166.59	0.00		ND^1	$ND^{\mathfrak{l}}$	ND^1	ND ¹	ND	49,000
	04/04/01	6.14		166.87	0.00		ND^{1}	ND^1	ND^1	ND ¹	ND^{i}	38,700/37,800 ³
	07/17/01	5.30		167.71	0.00		ND ¹	ND ¹	ND^1	ND^1	ND	65,000/56,000 ³
173.50	10/03/01	7.38		166.12	0.00		<250	2.7	<2.5	<2.5	<2.5	14,000/18,000 ³

Table 1
Groundwater Monitoring Data and Analytical Results

					Product							
WELL ID/	DATE	DTW	S.I.	GWE	Thickness	TPH-D	TPH-G	В	T	E	X	MTBE
TOC*		(ft.)	(ft. bgs)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-3												
178.44	07/20/99	8.50	5.0-25.0	169.94		**	1,000	76	52	79	76	330
	09/28/99	8.31		170.13	0.00		1,860 ⁶	174	95.4	71.8	135	443/288 ³
	01/07/00	8.56		169.88	0.00		28,400 ⁶	2,450	3,090	1,560	3,910	1,940
	03/31/00	8.42		170.02	0.00		26,000 ⁶	1,300	2,900	2,600	3,500	2,800
	07/14/00	8.61		169.83	0.00		24,500 ⁶	1,850	2,630	2,750	3,900	548
	10/03/00	9.14		169.30	0.00		$22,000^6$	1,910	2,020	2,400	2,680	965
	01/03/01	9.06		169.38	0.00		14,000 ⁶	1,600	1,100	2,300	1,400	3,300
	04/04/01	8.98		169.46	0.00		19,600 ⁶	1,150	1,470	2,100	1,820	1,050/450 ³
	07/17/01	7.46		170.98	0.00		26,000 ⁶	1,500	2,100	2,100	3,400	¹ ND/350 ³
178.13	10/03/01	9.81		168.32	0.00		$22,000^6$	830	1,900	1,700	3,000	<1,000
MW-4												
179.10	07/20/99	7.40	5.0-25.0	171.70			69	2.7	0.77	ND	7.1	100
	09/28/99	7.19		171.91	0.00		4,050 ⁶	1,250	72.0	51.3	133	416/459 ³
	01/07/00	8.98		170.12	0.00		7,010 ⁶	2,260	167	271	276	764
	03/31/00	7.26		171.84	0.00		5,500 ⁶	1,800	230	330	400	1,000
	07/14/00	7.67		171.43	0.00		7,940 ⁶	2,810	332	450	247	1,530
	10/03/00	8.12		170.98	0.00		11,400 ⁶	3,110	437	519	816	1,040
	01/03/017	9.10		170.00	0.00		8,600 ⁶	2,500	340	480	960	850
	04/04/01	8.63		170.47	0.00		9,950 ⁶	2,380	126	416	725	1,1 40/8 19 ³
	07/17/01	6.49		172.61	0.00		$10,000^6$	2,300	110	410	800	1,200/900 ³
178.96	10/03/01	7.01		171.95	0.00		7,800 ⁶	2,100	85	380	390	580/820 ³
MW-5												_
169.18	10/03/01 ¹⁰	2.81		166.37	0.00		<50	<0.50	<0.50	< 0.50	<0.50	1,800/2,100 ³

Table 1 Groundwater Monitoring Data and Analytical Results

WELL ID/ TOC*	DATE	DTW	S.I.	GWE	Product Thickness	TPH-D	TPH-G	В	T	E	X	МТВЕ
100		(ft.)	(ft. bgs)	(msl)	(ft.)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)
MW-6 169.04	10/03/01 ¹⁰	2.87		166.17	0.00		<50	<0.50	<0.50	<0.50	<0.50	200/270 ³
MW-7 171.64	10/03/01 ¹⁰	7.62		164.02	0.00		10,000°	210	<50	<50	800	35,000/40,000 ³
Trip Blank												
TB-LB	07/20/99											
	09/28/99						ND	ND	ND	ND	ND	ND
	01/07/00						ND	ND	ND	ND	ND	ND .
	03/31/00						ND	ND	ND	ND	ND	ND
	07/14/00						ND	ND	ND	ND	ND	ND
	10/03/00						ND	ND	ND	ND	ND	ND
	01/03/01						ND	ND	ND	ND	ND	ND
	04/04/01						ND	ND	ND	ND	ND	ND
	07/17/01						ND	ND	ND	ND	ND	ND
	10/03/01			••	••		<50	< 0.50	< 0.50	<0.50	< 0.50	<5.0
	10/05/01						<50	< 0.50	< 0.50	< 0.50	< 0.50	<5.0

Groundwater Monitoring Data and Analytical Results

Tosco 76 Service Station #1156 4276 MacArthur Boulevard Oakland, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to September 28, 1999, were compiled from reports prepared by Environmental Resolutions, Inc.

TOC = Top of Casing

TPH-D = Total Petroleum Hydrocarbons as Diesel

(ppb) = Parts per billion

DTW = Depth to Water

TPH-G = Total Petroleum Hydrocarbons as Gasoline

ND = Not Detected

(ft.) = Feet

B = Benzene

-- = Not Measured/Not Analyzed

S.I. = Screen Interval

T = Toluene

(ft. bgs) = Feet Below Ground Surface

E = Ethylbenzene

GWE = Groundwater Elevation

X = Xylenes

(msl) = Mean sea level

MTBE = Methyl tertiary butyl ether

- * TOC elevations were resurveyed in September 2001, by Morrow Surveying. TOC elevations are based on City of Oakland Benchmark No. 3967, (Elevation = 174.40 feet, msl).
- ** GWE has been corrected due to the presence of free product; correction factor: [(TOC DTW) + (Product Thickness x 0.77)].
- Detection limit raised. Refer to analytical reports.
- ² Laboratory report indicates unidentified hydrocarbons C9-C24.
- MTBE by EPA Method 8260.
- Laboratory analyzed sample past EPA recommended holding time.
- 5 Total Recoverable Petroleum Oil was ND.
- ⁶ Laboratory report indicates gasoline C6-C12.
- This sample was originally analyzed within holding time. Re-analysis for confirmation or dilution was performed past the recommended holding time.
- ⁸ Laboratory report indicates unidentified hydrocarbons <C16.
- Laboratory report indicates weathered gasoline C6-C12.
- Well development performed.

Table 2
Groundwater Analytical Results

WELL ID	DATE	ETHANOL	TBA	MTBE	DIPE	ETBE	TAME	1,2-DCA	EDB	HVOCs	SVOC₅
		(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ррь)	(ppb)	(ppb)
MW-1	07/20/99	 -		11,000 ³						ND¹	ND^2
	09/28/99		ND^6	333	ND^6	ND^6	ND^6			ND^4	ND ⁵
	01/07/00									$ND^{7.8}$	ND ⁹
	03/31/00								~~	11	ND^{10}
	07/14/00									ND ¹²	ND^{13}
	10/03/00									ND ¹⁵	ND^{14}
	01/03/01					<u></u>				ND ¹⁵	ND^{16}
	04/04/01	${ m ND}^6$	ND^6	481	ND^6	ND^6	ND ⁶	ND ⁶	ND^6	ND ¹⁷	ND ¹⁸
	07/17/01	ND ⁶	ND^6	230	ND ⁶	ND ⁶	ND ⁶	ND ⁶	ND ⁶	ND^{20}	ND ¹⁹
			6		armh	2776	smb				
MW-2	09/28/99	6	ND ⁶	6,150	ND ⁶	ND ⁶	ND ⁶	 ND6	 ND6		
	04/04/01	ND ⁶	ND ⁶	37,800	ND ⁶	ND ⁶	ND ⁶	ND ⁶	ND ⁶		
	07/17/01	ND ⁶	ND ⁶	56,000	ND^6	ND^6	ND ⁶	ND^6	ND^6		
	10/03/01		**	18,000							••
MW-3	09/28/99		ND^6	288	${ m ND}^6$	ND ⁶	8.80				
172 77 "3	04/04/01	ND ⁶	ND ⁶	450	ND ⁶	ND^6	ND ⁶	ND^6	ND^6		
	07/17/01	ND ⁶	ND ⁶	350	ND ⁶	ND ⁶	ND ⁶	ND ⁶	ND ⁶		
			6		rim6	ND ⁶	ND ⁶				
MW-4	09/28/99	6	ND ⁶	459	ND ⁶ ND ⁶	ND°	ND ⁶	 ND ⁶	ND ⁶		·
	04/04/01	ND ⁶	ND ⁶	819		ND ⁶	ND ⁶	ND _e	ND ⁶		
	07/17/01	ND ⁶	ND ⁶	900	ND ⁶						
	10/03/01			820	••		aw .				
MW-5	10/03/01			2,100		••		**			

Groundwater Analytical Results

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	МТВЕ <i>(ppb)</i>	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)	HVOCs (ppb)	SVOCs (pph)
MW-6	10/03/01			270			·			••	
MW-7	10/03/01	-		40,000							

Groundwater Analytical Results

Tosco 76 Service Station #1156 4276 MacArthur Boulevard Oakland, California

EXPLANATIONS:

Groundwater laboratory analytical results prior to September 28, 1999, were compiled from reports prepared by Environmental Resolutions, Inc.

TBA = Tertiary butyl alcohol

TAME = Tertiary amyl methyl ether

(ppb) = Parts per billion

MTBE = Methyl tertiary butyl ether

EDB = 1.2-Dibromoethane

ND = Not Detected

DIPE = Di-isopropyl ether

HVOCs = Halogenated Volatile Organic Compounds

-- = Not Analyzed

ETBE = Ethyl tertiary butyl ether

SVOCs = Semi-Volatile Organic Compounds

- All HVOCs were ND except for Chlorobenzene at 12 ppb; 1,2-Dichlorobenzene (1,2-DCB) at 3.9 ppb; 1,1-Dichloroethane (1,1-DCA) at 2.0 ppb; 1,2-Dichloroethane (1,2-DCA) at 20 ppb; cis-1,2-Dichloroethene (cis-1,2-DCE) at 3.6 ppb and 1,2-Dichloropropane (1,2-DCP) at 0.92 ppb.
- ² All SVOCs were ND except for Benzyl alcohol at 37 ppb; 2,4-Dimethylphenol at 140 ppb; 2-Methylnaphthalene at 240 ppb; 4-Methylphenol at 27 ppb and Naphthalene at 600 ppb.
- 3 Laboratory analyzed sample past EPA recommended holding time.
- All HVOCs were ND except for Benzene at 6,130 ppb; Ethylbenzene at 1,590 ppb; Naphthalene at 534 ppb; Toluene at 11,900 ppb; 1,2,4-Trimethylbenzene at 1,240 ppb; 1,3,5-Trimethylbenzene at 318 ppb and Total Xylenes at 7,360 ppb.
- All SVOCs were ND (with a raised detection limit) except for 2,4-Dimethylphenol at 13.6 ppb; 2-Methylphenol at 87.4 ppb; 2-Methylphenol at 26.4; 4-Methylphenol at 35.6 and Naphthalene at 292 ppb.
- 6 Detection limit raised. Refer to analytical reports.
- All HVOCs were ND (with a raised detection limit) except for Benzene at 8,380 ppb; Ethylbenzene at 2,380 ppb; Naphthalene at 1,050 ppb; n-Propylbenzene at 371 ppb; Toluene at 17,600 ppb; 1,2,4-Trimethylbenzene at 2,210 ppb; 1,3,5-Trimethylbenzene at 597 ppb and Total Xylenes at 10,800 ppb.
- 8 EPA Method 8260 for HVOCs.
- ⁹ All SVOCs were ND (with a raised detection limit) except for 2-Methylnaphthalene at 315 ppb and Naphthalene at 615 ppb.
- All SVOCs were ND except for Bis(2-ethylhexyl)phthalate at 10 ppb; 1,2-DCB at 6.2 ppb; 2-Methylphaphthalene at 73 ppb; 2-Methylphenol at 31 ppb; 4-Methylphenol at 18 ppb and Naphthalene at 140 ppb. Laboratory report indicates all SVOCs were analyzed outside the EPA recommended holding time.
- 11 Laboratory did not analyze for HVOCs.
- All HVOCs were ND (with a raised detection limit) except for Tetrachloroethene at 334 ppb.
- All SVOCs were ND (with a raised detection limit) except for 2-Methylnaphthalene at 300 ppb and Naphthalene at 690 ppb.
- All SVOCs were ND (with a raised detection limit) except for Benzoic acid at 362 ppb; Bis(2-ethylhexyl)phthalate at 51.6 ppb; 2-Methylnaphthalene at 98.1 ppb; 4-Methylphenol at 28.9 ppb and Naphthalene at 361 ppb.
- 15 All HVOCs were ND (with a raised detection limit).
- All SVOCs were ND (with a raised detection limit) except for 2-Methylnaphthalene at 180 ppb and Naphthalene at 400 ppb.
- All HVOCs were ND except for cis-1,2-DCA at 3.4 ppb; 1,2-DCA at 5.7 ppb; Chlorobenzene at 5.6 ppb and 1,2-DCB at 4.6 ppb.
- All SVOCs were ND except for Benzoic acid at 28 ppb; Bis(2-ethylhexyl)phthalate at 55 ppb; 2-Methylnaphthalene at 78 ppb and Naphthalene at 490 ppb.

Groundwater Analytical Results

Tosco 76 Service Station #1156 4276 MacArthur Boulevard Oakland, California

EXPLANATIONS: (cont)

- All SVOCs were ND except for Bis(2-ethylhexyl)phthalate at 400 ppb; 1,2-DCB at 18 ppb; 2,4-Dimethylphenol at 16 ppb; 2-Methylphenol at 29 ppb; 2-Methylphenol at 47 ppb; 4-Methylphenol at 25 ppb; Naphthalene at 740 ppb and N-Nitrosodimethylamine at 7.7 ppb.
- Volatile Organic Compounds (VOCs) by EPA Method 8021B were ND with a raised detection limit.

ANALYTICAL METHODS:

EPA Method 8260 for Oxygenate Compounds EPA Method 8010 for HVOCs EPA Method 8270 for SVOCs

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 well development, each well is monitored for the presence of free-phase hydrocarbons and the depth to water is recorded. Wells are then developed by alternately surging the well with the bailer, then purging the well with a pump to remove accumulated sediments and draw groundwater into the well. Development continues until the groundwater parameters (temperature, pH, and conductivity) have stabilized.

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.

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 Tosco Marketing Company, the purge water and decontamination water generated during sampling activities is transported to Tosco - San Francisco Area Refinery, located in Rodeo, California.

TOSCO 76 SERVICE STATION #1156 OAKLAND, CA

MONITORING AND SAMPLING EVENT OF OCTOBER 3, 2001

lient/			Job#:	180225	<u> </u>	
acility #	76 MacAithu	81.1	Date:	10-3-	_	
		UIVE .	•			
ity: Oa	Kland	 	_ Sample	r: Joe		
				- L		
Well ID	mw-1	Well Co	ondition:	0.K		<u>.</u>
Vell Diameter	$\frac{\nu_{in}}{\nu_{in}}$	Hydroc Thickne	-1/	Amount i		(gal.)
otal Depth	25.17	Volum			-	= 0.66
epth to Water	7.89	Factor	(VF)	6" = 1.50	12" = 5.80	
	17.28 x	vf <u>2:17</u> =	2.94 x 3 (case ve	olume) = Estimated	Purge Volume: _	g (gal.)
Purge	Disposable Bailer		Sampling Equipment:	(Disposable	Bailer	
Equipment:	Bailer ⁻ Stack	•		Bailer Pressure Ba		
	Suction	•		Grab Sampl		•
	Other:	-	•	Other:	_	
Starting Time:	2:50	_	eather Condition		Oden Å	
Sampling Time: Purging Flow Rat	3 <u>,108.m (15</u> te:	<u>10</u>) w	Vater Color:	clea/_		1 P S (gal)
Sampling Time: Purging Flow Rate Did well de-wate	3 , 10 Q. m (15) te:	10) W S If	Vater Color:	ion: Vol	ume:	(gal) Alkalinity (ppm)
Sampling Time: Purging Flow Rat Did well de-wate	3',10 f. m (15	Condu	vater Color: lediment Descript f yes; Time: crivity O Tempers/cm X	ion: Voi	ume:	Alkalinity
Sampling Time: Purging Flow Rate Did well de-wate Time 2:57 2:59	3,10 f. m (15) te: or volume pH (gal.) 3 7.30 6 7.32	Condu	vater Color: lediment Descript f yes; Time: crivity	ion: Vol	ume:	Alkalinity
Sampling Time: Purging Flow Rat Did well de-wate Time	3,100.m (15) te: 1 or er? Volume pH (gal.) 3 7.30	Condu	vater Color: lediment Descript lyes; Time: crivity O Temper ls/cm x	ion: Voi	ume:	Alkalinity
Sampling Time: Purging Flow Rate Did well de-wate Time 2:57 2:59	3,10 f. m (15) te: or volume pH (gal.) 3 7.30 6 7.32	Condu	vater Color: lediment Descript f yes; Time: crivity	ion: Vol	ume:	Alkalinity
Sampling Time: Purging Flow Rate Did well de-wate Time 2:57 2:59	3,10 f. m (15) te: or volume pH (gal.) 3 7.30 6 7.32	Condu	Vater Color: Jediment Descript Fyes; Time: ctivity Color Temper ctivity Color Temp	ion: Vol	ume:	Alkalinity
Sampling Time: Purging Flow Rate Did well de-wate Time 2:57 2:59 3:01	3,100.m (15) te: 1 or or? Volume pH (gal.) 3 7.30 6 7.32 9 7.36	Condus mile Condus mile It	vater Color: lediment Descript f yes; Time: crivity O Temper	ion: Vol	ORP (mV)	Alkalinity
Sampling Time: Purging Flow Rate Did well de-wate Time 2:57 2:59 3:01	3,10 f. m (15) te: or volume pH (gal.) 3 7.30 6 7.32	Condu	Vater Color: Jediment Descript Fyes; Time: ctivity Color Temper ctivity Color Temp	ion: Vol. Zature D.O. (mg/I	ORP (mV)	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 2:57 2:59	3,100.m (15) te: 1 or Property of the series of the serie	Conduction (Conduction) Conduction (Conductio	ATORY INFORMAPRESERV. TYPE	TION LABORATORY	ORP (mV)	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 2:57 2:59 3:01	3,100.m (15) te: 1 or Property of the series of the serie	Conduction (Conduction) Conduction (Conductio	ATORY INFORMAPRESERV. TYPE	TION LABORATORY	ORP (mV)	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 2:57 2:59 3:01	3,100.m (15) te: 1 or Property of the series of the serie	Conduction (Conduction) Conduction (Conductio	ATORY INFORMAPRESERV. TYPE	TION LABORATORY	ORP (mV)	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 2:57 2:59 3:01	3,100.m (15) te: 1 or Property of the series of the serie	Conduction (Conduction) Conduction (Conductio	ATORY INFORMAPRESERV. TYPE	TION LABORATORY	ORP (mV)	Alkalinity (ppm)

Client/ acility # <u>115</u>	6		Job#:	180225		
	76 MacAsthu	Blva	Date:	10-3-0		
City: Od	kland		Sample	er: Joe		 -
Well ID	mw-2	Well (Condition:	ork		
Well Diameter	2 in.	Hydro Thick	carbon 6	Amount Ba		(ord)
Total Depth	25.48 #	Value			* -	= 0.66
Depth to Water	7-38 4	Facto	x (VF)	6" = 1.50	12" = 5.80	
	x	vf <u>ø ·17</u> :	3.07 x 3 (case vo	olume) = Estimated Pu	irge Volume:	داهوا ک
Purge Equipment:	Disposable Bailer Bailer Stack	•	Sampling Equipment:	Disposable Ba Bailer Pressure Baile		. ,
·	Suction Grundfas			Grab Sample		•
Starting Time:	Other:	- - - - - - - - - - - - - - - - - - -	Weather Condition			
Sampling Time: Purging Flow Rate	3:0 3:358.m (1)	<u>(3</u> 5) v	Weather Condition Water Color:	s: <u>clear</u> clear	Odor	9 es (0al)
Sampling Time: Purging Flow Rate Did well de-wate	3:0 3:358.m (1)	Condi	Weather Condition: Water Color: Sediment Descript If yes; Time: Description Temperos/cm X F	s: <u>Clear</u> ion: Volum rature D.O. (mg/L)	Odor	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-water	3:0 3:358.m (13 e:	Conda 1 2 2 2	Weather Condition: Water Color: Sediment Descript If yes; Time:	s: Clear Clear Clear Column Cature D.O. (mg/L)	Odor:	Alkalinity
Sampling Time: Purging Flow Rate Did well de-water Time	3'. 6 3'. 358. m (1) e:	Conda 1 2 2 2	Weather Condition: Water Color: Sediment Descript If yes; Time: Description: Temperos/cm X 7 2	s: <u>Clear</u> clear clear volum cause D.O. (mg/L)	Odor:	Alkalinity
Sampling Time: Purging Flow Rate Did well de-water Time 2,22 2,24	3:0 3:358.m (13 e:	Conda 1 2 2 2	Weather Condition: Water Color: Sediment Descript If yes; Time:	s: <u>Clear</u> clear clear volum cause D.O. (mg/L)	Odor:	Alkalinity
Sampling Time: Purging Flow Rate Did well de-wate Time 2,22 3,24	3:0 3:358.m (13 e:	Conda (mh) 2. 2. 2. 2	Weather Conditions Water Color: Sediment Descript If yes; Time: Descrivity Temper Os/cm x	s: Clear Clear Clear Clear Tion: D.O. (mg/L)	Odor:	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 2,22 3,24 3,26 SAMPLE ID	3'. 6 3'. 358. m (13 e: or r? /olume pH (gal.) 2 7./8 7./0 9.5 7./7	Conda pumb 2 2 2 2 2 LABOR REFRIG.	Neather Conditions Nater Color:	s: Clear Clear Clear Column Tion LABORATORY	Odor:	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 2,22 3,24 3,26	3:0 3:358.m (13 e:	Condiguenth 2 2 2 1 LABOR	Weather Conditions Water Color: Sediment Descript If yes; Time: Descrivity Temper Os/cm x	s: Clear Clear Clear Clear Tion: D.O. (mg/L)	Odor:	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 2,22 3,24 3,26 SAMPLE ID	3'. 6 3'. 358. m (13 e: or r? /olume pH (gal.) 2 7./8 7./0 9.5 7./7	Conda pumb 2 2 2 2 2 LABOR REFRIG.	Neather Conditions Nater Color:	s: Clear Clear Clear Column Tion LABORATORY	Odor:	Alkalinity (ppm)
Sampling Time: Purging Flow Rate Did well de-wate Time 2,22 3,24 3,26 SAMPLE ID	3'. 6 3'. 358. m (13 e: or r? /olume pH (gal.) 2 7./8 7./0 9.5 7./7	Conda pumb 2 2 2 2 2 LABOR REFRIG.	Neather Conditions Nater Color:	s: Clear Clear Clear Column Tion LABORATORY	Odor:	Alkalinity (ppm)

Client/ Facility #	6		Job#:	180225	
Address: 42	76 MacArth	1 Blva	Date:	10-3-0	<u> </u>
City: Od	kland		Sample	er: Joe	
Well ID	mw-3	Well (Condition:	ork	
Well Diameter	$\frac{2}{100}$	Hydro Thick	carbon 6	Amount Bai	
Total Depth	25.03 +	Volu			
Depth to Water	9.81	Facto	ox (VF)	6" = 1.50	12" = 5.80
Purge Equipment:	Disposable Bailer Bailer Stack Suction Grundfos Other:	•	Sampling Equipment:	Disposable Baller Pressure Balle Grab Sample	
Purging Flow Rate	2.42 f. m (1) te:	 .	Sediment Descript	Volun	ne:
44.00	(gal.)	μπιλ	os/cm / -P	(mg/L)	(mV) (ppm)
2:20 	2.5 5.5 8 7.40	0 1	92 7 95 7 .93 7	3.1 2.4 3.4	
SAMPLE ID	(#) - CONTAINER	LABOR REFRIG.	ATORY INFORMA	ATION LABORATORY	ANALYSES
MW-3	3404	TY	HCL	Seq.	TPHG, BTEX, MTB
				i .	1
COMMENTS:					

Client/ Facility # <u>115</u>	6		Job#:	18	0225	<u>-</u>	
	76 MacArthu	Blvd	Date:	10	-3-0	<u> </u>	
City: Oa	4			oler: <u>To</u>)e.		· · · · · · · · · · · · · · · · · · ·
Well ID	mw-4	Well C	Condition:	01	k_		,
Well Diameter		Hydro Thickr	carbon 6		mount Bai		- (cal.)
Total Depth	25.32	Volum			3" = 0.38		- 0.66
Depth to Water	7.01 4	Facto	r (VF)	6 = 1.50) 	12" = 5.80	
	18.31 x	vf <u>e 17</u> .	3.11 x 3 (case	volume) = E	stimated Pur	rge Volume:	9.5 (cal.)
Purge Equipment:	Disposable Bailer Bailer Stack	•	Sampling Equipment	: Disp	osable Bai	ler	
•	Section Grundfos	•.		·Gral	sure Bailer Sample		
	Other:	_		Other:		. "	
Starting Time: Sampling Time: Purging Flow Rat	2 105 P.m (140) e:los	2) v	Veather Condition Vater Color: Sediment Descrip	<u>cleo</u>			<u> </u>
Did well de-wate	r? ————	t	f yes; Time: _		Volum	e:	; (gal.)
	/olume pH (gal.)	umha	.~	۴	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
1:50	$\frac{3}{1}$ $\frac{7.46}{3.26}$	<u>4.</u>	38 7	<u>29</u> 33			
11:55	9.5 7.25	4	.43. 7	3.3			
				<u> </u>			
					- · · ·		
SAMPLE ID	(#) - CONTAINER	LABORA REFRIG.	ATORY INFORM. PRESERV. TYPE		RATORY	ANAL	YSES
mw-4	BYOA	Υ	HCL	Sec		TPHG, BT	
		<u></u>		ļ .			
-	 						
00101000	·						
COMMENTS: _			· · · · · · · ·				
		•	·	<u>,</u>			<u> </u>

WELL MONITORING/DEVELOPMENT FIELD DATA SHEET

Client/ Facility 1 &	<u> </u>	# 113	36		Job#:		86031	,5	
Address: <u>1</u>	1056	Mac	tathi	12 Blod	Date:		0-3-	0	
City:	g K I~	d, ,	- A		Samp	ler:	Joc		
Weil ID	mr	<u> </u>	V	Vell Condition	n:	0.1	<u>C</u>		
Well Diameter			-	lydrocarbon hickness:	0	Ft.	Amount B	-	(gal,)
Total Depth		25.42	L	Volume Factor (VF)	2" = 0.	17	3" = 0.38		1" = 0.66
Depth to Water		2.81,			<u> </u>		4 p 	······································	
	2	?.6]	(: <u>0</u>	17 = 384 ;	(3 (case ·	voluma) =	Estimated Fu	irga Valume: _	3 9 (gai.)
Purge Equipment:	Bailer Stack Guch Grund	TIT .			mpling Jipment:	Ba Pr Gr	sposable Baller essure Balle ab Sample	er	
Starting Time: Sampling Time: Purging Flow Ra Did well de-wat	ate:		1202) 1 gpm	Water Co Sediment	lor: Descrip	ተ	Cleer J Volu	Odor: <u> </u>	1 Ø M <(gal.
Time	Volume (gal.)	pН		onductivity v	Tempe	rature	D.O. (mg/L)	ORP (mV)	Alkalinity (ppm)
11:08	4	7.37		8.97	73	8			
11:71	<u> </u>	7.41		7.15	74				
<u> </u>	<u> </u>	7.40		9.16	73.				
" <u>11:20</u>	15	7.42		9.20	<u> つ3.</u> フ3.				
11:24	21	7.45		9.22	73.				
1/:37	25	7.43		9,2/	72	9			
wd 11:40	29	7.44		9.24	74	/			
11:45	34	7.48		9.26	7				
11:44	39	746		9.30					
SAMPLE ID	(#) - CO	NTAINER	LABO	ORATORY IN			RATORY	ANAL	.YSES
MW-5	ንላ	0 A	Υ_	нс		Se	7	TPHG. STE	Y-MTBE
		<u> </u>							
COMMENTS: _									

WELL MONITORING/DEVELOPMENT

					CABO		
Client/ Facility 10	sco # 11.	56	\ Jobi	#: <u> </u>	80 98.	<u>5</u>	
	276 Mac	Arthu.	2 Bld). Date	e: <u>t</u>	0-3-0	7	
City:	a KInd,	C A	Sam	pler:	50 €	2	
	mw-6		- 11 C 11 ci	<i></i>	1		·
Well ID		-	ell Condition: _			-,	
Well Diameter		Th	drocarbon ickness:	ستونسه	Amount Bai (product/wate		(gal.)
Total Depth	25.32	v	olume 2" = 1 actor (VF)		3" = 0.38		!" = 0.66
Depth to Water							
	22.45	x ∵= <u>0.1</u>] =3.82 x 3 (case	e volume) = §	Estimated Furg	je Volume: J	39. (cal.
Purge Equipment:	Disposable Baile Bailer Stack Scotten Grundfes Other:		Sampling Equipmen	it: Disp Baild Pres Grai	er essure Bailer b Sample		
		9:10 040)	Weather Conditi		Clear		
Sampling Time: Purging Flow Ra	10:40 A.m (1	040) 1 gpm.	Water Color:	Tい。し ption:	<u>.'al</u>	Odor:	
Purging Flow Ra Did well de-wat	10:40 A.m (10 ate: er? Volume pH (gal.)	040) 1 gpm. ————————————————————————————————————	Water Color: Sediment Descri If yes; Time: _ ductivity COTemp thos/cm COTemp	ption:	<u>.'al</u>	Odor:	(ga Alkalinit
Sampling Time: Purging Flow Ra Did well de-wat	10:40 A.m (10 ate:	O 40) I gpm. Con um	Water Color: Sediment Describer Time: _ ductivity CO Tempelhos/cm 75	ption:	Volum	Odor:	(ga Alkalinit
Sampling Time: Purging Flow Ra Did well de-wat Time 9:26	10:40 A.m (10 ate:	040) 1 gpm. Con µm 1 0 1 0	Water Color: Sediment Describer	ption:	Volum	Odor:	(ga Alkalinit
Sampling Time: Purging Flow Ra Did well de-wat Time 9:26 9:35 9:39	10:40 A.m (10) ate: er? Volume pid (gal.) 4 7.49 8 7.55 12 7.55	Con	Water Color: Sediment Description Time: ductivity properties	ption:	Volum	Odor:	(ga Alkalinit
Sampling Time: Purging Flow Ra Did well de-wat Time 9:21 9:35 9:39	10:40 A.m (10) ate: ver? Volume pid (gal.) 4 7.49 8 7.55 10 7.55 16 7.58 20 7.55 23 7.55	Con- µm 1 0	Water Color: Sediment Description If yes; Time: _ ductivity If yes; Time: ductivity If yes; Time: ductivity If yes; Time: ductivity If yes; Time: ductivity If yes; Time: ductivity If yes; Time: ductivity If yes; Time: 74 74 74 76 77 77 77 77 77 77	ption:	Volum	Odor:	(ga Alkalinit
Sampling Time: Purging Flow Ra Did well de-wat Time 9:21 9:25 9:39 10:00 10:03	10:40 A.m (10) ate: ter? Volume (gal.) 4 7.49 8 7.55 10 7.55 20 7.55 23 7.55 26 7.58	Con µm 10 10 9	Water Color: Sediment Description If yes; Time: _ ductivity O Tempoles 16	ption:	Volum	Odor:	(ga Alkalinit
Sampling Time: Purging Flow Ra Did well de-wat Time 9:21 9:25 9:39 10:00 10:03	10:40 A.m (10) ate: volume (gal.) 4 7.49 8 7.55 12 7.55 16 7.55 20 7.55 23 7.55 31 7.56	Con	Water Color:	ption:	Volum	Odor:	(ga Alkalinit
Sampling Time: Purging Flow Ra Did well de-wat Time 9:21 9:25 9:35 9:39 10:00 10:00 10:20	10:40 A.m (10) ate: ter? Volume (gal.) 4 7.49 8 7.55 10 7.55 20 7.55 23 7.55 26 7.58	Con	Water Color:	ption:	Volum	Odor:	(ga Alkalinit
Sampling Time: Purging Flow Ra Did well de-wat Time 9:21 9:25 9:39 10:00 10:03 10:20	10:40 A.m (10) ate: ter? Volume (gal.) 4 7.49 8 7.55 16 7.55 20 7.55 23 7.56 31 7.56 35 7.56	Con 10 10 10 10 10 10 10 10 10 10 10 10 10	Water Color:	ption:	Volum	Odor:	(ga Alkalinit
Sampling Time: Purging Flow Ra Did well de-wat Time 9:21 9:25 9:35 9:39 10:00 10:03 10:20 W/0:36 10:30	10:40 A.m (10) ate: er7 Volume (gal.) 4 7.49 8 7.55 16 7.55 20 7.55 23 7.56 31 7.56 31 7.56 31 7.56 31 7.56 31 7.56	Con 10 10 10 10 10 10 10 10 10 10 10 10 10	Water Color:	ption: perature prior: generature priority priority	D.O. (mg/L)	Odor:	Alkalinit (ppm)
Sampling Time: Purging Flow Ra Did well de-wat Time 9:21 9:25 9:39 10:00 10:03 10:20 10:30	10:40 A.m (1) ate: volume (gal.) 4 7.49 8 7.53 10 7.55 10 7.55 20 7.55 23 7.56 31 7.56 31 7.53 35 7.54	Con	Water Color:	ption:	D.O. (mg/L)	Odor:	Alkalinit (ppm)

WELL MONITORING/DEVELOPMENT FIELD DATA SHEET

Client/ Facility 1 &	sco # 110	γ (0	Job#	1803	35	
	a 76 Mac F		2 Bli) Date	: 10-3	-0/	
,City: O	a KI-ral, c	A_		pler: 50	<	·
Well ID	mw-7	_ w	ell Condition: _	Ø.K		
Well Diameter	<u></u>	-	/drocarbon nickness:	Amount		(gal.)
Total Depth	25.51	<u></u>		0.17 3" = 0.3	38 4	" = 0.66
Depth to Water	7.62		Factor (VF)	6" = 1.50	12" = 5.80	
Purge Equipment:	17.89 Disposable Salle Saller Stack Suction Grundfes Other:	:	7 <u>- 3.04</u> x 3 case Sempling Equipmen	t: <u>Disposable A</u> Bailer Pressure Bai Grab Sample	Pailer ler	3/ (ggj.)
Purging Flow Ra	er?VH	1323) gpm.	Sediment Descri	mu/ky	Odor:	(Gal.) Alkalinity
12:20 12:23 12:29	(gal.) 3 7.10 6 7.08 9 6.98 12 6.97		$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	6.4	(mV)	(bbm)
tel 12:45	15 6.98	3	69 73	.8		
<u>12:48</u>	18 6.95		3:69 <u>73</u>	<u>s</u>		
1:03	24 6.92		.72 73	6		***************************************
1:14	27 <u>6.92</u> 31 <u>6.92</u>		3.7/ 73 3.76 73	4		
SAMPLE ID	(#) - CONTAINER	LABOI REFRIG.	RATORY INFORMA	LABORATORY	ANAL	
MW-7	3vo4	Υ	ИСС	5-62	17PHG, 13TE	EX,,mTRE
		· · · · · · · · · · · · · · · · · · ·				
COMMENTS:	Control of the Contro					3/97-fisions, for



	1	1				OSCO (76)						_		Contact	t (Name))	MR. I	DAVID	DEW	ITT_	
	P					6 MACARTH		OAKL	AND	CA		-					(925)			4	
TOSO						180225.8							Laborator				a Ana	<u>llyti</u>	ca1		<u> </u>
8 100 00	· .	ı				-Ryan_Inc						'	Laborator	ry Relac	nuK eec	ber					
Toote Marketing I 2000 Crow Caryon San Ramon, Califo	n.PL, \$14, 400					Court, S			прТТ	aCA	<u> 945£</u>	18 f	Semples	Collecte	ed by (F	lame)"	<u> </u>	<u>: </u>	EMI	<u> </u>	
•		ľ	'roject Lo	-	•	eanna L. 5-551-755				 551_		- '	Collection	`` (57/	\mathcal{L}					
-		 	<u> </u>	"	none).		72(rox	Humber	r) <u>-1</u>	-155-	7000	<u>ــــــــــــــــــــــــــــــــــــ</u>	Signature			S					
410027	1	ا ۾ ا	Air Charced	يُ	!			<u>:</u>	7-		T 19	· .		•• To P	Be Perfo	med	т—				DO NOT BILL
	Sample Number	Containen	₹ &	Grab Composite Discrete		aftion	ا ت	BTEX WATSE			S S	dette	Ī	Organica							TB-LB ANALYSIS
ğ	2	8	√∪	888		ا ق	्रि ४	Z E	ļ	2	taloca	Ę	Organica	ğ	1 5 2	,		ı			D. MEDEL 0040
Sample Number	Samp.	5	Soll Water	900		1 & '	ع ع ک	± _		20 6	1 20	* 80	ja (c	SED SE	7 7	;					Run MTBE by 8260 on all 8020 MTBE
Ë	ğ.	Mumber	* States	<u>.</u>	<u>.</u>	Sample	7 E	17H G=+	1PH Dissal (9015)	Oil and Grades (\$520)	Purpeable Halocarbo (8010)	Purgeable Arometles (8020)	Purgedble (8240)	Extractoble (8270)	Metals CA.C. Pb.Zn.Ni (ICAP or AA)	į					hits.
mn rp			<u> </u>	ļ <u> </u>		••	 	 	 -	-	" !				1200	-	 		-		
TB-LB	01	VoA		G_	-	H CC	Y	7	<u> </u>	-	. /	i—		 	<u> </u>		-	 	-	 	
mw-1	0)_	304		/	1510	,	,				<u> </u>	<u> </u>	<u> </u>	 	ļ		_	<u> </u>	J		<u> </u>
WM-5	03	'			1535		/	<u> </u>		<u> </u>	<u> </u> !	 		<u></u>	<u> </u>	ļ					
mω.3	01			/_	1442		/	<u>\</u>	<u> </u>	<u> </u>	.	l		<u> </u>	<u> </u>	<u> </u>	<u> </u>	<u> </u>	 		<u> </u>
MW-4	8	1	/	,	1405	1.	1	/		<u> </u>		<u> </u>		<u> </u>	ļ'						
mw.s	06	/		,	1202	/	/	1				<u> </u>		<u> </u>	<u> </u>	<u> </u>					
MW-6	07	,	/	,	1040		/_	<u>\</u>	<u> </u>	<u> </u>		l	_	<u> </u>	<u> </u> '	ļ	1	 	<u> </u>		<u> </u>
mw-7	8	,	/	,	1323	/	/	<u> </u>	-	. !	<u> </u>	ļ	_	<u> </u>	<u> </u>	 		—	 		
	l							.]		'	<u> </u>	 	_		 	·		-		- 	
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													<u> </u>	<u> </u>	<u> </u>		<u></u>	<u> </u>	<u> </u>	<u> </u>	
Relinguished by ((Signature)		1 '	inization R Inc.	De le	ote/Time ago	Rea	elvedy (B)	(Sland	7	0	C	Organizali	ion	Date	13/4	1900		Turn A	24	ne (Circle Choloe) Hre.
Relinquiched B)			Orga	nizaVoti		ate/Time	Rec	elved By				(Organizali	ion	Dole	•/Ilm•					Hre. Daye
															 					10	Doye
Relinquished By ((Signature)		Orga	nization	De	ale/IIme	Reol	eved Fo	r Lobor	alory Dy	y (Signal	ur•)			Date	•/Time				An Coi	ntrooted
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18 October, 2001

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

GETTLEK-KYAN INC.

RECEIVED

RE: Tosco(1) Sequoia Report: L110027

Enclosed are the results of analyses for samples received by the laboratory on 10/03/01 19:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Solonya K. Palt

Latonya Pelt Project Manager

CA ELAP Certificate #2360



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

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager: Deanna Harding

Reported: 10/18/01 07:08

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L110027-01	Water	10/03/01 00:00	10/03/01 19:00
MW-1	L110027-02	Water	10/03/01 15:10	10/03/01 19:00
MW-2	L110027-03	Water	10/03/01 15:35	10/03/01 19:00
MW-3	L110027-04	Water	10/03/01 14:42	10/03/01 19:00
MW-4	L110027-05	Water	10/03/01 14:05	10/03/01 19:00
MW-5	L110027-06	Water	10/03/01 12:02	10/03/01 19:00
MW-6	L110027-07	Water	10/03/01 10:40	10/03/01 19:00
MW-7	L110027-08	Water	10/03/01 13:23	10/03/01 19:00

Sequoia Analytical - San Carlos

Solonya K. Palt

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.



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Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager: Deanna Harding

Reported: 10/18/01 07:08

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (L110027-01) Water	Sampled: 10/03/01 00:00	Received:	10/03/01	19:00					
Purgeable Hydrocarbons as Gas		50	ug/l	1	1100059	10/12/01	10/12/01	DHS LUFT	
Benzene	ND	0.50	•	**	**	н	**	•	
Toluene	ND	0.50	**	π	₩.	4	n	u	
Ethylbenzene	ND	0.50	Ħ	н		П	H	n	
Xylenes (total)	ND	0.50	n		н	H	"	п	
Methyl tert-butyl ether	ND	5.0		*	lt .		#	.**	
Surrogate: a,a,a-Trifluorotoluer	ne	92.1 %	70	-130	77	"	н	н	
MW-1 (L110027-02) Water		Received: 1	0/03/01	19:00			. 		
Purgeable Hydrocarbons as G		25000	ug/l	500	1100059	10/12/01	10/12/01	DHS LUFT	P-01
Benzene	8200	250	Ħ	*	7	11	Ħ	н	
Toluene	18000	250		**	•	и	H	*	
Ethylbenzene	3000	250	n	n		**	n	,	
Xylenes (total)	16000	250	n	н .	H	*	7	**	
Methyl tert-butyl ether	ND	2500	. н	*	**	n		* · · · · · · · · · · · · · · · · · · ·	
Surrogate: a,a,a-Trifluorotolue	ne	94.7 %	70	-130	Ħ	77	"	"	
MW-2 (L110027-03) Water		Received:	10/03/01	19:00					
Purgeable Hydrocarbons as Gas		250	ug/l	5	1100059	10/12/01	10/12/01	DHS LUFT	
Benzene	2.7	2.5	11	•	#	**			
Toluene	ND	2.5	н	*	H	Ħ	H	11	
Ethylbenzene	ND	2.5	*	Ħ	*	H	11	rt	
Xylenes (total)	ND	2.5	•	,	**	#	7	•	
Methyl tert-butyl ether	14000	1000		200		11	H	н	M-04
Surrogate: a,a,a-Trifluorotolue	ne	95.5 %	70	-130	"	r	**	a	



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Reported: 10/18/01 07:08

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (L110027-04) Water Sampled:	10/03/01 14:42	Received: 1	0/03/01 1	19:00					
Purgeable Hydrocarbons as Gasoline	22000	10000	ug/l	200	1100059	10/12/01	10/12/01	DHS LUFT	P-01
Benzene	830	100	n	H	Ħ	н	Ħ	N	
Toluene	1900	100	n		n	n		•	
Ethylbenzene	1700	100	ti	n	H	н	11	n	
Xylenes (total)	3000	100		n	II .	н	13	gr.	
Methyl tert-butyl ether	ND	1000			#	н	н	#	
Surrogate: a,a,a-Trifluorotoluene		82.7 %	70-	130	π	n	n	Я	
MW-4 (L110027-05) Water Sampled:	10/03/01 14:05	Received: 1	0/03/01 1	19:00					
Purgeable Hydrocarbons as Gasoline	7800	2500	ug/l	50	1100059	10/12/01	10/12/01	DHS LUFT	P-0
Benzene	2100	25	Ħ	m		u	*	•	
Toluene	85	25	*	**	n	п	*	*	
Ethylbenzene	380	25	*	π	п	Ħ	Ħ	•	
Xylenes (total)	390	25	*	H	н	н	ħ	u	
Methyl tert-butyl ether	580	250	•	п.	n	n	#	n	
Surrogate: a,a,a-Trifluorotoluene		83.9 %	70-	130	ır	n	"	#	
MW-5 (L110027-06) Water Sampled:	10/03/01 12:02	Received: 1	0/03/01	19:00					
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1100058	10/12/01	10/12/01	DHS LUFT	
Benzene	ND	0.50	**	Ħ	*	**	*	*	
Toluene	ND	0.50	•		*	Ħ	n .	•	
Ethylbenzene	ND	0.50	*	H	*	11	H		
Xylenes (total)	ND	0.50	*	**	*	Ħ	Ħ	"	
Methyl tert-butyl ether	1800	100	77	20	#	#	10/15/01	п	M-0
Surrogate: a,a,a-Trifluorotoluene		105 %	70-	-130	Ħ	n	10/12/01	s	





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Project Manager: Deanna Harding

Reported: 10/18/01 07:08

	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
Analyte	Result	Lunn	Omb		2-1011	,			
MW-6 (L110027-07) Water Sampled: 1	0/03/01 10:40	Received: 1	0/03/01_1	9:00					
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	1	1100058	10/12/01	10/12/01	DHS LUFT	
Benzene	ND	0.50	•	*		*	н		
Toluene	ND	0.50	п	11	н	n	•	#	
Ethylbenzene	ND	0.50	**	н	"	н	**		
Xylenes (total)	ND	0.50	н	h	•	R	n	н	
Methyl tert-butyl ether	200	5.0	"	π		*	н	ii ii	
Surrogate: a,a,a-Trifluorotoluene		112%	70-	130	Ħ	**	"	93	
	0/03/01 13:23	Received: 1	0/03/01	19:00					
Purgeable Hydrocarbons as Gasoline	10000	5000	ug/l	100	1100058	10/12/01	10/12/01	DHS LUFT	P-02
Benzene	210	50	n		н	Ħ	W	Ħ	
Toluene	ND	50	*	H			м	17	
Ethylbenzene	ND	50	•		*	Ħ	а	**	
Xylenes (total)	800	50	**	*	Ħ	*		п	
Methyl tert-butyl ether	35000	500	н		n	"	H	н	
Surrogate: a a a-Trifluorotoluene		104 %	70	-130	"	*	77	*	





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Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager: Deanna Harding

Reported: 10/18/01 07:08

MTBE Confirmation by EPA Method 8260B Sequoia Analytical - San Carlos

	20.	,	723 72 74						
Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-2 (L110027-03) Water	Sampled: 10/03/01 15:35	Received: 1	0/03/01	19:00					
Methyl tert-butyl ether	18000	200	սք/1	100	1100045	10/16/01	10/16/01	EPA 8260B	
Surrogate: 1,2-Dichloroethan	e-d4	96.6 %	76	-114	"	*	n	n	
MW-4 (L110027-05) Water	Sampled: 10/03/01 14:05	Received: 1	0/03/01	19: <u>00</u>					
Methyl tert-butyl ether	820	12	ug/l	6,25	1100045	10/16/01	10/16/01	EPA 8260B	
Surrogate: 1,2-Dichloroethan	e-d4	93.4 %	76	-114	rr	"	n	**	
MW-5 (L110027-06) Water	Sampled: 10/03/01 12:02	Received: 1	0/03/01	19:00					
Methyl tert-butyl ether	2100	40	ug/l	20	1100045	10/16/01	10/16/01	EPA 8260B	
Surrogate: 1,2-Dichloroethan	ne-d4	96.8 %	76	-114	"	н	et	##	
MW-6 (L110027-07) Water	Sampled: 10/03/01 10:40	Received: 1	0/03/01	19:00				<u> </u>	
Methyl tert-butyl ether	270	5.0	ug/l	2.5	1100045	10/16/01	10/16/01	EPA 8260B	
Surrogate: 1,2-Dichloroethan	ne-d4	95.4 %	76	-114	r.	n	n	"	
MW-7 (L110027-08) Water	Sampled: 10/03/01 13:23	Received: 1	0/03/01	19:00					
Methyl tert-butyl ether	40000	1000	ug/l	500	1100045	10/16/01	10/16/01	EPA 8260B	
Surrogate: 1,2-Dichloroethan	ne-d4	95.2 %	76	-114	#	ır	"	u	



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

Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager: Deanna Harding

Reported: 10/18/01 07:08

	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Result	ւտու	Onits	Level	Result	/BREC	Limis	МЪ	CBIIIC	Notes
Batch 1100058 - EPA 5030B (P/T)							<u>-</u> .			
Blank (1100058-BLK1)				Prepared	& Analyze	ed: 10/12/0)1		- · · · · · · · · · · · · · · · · · · ·	
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50								
Coluene	ND	0.50	*						•	
Ethylbenzene	ND	0.50	#							
(ylenes (total)	ND	0.50	11							
Methyl tert-butyl ether	ND	5.0	н							
urrogate: a,a,a-Trifluorotoluene	8,99		**	10.0		89.9	70-130			
LCS (1100058-BS1)				Prepared	& Analyz	ed: 10/12/	01			
Benzene	8.98	0.50	ug/l	10.0		89.8	70-130			
Foluene	9.12	0.50	#	10.0		91.2	70-130			
Ethylbenzene	9.23	0.50		10.0		92.3	70-130			
Xylenes (total)	27.6	0.50	H	30.0		92.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	10.0		n	10.0		100	70-130			
LCS (1100058-BS2)				Prepared	& Analyz	ed: 10/12/	01			
Purgeable Hydrocarbons as Gasoline	279	50	ug/l	250		112	70-130			
Surrogate: a,a,a-Trifluorotoluene	11.2		H	10.0		112	70-130			
Matrix Spike (1100058-MS1)	So	urce: L11002	2-02	Prepared	& Analyz	ed: 10/12/	01			
Benzene	10.2	0.50	ug/l	10.0	ND	102	60-140			
Toluene	10.1	0.50		10.0	ND	101	60-140			
Ethylbenzene	10.3	0.50	Ħ	10.0	ND	103	60-140			
Xylenes (total)	30.9	0.50	fi	30.0	ND	103	60-140			
Surrogate: a,a,a-Trifluorotoluene	10.0		"	10.0		100	70-130			
Matrix Spike Dup (1100058-MSD1)	So	urce: L11002	22-02	Prepared	: 10/12/01	Analyze	d: 10/13/01			
Benzene	10.2	0.50	ug/l	10.0	ND	102	60-140	0.00	25	
Toluene	10.2	0.50	н	10.0	ND	102	60-140	0.985	25	
Ethylbenzene	10.4	0.50	Ħ	10.0	ND	104	60-140	0.966	25	
Xylenes (total)	31.1	0.50	W	30.0	ND	104	60-140	0.645	25	
Surrogate: a,a,a-Trifluorotoluene	10.3		"	10.0		103	70-130			



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

Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager: Deanna Harding

Reported: 10/18/01 07:08

A star	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Analyte	Result	1\mint	Omts	20701	103411	,,,,,,,,				. 10100
Batch 1100059 - EPA 5030B (P/T)				<u></u>						
Blank (1100059-BLK1)				Prepared a	& Analyza	ed: 10/12/0	01			
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l							
Benzene	ND	0.50								
l'oluene	ND	0.50	*							
Ethylbenzene	ND	0.50	-							
(Yylenes (total)	ND	0.50	н							
Methyl tert-butyl ether	ND	5.0	*							
Surrogate: a,a,a-Trifluorotoluene	10.1		*	10.0		101	70-130			
LCS (1100059-BS1)				Prepared	& Analyz	ed: 10/12/	01			
Вепгене	8.25	0.50	ug/l	10.0		82.5	70-130			
l'oluene	8.27	0.50	Ħ	10.0		82.7	70-130			
Ethylbenzene	8.34	0.50	н	10.0		83.4	70-130			
Xylenes (total)	24.6	0.50	н	30.0		82.0	70-130			
Surrogate: a,a,a-Trifluorotoluene	9.65	•	n	10.0		96.5	70-130			
LCS (1100059-BS2)				Prepared	& Analyz	ed: 10/12/	01			
Purgeable Hydrocarbons as Gasoline	241	50	ug/l	250		96.4	70-130			
Surrogate: a,a,a-Trifluorotoluene	9.15		н	10.0		91.5	70-130			
Matrix Spike (1100059-MS1)	So	urce: L11002	3-02	Prepared	& Analyz	ed: 10/12/	01			
Benzene	8.86	0.50	ug/l	10.0	ND	88.6	60-140			
Toluene	8.74	0.50	n	10.0	ND	87.4	60-140			
Ethylbenzene	9.00	0.50	77	10.0	ND	90.0	60-140			
Xylenes (total)	25.7	0.50	"	30.0	ND	85.7	60-140			
Surrogate: a,a,a-Trifluorotoluene	9.58		"	10.0		95.8	70-130			
Matrix Spike Dup (1100059-MSD1)	So	urce: L11002	3-02	Prepared	: 10/12/01	Analyze	d: 10/13/01			
Benzene	8.80	0.50	ug/l	10.0	ND	88.0	60-140	0.679	25	
Toluene	8.69	0.50	•	10.0	ND	86.9	60-140	0.574	25	
Ethylbenzene	8.91	0.50	•	10.0	ND	89.1	60-140	1.01	25	
Xylenes (total)	26.0	0.50	*	30.0	ND	86.7	60-140	1.16	25	
Surrogate: a,a,a-Trifluorotoluene	8.54	······································	"	10.0		85.4	70-130	-		



Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

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Project Manager: Deanna Harding

Reported: 10/18/01 07:08

MTBE Confirmation by EPA Method 8260B - Quality Control Sequoia Analytical - San Carlos

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1100045 - EPA 5030B [P/T]					<u> </u>					
Blank (1100045-BLK1)				Prepared	& Analyz	ed: 10/09/	01			
Methyl tert-butyl ether	ND	2.0	ug/l							
Surrogate: 1,2-Dichloroethane-d4	56.1		"	50.0		112	76-114			
Blank (1100045-BLK2)				Prepared	& Analyz	ed: 10/16/	01			
Methyl tert-butyl ether	ND	2.0	ug/l							
Surrogate: 1,2-Dichloroethane-d4	49.0		п	50.0		98.0	76-114			
LCS (1100045-BS1)				Prepared	& Analyz	ed: 10/09/	01			
Methyl tert-butyl ether	57.3	2.0	ug/l	50.0		115	70-130			
Surrogate: 1,2-Dichloroethane-d4	55.4		P	50.0		111	76-114			
LCS (1100045-BS2)				Prepared	& Analyz	zed: 10/16/	01			
Methyl tert-butyl ether	49.6	2.0	ug/l	50.0		99.2	70-130			
Surrogate: 1,2-Dichloroethane-d4	51.7		ti	50.0	<u> </u>	103	76-114			
Matrix Spike (1100045-MS1)	So	urce: L11002	26-03	Prepared	& Analy:	zed: 10/09/	/01			
Methyl tert-butyl ether	88.5	2.0	ug/l	50.0	37	103	60-140			
Surrogate: 1,2-Dichloroethane-d4	55.5		,,,	50.0		111	76-114			
Matrix Spike Dup (1100045-MSD1)	So	urce: L11002	26-03	Prepared	& Analy	zed: 10/09	/01			
Methyl tert-butyl ether	83.8	2.0	ug/l	50.0	- 37	93.6	60-140	9.56	25	•
Surrogate: 1,2-Dichloroethane-d4	54.6		H	50.0		109	76-114			



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

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Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager. Deanna Harding

Reported:

10/18/01 07:08

Notes and Definitions

M-04 MTBE was reported from second analysis.
 P-01 Chromatogram Pattern: Gasoline C6-C12
 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

TOSCO 76 SERVICE STATION #1156 OAKLAND, CA

MONITORING AND SAMPLING EVENT OF OCTOBER 5, 2001

ent/			Job#:	18022	<u> </u>
cility #_1156	· · · · · · · · · · · · · · · · · · ·	1		10-5-0	0
dress: 427	6 Machethar	Slvd.	Date:		
y: ONE	and	 	Sample:	. Joe	
			 		
Well ID	mu-1	Well C	Condition:	OIK	
ell Diameter	2 in	Hydro: Thickr	carbon ess:	Amount Baile	A STATE OF THE STA
tal Depth	7.91	Volum Factor	$2^a = 0.17$ or (VF)	3° = 0.38 6° = 1.50	
epth to Water	1.11 4	<u> </u>			
	17.26 x	vf <u>0.17</u> -		ume) = Estimated Purg	ge Volume: 9lost)
Purge	Disposable Bailer	•	Sampling Equipment:	Disposable Bail	er ,
quipment:	Bailer Stack	•		Bailer	
:	Suction	•		Pressure Bailer Grab Sample	•
	Grundfos		^	ther:	
	Other:				
tarting Time:	2:4		Weather Conditions		
Time V		(Condi	Weather Conditions Water Color: Sediment Descripti If yes; Time: sectivity O Temper ses/cm x F	on:	Odor:
Sampling Time: Purging Flow Rate Did well de-water Time	2:4: 3:10 P.m (15 e:	Condi	Weather Conditions Water Color: Sediment Descripti If yes; Time: Inctivity Temper Instruction Temper Instruct	TION	ORP Alkalinit (mV) (ppm)
Sampling Time: Purging Flow Rate Did well de-water Time 2:52	2:4: 3:10 P.m (15 e:	Condi	Weather Conditions Water Color: Sediment Descripti If yes; Time: Descripti Sediment Descripti Office Sediment Descripti Office Sediment Descripti Office Of	TION LABORATORY	ORP Alkalinit (mV) (ppm)
Sampling Time: Purging Flow Rate Did well de-water Time 2: 52 2: 58 3:03	2:4: 3:10 P.m (15 e:	Condi	Weather Conditions Water Color: Sediment Descripti If yes; Time: Inctivity Temper Instruction Temper Instruct	TION LABORATORY Foq 9 9 Volume (mg/L) A LABORATORY	ORP Alkalinit (mV) (ppm) ANALYSES
Sampling Time: Purging Flow Rate Did well de-water Time 2:52 2:58 3:03	2:4: 3:10 P.m (15 e:	Condi	Weather Conditions Water Color: Sediment Descripti If yes; Time: Descripti Sediment Descripti Office Sediment Descripti Office Sediment Descripti Office Of	TION LABORATORY	ORP Alkalinit (mV) (ppm)
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Sampling Time: Purging Flow Rate Did well de-water Time 2: 52 2: 58 3:03	2:4: 3:10 P.m (15 e:	Condi	Weather Conditions Water Color: Sediment Descripti If yes; Time: Descripti Sediment Descripti Office Sediment Descripti Office Sediment Descripti Office Of	TION LABORATORY Foq 9 9 Volume (mg/L) A LABORATORY	ORP Alkalinit (mV) (ppm) ANALYSES

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Culpour Number	Lob Sample Number	Mumber of Contohers	Matrix S = Soil A = Air W = Water C = Charcool	Type G = Grab C = Composite D = Discrete	Time	Sample Preservation	iced (Yee or No.)	TPH Gas + BTEX wiMTBE (BO20)	TPH Dissel (8015)	Off and Greate (5520)	Paryedble Holocarbons (5010)	Purpeoble Aromotics (8020)	ganice	50	Metris CA.O.Pb.Zn.Mi (CAP or AA)						DO NOT BILL TB-LB ANALYSIS Remarks
TB-LB	01		W	G		HCL	Y	✓													
mw-1	02	Aut	11	"	1510		"		~	 				<u> </u>					 		
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19 October, 2001

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

RE: Tosco(1)

Sequoia Report: L110047

Enclosed are the results of analyses for samples received by the laboratory on 10/05/01 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Richard Yee For Latonya Pelt Project Manager

CA ELAP Certificate #2360



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

Gettler-Ryan/Geostrategies(1) 6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager: Deanna Harding

Reported: 10/19/01 14:52

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
TB-LB	L110047-01	Water	10/05/01 00:00	10/05/01 17:00
MW-1	L110047-02	Water	10/05/01 15:10	10/05/01 17:00

Sequoia Analytical - San Carlos

Ribul 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.





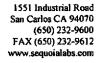
6747 Sierra Court, Suite J Dublin CA, 94568 Project: Tosco(1)

Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager: Deanna Harding

Reported: 10/19/01 14:52

Analyte		Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
TB-LB (L110047-01) Water	Sampled:	10/05/01 00:00	Received:	10/05/01	17:00				<u>u,</u>	
Purgeable Hydrocarbons as Ga	soline	ND	50	ug/l	1	1100067	10/16/01	10/16/01	DHS LUFT	
Benzene		ND	0.50	ır	11	n	•	11	71	
Toluene		ND	0.50		и	П	•	Ħ	н	
Ethylbenzene		ND	0.50		n	**	11	Ħ	Ħ	
Xylenes (total)		ND	0.50	**		"	н	n	**	
Methyl tert-butyl ether		ND	5.0	-	0	И	н	•	W	
Surrogate: a,a,a-Trifluorotolue	ne	_	118%	70-	130	**	*	#	H	





6747 Sierra Court, Suite J

Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager: Deanna Harding

Reported: 10/19/01 14:52

Diesel Hydrocarbons (C9-C24) by 8015B

Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (L110047-02) Water Sampled: 1	0/05/01 15:10	Received: 1	0/05/01	17:00					
Diesel Range Organics (C9-C24)	13000	1000	ug/l	20	1J17048	10/17/01	10/19/01	DHS LUFT	D-15
Surrovate: n-Pentacosane		136 %	50-	-150	rr*	"	"	"	



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

Project Number: Tosco (76) SS#1156, Oakland, CA

Spike

Source

%REC

Project Manager: Deanna Harding

Reported: 10/19/01 14:52

RPD

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

Reporting

Analyte	Result	Limit	Units	Level	Result	%REC	Limits	RPD	Limit	Notes
Batch 1100067 - EPA 5030B (P/T)							<u></u>			
Blank (1100067-BLK1)				Prepared a	& Analyz	ed: 10/16/0)1			
Purgeable Hydrocarbons as Gasoline	ND	50	ug/l	_						
Benzene	ND	0.50	H							
Toluene	ND	0.50	н							
Ethylbenzene	ND	0.50	n							
Xylenes (total)	ND	0.50	н							
Methyl tert-butyl ether	ND	5.0	и							
Surrogate: a,a,a-Trifluorotoluene	8.05		"	10.0		80.5	70-130			
LCS (1100067-BS1)	Prepared & Analyzed: 10/16/01									
Benzene	9.51	0.50	ug/l	10.0		95.1	70-130			
Toluene	9.45	0.50	*	10.0		94.5	70-130			
Ethylbenzene	9.70	0.50	H	10.0		97.0	70-130			
Xylenes (total)	28.9	0.50	n	30.0		96.3	70-130			
Surrogate: a,a,a-Trifluorotoluene	8.01		17	10.0		80.1	70-130			
LCS (1100067-BS2)				Prepared & Analyzed: 10/16/01						
Purgeable Hydrocarbons as Gasoline	228	50	ug/l	250		91.2	70-130			
Surrogate: a,a,a-Trifluorotoluene	11.6		п	10.0		116	70-130			
Matrix Spike (1100067-MS1)	Sour	ce: L11003	4-07	Prepared	& Analyz	ed: 10/16/	01			
Benzene	8.75	0.50	ug/l	10.0	ND	87.5	60-140			
Toluene	8.71	0.50	**	10.0	ND	87.1	60-140			
Ethylbenzene	9.13	0.50	u	10.0	ИD	91.3	60-140			
Xylenes (total)	27.3	0.50	#	30.0	ND	91.0	60-140			
Surrogate: a,a,a-Trifluorotoluene	10.6		ər	10.0	-	106	70-130			
Matrix Spike Dup (1100067-MSD1)	Sour	ce: L11003	4-07	Prepared	& Analyz	ed: 10/16/	01			
Benzene	9.51	0.50	ug/l	10.0	ND	95.1	60-140	8.32	25	
Toluene	9.28	0.50	11	10.0	ND	92.8	60-140	6.34	25	
Ethylbenzene	9.63	0.50	11	10.0	ND	96.3	60-140	5.33	25	
Xylenes (total)	28.7	0.50	"	30.0	ND	95.7	60-140	5.00	25	
Surrogate: a,a,a-Trifluorotoluene	10.3		"	10.0	_	103	70-130			





6747 Sierra Court, Suite J

Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco (76) SS#1156, Oakland, CA

Project Manager: Deanna Harding

Reported: 10/19/01 14:52

Diesel Hydrocarbons (C9-C24) by 8015B - Quality Control Sequoia Analytical - Morgan Hill

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 1J17048 - EPA 3510B	<u> </u>			<u>-</u>	· · · <u>- · - · - · - · - · - · · · · · ·</u>					
Blank (1J17048-BLK1)				Prepared:	10/17/01	Analyzed	: 10/18/01			
Diesel Range Organics (C9-C24)	ND	50	ug/l			· -				
Surrogate: n-Pentacosane	45.3		"	50.0		90.6	50-150			
LCS (1J17048-BS1)				Prepared:	10/17/01	Analyzed	: 10/18/01			
Diesel Range Organics (C9-C24)	387	50	ug/l	500		77.4	60-140			
Surrogate: n-Pentacosane	45.9		"	50.0		91.8	50-150			
LCS Dup (1J17048-BSD1)				Prepared:	10/17/01	Analyzed	l: 10/18/01			
Diesel Range Organics (C9-C24)	370	50	ug/l	500		74.0	60-140	4.49	50	
Surrogate: n-Pentacosane	45.7		"	50.0		91.4	50-150			



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Dublin CA, 94568

Project: Tosco(1)

Project Number: Tosco (76) SS#1156, Oakland, CA

Reported:

Project Manager: Deanna Harding

10/19/01 14:52

Notes and Definitions

Chromatogram Pattern: Unidentified Hydrocarbons C9-C24 D-15

Analyte DETECTED DET

Analyte NOT DETECTED at or above the reporting limit

Not Reported NR

ND

Sample results reported on a dry weight basis dry

Relative Percent Difference RPD