



GETTLER-RYAN Inc.

TRANSMITTAL

February 11, 2003

G-R #180225

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

CC: Mr. Paul Blank
ERI, Inc.
73 Digital Drive, Suite 100
Novato, California

FROM: Deanna L. Harding
Project Coordinator
Gettler-Ryan Inc.
6747 Sierra Court, Suite J
Dublin, California 94568

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

WE HAVE ENCLOSED THE FOLLOWING:

COPIES	DATED	DESCRIPTION
1	February 10, 2003	Groundwater Monitoring and Sampling Report First Quarter - Event of January 6, 2003

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 ~~February 26, 2003~~, 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

trans/1156-DBD



GETTLER - RYAN Inc.

February 10, 2003
G-R Job #180225

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

RE: First Quarter Event of January 6, 2003
Groundwater Monitoring & Sampling Report
Tosco 76 Service Station #1156
4276 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). A joint groundwater monitoring event was conducted with the Shell Service Station, located at 4255 MacArthur Boulevard, Oakland, California.

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 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 reports are also attached.

Sincerely,

Deanna L. Harding
Project Coordinator

Hagop Kevork
P.E. No. C55734



- Figure 1: Potentiometric Map
- Figure 2: Concentration Map
- Table 1: Groundwater Monitoring Data and Analytical Results
- Table 2: Groundwater Analytical Results
- Table 3: Groundwater Analytical Results
- Table 4: Joint Groundwater Monitoring Data and Analytical Results Provided by Blaine Tech Services, Inc.
- Attachments: Standard Operating Procedure - Groundwater Sampling
Field Data Sheets
Chain of Custody Document and Laboratory Analytical Reports

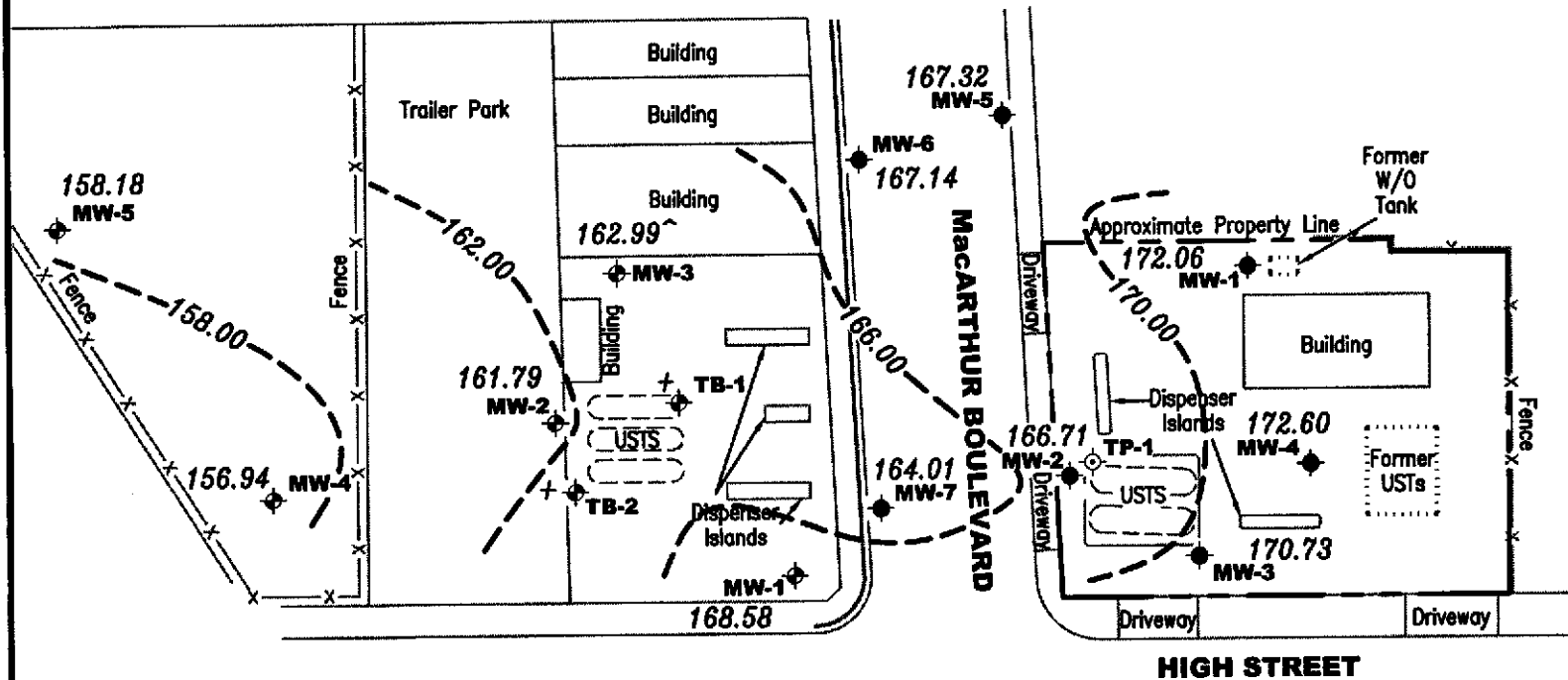
EXPLANATION

- ◆ Groundwater monitoring well (Tosco) 99.99 Groundwater elevation in feet referenced to Mean Sea Level
- ⊕ Groundwater monitoring well (Shell) - - - 99.99 - - - Groundwater elevation contour, dashed where inferred
- ⊖ Tank Pit Backfill Well + TOC not available

← Groundwater elevation corrected for the presence of free product



Approximate groundwater flow direction at a gradient of 0.03 to 0.07 Ft./Ft.



Source: Figure modified from drawing provided by Environmental Resolutions Inc.

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

FIGURE
1

PROJECT NUMBER
180225

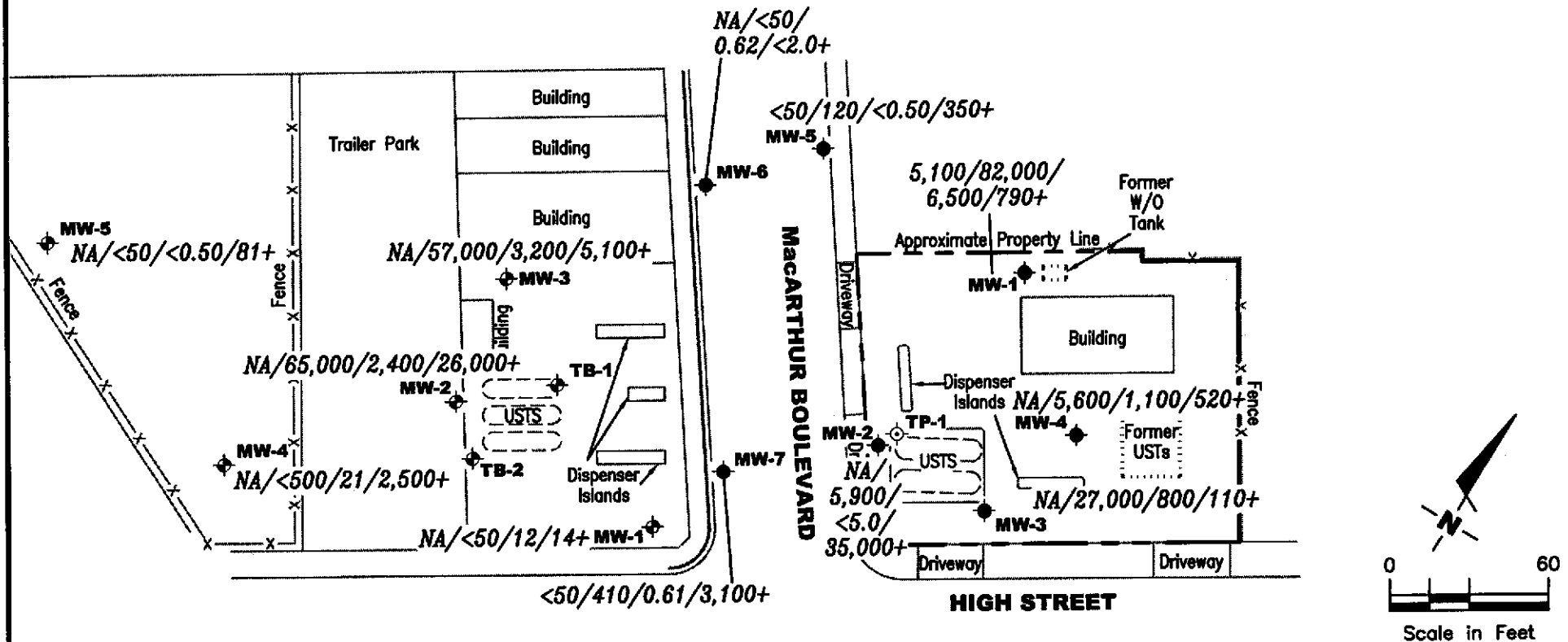
REVIEWED BY

DATE
 January 6, 2003

REVISED DATE

EXPLANATION

- ◆ Groundwater monitoring well (Tosco) A/B/C/D Total Petroleum Hydrocarbons (TPH) as Diesel/TPH as Gasoline/Benzene/MTBE concentrations in ppb
- ◆ Groundwater monitoring well (Shell)
- ⊕ Tank Pit Backfill Well + MTBE by EPA Method 8260
- Not Analyzed



Source: Figure modified from drawing provided by Environmental Resolutions Inc.

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

FIGURE

2

PROJECT NUMBER
 180225

REVIEWED BY

DATE
 January 6, 2003

REVISED DATE

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	Product	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
					Thickness (ft.)							
MW-1												
174.86	07/20/99 ⁵	7.50	5.0-25.0	167.36	--	16,000 ²	120,000	11,000	27,000	3,300	18,000	ND ¹
	09/28/99	8.75		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 ¹
	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	2,200 ⁸	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
	10/05/01	7.91		169.63	0.00	13,000 ²	--	--	--	--	--	--
	01/28/02	5.98		171.56	0.00	4,400 ¹¹	110,000 ¹²	8,900	19,000	2,600	12,000	3,000/440 ³
	04/25/02	6.19		171.35	0.00	9,000 ¹³	93,000	8,100	18,000	3,000	15,000	810/670 ³
	07/18/02	6.99		170.55	0.00	9,200 ¹³	69,000	5,400	10,000	2,100	10,000	<500/620 ³
	10/07/02	7.73		169.81	0.00	3,400	82,000	9,200	20,000	2,600	13,000	1,300/760 ³
	01/06/03	5.48		172.06	0.00	5,100 ¹³	82,000	6,500	18,000	2,700	11,000	<1,000/790 ^{3,4}
MW-2												
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 ¹	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 ¹	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 ¹	ND ¹	ND ¹	ND ¹	49,000

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco 76 Service Station #1156
 4276 MacArthur Boulevard
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. hgs)	GWE (msl)	Product								
					Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
MW-2	04/04/01	6.14	5.0-25.0	166.87	0.00	--	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	38,700/37,800 ³
(cont)	07/17/01	5.30		167.71	0.00	--	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	ND ¹	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	<2.5	14,000/18,000 ³
	01/28/02	5.68		167.82	0.00	--	<250	2.5	4.4	2.8	7.4		11,000/10,000 ³
	04/25/02	5.82		167.68	0.00	--	<50	<0.50	<0.50	<0.50	<0.50		8,400/8,100 ³
	07/18/02	6.90		166.60	0.00	--	<500	<5.0	<5.0	<5.0	<5.0		4,300/8,800 ³
	10/07/02	7.54		165.96	0.00	--	4,300	<10	27	21	75		7,100/5,900 ³
	01/06/03	6.79		166.71	0.00	--	5,900	<5.0	<5.0	<5.0	<5.0		31,000/35,000 ³
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
	01/28/02	7.39		170.74	0.00	--	30,000 ¹²	880	2,600	1,800	4,300		3,200/210 ³
	04/25/02	7.86		170.27	0.00	--	18,000	500	2,000	1,300	3,800		500/260 ³
	07/18/02	8.83		169.30	0.00	--	37,000	1,800	3,800	2,200	8,000		<250/270 ³
	10/07/02	9.71		168.42	0.00	--	26,000	600	2,000	1,800	6,400		<120/<200 ³
	01/06/03	7.40		170.73	0.00	--	27,000	800	2,100	2,000	6,400		440/110 ³

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco 76 Service Station #1156
 4276 MacArthur Boulevard
 Oakland, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	Product	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
					Thickness (ft.)							
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
	01/03/01 ⁷	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	1,140/819 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
	01/28/02	6.21		172.75	0.00	--	12,000 ¹²	2,100	130	350	670	1,100/500 ³
	04/25/02	5.49		173.47	0.00	--	3,300	1,300	42	270	250	680/600 ³
	07/18/02	8.28		170.68	0.00	--	4,800	1,300	71	290	220	530/760 ³
	10/07/02	7.49		171.47	0.00	--	5,100	1,400	110	330	380	650/540 ³
	01/06/03	6.36		172.60	0.00	--	5,600	1,100	57	260	320	370/520 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
	01/28/02	1.88		167.30	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	650/550 ³
	04/25/02	1.99		167.19	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	2,200/2,400 ³
	07/18/02	2.49		166.69	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	530/690 ³
	10/07/02	2.80		166.38	0.00	--	140	<0.50	<0.50	<0.50	<0.50	300/330 ³
	01/06/03	1.86		167.32	0.00	<50	120 ¹³	<0.50	<0.50	<0.50	<0.50	410/350 ³

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco 76 Service Station #1156
 4276 MacArthur Boulevard
 Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	Product							
					Thickness (ft.)	TPH-D (ppb)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (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
	01/28/02	1.82		167.22	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	04/25/02	2.01		167.03	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/18/02	2.44		166.60	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0 ³
	10/07/02	2.72		166.32	0.00	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5/<2.0 ³
	01/06/03	1.90		167.14	0.00	--	<50	0.62	1.2	1.2	3.5	<2.0/<2.0 ³
MW-7												
171.64	10/03/01 ¹⁰	7.62	--	164.02	0.00	--	10,000 ⁹	210	<50	<50	800	35,000/40,000 ³
	01/28/02	7.21		164.43	0.00	--	<1,000	<10	<10	<10	<10	42,000/38,000 ³
	04/25/02	7.25		164.39	0.00	--	<5,000	660	<50	<50	<50	42,000/45,000 ³
	07/18/02	8.12		163.52	0.00	--	<5,000	130	<50	<50	<50	51,000/53,000 ³
	10/07/02	7.71		163.93	0.00	--	18,000	<50	<50	<50	<50	33,000/38,000 ³
	01/06/03	7.63		164.01	0.00	<50	410	0.61	1.0	0.89	2.9	3,900/3,100 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

Table 1
Groundwater Monitoring Data and Analytical Results
 Tosco 76 Service Station #1156
 4276 MacArthur Boulevard
 Oakland, California

WELL ID/ TOC* (ft.)	DATE	DTW (ft.)	S.I. (ft. bgs)	GWE (msl)	Product		B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)	
					Thickness (ft.)	TPH-D (ppb)						
TB-LB	10/05/01	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
(cont)	01/28/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	04/25/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	07/18/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
QA	10/07/02	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.5
	01/06/03	--	--	--	--	--	<50	<0.50	<0.50	<0.50	<0.50	<2.0

Table 1
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 (ft.) = Feet	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
S.I. = Screen Interval	B = Benzene	-- = Not Measured/Not Analyzed
(ft. bgs) = Feet Below Ground Surface	T = Toluene	QA = Quality Assurance/Trip Blank
GWE = Groundwater Elevation	E = Ethylbenzene	
(msl) = Mean sea level	X = Xylenes	
	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: $[(TOC - DTW) + (Product\ Thickness \times 0.77)]$.
- ¹ Detection limit raised. Refer to analytical reports.
- ² Laboratory report indicates unidentified hydrocarbons C9-C24.
- ³ MTBE by EPA Method 8260.
- ⁴ Laboratory report indicates sample was analyzed past EPA recommended holding time.
- ⁵ Total Recoverable Petroleum Oil was ND.
- ⁶ Laboratory report indicates gasoline C6-C12.
- ⁷ 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.
- ⁹ Laboratory report indicates weathered gasoline C6-C12.
- ¹⁰ Well development performed.
- ¹¹ Laboratory report indicates unidentified hydrocarbons C10-C28.
- ¹² Laboratory report indicates gasoline C6-C10.
- ¹³ Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but it does not resemble the pattern of the requested fuel.

Table 2
Groundwater Analytical Results
Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)	HVOCs (ppb)	SVOCs (ppb)
MW-1	07/20/99	--	--	11,000 ³	--	--	--	--	--	ND ¹	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	--	--	--	--	--	--	--	--	ND ¹⁵	ND ¹⁶
	04/04/01	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
	01/28/02	--	--	440	--	--	--	--	--	--	--
	04/25/02	--	--	670	--	--	--	--	--	--	--
	07/18/02	<2,500	<100	620	<10	<10	<10	<10	<10	--	--
	10/07/02	<50,000	<10,000	760	<200	<200	<200	<200	<200	--	--
01/06/03 ³	<100,000	<20,000	790	<400	<400	<400	<400	<400	--	--	
MW-2	09/28/99	--	ND ⁶	6,150	ND ⁶	ND ⁶	ND ⁶	--	--	--	--
	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	--	--	--	--	--	--	--
	01/28/02	--	--	10,000	--	--	--	--	--	--	--
	04/25/02	--	--	8,100	--	--	--	--	--	--	--
	07/18/02	<25,000	<1,000	8,800	<100	<100	<100	<100	<100	--	--
	10/07/02	<100,000	<20,000	5,900	<400	<400	<400	<400	<400	--	--
	01/06/03	<250,000	<50,000	35,000	<1,000	<1,000	<1,000	<1,000	<1,000	--	--
MW-3	09/28/99	--	ND ⁶	288	ND ⁶	ND ⁶	8.80	--	--	--	--
	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	--	--

Table 2
Groundwater Analytical Results
 Tosco 76 Service Station #1156
 4276 MacArthur Boulevard
 Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)	HVOCs (ppb)	SVOCs (ppb)
MW-3	01/28/02	--	--	210	--	--	--	--	--	--	--
(cont)	04/25/02	--	--	260	--	--	--	--	--	--	--
	07/18/02	<1,200	<50	270	<5.0	<5.0	<5.0	<5.0	<5.0	--	--
	10/07/02	<50,000	<10,000	<200	<200	<200	<200	<200	<200	--	--
	01/06/03	23,000	<4,000	110	<80	<80	<80	<80	<80	--	--
MW-4	09/28/99	--	ND ⁶	459	ND ⁶	ND ⁶	ND ⁶	--	--	--	--
	04/04/01	ND ⁶	ND ⁶	819	ND ⁶	ND ⁶	ND ⁶	ND ⁶	ND ⁶	--	--
	07/17/01	ND ⁶	ND ⁶	900	ND ⁶	ND ⁶	ND ⁶	ND ⁶	ND ⁶	--	--
	10/03/01	--	--	820	--	--	--	--	--	--	--
	01/28/02	--	--	500	--	--	--	--	--	--	--
	04/25/02	--	--	600	--	--	--	--	--	--	--
	07/18/02	<2,500	<100	760	<10	<10	<10	49	<10	--	--
	10/07/02	<50,000	<10,000	540	<200	<200	<200	<200	<200	--	--
	01/06/03	<5,000	<1,000	520	<20	<20	<20	<20	<20	--	--
MW-5	10/03/01	--	--	2,100	--	--	--	--	--	--	--
	01/28/02	--	--	550	--	--	--	--	--	--	--
	04/25/02	--	--	2,400	--	--	--	--	--	--	--
	07/18/02	<500	<20	690	<2.0	<2.0	<2.0	<2.0	<2.0	--	--
	10/07/02	<500	<100	330	<2.0	<2.0	<2.0	<2.0	<2.0	--	--
	01/06/03	<500	<100	350	<2.0	<2.0	<2.0	<2.0	<2.0	--	--
MW-6	10/03/01	--	--	270	--	--	--	--	--	--	--
	07/18/02	<500	<20	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	--	--
	10/07/02	<500	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	--	--
	01/06/03	<500	<100	<2.0	<2.0	<2.0	<2.0	<2.0	<2.0	--	--

Table 2
Groundwater Analytical Results
 Tosco 76 Service Station #1156
 4276 MacArthur Boulevard
 Oakland, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)	HVOCs (ppb)	SVOCs (ppb)
MW-7	10/03/01	--	--	40,000	--	--	--	--	--	--	--
	01/28/02	--	--	38,000	--	--	--	--	--	--	--
	04/25/02	--	--	45,000	--	--	--	--	--	--	--
	07/18/02	<5,000	33,000	53,000	<20	<20	<20	<20	<20	--	--
	10/07/02	<100,000	26,000	38,000	<400	<400	<400	<400	<400	--	--
	01/06/03	<50,000	<10,000	3,100	<200	<200	<200	<200	<200	--	--

Table 2
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

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

EDB = 1,2-Dibromoethane

HVOCs = Halogenated Volatile Organic Compounds

SVOCs = Semi-Volatile Organic Compounds

(ppb) = Parts per billion

ND = Not Detected

-- = Not Analyzed

- ¹ 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 report indicates sample was analyzed past EPA recommended holding time.
- ⁴ 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.
- ⁵ All SVOCs were ND (with a raised detection limit) except for 2,4-Dimethylphenol at 13.6 ppb; 2-Methylnaphthalene 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.
- ⁷ 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.
- ¹⁰ All SVOCs were ND except for Bis(2-ethylhexyl)phthalate at 10 ppb; 1,2-DCB at 6.2 ppb; 2-Methylnaphthalene 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.
- ¹² All HVOCs were ND (with a raised detection limit) except for Tetrachloroethene at 334 ppb.
- ¹³ All SVOCs were ND (with a raised detection limit) except for 2-Methylnaphthalene at 300 ppb and Naphthalene at 690 ppb.
- ¹⁴ 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).
- ¹⁶ All SVOCs were ND (with a raised detection limit) except for 2-Methylnaphthalene at 180 ppb and Naphthalene at 400 ppb.
- ¹⁷ 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.
- ¹⁸ 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.

Table 2
Groundwater Analytical Results
Tosco 76 Service Station #1156
4276 MacArthur Boulevard
Oakland, California

EXPLANATIONS: (cont)

- ¹⁹ 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-Methylnaphthalene at 290 ppb; 2-Methylphenol at 47 ppb; 4-Methylphenol at 25 ppb; Naphthalene at 740 ppb and N-Nitrosodimethylamine at 7.7 ppb.
- ²⁰ 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

Table 3
Groundwater Analytical Results
 Tosco 76 Service Station #1156
 4276 MacArthur Boulevard
 Oakland, California

WELL ID	DATE	cis-1,2-DCE (ppb)	1,2-DCA (ppb)	PCE (ppb)	Chloro- benzene (ppb)	HVOCs (ppb)	Bis(2- ethylhexyl)ph thalate (ppb)	2-Methylnaph- thalene (ppb)	2-Methyl- phenol (ppb)	4-Methyl- phenol (ppb)	Naphthalene (ppb)	SVOCs (ppb)
MW-1	07/18/02	1.3	<1.6	<0.60	5.9	<0.50-<10 ¹	120	420	13	25	910	<5.0-<20 ²
MW-5	01/06/03	<0.50	1.4	<0.50	<0.50	<0.50-<5.0	<5.0	<5.0	<5.0	<5.0	<10	<5.0-<20
MW-7	01/06/03	<50	<50	<50	<50	<50-<500	<5.0	<5.0	<5.0	<5.0	<10	<5.0-<20

Table 3
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. Historical Halogenated and Semi-Volatile Organic Compound data are presented in Table 2.

cis-1,2-DCE = cis-1,2-Dichloroethene

1,2-DCA = 1,2-Dichloroethane

PCE = Tetrachloroethene

HVOCs = Halogenated Volatile Organic Compounds

SVOCs = Semi-Volatile Organic Compounds

(ppb) = Parts per billion

¹ All other HVOCs were less than the reporting limit except for Chloroethane was detected at 1.1 ppb, 1,4-Dichlorobenzene was detected at 1.3 ppb and 1,2-Dichlorobenzene was detected at 5.8 ppb.

² All other SVOCs were less than the reporting limit except for Phenol was detected at 32 ppb.

ANALYTICAL METHODS:

EPA Method 8010/8021 for HVOCs

EPA Method 8270 for SVOCs

TABLE 4
Joint Groundwater Monitoring Data and Analytical Results
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA

Well ID	Date	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-1	11/17/1993	410	21	11	7.9	47	NA	NA	175.79	8.59	NA	167.20	NA	NA	NA
MW-1	1/20/1994	1,200	180	19	48	47	NA	NA	175.79	8.22	NA	167.57	NA	NA	NA
MW-1	4/25/1994	3,100	610	<10	130	27	NA	NA	175.79	7.63	NA	168.18	NA	NA	NA
MW-1	7/7/1994	2,400	1,000	10	250	20	NA	NA	175.79	8.31	NA	167.48	NA	NA	NA
MW-1	10/27/1994	2,200	500	3.1	72	1.8	NA	NA	175.79	8.84	NA	166.95	NA	NA	NA
MW-1	11/17/1994	NA	NA	NA	NA	NA	NA	NA	175.79	7.60	NA	168.19	NA	NA	NA
MW-1	11/28/1994	NA	NA	NA	NA	NA	NA	NA	175.79	7.56	NA	168.23	NA	NA	NA
MW-1	1/13/1995	570	75	2.5	6.7	11	NA	NA	175.79	7.11	NA	168.68	NA	NA	NA
MW-1	4/12/1995	1,800	480	<5.0	79	<5.0	NA	NA	175.79	7.08	NA	168.71	NA	NA	NA
MW-1	7/25/1995	120	15	1.1	2.1	2.9	NA	NA	175.79	7.73	NA	168.06	NA	NA	NA
MW-1 (D)	7/25/1995	300	88	2.4	11	6.5	NA	NA	175.79	7.73	NA	168.06	NA	NA	NA
MW-1	10/18/1995	130	9.5	0.8	1.3	1.7	NA	NA	175.79	8.42	NA	167.37	NA	NA	NA
MW-1 (D)	10/18/1995	120	11	0.8	1.4	1.8	NA	NA	175.79	8.42	NA	167.37	NA	NA	NA
MW-1	1/17/1996	250	22	0.9	1.6	2.3	NA	NA	175.79	7.83	NA	167.96	NA	NA	NA
MW-1	4/25/1996	<50	4.6	<0.5	<0.5	0.6	500b	NA	175.79	7.35	NA	168.44	NA	NA	NA
MW-1	7/17/1996	<250	15	<2.5	<2.5	<2.5	540	NA	175.79	7.70	NA	168.09	NA	NA	NA
MW-1	10/1/1996	1,200	500	12	57	82	1,900	NA	175.79	8.07	NA	167.72	NA	NA	NA
MW-1	1/22/1997	640	170	4.3	33	33	1,200	NA	175.79	7.21	NA	168.58	NA	NA	NA
MW-1	4/8/1997	<200	34	<2.0	3.3	4.3	950	NA	175.79	7.75	NA	168.04	NA	NA	NA
MW-1 (D)	4/8/1997	<200	66	<2.0	6.4	8	740	NA	175.79	7.75	NA	168.04	NA	NA	NA
MW-1	7/8/1997	190	49	1.2	5.8	8.6	560	NA	175.79	8.01	NA	167.78	NA	NA	NA
MW-1	10/8/1997	<100	7	<1.0	<1.0	<1.0	620	NA	175.79	8.10	NA	167.69	NA	NA	NA
MW-1	1/9/1998	970	390	12	48	71	1,200	NA	175.79	7.14	NA	168.65	NA	NA	NA
MW-1	4/13/1998	<50	136	<0.50	1.5	1.8	170	NA	175.79	6.78	NA	169.01	NA	NA	NA
MW-1	7/17/1998	2,500	750	11	88	67	150	NA	175.79	7.28	NA	168.51	NA	NA	NA
MW-1	10/2/1998	8,000	970	36	270	440	35	NA	175.79	7.77	NA	168.02	NA	NA	NA
MW-1	2/3/1999	210	56	0.82	<0.50	3.2	220	NA	175.79	7.45	NA	168.34	NA	1.4	NA
MW-1	4/29/1999	<50	4.5	<0.50	0.56	<0.50	140	196	175.79	7.58	NA	168.21	NA	1.2	140
MW-1	7/23/1999	<50.0	<0.500	<0.500	<0.500	<0.500	120	111*	175.79	8.51	NA	167.28	NA	1.0	NA
MW-1	11/1/1999	<50.0	<0.500	<0.500	<0.500	<0.500	2.90	NA	175.79	8.30	NA	167.49	NA	1.4	-71
MW-1	1/17/2000	<50	<0.50	<0.50	<0.50	<0.50	3.30	NA	175.79	8.04	NA	167.75	NA	16.9	64
MW-1	4/17/2000	<50.0	1.08	<0.500	<0.500	<0.500	<2.50	NA	175.79	8.00	NA	167.79	NA	1.8	112

TABLE 4
Joint Groundwater Monitoring Data and Analytical Results
 Shell-branded Service Station
 4255 MacArthur Boulevard
 Oakland, CA

Well ID	Date	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-1	7/26/2000	125	54.3	2.16	5.45	9.86	33.1	NA	175.79	7.52	NA	168.27	NA	13.2	-140
MW-1	10/12/2000	101	40.7	2.68	3.00	5.18	25.0	NA	175.79	7.71	NA	168.08	NA	>20	534
MW-1	1/15/2001	<50.0	0.633	<0.500	0.505	1.74	<2.50	NA	175.79	7.33	NA	168.46	NA	16.9	-127
MW-1	4/9/2001	<50.0	<0.500	<0.500	<0.500	0.927	<2.50	NA	175.79	7.68	NA	168.11	NA	12.8	-117
MW-1	7/24/2001	<50	4.0	0.65	0.53	1.3	NA	<5.0	175.79	8.00	NA	167.79	NA	>20	43
MW-1	10/31/2001	<50	4.4	<0.50	<0.50	0.98	NA	<5.0	175.79	7.94	NA	167.85	NA	13.6	123
MW-1	1/10/2002	<50	2.2	<0.50	<0.50	1.2	NA	6.1	175.79	7.63	NA	168.16	NA	0.1	63
MW-1	4/25/2002	<50	2.0	<0.50	<0.50	<0.50	NA	<5.0	175.79	7.76	NA	168.03	NA	0.3	54
MW-1	7/18/2002	<50	6.1	<0.50	<0.50	0.98	NA	<5.0	175.79	8.29	NA	167.50	NA	1.1	32
MW-1	10/7/2002	500	17	14	11	60	NA	9.0	175.76	8.34	NA	167.42	NA	2.8	-26
MW-1	1/6/2003	<50	12	<0.50	0.73	0.58	NA	14	175.76	7.18	NA	168.58	NA	0.5	-22
MW-2	11/17/1993	31,000	9,400	4,600	1,000	3,900	NA	NA	170.91	12.31	NA	158.60	NA	NA	NA
MW-2	1/20/1994	40,000	6,900	5,600	780	4,100	NA	NA	170.91	11.48	NA	159.43	NA	NA	NA
MW-2 (D)	1/20/1994	41,000	7,200	6,200	900	4,800	NA	NA	170.91	11.48	NA	159.43	NA	NA	NA
MW-2	4/25/1994	60,000	9,300	6,100	1,400	6,200	NA	NA	170.91	10.84	NA	160.07	NA	NA	NA
MW-2	7/7/1994	280,000a	40,000	26,000	8,100	32,000	NA	NA	170.91	11.89	NA	159.02	NA	NA	NA
MW-2 (D)	7/7/1994	53,000	13,000	6,600	2,000	8,400	NA	NA	170.91	11.89	NA	159.02	NA	NA	NA
MW-2	10/27/1994	130,000	14,000	12,000	2,400	13,000	NA	NA	170.91	12.89	NA	158.02	NA	NA	NA
MW-2 (D)	10/27/1994	390,000	8,800	7,000	1,700	11,000	NA	NA	170.91	12.89	NA	158.02	NA	NA	NA
MW-2	11/17/1994	NA	NA	NA	NA	NA	NA	NA	170.91	9.11	NA	161.80	NA	NA	NA
MW-2	11/28/1994	NA	NA	NA	NA	NA	NA	NA	170.91	9.22	NA	161.69	NA	NA	NA
MW-2	1/13/1995	75,000	5,900	12,000	3,100	17,000	NA	NA	170.91	8.10	NA	162.81	NA	NA	NA
MW-2	4/12/1995	100,000	8,500	11,000	2,400	12,000	NA	NA	170.91	10.12	NA	160.79	NA	NA	NA
MW-2 (D)	4/12/1995	80,000	4,200	9,300	2,500	12,000	NA	NA	170.91	10.12	NA	160.79	NA	NA	NA
MW-2	7/25/1995	NA	NA	NA	NA	NA	NA	NA	170.91	11.53	NA	159.80	0.52	NA	NA
MW-2	10/18/1995	NA	NA	NA	NA	NA	NA	NA	170.91	14.02	NA	156.99	0.13	NA	NA
MW-2	1/17/1996	NA	NA	NA	NA	NA	NA	NA	170.91	10.27	NA	160.78	0.17	NA	NA
MW-2	4/25/1996	NA	NA	NA	NA	NA	NA	NA	170.91	11.68	NA	159.25	0.03	NA	NA
MW-2	7/17/1996	NA	NA	NA	NA	NA	NA	NA	170.91	12.78	NA	158.81	0.48	NA	NA
MW-2	10/1/1996	NA	NA	NA	NA	NA	NA	NA	170.91	14.21	NA	156.70	0.28	NA	NA
MW-2	1/22/1997	NA	NA	NA	NA	NA	NA	NA	170.91	10.92	NA	160.08	0.11	NA	NA
MW-2	4/8/1997	NA	NA	NA	NA	NA	NA	NA	170.91	14.12	NA	156.95	0.20	NA	NA

TABLE 4
Joint Groundwater Monitoring Data and Analytical Results
Shell-branded Service Station
4255 MacArthur Boulevard
Oakland, CA

Well ID	Date	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-2	7/8/1997	NA	NA	NA	NA	NA	NA	NA	170.91	14.98	NA	156.08	0.19	NA	NA
MW-2	10/8/1997	NA	NA	NA	NA	NA	NA	NA	170.91	12.97	NA	157.98	0.05	NA	NA
MW-2	1/8/1998	NA	NA	NA	NA	NA	NA	NA	170.91	12.54	NA	158.43	0.08	NA	NA
MW-2	4/13/1998	180,000	2,800	5,200	2,400	13,000	71,000	NA	170.91	10.05	NA	160.86	NA	NA	NA
MW-2	7/17/1998	NA	NA	NA	NA	NA	NA	NA	170.91	11.75	NA	159.24	0.10	NA	NA
MW-2	10/2/1998	NA	NA	NA	NA	NA	NA	NA	170.91	16.78	NA	154.22	0.11	NA	NA
MW-2	2/3/1999	NA	NA	NA	NA	NA	NA	NA	170.91	9.90	9.82	161.07	0.08	NA	NA
MW-2	4/29/1999	NA	NA	NA	NA	NA	NA	NA	170.91	9.86	9.81	161.09	0.05	NA	NA
MW-2	7/23/1999	65,800	6,500	4,480	1,960	8,960	46,600	58,500*	170.91	14.45	NA	156.46	NA	1.4	NA
MW-2	11/1/1999	NA	NA	NA	NA	NA	NA	NA	170.91	11.84	11.81	159.09	0.03	NA	NA
MW-2	1/17/2000	46,000	6,000	2,400	1,500	5,500	50,000	31,000	170.91	11.00	NA	159.91	NA	1.3	-54
MW-2	4/17/2000	96,300	8,150	10,200	2,820	14,900	112,000	108,000	170.91	11.06	NA	159.85	NA	2.6	125
MW-2	7/26/2000	72,400	8,680	5,620	2,810	13,400	66,200	46,300	170.91	12.82	NA	158.09	NA	2.2	113
MW-2	10/12/2000	63,200	5,840	4,180	2,310	11,100	61,200	66,600	170.91	11.32	NA	159.59	NA	0.4	55
MW-2	1/15/2001	59,700	2,630	4,800	2,050	11,500	44,400	5,080	170.91	10.19	NA	160.72	NA	1.1	-22
MW-2	4/9/2001	56,900	1,860	2,550	1,810	9,720	40,000	46,600	170.91	11.15	NA	159.76	NA	1.0	-55
MW-2	7/24/2001	84,000	3,000	4,600	2,500	13,000	NA	41,000	170.91	11.67	NA	159.24	NA	0.2	53
MW-2	10/31/2001	45,000	2,200	3,000	1,500	7,700	NA	29,000	170.91	11.04	NA	159.87	NA	1.2	-17
MW-2	1/10/2002	28,000	840	740	760	3,300	NA	32,000	170.91	9.58	NA	161.33	NA	2.1	-76
MW-2	4/25/2002	41,000	1,900	2,000	1,200	6,900	NA	17,000	170.91	11.40	NA	159.51	NA	0.8	-95
MW-2	7/18/2002	87,000	2,000	2,200	1,400	10,000	NA	19,000	170.91	12.68	NA	158.23	NA	0.7	-34
MW-2	10/7/2002	110,000	3,900	6,700	2,700	15,000	NA	20,000	170.88	11.58	NA	159.30	NA	1.4	-52
MW-2	1/6/2003	65,000	2,400	3,500	1,400	8,600	NA	26,000	170.88	9.09	NA	161.79	NA	0.4	40
MW-3	11/17/1993	18,000	5,400	660	720	2,200	NA	NA	174.61	15.40	NA	159.21	NA	NA	NA
MW-3	1/20/1994	55,000	13,000	2,600	2,200	6,500	NA	NA	174.61	14.61	NA	160.00	NA	NA	NA
MW-3	4/25/1994	96,000	11,000	1,600	3,100	9,900	NA	NA	174.61	13.12	NA	161.49	NA	NA	NA
MW-3 (D)	4/25/1994	78,000	12,000	1,900	2,600	7,300	NA	NA	174.61	13.12	NA	161.49	NA	NA	NA
MW-3	7/7/1994	NA	NA	NA	NA	NA	NA	NA	174.61	14.54	NA	160.07	0.02	NA	NA
MW-3	10/27/1994	NA	NA	NA	NA	NA	NA	NA	174.61	15.62	NA	159.03	0.05	NA	NA
MW-3	11/17/1994	NA	NA	NA	NA	NA	NA	NA	174.61	13.83	NA	160.78	NA	NA	NA
MW-3	11/28/1994	NA	NA	NA	NA	NA	NA	NA	174.61	14.02	NA	160.59	NA	NA	NA
MW-3	1/13/1995	180,000	3,200	2,700	1,700	5,200	NA	NA	174.61	12.13	NA	162.48	NA	NA	NA

TABLE 4
Joint Groundwater Monitoring Data and Analytical Results
 Shell-branded Service Station
 4255 MacArthur Boulevard
 Oakland, CA

Well ID	Date	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-3 (D)	1/13/1995	23,000	4,000	690	960	3,000	NA	NA	174.61	12.13	NA	162.48	NA	NA	NA
MW-3	4/12/1995	56,000	8,700	1,500	2,100	6,300	NA	NA	174.61	12.96	NA	161.65	NA	NA	NA
MW-3	7/25/1995	NA	NA	NA	NA	NA	NA	NA	174.61	14.28	NA	160.38	0.06	NA	NA
MW-3	10/18/1995	NA	NA	NA	NA	NA	NA	NA	174.61	15.88	NA	158.77	0.05	NA	NA
MW-3	1/17/1996	NA	NA	NA	NA	NA	NA	NA	174.61	13.86	NA	160.94	0.24	NA	NA
MW-3	4/25/1996	NA	NA	NA	NA	NA	NA	NA	174.61	13.82	NA	160.81	0.02	NA	NA
MW-3	7/17/1996	NA	NA	NA	NA	NA	NA	NA	174.61	16.11	NA	158.52	0.03	NA	NA
MW-3	10/1/1996	46,000	7,300	530	1,700	3,900	3,200	NA	174.61	16.56	NA	158.05	NA	NA	NA
MW-3 (D)	10/1/1996	47,000	7,100	530	1,700	4,000	2,900	NA	174.61	16.56	NA	158.05	NA	NA	NA
MW-3	1/22/1997	82,000	5,200	1,300	2,800	8,900	1,100	NA	174.61	13.07	NA	161.54	NA	NA	NA
MW-3 (D)	1/22/1997	61,000	8,400	1,100	2,300	7,000	2,700	NA	174.61	13.07	NA	161.54	NA	NA	NA
MW-3	4/8/1997	NA	NA	NA	NA	NA	NA	NA	174.61	17.09	NA	157.54	0.03	NA	NA
MW-3	7/8/1997	56,000	8,800	580	2,000	4,900	2,800	NA	174.61	15.85	NA	158.76	NA	NA	NA
MW-3	10/8/1997	48,000	8,000	590	1,700	3,400	5,100	NA	174.61	16.22	NA	158.39	NA	NA	NA
MW-3	1/8/1998	47,000	9,400	810	2,300	4,700	6,300	NA	174.61	13.80	NA	160.81	NA	NA	NA
MW-3 (D)	1/8/1998	48,000	8,100	750	2,000	4,100	5,800	NA	174.61	13.80	NA	160.81	NA	NA	NA
MW-3	4/13/1998	32,000	6,800	540	1,400	3,400	4,000	NA	174.61	12.97	NA	161.64	NA	NA	NA
MW-3 (D)	4/13/1998	36,000	7,300	660	1,600	3,700	4,000	NA	174.61	12.97	NA	161.64	NA	NA	NA
MW-3	7/17/1998	71,000	11,000	590	2,200	6,900	3,900	NA	174.61	11.51	NA	163.10	NA	NA	NA
MW-3 (D)	7/17/1998	76,000	12,000	700	2,600	8,000	3,000	NA	174.61	11.51	NA	163.10	NA	NA	NA
MW-3	10/2/1998	66,000	8,900	510	2,000	4,900	4,600	NA	174.61	16.50	NA	158.11	NA	NA	NA
MW-3 (D)	10/2/1998	59,000	9,400	460	2,000	4,900	4,700	NA	174.61	16.50	NA	158.11	NA	NA	NA
MW-3	2/3/1999	36,000	6,800	300	1,600	2,900	18,000	NA	174.61	15.21	NA	159.40	NA	1.3	NA
MW-3	4/29/1999	45,000	8,100	580	2,200	5,800	4,700	5,150	174.61	15.43	NA	159.18	NA	1.5	-68
MW-3	7/23/1999	29,400	3,540	215	810	3,800	4,720	6,950*	174.61	14.95	NA	159.66	NA	1.3	NA
MW-3	11/1/1999	20,000	4,190	294	1,060	1,740	5,540	8,590	174.61	14.66	NA	159.95	NA	0.6	-110
MW-3	1/17/2000	17,000	3,900	89	1,100	1,200	7,900	NA	174.61	13.94	NA	160.67	NA	1.3	-40
MW-3	4/17/2000	28,100	5,240	247	1,540	2,750	16,600	NA	174.61	14.00	NA	160.61	NA	1.1	-86
MW-3	7/26/2000	24,300	6,680	159	1,610	1,640	17,100	NA	174.61	13.72	NA	160.89	NA	0.9	-70
MW-3	10/12/2000	14,300	2,630	86.7	241	1,360	16,300	NA	174.61	14.15	NA	160.46	NA	0.9	50
MW-3	1/15/2001	22,100	4,400	266	977	2,990	13,200	NA	174.61	13.05	NA	161.56	NA	1.3	-40
MW-3	4/9/2001	33,800	7,100	147	1,700	2,660	13,000	NA	174.61	13.59	NA	161.02	NA	0.6	-56

TABLE 4
Joint Groundwater Monitoring Data and Analytical Results
 Shell-branded Service Station
 4255 MacArthur Boulevard
 Oakland, CA

Well ID	Date	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-3	7/24/2001	220,000	5,600	1,900	4,400	19,000	NA	12,000	174.61	14.43	NA	160.18	NA	0.4	29
MW-3	10/31/2001	65,000	2,700	510	1,800	7,200	NA	9,800	174.61	14.59	NA	160.02	NA	0.9	-27
MW-3	1/10/2002	66,000	2,400	490	1,700	6,600	NA	5,500	174.61	12.65	NA	161.96	NA	1.7	-76
MW-3	4/25/2002	55,000	4,600	460	2,400	6,900	NA	8,100	174.61	14.13	NA	160.48	NA	1.2	-96
MW-3	7/18/2002	56,000	3,300	270	1,700	5,000	NA	8,400	174.61	15.48	15.45	159.15	0.03	0.8	-41
MW-3	10/7/2002	NA	NA	NA	NA	NA	NA	NA	174.59	14.60	14.40	160.15	0.20	NA	NA
MW-3	1/6/2003	57,000	3,200	330	1,800	5,400	NA	5,100	174.59	11.62	11.60	162.99	0.02	0.4	33
MW-4	11/17/1994	NA	NA	NA	NA	NA	NA	NA	164.06	6.62	NA	157.44	NA	NA	NA
MW-4	11/28/1994	2,900	200	17	76	260	NA	NA	164.06	6.11	NA	157.95	NA	NA	NA
MW-4	1/13/1995	1,900	130	5.6	13	40	NA	NA	164.06	6.05	NA	158.01	NA	NA	NA
MW-4	4/12/1995	680	150	<2.0	10	13	NA	NA	164.06	6.31	NA	157.75	NA	NA	NA
MW-4	7/25/1995	340	100	0.8	8.8	3	NA	NA	164.06	7.36	NA	156.70	NA	NA	NA
MW-4	10/18/1995	150	31	<0.5	3.5	0.8	NA	NA	164.06	8.54	NA	155.52	NA	NA	NA
MW-4	1/17/1996	290	14	<0.5	1.8	0.8	NA	NA	164.06	8.48	NA	155.58	NA	NA	NA
MW-4	4/25/1996	<500	65	<5	<5	<5	1,700	NA	164.06	7.40	NA	156.66	NA	NA	NA
MW-4 (D)	4/25/1996	<500	66	<5	8.7	<5	1,500	NA	164.06	7.40	NA	156.66	NA	NA	NA
MW-4	7/17/1996	<500	84	<5.0	6.5	<5.0	1,500	NA	164.06	7.75	NA	156.31	NA	NA	NA
MW-4 (D)	7/17/1996	<500	54	<5.0	<5.0	<5.0	1,700	2,100	164.06	7.75	NA	156.31	NA	NA	NA
MW-4	10/1/1996	<500	1.9	<5.0	<5.0	<5.0	3,000	NA	164.06	8.82	NA	155.24	NA	NA	NA
MW-4	1/22/1997	580	130	<2.5	18	5.2	1,200	NA	164.06	7.51	NA	156.55	NA	NA	NA
MW-4	4/8/1997	770	200	7	26	55	1,500	8	164.06	7.18	NA	156.88	NA	NA	NA
MW-4	7/8/1997	570	78	<5.0	14	11	1,200	NA	164.06	9.00	NA	155.06	NA	NA	NA
MW-4 (D)	7/8/1997	640	81	<5.0	16	19	1,600	NA	164.06	9.00	NA	155.06	NA	NA	NA
MW-4	10/8/1997	<500	40	<5.0	7.4	5.4	1,400	NA	164.06	8.97	NA	155.09	NA	NA	NA
MW-4 (D)	10/8/1997	<500	36	<5.0	5.9	<5.0	1,400	NA	164.06	8.97	NA	155.09	NA	NA	NA
MW-4	1/8/1998	<1,000	55	<10	13	<10	2,000	NA	164.06	7.90	NA	156.16	NA	NA	NA
MW-4	4/13/1998	350	110	2.4	20	26	<2.5	NA	164.06	7.35	NA	156.71	NA	NA	NA
MW-4	7/17/1998	210	66	0.78	5.4	9.8	1,700	NA	164.06	6.95	NA	157.11	NA	NA	NA
MW-4	10/2/1998	<50	0.69	<0.50	<0.50	<0.50	2,900	NA	164.06	7.35	NA	156.71	NA	NA	NA
MW-4	2/3/1999	560	120	2.5	29	34	6,800	NA	164.06	7.71	NA	156.35	NA	0.9	NA
MW-4	4/29/1999	390	80	1.9	13	19	7,000	8,360	164.06	7.83	NA	156.23	NA	1.1	-125
MW-4	7/23/1999	460	93.6	8.40	25.2	28.8	3,760	6,000*	164.06	11.33	NA	152.73	NA	0.9	NA

TABLE 4
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Shell-branded Service Station
4255 MacArthur Boulevard
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Well ID	Date	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
MW-4	11/1/1999	77.3	0.520	<0.500	<0.500	<0.500	539	NA	164.06	10.66	NA	153.40	NA	2.8	3
MW-4	1/17/2000	160	27	<0.50	12	6.3	12,000	NA	164.06	10.15	NA	153.91	NA	3.9	-17
MW-4	4/17/2000	<500	26	6.38	9.35	10.4	9,070	NA	164.06	10.10	NA	153.96	NA	1.7	-129
MW-4	7/26/2000	<500	22.7	<5.00	7.59	6.96	7,660	NA	164.06	10.09	NA	153.97	NA	1.4	-137
MW-4	10/12/2000	172	19.8	<0.500	7.47	4.50	8,290	NA	164.06	9.35	NA	154.71	NA	3.5	529
MW-4	1/15/2001	53.6	1.50	<0.500	2.45	1.80	9,260	NA	164.06	8.77	NA	155.29	NA	2.3	53
MW-4	4/9/2001	<500	<5.00	<5.00	<5.00	5.52	10,300	NA	164.06	7.75	NA	156.31	NA	1.0	-133
MW-4	7/24/2001	58	3.8	<0.50	3.2	2.9	NA	1,700	164.06	10.07	NA	153.99	NA	0.5	106
MW-4	10/31/2001	<1,000	<10	<10	<10	<10	NA	7,400	164.06	9.97	NA	154.09	NA	0.8	22
MW-4	1/10/2002	<2,000	<20	<20	<20	<20	NA	12,000	164.06	8.53	NA	155.53	NA	8.9	224
MW-4	4/25/2002	<2,000	<20	<20	<20	<20	NA	7,900	164.06	7.33	NA	156.73	NA	3.6	-84
MW-4	7/18/2002	<2,000	<20	<20	<20	<20	NA	7,200	164.06	9.05	NA	155.01	NA	1.7	120
MW-4	10/7/2002	<1,000	<10	<10	<10	<10	NA	3,300	164.03	9.06	NA	154.97	NA	2.5	33
MW-4	1/6/2003	<500	21	<5.0	<5.0	<5.0	NA	2,500	164.03	7.09	NA	156.94	NA	0.5	55
MW-5	1/4/2002	NA	NA	NA	NA	NA	NA	NA	NA	5.62	NA	NA	NA	NA	NA
MW-5	1/10/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	110	164.06	5.88	NA	158.18	NA	3.3	172
MW-5	4/25/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	73	164.06	6.81	NA	157.25	NA	0.3	-44
MW-5	7/18/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	75	164.06	7.38	NA	156.68	NA	0.4	170
MW-5	10/7/2002	<50	<0.50	<0.50	<0.50	<0.50	NA	41	164.14	6.75	NA	157.39	NA	1.5	16
MW-5	1/6/2003	<50	<0.50	<0.50	<0.50	<0.50	NA	81	164.14	5.96	NA	158.18	NA	0.6	166
TB-1	4/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	6.00	NA	NA	NA	3.8	-132
TB-1	11/1/1999	NA	NA	NA	NA	NA	NA	NA	NA	12.65	NA	NA	NA	0.2	-165
TB-1	1/17/2000	NA	NA	NA	NA	NA	NA	NA	NA	7.72	NA	NA	NA	0.8	-178
TB-1	4/17/2000	NA	NA	NA	NA	NA	NA	NA	NA	7.65	NA	NA	NA	0.5	-152
TB-1	7/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	5.13	NA	NA	NA	1.0	-124
TB-1	10/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	5.20	NA	NA	NA	0.7	-73
TB-1	1/15/2001	NA	NA	NA	NA	NA	NA	NA	NA	5.09	NA	NA	NA	1.2	-118
TB-1	4/9/2001	NA	NA	NA	NA	NA	NA	NA	NA	4.96	NA	NA	NA	1.0	-72
TB-1	7/24/2001	NA	NA	NA	NA	NA	NA	NA	NA	6.03	NA	NA	NA	1.4	31
TB-1	10/31/2001	1,000	85	<10	<10	42	NA	4,100	NA	5.89	NA	NA	NA	1.8	88
TB-1	1/10/2002	5,000	410	390	65	620	NA	9,000	NA	7.47	NA	NA	NA	2.0	95
TB-1	4/25/2002	5,000	780	60	49	91	NA	6,000	NA	11.71	NA	NA	NA	1.7	-136

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 4255 MacArthur Boulevard
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Well ID	Date	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
TB-1	7/18/2002	Insufficient water		NA	NA	NA	NA	NA	NA	13.50	NA	NA	NA	NA	NA
TB-1	10/7/2002	4,600	480	36	98	200	NA	4,000	NA	12.95	NA	NA	NA	1.6	-48
TB-1	1/6/2003	130	30	<0.50	<0.50	0.78	NA	330	NA	5.56	NA	NA	NA	0.4	-20
TB-2	4/29/1999	NA	NA	NA	NA	NA	NA	NA	NA	4.76	NA	NA	NA	4.2	-108
TB-2	11/1/1999	NA	NA	NA	NA	NA	NA	NA	NA	11.33	NA	NA	NA	0.5	-148
TB-2	1/17/2000	NA	NA	NA	NA	NA	NA	NA	NA	9.79	NA	NA	NA	0.7	-162
TB-2	4/17/2000	NA	NA	NA	NA	NA	NA	NA	NA	9.75	NA	NA	NA	0.9	-121
TB-2	7/26/2000	NA	NA	NA	NA	NA	NA	NA	NA	4.73	NA	NA	NA	0.9	-85
TB-2	10/12/2000	NA	NA	NA	NA	NA	NA	NA	NA	4.05	NA	NA	NA	0.6	-47
TB-2	1/15/2001	NA	NA	NA	NA	NA	NA	NA	NA	3.87	NA	NA	NA	0.7	-91
TB-2	4/9/2001	46,600	1,240	1,310	1,110	12,100	31,300	NA	NA	3.76	NA	NA	NA	0.8	-24
TB-2	7/24/2001	11,000	630	<25	310	200	NA	11,000	NA	4.75	NA	NA	NA	0.4	-51
TB-2	10/31/2001	7,500	530	1,500	100	500	NA	2,500	NA	4.24	NA	NA	NA	0.6	-7
TB-2	1/10/2002	<5,000	480	47	34	110	NA	12,000	NA	6.26	NA	NA	NA	1.3	-81
TB-2	4/25/2002	4,700	470	140	<20	80	NA	7,400	NA	11.78	NA	NA	NA	0.9	-107
TB-2	7/18/2002	7,500	630	650	<25	390	NA	44,000	NA	12.34	NA	NA	NA	0.9	-67
TB-2	10/7/2002	<10,000	580	<100	<100	180	NA	30,000	NA	11.62	NA	NA	NA	1.0	-41
TB-2	1/6/2003	120	4.8	<0.50	<0.50	2.0	NA	220	NA	4.35	NA	NA	NA	0.5	-515

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 4255 MacArthur Boulevard
 Oakland, CA

Well ID	Date	TPH-G (µg/L)	B (µg/L)	T (µg/L)	E (µg/L)	X (µg/L)	MTBE 8020 (µg/L)	MTBE 8260 (µg/L)	TOC (MSL)	Depth to Water (ft.)	Depth to SPH (ft.)	GW Elevation (MSL)	SPH Thickness (ft.)	DO Reading (ppm)	ORP Reading (mV)
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Abbreviations:

TPH-G = Total petroleum hydrocarbons as gasoline by EPA Method 8260B; prior to July 24, 2001, analyzed by EPA Method 8015.

BTEX = Benzene, toluene, ethylbenzene, xylenes by EPA Method 8260B; prior to July 24, 2001, analyzed by EPA Method 8020.

MTBE = Methyl-tertiary-butyl ether

TOC = Top of Casing Elevation

SPH = Separate-Phase Hydrocarbons

GW = Groundwater

µg/L = Parts per billion

MSL = Mean sea level

ft = Feet

<n = Below detection limit

D = Duplicate sample

NA = Not applicable

DO = Dissolved Oxygens

ppm = Parts per million

ORP = Oxidation Reduction Potential

mV = Millivolts

Notes:

Joint Monitoring data and laboratory analytical results provided by Blaine Tech Services, Inc.

* = Sample analyzed outside the EPA recommended holding time.

a = Ground water surface had a sheen when sampled.

b = MTBE value is estimated by Sequoia Analytical of Redwood City, California.

Site surveyed March 14, 2002, by Virgil Chavez Land Surveying of Vallejo, California.

When separate-phase hydrocarbons are present, ground water elevation is adjusted using the relation:

Corrected ground water elevation = Top-of-casing elevation - depth to water + (0.8 x hydrocarbon thickness).

STANDARD OPERATING PROCEDURE - GROUNDWATER SAMPLING

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

Prior to sampling, the presence or absence of free-phase hydrocarbons is determined using an interface probe. Product thickness, if present, is measured to the nearest 0.01 foot and is noted in the field notes. In addition, 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.



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #1156 Job Number: 180225
 Site Address: 4276 MacArthur Event Date: 1-6-03 (inclusive)
 City: Oakland, CA Sampler: Joc

Well ID: MW-1 Date Monitored: 1-6-03 Well Condition: OK

Well Diameter: 2 in.

Total Depth: 25.11 ft.

Depth to Water: 5.48 ft.

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

19.63 x VF 0.17 = 3.34 x3 (case volume) = Estimated Purge Volume: 10 gal.

Purge Equipment:

Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Other: _____

Sampling Equipment:

Disposable Bailer _____
 Pressure Bailer _____
 Discrete Bailer _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Bailed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbent Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Product Transferred to: _____

Start Time (purge): 1105 Weather Conditions: clear
 Sample Time/Date: 1130 1-6-03 Water Color: clear Odor: yes
 Purging Flow Rate: 1 gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
<u>1115</u>	<u>3.5</u>	<u>6.55</u>	<u>1.84</u>	<u>69.2</u>		
<u>1117</u>	<u>7</u>	<u>6.55</u>	<u>1.80</u>	<u>69.0</u>		
<u>1120</u>	<u>10</u>	<u>6.67</u>	<u>1.77</u>	<u>69.5</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-1</u>	<u>5 x vov vial</u>	<u>YES</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH-G(8015)/BTEX/MTBE(6021)/ 8 Oxy's(8260)</u>
	<u>1 Anal</u>	<u>11</u>	<u>---</u>	<u>''</u>	<u>TPHP</u>

COMMENTS:

Add/Replaced Lock: _____

Add/Replaced Plug: _____ Size: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #1156 Job Number: 180225
 Site Address: 4276 MacArthur Event Date: 1-6-03 (inclusive)
 City: Oakland, CA Sampler: Joe

Well ID: MW-2 Date Monitored: 1-6-03 Well Condition: O.K.
 Well Diameter: 2 in.
 Total Depth: 24.13 ft.
 Depth to Water: 6.79 ft.
 Volume Factor (VF): 17.34 xVF 0.17 = 2.95 x3 (case volume) = Estimated Purge Volume: 9 gal.

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Purge Equipment:
 Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump ✓
 Grundfos _____
 Other: _____

Sampling Equipment:
 Disposable Bailer ✓
 Pressure Bailer _____
 Discrete Bailer _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Bailed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Product Transferred to: _____

Start Time (purge): 0935 Weather Conditions: clear
 Sample Time/Date: 1000 1-6-03 Water Color: clear Odor: yes
 Purging Flow Rate: 1 gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) ^{4/500}	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
<u>0945</u>	<u>3</u>	<u>6.72</u>	<u>3.11</u>	<u>70.5</u>	_____	_____
<u>0947</u>	<u>6</u>	<u>6.67</u>	<u>2.59</u>	<u>69.6</u>	_____	_____
<u>0949</u>	<u>9</u>	<u>6.71</u>	<u>7.67</u>	<u>70.4</u>	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-2</u>	<u>5 x voc vial</u>	<u>YES</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH-G(8015)/BTEX/MTBE(8021)/ 8 Oxy's(8260)</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Size: _____



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #1156
 Site Address: 4276 MacArthur
 City: Oakland, CA

Job Number: 180225
 Event Date: 1-6-03 (inclusive)
 Sampler: Joc

Well ID: MW-3
 Well Diameter: 2 in.
 Total Depth: 25.05 ft.
 Depth to Water: 7.40 ft.
17.65 x VF 0.17 = 3.00 x3 (case volume) = Estimated Purge Volume: 9 gal.

Date Monitored: 1-6-03 Well Condition: OK

Volume	3/4"= 0.02	1"= 0.04	2"= 0.17	3"= 0.38
Factor (VF)	4"= 0.66	5"= 1.02	6"= 1.50	12"= 5.80

Purge Equipment:

Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump _____
 Grundfos _____
 Other: _____

Sampling Equipment:

Disposable Bailer _____
 Pressure Bailer _____
 Discrete Bailer _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Bailed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Product Transferred to: _____

Start Time (purge): 1040 Weather Conditions: clear
 Sample Time/Date: 1052-1-6-03 Water Color: clear Odor: yes
 Purging Flow Rate: 1 gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
<u>1043</u>	<u>3</u>	<u>6.88</u>	<u>3.61</u>	<u>72.1</u>		
<u>1045</u>	<u>6</u>	<u>7.10</u>	<u>3.68</u>	<u>69.6</u>		
<u>1047</u>	<u>9</u>	<u>7.14</u>	<u>3.57</u>	<u>70.5</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-3</u>	<u>5</u> x voc vial	<u>YES</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH-G(8015)/BTEX/MTBE(8021)/ 8 Oxy's(8260)</u>

COMMENTS:

Add/Replaced Lock: _____

Add/Replaced Plug: _____ Size: _____



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #1156 Job Number: 180225
 Site Address: 4276 MacArthur Event Date: 1-6-03 (inclusive)
 City: Oakland, CA Sampler: _____

Well ID: MW-4 Date Monitored: 1-6-03 Well Condition: OK

Well Diameter: 2 in.
 Total Depth: 25.31 ft.
 Depth to Water: 6.36 ft.
 $18.95 \times VF \times 0.17 = 3.22 \times 3$ (case volume) = Estimated Purge Volume: 10 gal.

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Purge Equipment:
 Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump ✓
 Grundfos _____
 Other: _____

Sampling Equipment:
 Disposable Bailer ✓
 Pressure Bailer _____
 Discrete Bailer _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Bailed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Product Transferred to: _____

Start Time (purge): 1014 Weather Conditions: clear
 Sample Time/Date: 1035 1-6-03 Water Color: clear Odor: yes
 Purging Flow Rate: 1 gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
<u>1022</u>	<u>3</u>	<u>6.90</u>	<u>3.55</u>	<u>73.0</u>	_____	_____
<u>1024</u>	<u>7.5</u>	<u>7.10</u>	<u>3.29</u>	<u>70.5</u>	_____	_____
<u>1026</u>	<u>10</u>	<u>7.16</u>	<u>3.22</u>	<u>71.0</u>	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-4</u>	<u>5</u> x vov vial	<u>YES</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH-G(8015)/BTEX/MTBE(8021)/ 8 Oxy's(8260)</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Size: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #1156 Job Number: 180225
 Site Address: 4276 MacArthur Event Date: 1-6-03 (inclusive)
 City: Oakland, CA Sampler: Joe

Well ID: MW-5 Date Monitored: 1-6-03 Well Condition: 0.1c

Well Diameter: 2 in.
 Total Depth: 25.39 ft.
 Depth to Water: 1.86 ft.
23.53 x VF 0.17 = 4.00 x3 (case volume) = Estimated Purge Volume: 12 gal.

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Purge Equipment:
 Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump /
 Grundfos _____
 Other: _____

Sampling Equipment: /
 Disposable Bailer _____
 Pressure Bailer _____
 Discrete Bailer _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Bailed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 4 ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbent Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Product Transferred to: _____

Start Time (purge): 0740 Weather Conditions: clear
 Sample Time/Date: 0805 1-6-03 Water Color: clear Odor: mild
 Purging Flow Rate: 1 gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) ²⁵	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
<u>0740</u>	<u>4</u>	<u>7.10</u>	<u>5.57</u>	<u>72.1</u>	_____	_____
<u>0752</u>	<u>8</u>	<u>7.30</u>	<u>5.62</u>	<u>71.6</u>	_____	_____
<u>0753</u>	<u>12</u>	<u>7.31</u>	<u>5.67</u>	<u>71.6</u>	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-5</u>	<u>5 x vva vial</u>	<u>YES</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH-G(8015)/BTEX/MTBE(8021)/ 8 Oxy's(8260)</u>
	<u>2 x vva</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>HVOC's (8010 L15T) by 8021 B</u>
	<u>1 x Anal</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>TPHO</u>
	<u>1 x Anal</u>	<u>"</u>	<u>-</u>	<u>"</u>	<u>SVOC's by 8270</u>

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Size: _____



GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #1156 Job Number: 180225
 Site Address: 4276 MacArthur Event Date: 1-6-03 (inclusive)
 City: Oakland, CA Sampler: Soe

Well ID: MW-6 Date Monitored: 1-6-03 Well Condition: o.k.
 Well Diameter: 2 in.
 Total Depth: 24.91 ft.
 Depth to Water: 1.90 ft.
23.01 xVF 0.19 = 3.91 x3 (case volume) = Estimated Purge Volume: 12 gal.

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

Purge Equipment:
 Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump ✓
 Grundfos _____
 Other: _____

Sampling Equipment:
 Disposable Bailer ✓
 Pressure Bailer _____
 Discrete Bailer _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Bailed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbant Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Product Transferred to: _____

Start Time (purge): 0815 Weather Conditions: clear
 Sample Time/Date: 0845 1-6-03 Water Color: clear Odor: none
 Purging Flow Rate: 1 gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
<u>0825</u>	<u>4</u>	<u>7.09</u>	<u>7.10</u>	<u>73.3</u>	_____	_____
<u>0828</u>	<u>8</u>	<u>7.51</u>	<u>6.36</u>	<u>71.6</u>	_____	_____
<u>0831</u>	<u>12</u>	<u>7.62</u>	<u>6.31</u>	<u>72.2</u>	_____	_____
_____	_____	_____	_____	_____	_____	_____

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-6</u>	<u>5</u> x voa vial	<u>YES</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH-G(8015)/BTEX/MTBE(8021)/ 8 Oxy's(8260)</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Size: _____



GETTLER - RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #1156 Job Number: 180225
 Site Address: 4276 MacArthur Event Date: 1-6-03 (inclusive)
 City: Oakland, CA Sampler: JJC

Well ID: MW-7 Date Monitored: 1-6-03 Well Condition: OK

Well Diameter: 2 in.
 Total Depth: 25.51 ft.
 Depth to Water: 7.63 ft.

Volume	3/4" = 0.02	1" = 0.04	2" = 0.17	3" = 0.38
Factor (VF)	4" = 0.66	5" = 1.02	6" = 1.50	12" = 5.80

17.88 x VF 0.17 = 3.04 x3 (case volume) = Estimated Purge Volume: 9.5 gal.

Purge Equipment:
 Disposable Bailer _____
 Stainless Steel Bailer _____
 Stack Pump _____
 Suction Pump ✓
 Grundfos _____
 Other: _____

Sampling Equipment:
 Disposable Bailer ✓
 Pressure Bailer _____
 Discrete Bailer _____
 Other: _____

Time Started: _____ (2400 hrs)
 Time Bailed: _____ (2400 hrs)
 Depth to Product: _____ ft
 Depth to Water: _____ ft
 Hydrocarbon Thickness: 0 ft
 Visual Confirmation/Description: _____
 Skimmer / Absorbent Sock (circle one)
 Amt Removed from Skimmer: _____ gal
 Amt Removed from Well: _____ gal
 Product Transferred to: _____

Start Time (purge): 0848 Weather Conditions: clear
 Sample Time/Date: 0920 / 1-6-03 Water Color: clear Odor: yes
 Purging Flow Rate: 1 gpm. Sediment Description: _____
 Did well de-water? _____ If yes, Time: _____ Volume: _____ gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm)	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
<u>0858</u>	<u>3</u>	<u>6.55</u>	<u>3.11</u>	<u>73.0</u>		
<u>0902</u>	<u>6</u>	<u>6.75</u>	<u>2.94</u>	<u>71.5</u>		
<u>0904</u>	<u>9.5</u>	<u>6.70</u>	<u>2.96</u>	<u>71.2</u>		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
<u>MW-7</u>	<u>5 x vovial</u>	<u>YES</u>	<u>HCL</u>	<u>SEQUOIA</u>	<u>TPH-G(8015)/BTEX/MTBE(8021)/ 8 Oxy's(8260)</u>
	<u>2 vovial</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>HVOC's (8010/11/17) by 8021 B</u>
	<u>1 x AmS</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>(PHD)</u>
	<u>1 x AmS</u>	<u>"</u>	<u>"</u>	<u>"</u>	<u>SVOC's by 8270</u>

COMMENTS: _____

Add/Replaced Lock: _____ Add/Replaced Plug: _____ Size: _____

Tosco Corp./ Phillips 66 Co. 2000 Crow Canyon Place Suite 400 San Ramon, CA 94583	Facility Number	#1158	Laboratory Name	SEQUOIA ANALYTICAL	
	Facility Address	4276 MACARTHUR, OAKLAND, CA	Consultant	GETTLER-RYAN, INC.	DEANNA L. HARDING
	Global ID	T0600102279	Project	180225.80	
	Client Contact	MR. DAVID B. DEWITT	Address	6747 SIERRA CT., SUITE J, DUBLIN CA 94568	
	Phone	(825) 277-2384	Phone	(925) 551-7555	Fax (925) 551-7899
			Sample Collected by	JOE AJEMIAN	

SAMPLE ID	Number of Containers Matrix	S = Soil W = Water A = Air C = Charcoal	Sample Preservation	Date/Time (2400 Hrs)	TPH-CAS/BTEX/MTBE EPA 8015/8021B	TPH-DIESEL EPA 8015	TPH-DIESEL w/Silica gel EPA 8015	TPH-CAS EPA 8015	TPH-CAS/BTEX/MTBE EPA 8260	OXYGENATES EPA 8260	METHANOL EPA 8015	TOTAL OIL & GREASE EPA 8020	METALS Cd, Cr, Pb, Zn, Ni	NITRATE/SULFATE/ALKALINITY EPA 300 SERIES	HAOCS (8010) EPA 8021B	VOC'S (8240) EPA 8260	SWOCS EPA 8270	Remarks
QA	1	W	HCL	1-6-03	✓													Run MTEE by 826 on all 8021 MTEE fits.
MW-1	6			1130	✓	✓			✓									5301129-01
MW-2	5			1000	✓				✓									-02
MW-3	5			1052	✓				✓									-03
MW-4	5			1035	✓				✓									-04
MW-5	9			0805	✓	✓			✓					✓		✓		-05
MW-6	5			0845	✓				✓									-06
MW-7	9			0920	✓	✓			✓					✓		✓		-07
																		-08

- OXYGENATES 8260
- 1 - MTBE
 - 2 - TBA
 - 3 - TAME
 - 4 - DIPE
 - 5 - ETBE
 - 6 - 1,2-DCA
 - 7 - EDB
 - 8 - ETHANOL

Relinquished By (Signature)	Organization	Date/Time 1700 1-6-03	Received By (Signature)	Organization	Date/Time 1700 1/6/03	Lead Y/N	Turn Around Time (Circle Choice) 24 Hrs. 48 Hrs. 72 Hrs. 5 Days 10 Days As Contracted
Relinquished By (Signature)	Organization	Date/Time 1430 1/7/03	Received By (Signature)	Organization	Date/Time 1450 1/7/03	Lead Y/N	
Relinquished By (Signature)	Organization	Date/Time 1610 1/7/03	Received For Laboratory By (Signature)	Organization	Date/Time 1610 1/7/03	Lead Y/N	

7/1/03 826MT 11/7/03 1700 MERRICK PROGRAM 1/8/03 1700

FILE NAME: P:\EMIRO\4-CHARACTERS\STD-COC.DWG | Layout: Job Model



**Sequoia
Analytical**

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Sacramento, CA 95834
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30 January, 2003

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

7516711511
JAN 30 2003
GETTLER-RYAN INC.
GENERAL CONTRACTORS

RE: TOSCO 1156, Oakland, CA
Sequoia Work Order: S301129

Enclosed are the results of analyses for samples received by the laboratory on 01/06/03 17:00. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Client Services Representative

CA ELAP Certificate #1624

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

Project: TOSCO 1156, Oakland, CA
Project Number: N/A
Project Manager: Deanna L. Harding

S301129
Reported:
01/30/03 14:10

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
QA	S301129-01	Water	01/06/03 00:00	01/06/03 17:00
MW-1	S301129-02	Water	01/06/03 11:30	01/06/03 17:00
MW-2	S301129-03	Water	01/06/03 10:00	01/06/03 17:00
MW-3	S301129-04	Water	01/06/03 10:52	01/06/03 17:00
MW-4	S301129-05	Water	01/06/03 10:35	01/06/03 17:00
MW-5	S301129-06	Water	01/06/03 08:05	01/06/03 17:00
MW-6	S301129-07	Water	01/06/03 08:45	01/06/03 17:00
MW-7	S301129-08	Water	01/06/03 09:20	01/06/03 17:00

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

 Project: TOSCO 1156, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S301129
 Reported:
 01/30/03 14:10

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-3 (S301129-04) Water Sampled: 01/06/03 10:52 Received: 01/06/03 17:00									
Purgeable Hydrocarbons	27000	10000	ug/l	200	3010167	01/13/03	01/13/03	EPA 8015/8021	
Benzene	800	100	"	"	"	"	"	"	
Toluene	2100	100	"	"	"	"	"	"	
Ethylbenzene	2000	100	"	"	"	"	"	"	
Xylenes (total)	6400	100	"	"	"	"	"	"	
Methyl tert-butyl ether	440	400	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		94 %	60-140		"	"	"	"	
MW-4 (S301129-05) Water Sampled: 01/06/03 10:35 Received: 01/06/03 17:00									
Purgeable Hydrocarbons	5600	2500	ug/l	50	3010213	01/10/03	01/11/03	EPA 8015/8021	
Benzene	1100	25	"	"	"	"	"	"	
Toluene	57	25	"	"	"	"	"	"	
Ethylbenzene	260	25	"	"	"	"	"	"	
Xylenes (total)	320	25	"	"	"	"	"	"	
Methyl tert-butyl ether	370	100	"	"	"	"	"	"	
Surrogate: a,a,a-Trifluorotoluene		70 %	60-140		"	"	"	"	
MW-5 (S301129-06) Water Sampled: 01/06/03 08:05 Received: 01/06/03 17:00									
Purgeable Hydrocarbons	120	50	ug/l	1	3010213	01/10/03	01/11/03	EPA 8015/8021	HC-12
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	410	80	"	40	"	"	01/15/03	"	
Surrogate: a,a,a-Trifluorotoluene		75 %	60-140		"	"	01/11/03	"	

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 S301129
 Reported:
 01/30/03 14:10

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

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
QA (S301129-01) Water Sampled: 01/06/03 00:00 Received: 01/06/03 17:00									
Purgeable Hydrocarbons	ND	50	ug/l	1	3010167	01/10/03	01/10/03	EPA 8015/8021	
Benzene	ND	0.50	"	"	"	"	"	"	
Toluene	ND	0.50	"	"	"	"	"	"	
Ethylbenzene	ND	0.50	"	"	"	"	"	"	
Xylenes (total)	ND	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		79 %	60-140	"	"	"	"	"	
MW-1 (S301129-02) Water Sampled: 01/06/03 11:30 Received: 01/06/03 17:00									
Purgeable Hydrocarbons	82000	25000	ug/l	500	3010167	01/13/03	01/13/03	EPA 8015/8021	
Benzene	6500	250	"	"	"	"	"	"	
Toluene	18000	250	"	"	"	"	"	"	
Ethylbenzene	2700	250	"	"	"	"	"	"	
Xylenes (total)	11000	250	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	1000	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		85 %	60-140	"	"	"	"	"	
MW-2 (S301129-03) Water Sampled: 01/06/03 10:00 Received: 01/06/03 17:00									
Purgeable Hydrocarbons	5900	500	ug/l	10	3010167	01/10/03	01/10/03	EPA 8015/8021	
Benzene	ND	5.0	"	"	"	"	"	"	
Toluene	ND	5.0	"	"	"	"	"	"	
Ethylbenzene	ND	5.0	"	"	"	"	"	"	
Xylenes (total)	ND	5.0	"	"	"	"	"	"	
Methyl tert-butyl ether	31000	2000	"	1000	"	"	01/13/03	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		73 %	60-140	"	"	"	01/10/03	"	



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Reported:
01/30/03 14:10

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

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-6 (S301129-07) Water Sampled: 01/06/03 08:45 Received: 01/06/03 17:00									
Purgeable Hydrocarbons	ND	50	ug/l	1	3010213	01/10/03	01/11/03	EPA 8015/8021	
Benzene	0.62	0.50	"	"	"	"	"	"	
Toluene	1.2	0.50	"	"	"	"	"	"	
Ethylbenzene	1.2	0.50	"	"	"	"	"	"	
Xylenes (total)	3.5	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: a,a,a-Trifluorotoluene</i>		71 %	60-140		"	"	"	"	
MW-7 (S301129-08) Water Sampled: 01/06/03 09:20 Received: 01/06/03 17:00									
Purgeable Hydrocarbons	410	50	ug/l	1	3010213	01/10/03	01/11/03	EPA 8015/8021	
Benzene	0.61	0.50	"	"	"	"	"	"	
Toluene	1.0	0.50	"	"	"	"	"	"	
Ethylbenzene	0.89	0.50	"	"	"	"	"	"	
Xylenes (total)	2.9	0.50	"	"	"	"	"	"	
Methyl tert-butyl ether	3900	200	"	100	"	"	01/13/03	"	Q-28
<i>Surrogate: a,a,a-Trifluorotoluene</i>		89 %	60-140		"	"	01/11/03	"	

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S301129
Reported:
01/30/03 14:10

**Diesel Hydrocarbons by DHS LUFT
Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (S301129-02) Water Sampled: 01/06/03 11:30 Received: 01/06/03 17:00									
Diesel Range Organics (C10-C28)	5.1	0.50	mg/l	10	3010197	01/13/03	01/16/03	DHS LUFT	HC-12
Surrogate: Octacosane		58 %	50-150		"	"	"	"	
MW-5 (S301129-06) Water Sampled: 01/06/03 08:05 Received: 01/06/03 17:00									
Diesel Range Organics (C10-C28)	ND	0.050	mg/l	1	3010197	01/13/03	01/14/03	DHS LUFT	
Surrogate: Octacosane		126 %	50-150		"	"	"	"	
MW-7 (S301129-08) Water Sampled: 01/06/03 09:20 Received: 01/06/03 17:00									
Diesel Range Organics (C10-C28)	ND	0.050	mg/l	1	3010197	01/13/03	01/15/03	DHS LUFT	
Surrogate: Octacosane		91 %	50-150		"	"	"	"	

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 S301129
 Reported:
 01/30/03 14:10

Volatile Organic Compounds 8010B list by EPA Method 8260B
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (S301129-06) Water Sampled: 01/06/03 08:05 Received: 01/06/03 17:00									
Freon 113	ND	1.0	ug/l	1	3010266	01/15/03	01/16/03	EPA 8260B	
Bromodichloromethane	ND	0.50	"	"	"	"	"	"	
Bromoform	ND	0.50	"	"	"	"	"	"	
Bromomethane	ND	1.0	"	"	"	"	"	"	
Carbon tetrachloride	ND	0.50	"	"	"	"	"	"	
Chlorobenzene	ND	0.50	"	"	"	"	"	"	
Chloroethane	ND	0.50	"	"	"	"	"	"	
Chloroform	ND	0.50	"	"	"	"	"	"	
Chloromethane	ND	0.50	"	"	"	"	"	"	
Dibromochloromethane	ND	0.50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	0.50	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	0.50	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	0.50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	0.50	"	"	"	"	"	"	
1,2-Dichloroethane	1.4	0.50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	0.50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	0.50	"	"	"	"	"	"	
1,2-Dichloropropane	ND	0.50	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	0.50	"	"	"	"	"	"	
Methylene chloride	ND	5.0	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	1.0	"	"	"	"	"	"	
Tetrachloroethene	ND	0.50	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	0.50	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	0.50	"	"	"	"	"	"	
Trichloroethene	ND	0.50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	0.50	"	"	"	"	"	"	
Vinyl chloride	ND	0.50	"	"	"	"	"	"	
<i>Surrogate: 1,2-DCA-d4</i>		103 %		70-130	"	"	"	"	
<i>Surrogate: Toluene-d8</i>		112 %		70-130	"	"	"	"	
<i>Surrogate: 4-BFB</i>		100 %		70-130	"	"	"	"	

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 Project: TOSCO 1156, Oakland, CA
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 Project Manager: Deanna L. Harding

 S301129
 Reported:
 01/30/03 14:10

Volatile Organic Compounds 8010B list by EPA Method 8260B
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (S301129-08) Water									R-05
Sampled: 01/06/03 09:20 Received: 01/06/03 17:00									
Freon 113	ND	100	ug/l	100	3010266	01/15/03	01/16/03	EPA 8260B	
Bromodichloromethane	ND	50	"	"	"	"	"	"	
Bromoform	ND	50	"	"	"	"	"	"	
Bromomethane	ND	100	"	"	"	"	"	"	
Carbon tetrachloride	ND	50	"	"	"	"	"	"	
Chlorobenzene	ND	50	"	"	"	"	"	"	
Chloroethane	ND	50	"	"	"	"	"	"	
Chloroform	ND	50	"	"	"	"	"	"	
Chloromethane	ND	50	"	"	"	"	"	"	
Dibromochloromethane	ND	50	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	50	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	50	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	50	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	50	"	"	"	"	"	"	
Dichlorodifluoromethane	ND	50	"	"	"	"	"	"	
1,1-Dichloroethane	ND	50	"	"	"	"	"	"	
1,2-Dichloroethane	ND	50	"	"	"	"	"	"	
1,1-Dichloroethene	ND	50	"	"	"	"	"	"	
cis-1,2-Dichloroethene	ND	50	"	"	"	"	"	"	
trans-1,2-Dichloroethene	ND	50	"	"	"	"	"	"	
1,2-Dichloropropane	ND	50	"	"	"	"	"	"	
cis-1,3-Dichloropropene	ND	50	"	"	"	"	"	"	
trans-1,3-Dichloropropene	ND	50	"	"	"	"	"	"	
Methylene chloride	ND	500	"	"	"	"	"	"	
1,1,2,2-Tetrachloroethane	ND	100	"	"	"	"	"	"	
Tetrachloroethene	ND	50	"	"	"	"	"	"	
1,1,1-Trichloroethane	ND	50	"	"	"	"	"	"	
1,1,2-Trichloroethane	ND	50	"	"	"	"	"	"	
Trichloroethene	ND	50	"	"	"	"	"	"	
Trichlorofluoromethane	ND	50	"	"	"	"	"	"	
Vinyl chloride	ND	50	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		98 %		70-130	"	"	"	"	
Surrogate: Toluene-d8		112 %		70-130	"	"	"	"	
Surrogate: 4-BFB		99 %		70-130	"	"	"	"	



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Dublin CA, 94568

Project: TOSCO 1156, Oakland, CA
Project Number: N/A
Project Manager: Deanna L. Harding

S301129
Reported:
01/30/03 14:10

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-1 (S301129-02) Water Sampled: 01/06/03 11:30 Received: 01/06/03 17:00									
Tert-butyl alcohol	ND	20000	ug/l	200	3010337	01/21/03	01/21/03	EPA 8260B	HT-04
Methyl tert-butyl ether	790	400	"	"	"	"	"	"	HT-04
Di-isopropyl ether	ND	400	"	"	"	"	"	"	HT-04
Ethyl tert-butyl ether	ND	400	"	"	"	"	"	"	HT-04
Tert-amyl methyl ether	ND	400	"	"	"	"	"	"	HT-04
Ethanol	ND	100000	"	"	"	"	"	"	HT-04
1,2-Dichloroethane	ND	400	"	"	"	"	"	"	HT-04
1,2-Dibromoethane (EDB)	ND	400	"	"	"	"	"	"	HT-04
Surrogate: 1,2-DCA-d4		124 %	60-140		"	"	"	"	HT-04
MW-2 (S301129-03) Water Sampled: 01/06/03 10:00 Received: 01/06/03 17:00									
Tert-butyl alcohol	ND	50000	ug/l	500	3010282	01/16/03	01/16/03	EPA 8260B	
Methyl tert-butyl ether	35000	1000	"	"	"	"	"	"	
Di-isopropyl ether	ND	1000	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	1000	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	1000	"	"	"	"	"	"	
Ethanol	ND	250000	"	"	"	"	"	"	
1,2-Dichloroethane	ND	1000	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	1000	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		124 %	60-140		"	"	"	"	
MW-3 (S301129-04) Water Sampled: 01/06/03 10:52 Received: 01/06/03 17:00									
Tert-butyl alcohol	ND	4000	ug/l	40	3010282	01/16/03	01/16/03	EPA 8260B	
Methyl tert-butyl ether	110	80	"	"	"	"	"	"	
Di-isopropyl ether	ND	80	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	80	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	80	"	"	"	"	"	"	
Ethanol	23000	20000	"	"	"	"	"	"	
1,2-Dichloroethane	ND	80	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	80	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		123 %	60-140		"	"	"	"	

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 Project: TOSCO 1156, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S301129
 Reported:
 01/30/03 14:10

**Volatile Organic Compounds by EPA Method 8260B
 Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-4 (S301129-05) Water Sampled: 01/06/03 10:35 Received: 01/06/03 17:00									
Tert-butyl alcohol	ND	1000	ug/l	10	3010282	01/16/03	01/16/03	EPA 8260B	
Methyl tert-butyl ether	520	20	"	"	"	"	"	"	
Di-isopropyl ether	ND	20	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	20	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	20	"	"	"	"	"	"	
Ethanol	ND	5000	"	"	"	"	"	"	
1,2-Dichloroethane	ND	20	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	20	"	"	"	"	"	"	
<i>Surrogate: 1,2-DCA-d4</i>		120 %	60-140	"	"	"	"	"	
MW-5 (S301129-06) Water Sampled: 01/06/03 08:05 Received: 01/06/03 17:00									
Tert-butyl alcohol	ND	100	ug/l	1	3010266	01/15/03	01/16/03	EPA 8260B	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Ethanol	ND	500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: 1,2-DCA-d4</i>		103 %	60-140	"	"	"	"	"	
MW-5 (S301129-06RE1) Water Sampled: 01/06/03 08:05 Received: 01/06/03 17:00									
Methyl tert-butyl ether	350	10	ug/l	5	3010266	01/15/03	01/16/03	EPA 8260B	
<i>Surrogate: 1,2-DCA-d4</i>		63 %	60-140	"	"	"	"	"	
MW-6 (S301129-07) Water Sampled: 01/06/03 08:45 Received: 01/06/03 17:00									
Tert-butyl alcohol	ND	100	ug/l	1	3010322	01/20/03	01/20/03	EPA 8260B	
Methyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Di-isopropyl ether	ND	2.0	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	2.0	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	2.0	"	"	"	"	"	"	
Ethanol	ND	500	"	"	"	"	"	"	
1,2-Dichloroethane	ND	2.0	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	2.0	"	"	"	"	"	"	
<i>Surrogate: 1,2-DCA-d4</i>		115 %	60-140	"	"	"	"	"	

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

Project: TOSCO 1156, Oakland, CA
Project Number: N/A
Project Manager: Deanna L. Harding

S301129
Reported:
01/30/03 14:10

Volatile Organic Compounds by EPA Method 8260B
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (S301129-08) Water Sampled: 01/06/03 09:20 Received: 01/06/03 17:00									
Tert-butyl alcohol	ND	10000	ug/l	100	3010266	01/15/03	01/16/03	EPA 8260B	
Methyl tert-butyl ether	3100	200	"	"	"	"	"	"	
Di-isopropyl ether	ND	200	"	"	"	"	"	"	
Ethyl tert-butyl ether	ND	200	"	"	"	"	"	"	
Tert-amyl methyl ether	ND	200	"	"	"	"	"	"	
Ethanol	ND	50000	"	"	"	"	"	"	
1,2-Dichloroethane	ND	200	"	"	"	"	"	"	
1,2-Dibromoethane (EDB)	ND	200	"	"	"	"	"	"	
<i>Surrogate: 1,2-DCA-d4</i>		98 %		60-140	"	"	"	"	

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

 Project: TOSCO 1156, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S301129
 Reported:
 01/30/03 14:10

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (S301129-06) Water Sampled: 01/06/03 08:05 Received: 01/06/03 17:00									
N-Nitrosodimethylamine	ND	5.0	ug/l	1	3010179	01/10/03	01/16/03	EPA 8270C	
Phenol	ND	5.0	"	"	"	"	"	"	
Aniline	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
2-Chlorophenol	ND	10	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Benzyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2-Methylphenol	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	5.0	"	"	"	"	"	"	
4-Methylphenol	ND	5.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Nitrobenzene	ND	5.0	"	"	"	"	"	"	
Isophorone	ND	5.0	"	"	"	"	"	"	
2-Nitrophenol	ND	20	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	5.0	"	"	"	"	"	"	
Benzoic acid	ND	20	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	10	"	"	"	"	"	"	
4-Chloroaniline	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	5.0	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	20	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.0	"	"	"	"	"	"	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	5.0	"	"	"	"	"	"	
3-Nitroaniline	ND	5.0	"	"	"	"	"	"	
Acenaphthene	ND	5.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	20	"	"	"	"	"	"	
4-Nitrophenol	ND	20	"	"	"	"	"	"	
Dibenzofuran	ND	5.0	"	"	"	"	"	"	

Sequoia Analytical - Sacramento

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 Dublin CA, 94568

 Project: TOSCO 1156, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S301129
 Reported:
 01/30/03 14:10

Semivolatile Organic Compounds by EPA Method 8270C
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (S301129-06) Water Sampled: 01/06/03 08:05 Received: 01/06/03 17:00									
2,4-Dinitrotoluene	ND	5.0	ug/l	1	3010179	01/10/03	01/16/03	EPA 8270C	
Diethyl phthalate	ND	5.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	5.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	20	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.0	"	"	"	"	"	"	
Azobenzene	ND	5.0	"	"	"	"	"	"	
4-Nitroaniline	ND	5.0	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Hexachlorobenzene	ND	5.0	"	"	"	"	"	"	
Pentachlorophenol	ND	20	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Carbazole	ND	5.0	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	5.0	"	"	"	"	"	"	
Benzyl butyl phthalate	ND	5.0	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	10	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.0	"	"	"	"	"	"	
Surrogate: 2-Fluorophenol		53 %		15-103	"	"	"	"	
Surrogate: Phenol-d6		32 %		18-115	"	"	"	"	
Surrogate: Nitrobenzene-d5		88 %		39-103	"	"	"	"	
Surrogate: 2-Fluorobiphenyl		90 %		40-124	"	"	"	"	
Surrogate: 2,4,6-Tribromophenol		109 %		11-142	"	"	"	"	
Surrogate: Terphenyl-d14		65 %		56-139	"	"	"	"	

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 Project: TOSCO 1156, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

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 Reported:
 01/30/03 14:10

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (S301129-08) Water Sampled: 01/06/03 09:20 Received: 01/06/03 17:00									
N-Nitrosodimethylamine	ND	5.0	ug/l	1	3010179	01/10/03	01/16/03	EPA 8270C	
Phenol	ND	5.0	"	"	"	"	"	"	
Aniline	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethyl)ether	ND	5.0	"	"	"	"	"	"	
2-Chlorophenol	ND	10	"	"	"	"	"	"	
1,3-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
1,4-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
Benzyl alcohol	ND	5.0	"	"	"	"	"	"	
1,2-Dichlorobenzene	ND	5.0	"	"	"	"	"	"	
2-Methylphenol	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroisopropyl)ether	ND	5.0	"	"	"	"	"	"	
4-Methylphenol	ND	5.0	"	"	"	"	"	"	
N-Nitrosodi-n-propylamine	ND	5.0	"	"	"	"	"	"	
Hexachloroethane	ND	5.0	"	"	"	"	"	"	
Nitrobenzene	ND	5.0	"	"	"	"	"	"	
Isophorone	ND	5.0	"	"	"	"	"	"	
2-Nitrophenol	ND	20	"	"	"	"	"	"	
2,4-Dimethylphenol	ND	5.0	"	"	"	"	"	"	
Bis(2-chloroethoxy)methane	ND	5.0	"	"	"	"	"	"	
Benzoic acid	ND	20	"	"	"	"	"	"	
2,4-Dichlorophenol	ND	10	"	"	"	"	"	"	
1,2,4-Trichlorobenzene	ND	5.0	"	"	"	"	"	"	
Naphthalene	ND	10	"	"	"	"	"	"	
4-Chloroaniline	ND	5.0	"	"	"	"	"	"	
Hexachlorobutadiene	ND	5.0	"	"	"	"	"	"	
4-Chloro-3-methylphenol	ND	5.0	"	"	"	"	"	"	
2-Methylnaphthalene	ND	5.0	"	"	"	"	"	"	
Hexachlorocyclopentadiene	ND	20	"	"	"	"	"	"	
2,4,6-Trichlorophenol	ND	10	"	"	"	"	"	"	
2,4,5-Trichlorophenol	ND	10	"	"	"	"	"	"	
2-Chloronaphthalene	ND	5.0	"	"	"	"	"	"	
2-Nitroaniline	ND	5.0	"	"	"	"	"	"	
Dimethyl phthalate	ND	5.0	"	"	"	"	"	"	
Acenaphthylene	ND	5.0	"	"	"	"	"	"	
2,6-Dinitrotoluene	ND	5.0	"	"	"	"	"	"	
3-Nitroaniline	ND	5.0	"	"	"	"	"	"	
Acenaphthene	ND	5.0	"	"	"	"	"	"	
2,4-Dinitrophenol	ND	20	"	"	"	"	"	"	
4-Nitrophenol	ND	20	"	"	"	"	"	"	
Dibenzofuran	ND	5.0	"	"	"	"	"	"	

Sequoia Analytical - Sacramento

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

 Project: TOSCO 1156, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S301129
 Reported:
 01/30/03 14:10

Semivolatile Organic Compounds by EPA Method 8270C

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-7 (S301129-08) Water Sampled: 01/06/03 09:20 Received: 01/06/03 17:00									
2,4-Dinitrotoluene	ND	5.0	ug/l	1	3010179	01/10/03	01/16/03	EPA 8270C	
Diethyl phthalate	ND	5.0	"	"	"	"	"	"	
4-Chlorophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Fluorene	ND	5.0	"	"	"	"	"	"	
4,6-Dinitro-2-methylphenol	ND	20	"	"	"	"	"	"	
N-Nitrosodiphenylamine	ND	5.0	"	"	"	"	"	"	
Azobenzene	ND	5.0	"	"	"	"	"	"	
4-Nitroaniline	ND	5.0	"	"	"	"	"	"	
4-Bromophenyl phenyl ether	ND	5.0	"	"	"	"	"	"	
Hexachlorobenzene	ND	5.0	"	"	"	"	"	"	
Pentachlorophenol	ND	20	"	"	"	"	"	"	
Phenanthrene	ND	5.0	"	"	"	"	"	"	
Anthracene	ND	5.0	"	"	"	"	"	"	
Carbazole	ND	5.0	"	"	"	"	"	"	
Di-n-butyl phthalate	ND	5.0	"	"	"	"	"	"	
Fluoranthene	ND	5.0	"	"	"	"	"	"	
Pyrene	ND	5.0	"	"	"	"	"	"	
Benzyl butyl phthalate	ND	5.0	"	"	"	"	"	"	
3,3'-Dichlorobenzidine	ND	10	"	"	"	"	"	"	
Bis(2-ethylhexyl)phthalate	ND	5.0	"	"	"	"	"	"	
Benzo (a) anthracene	ND	5.0	"	"	"	"	"	"	
Chrysene	ND	5.0	"	"	"	"	"	"	
Di-n-octyl phthalate	ND	5.0	"	"	"	"	"	"	
Benzo (b) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (k) fluoranthene	ND	5.0	"	"	"	"	"	"	
Benzo (a) pyrene	ND	5.0	"	"	"	"	"	"	
Indeno (1,2,3-cd) pyrene	ND	5.0	"	"	"	"	"	"	
Dibenz (a,h) anthracene	ND	5.0	"	"	"	"	"	"	
Benzo (ghi) perylene	ND	5.0	"	"	"	"	"	"	
<i>Surrogate: 2-Fluorophenol</i>		49 %		15-103	"	"	"	"	
<i>Surrogate: Phenol-d6</i>		31 %		18-115	"	"	"	"	
<i>Surrogate: Nitrobenzene-d5</i>		75 %		39-103	"	"	"	"	
<i>Surrogate: 2-Fluorobiphenyl</i>		77 %		40-124	"	"	"	"	
<i>Surrogate: 2,4,6-Tribromophenol</i>		103 %		11-142	"	"	"	"	
<i>Surrogate: Terphenyl-d14</i>		40 %		56-139	"	"	"	"	S-BN

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

 Project: TOSCO 1156, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S301129
 Reported:
 01/30/03 14:10

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
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Batch 3010167 - EPA 5030B (P/T)
Blank (3010167-BLK1)

Prepared & Analyzed: 01/09/03

Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.0	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.88		"	10.0		99	60-140			

Blank (3010167-BLK2)

Prepared & Analyzed: 01/10/03

Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.0	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	8.81		"	10.0		88	60-140			

Blank (3010167-BLK3)

Prepared & Analyzed: 01/13/03

Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.0	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.5		"	10.0		105	60-140			

Laboratory Control Sample (3010167-BS1)

Prepared & Analyzed: 01/09/03

Benzene	9.14	0.50	ug/l	10.0		91	70-130			
Toluene	10.1	0.50	"	10.0		101	70-130			
Ethylbenzene	10.2	0.50	"	10.0		102	70-130			
Xylenes (total)	30.4	0.50	"	30.0		101	70-130			
Methyl tert-butyl ether	7.56	2.0	"	10.0		76	70-130			

Sequoia Analytical - Sacramento

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 6747 Sierra Court, Ste. J
 Dublin CA, 94568

 Project: TOSCO 1156, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S301129
 Reported:
 01/30/03 14:10

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
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Batch 3010167 - EPA 5030B (P/T)
Laboratory Control Sample (3010167-BS1)

Prepared & Analyzed: 01/09/03

<i>Surrogate: a,a,a-Trifluorotoluene</i>	10.1		ug/l	10.0		101	60-140			
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Laboratory Control Sample (3010167-BS2)

Prepared & Analyzed: 01/10/03

Benzene	8.43	0.50	ug/l	10.0		84	70-130			
Toluene	9.81	0.50	"	10.0		98	70-130			
Ethylbenzene	10.2	0.50	"	10.0		102	70-130			
Xylenes (total)	30.7	0.50	"	30.0		102	70-130			
Methyl tert-butyl ether	7.02	2.0	"	10.0		70	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.57		"	10.0		96	60-140			

Laboratory Control Sample (3010167-BS3)

Prepared & Analyzed: 01/13/03

Benzene	9.07	0.50	ug/l	10.0		91	70-130			
Toluene	8.92	0.50	"	10.0		89	70-130			
Ethylbenzene	9.03	0.50	"	10.0		90	70-130			
Xylenes (total)	25.9	0.50	"	30.0		86	70-130			
Methyl tert-butyl ether	9.78	2.0	"	10.0		98	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.58		"	10.0		96	60-140			

Batch 3010213 - EPA 5030B (P/T)
Blank (3010213-BLK1)

Prepared & Analyzed: 01/10/03

Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.0	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	8.54		"	10.0		85	60-140			

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

 Project: TOSCO 1156, Oakland, CA
 Project Number: N/A
 Project Manager: Deanna L. Harding

 S301129
 Reported:
 01/30/03 14:10

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
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Batch 3010213 - EPA 5030B (P/T)
Blank (3010213-BLK2)

Prepared & Analyzed: 01/13/03

Purgeable Hydrocarbons	ND	50	ug/l							
Benzene	ND	0.50	"							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	2.0	"							
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.28		"	10.0		93	60-140			

Laboratory Control Sample (3010213-BS1)

Prepared & Analyzed: 01/10/03

Benzene	8.83	0.50	ug/l	10.0		88	70-130			
Toluene	9.86	0.50	"	10.0		99	70-130			
Ethylbenzene	10.8	0.50	"	10.0		108	70-130			
Xylenes (total)	34.3	0.50	"	30.0		114	70-130			
Methyl tert-butyl ether	8.24	2.0	"	10.0		82	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	8.75		"	10.0		88	60-140			

Laboratory Control Sample (3010213-BS2)

Prepared & Analyzed: 01/13/03

Benzene	9.11	0.50	ug/l	10.0		91	70-130			
Toluene	10.1	0.50	"	10.0		101	70-130			
Ethylbenzene	10.2	0.50	"	10.0		102	70-130			
Xylenes (total)	30.3	0.50	"	30.0		101	70-130			
Methyl tert-butyl ether	7.77	2.0	"	10.0		78	70-130			
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.26		"	10.0		93	60-140			

Laboratory Control Sample Dup (3010213-BSD1)

Prepared: 01/10/03 Analyzed: 01/11/03

Benzene	8.62	0.50	ug/l	10.0		86	70-130	2	25	
Toluene	9.63	0.50	"	10.0		96	70-130	2	25	
Ethylbenzene	9.68	0.50	"	10.0		97	70-130	11	25	
Xylenes (total)	29.0	0.50	"	30.0		97	70-130	17	25	
Methyl tert-butyl ether	10.3	2.0	"	10.0		103	70-130	22	25	
<i>Surrogate: a,a,a-Trifluorotoluene</i>	9.05		"	10.0		90	60-140			

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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
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Batch 3010213 - EPA 5030B (P/T)

Laboratory Control Sample Dup (3010213-BSD1)

Prepared: 01/10/03 Analyzed: 01/11/03

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Project Number: N/A
Project Manager: Deanna L. Harding

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**Diesel Hydrocarbons by DHS LUFT - Quality Control
Sequoia Analytical - Sacramento**

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3010197 - EPA 3510C										
Blank (3010197-BLK1) Prepared: 01/13/03 Analyzed: 01/14/03										
Diesel Range Organics (C10-C28)	0.0540	0.050	mg/l							A-01
<i>Surrogate: Octacosane</i>	0.0199		"	0.0200		100	50-150			
Laboratory Control Sample (3010197-BS1) Prepared: 01/13/03 Analyzed: 01/14/03										
Diesel Range Organics (C10-C28)	0.476	0.050	mg/l	0.500		95	60-140			
<i>Surrogate: Octacosane</i>	0.0194		"	0.0200		97	50-150			
Laboratory Control Sample Dup (3010197-BSD1) Prepared: 01/13/03 Analyzed: 01/14/03										
Diesel Range Organics (C10-C28)	0.485	0.050	mg/l	0.500		97	60-140	2	50	
<i>Surrogate: Octacosane</i>	0.0198		"	0.0200		99	50-150			

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Volatile Organic Compounds 8010B list by EPA Method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3010266 - EPA 5030B [P/T]
Blank (3010266-BLK1)

Prepared: 01/15/03 Analyzed: 01/16/03

Freon 113	ND	1.0	ug/l							
Bromodichloromethane	ND	0.50	"							
Bromoform	ND	0.50	"							
Bromomethane	ND	1.0	"							
Carbon tetrachloride	ND	0.50	"							
Chlorobenzene	ND	0.50	"							
Chloroethane	ND	0.50	"							
Chloroform	ND	0.50	"							
Chloromethane	ND	0.50	"							
Dibromochloromethane	ND	0.50	"							
1,2-Dibromoethane (EDB)	ND	0.50	"							
1,2-Dichlorobenzene	ND	0.50	"							
1,3-Dichlorobenzene	ND	0.50	"							
1,4-Dichlorobenzene	ND	0.50	"							
Dichlorodifluoromethane	ND	0.50	"							
1,1-Dichloroethane	ND	0.50	"							
1,2-Dichloroethane	ND	0.50	"							
1,1-Dichloroethene	ND	0.50	"							
cis-1,2-Dichloroethene	ND	0.50	"							
trans-1,2-Dichloroethene	ND	0.50	"							
1,2-Dichloropropane	ND	0.50	"							
cis-1,3-Dichloropropene	ND	0.50	"							
trans-1,3-Dichloropropene	ND	0.50	"							
Methylene chloride	ND	5.0	"							
1,1,2,2-Tetrachloroethane	ND	1.0	"							
Tetrachloroethene	ND	0.50	"							
1,1,1-Trichloroethane	ND	0.50	"							
1,1,2-Trichloroethane	ND	0.50	"							
Trichloroethene	ND	0.50	"							
Trichlorofluoromethane	ND	0.50	"							
Vinyl chloride	ND	0.50	"							
<hr/>										
Surrogate: 1,2-DCA-d4	24.9		"	25.0		100	70-130			
Surrogate: Toluene-d8	28.9		"	25.0		116	70-130			
Surrogate: 4-BFB	24.6		"	25.0		98	70-130			

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 Project Manager: Deanna L. Harding

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Volatile Organic Compounds 8010B list by EPA Method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3010266 - EPA 5030B [P/T]
Laboratory Control Sample (3010266-BS1)

Prepared: 01/15/03 Analyzed: 01/16/03

Chlorobenzene	25.2	0.50	ug/l	25.0		101	70-130			
1,1-Dichloroethene	22.9	0.50	"	25.0		92	70-130			
Trichloroethene	21.8	0.50	"	25.0		87	70-130			

<i>Surrogate: 1,2-DCA-d4</i>	24.9		"	25.0		100	70-130			
<i>Surrogate: Toluene-d8</i>	27.9		"	25.0		112	70-130			
<i>Surrogate: 4-BFB</i>	24.8		"	25.0		99	70-130			

Matrix Spike (3010266-MS1)

Source: S301225-01

Prepared: 01/15/03 Analyzed: 01/16/03

Chlorobenzene	25.2	0.50	ug/l	25.0	ND	101	60-140			
1,1-Dichloroethene	23.5	0.50	"	25.0	ND	94	60-140			
Trichloroethene	22.4	0.50	"	25.0	ND	90	60-140			

<i>Surrogate: 1,2-DCA-d4</i>	24.4		"	25.0		98	70-130			
<i>Surrogate: Toluene-d8</i>	27.6		"	25.0		110	70-130			
<i>Surrogate: 4-BFB</i>	24.8		"	25.0		99	70-130			

Matrix Spike Dup (3010266-MSD1)

Source: S301225-01

Prepared: 01/15/03 Analyzed: 01/16/03

Chlorobenzene	25.1	0.50	ug/l	25.0	ND	100	60-140	0.4	25	
1,1-Dichloroethene	23.2	0.50	"	25.0	ND	93	60-140	1	25	
Trichloroethene	22.0	0.50	"	25.0	ND	88	60-140	2	25	

<i>Surrogate: 1,2-DCA-d4</i>	24.9		"	25.0		100	70-130			
<i>Surrogate: Toluene-d8</i>	28.2		"	25.0		113	70-130			
<i>Surrogate: 4-BFB</i>	25.3		"	25.0		101	70-130			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3010266 - EPA 5030B [P/T]

Prepared: 01/15/03 Analyzed: 01/16/03										
Blank (3010266-BLK1)										
Tert-butyl alcohol	ND	100	ug/l							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Ethanol	ND	500	"							
1,2-Dichloroethane	ND	2.0	"							
1,2-Dibromoethane (EDB)	ND	2.0	"							

Surrogate: 1,2-DCA-d4	24.9	"	25.0	100	60-140
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Prepared: 01/15/03 Analyzed: 01/16/03										
Laboratory Control Sample (3010266-BS1)										
Methyl tert-butyl ether	22.9	2.0	ug/l	25.0		92	60-140			
Surrogate: 1,2-DCA-d4	24.9	"	25.0	100	60-140					

Prepared: 01/15/03 Analyzed: 01/16/03										
Matrix Spike (3010266-MS1)										
			Source: S301225-01							
Methyl tert-butyl ether	31.8	2.0	ug/l	25.0	10	87	60-140			
Surrogate: 1,2-DCA-d4	24.4	"	25.0	98	60-140					

Prepared: 01/15/03 Analyzed: 01/16/03										
Matrix Spike Dup (3010266-MSD1)										
			Source: S301225-01							
Methyl tert-butyl ether	32.2	2.0	ug/l	25.0	10	89	60-140	1	25	
Surrogate: 1,2-DCA-d4	24.9	"	25.0	100	60-140					

Batch 3010282 - EPA 5030B [P/T]

Prepared & Analyzed: 01/16/03										
Blank (3010282-BLK1)										
Tert-butyl alcohol	ND	100	ug/l							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Ethanol	ND	500	"							

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Volatile Organic Compounds by EPA Method 8260B - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3010282 - EPA 5030B [P/T]										
Blank (3010282-BLK1) Prepared & Analyzed: 01/16/03										
1,2-Dichloroethane	ND	2.0	ug/l							
1,2-Dibromoethane (EDB)	ND	2.0	"							
<i>Surrogate: 1,2-DCA-d4</i>	29.4		"	25.0		118	60-140			
Laboratory Control Sample (3010282-BS1) Prepared & Analyzed: 01/16/03										
Methyl tert-butyl ether	17.5	2.0	ug/l	22.4		78	60-140			
<i>Surrogate: 1,2-DCA-d4</i>	29.7		"	25.0		119	60-140			
Matrix Spike (3010282-MS1) Source: S301086-04 Prepared: 01/16/03 Analyzed: 01/17/03										
Methyl tert-butyl ether	19.1	2.0	ug/l	22.4	ND	82	60-140			
<i>Surrogate: 1,2-DCA-d4</i>	33.0		"	25.0		132	60-140			
Matrix Spike Dup (3010282-MSD1) Source: S301086-04 Prepared: 01/16/03 Analyzed: 01/17/03										
Methyl tert-butyl ether	17.0	2.0	ug/l	22.4	ND	73	60-140	12	25	
<i>Surrogate: 1,2-DCA-d4</i>	26.6		"	25.0		106	60-140			
Batch 3010322 - EPA 5030B [P/T]										
Blank (3010322-BLK1) Prepared & Analyzed: 01/20/03										
Tert-butyl alcohol	ND	100	ug/l							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Ethanol	ND	500	"							
1,2-Dichloroethane	ND	2.0	"							
1,2-Dibromoethane (EDB)	ND	2.0	"							
<i>Surrogate: 1,2-DCA-d4</i>	30.2		"	25.0		121	60-140			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3010322 - EPA 5030B [P/T]

Laboratory Control Sample (3010322-BS1)				Prepared & Analyzed: 01/20/03						
Methyl tert-butyl ether	15.6	2.0	ug/l	22.4		70	60-140			
<i>Surrogate: 1,2-DCA-d4</i>	29.8		"	25.0		119	60-140			

Matrix Spike (3010322-MS1)				Source: S301283-10		Prepared: 01/20/03		Analyzed: 01/21/03		
Methyl tert-butyl ether	18.2	2.0	ug/l	22.4	ND	81	60-140			
<i>Surrogate: 1,2-DCA-d4</i>	33.0		"	25.0		132	60-140			

Matrix Spike Dup (3010322-MSD1)				Source: S301283-10		Prepared: 01/20/03		Analyzed: 01/21/03		
Methyl tert-butyl ether	14.4	2.0	ug/l	22.4	ND	64	60-140	23	25	
<i>Surrogate: 1,2-DCA-d4</i>	28.8		"	25.0		115	60-140			

Batch 3010337 - EPA 5030B [P/T]

Blank (3010337-BLK1)				Prepared & Analyzed: 01/21/03						
Tert-butyl alcohol	ND	100	ug/l							
Methyl tert-butyl ether	ND	2.0	"							
Di-isopropyl ether	ND	2.0	"							
Ethyl tert-butyl ether	ND	2.0	"							
Tert-amyl methyl ether	ND	2.0	"							
Ethanol	ND	500	"							
1,2-Dichloroethane	ND	2.0	"							
1,2-Dibromoethane (EDB)	ND	2.0	"							
<i>Surrogate: 1,2-DCA-d4</i>	30.5		"	25.0		122	60-140			

Laboratory Control Sample (3010337-BS1)				Prepared & Analyzed: 01/21/03						
Methyl tert-butyl ether	18.8	2.0	ug/l	22.4		84	60-140			
<i>Surrogate: 1,2-DCA-d4</i>	30.8		"	25.0		123	60-140			

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Volatile Organic Compounds by EPA Method 8260B - Quality Control Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3010337 - EPA 5030B [P/T]										
Matrix Spike (3010337-MS1)		Source: S301283-15			Prepared: 01/21/03		Analyzed: 01/22/03			
Methyl tert-butyl ether	20.5	2.0	ug/l	22.4	ND	83	60-140			
<i>Surrogate: 1,2-DCA-d4</i>	<i>34.4</i>		"	<i>25.0</i>		<i>138</i>	<i>60-140</i>			
Matrix Spike Dup (3010337-MSD1)		Source: S301283-15			Prepared: 01/21/03		Analyzed: 01/22/03			
Methyl tert-butyl ether	21.0	2.0	ug/l	22.4	ND	85	60-140	2	25	
<i>Surrogate: 1,2-DCA-d4</i>	<i>33.7</i>		"	<i>25.0</i>		<i>135</i>	<i>60-140</i>			

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Semivolatile Organic Compounds by EPA Method 8270C - Quality Control
Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3010179 - EPA 3510C
Blank (3010179-BLK1)

Prepared: 01/10/03 Analyzed: 01/16/03

N-Nitrosodimethylamine	ND	5.0	ug/l							
Phenol	ND	5.0	"							
Aniline	ND	5.0	"							
Bis(2-chloroethyl)ether	ND	5.0	"							
2-Chlorophenol	ND	10	"							
1,3-Dichlorobenzene	ND	5.0	"							
1,4-Dichlorobenzene	ND	5.0	"							
Benzyl alcohol	ND	5.0	"							
1,2-Dichlorobenzene	ND	5.0	"							
2-Methylphenol	ND	5.0	"							
Bis(2-chloroisopropyl)ether	ND	5.0	"							
4-Methylphenol	ND	5.0	"							
N-Nitrosodi-n-propylamine	ND	5.0	"							
Hexachloroethane	ND	5.0	"							
Nitrobenzene	ND	5.0	"							
Isophorone	ND	5.0	"							
2-Nitrophenol	ND	20	"							
2,4-Dimethylphenol	ND	5.0	"							
Bis(2-chloroethoxy)methane	ND	5.0	"							
Benzoic acid	ND	20	"							
2,4-Dichlorophenol	ND	10	"							
1,2,4-Trichlorobenzene	ND	5.0	"							
Naphthalene	ND	10	"							
4-Chloroaniline	ND	5.0	"							
Hexachlorobutadiene	ND	5.0	"							
4-Chloro-3-methylphenol	ND	5.0	"							
2-Methylnaphthalene	ND	5.0	"							
Hexachlorocyclopentadiene	ND	20	"							
2,4,6-Trichlorophenol	ND	10	"							
2,4,5-Trichlorophenol	ND	10	"							
2-Chloronaphthalene	ND	5.0	"							
2-Nitroaniline	ND	5.0	"							
Dimethyl phthalate	ND	5.0	"							
Acenaphthylene	ND	5.0	"							
2,6-Dinitrotoluene	ND	5.0	"							
3-Nitroaniline	ND	5.0	"							

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 Project Manager: Deanna L. Harding

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Semivolatile Organic Compounds by EPA Method 8270C - Quality Control Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3010179 - EPA 3510C
Blank (3010179-BLK1)

Prepared: 01/10/03 Analyzed: 01/16/03

Acenaphthene	ND	5.0	ug/l							
2,4-Dinitrophenol	ND	20	"							
4-Nitrophenol	ND	20	"							
Dibenzofuran	ND	5.0	"							
2,4-Dinitrotoluene	ND	5.0	"							
Diethyl phthalate	ND	5.0	"							
4-Chlorophenyl phenyl ether	ND	5.0	"							
Fluorene	ND	5.0	"							
4,6-Dinitro-2-methylphenol	ND	20	"							
N-Nitrosodiphenylamine	ND	5.0	"							
Azobenzene	ND	5.0	"							
4-Nitroaniline	ND	5.0	"							
4-Bromophenyl phenyl ether	ND	5.0	"							
Hexachlorobenzene	ND	5.0	"							
Pentachlorophenol	ND	20	"							
Phenanthrene	ND	5.0	"							
Anthracene	ND	5.0	"							
Carbazole	ND	5.0	"							
Di-n-butyl phthalate	ND	5.0	"							
Fluoranthene	ND	5.0	"							
Pyrene	ND	5.0	"							
Benzyl butyl phthalate	ND	5.0	"							
3,3'-Dichlorobenzidine	ND	10	"							
Bis(2-ethylhexyl)phthalate	ND	5.0	"							
Benzo (a) anthracene	ND	5.0	"							
Chrysene	ND	5.0	"							
Di-n-octyl phthalate	ND	5.0	"							
Benzo (b) fluoranthene	ND	5.0	"							
Benzo (k) fluoranthene	ND	5.0	"							
Benzo (a) pyrene	ND	5.0	"							
Indeno (1,2,3-cd) pyrene	ND	5.0	"							
Dibenz (a,h) anthracene	ND	5.0	"							
Benzo (ghi) perylene	ND	5.0	"							
<hr/>										
Surrogate: 2-Fluorophenol	84.8		"	150		57	15-103			
Surrogate: Phenol-d6	50.9		"	150		34	18-115			

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 Project Number: N/A
 Project Manager: Deanna L. Harding

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Semivolatile Organic Compounds by EPA Method 8270C - Quality Control

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
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Batch 3010179 - EPA 3510C
Blank (3010179-BLK1)

Prepared: 01/10/03 Analyzed: 01/16/03

Surrogate: Nitrobenzene-d5	90.0		ug/l	100		90	39-103			
Surrogate: 2-Fluorobiphenyl	90.5		"	100		90	40-124			
Surrogate: 2,4,6-Tribromophenol	165		"	150		110	11-142			
Surrogate: Terphenyl-d14	70.5		"	100		70	56-139			

Laboratory Control Sample (3010179-BS1)

Prepared: 01/10/03 Analyzed: 01/16/03

Phenol	60.8	5.0	ug/l	150		41	22-117			
2-Chlorophenol	132	10	"	150		88	28-111			
1,4-Dichlorobenzene	90.6	5.0	"	100		91	29-108			
N-Nitrosodi-n-propylamine	89.3	5.0	"	100		89	29-119			
1,2,4-Trichlorobenzene	87.3	5.0	"	100		87	24-131			
4-Chloro-3-methylphenol	138	5.0	"	150		92	51-116			
Acenaphthene	94.1	5.0	"	100		94	58-120			
4-Nitrophenol	56.0	20	"	150		37	25-148			
2,4-Dinitrotoluene	97.2	5.0	"	100		97	60-140			
Pentachlorophenol	174	20	"	150		116	40-131			
Pyrene	90.1	5.0	"	100		90	52-127			
Surrogate: 2-Fluorophenol	93.0		"	150		62	15-103			
Surrogate: Phenol-d6	56.0		"	150		37	18-115			
Surrogate: Nitrobenzene-d5	93.2		"	100		93	39-103			
Surrogate: 2-Fluorobiphenyl	93.8		"	100		94	40-124			
Surrogate: 2,4,6-Tribromophenol	189		"	150		126	11-142			
Surrogate: Terphenyl-d14	66.0		"	100		66	56-139			

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Project: TOSCO 1156, Oakland, CA
Project Number: N/A
Project Manager: Deanna L. Harding

S301129
Reported:
01/30/03 14:10

Notes and Definitions

- A-01 This positive result is due to non diesel pattern peaks in the blank. The associated samples did not contain these peaks.
- HC-12 Hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.
- HT-04 This sample was analyzed beyond the EPA recommended holding time. The results may still be useful for their intended purpose.
- Q-28 The opening calibration verification standard was outside acceptance limits by -7%. Although the Laboratory Control Sample verified the accuracy of the batch, this should be considered in evaluating the data for its intended purpose.
- R-05 The sample was diluted due to the presence of high levels of non-target analytes resulting in elevated reporting limits.
- S-BN Base/Neutral surrogate recovery outside control limits. The data was accepted based on valid recovery of remaining two base/neutral surrogates.
- 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