RO-3666

GETTLER-RYAN INC.

1364 North McDowell Blvd. Suite B2
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TRANSMITTAL

TO: Mr. David DeWitt
ConocoPhillips
76 Broadway
Sacramento, CA 95818

DATE: May 20, 2003
PROJECT NO. 140071.3
SUBJECT: 76 Service Station #3292

Alameda County
MAY 22 2003
Environmental Health

From: Jed Douglas

WE ARE SENDING YOU:

COPIES	DATED	DESCRIPTION
1	5/20/03	Risk-Based Corrective Action Evaluation
		15006 E 14th St
		San Leandro, CA

THESE ARE TRANSMITTED as checked below:

- ☐ For review and comment
- ☒ As Requested
- ☐ For Approval
- ☐ Approved as submitted
- ☐ Approved as noted
- ☐ Returned for corrections
- ☐ For your files
- ☒ For your use
- ☐ As noted below

COMMENTS:

Signed: _____

COPIES TO: Ms. Eva Chu, Alameda County Environmental Health Services
1131 Harbor Bay Parkway, Alameda, CA 94502

Gerald Friedkin, 430 - 3rd Street, Oakland, CA 94607

RO-366

GETTLER-RYAN INC.

May 20, 2003

Mr. David B. DeWitt
ConocoPhillips
76 Broadway
Sacramento, California 95818

Subject: ***Risk-Based Corrective Action Evaluation***
ConocoPhillips (76) Service Station No. 3292
15008 East 14th Street, San Leandro, California

Dear Mr. DeWitt:

At the request of ConocoPhillips, Gettler-Ryan Inc. (GR) is submitting this report to document the results of the Risk-Based Corrective Action (RBCA) planning process implemented for the subject site, as described in ASTM E2081-00 "Standard Guide for Risk-Based Corrective Action". This Tier 2 RBCA was conducted with site-specific data from the ConocoPhillips (76) service station located at 15008 East 14th Street in San Leandro, California. This RBCA was prepared to evaluate future commercial use of the site and a current surrounding residential use. The purpose of this work was to evaluate whether the residual hydrocarbons in the site soils and groundwater pose a risk to human health. This report describes site conditions and the RBCA model results for the site.

Site Description

The subject site is an active service station located on the eastern corner of the intersection of East 14th Street and 150th Avenue in San Leandro, California (Figure 1). Northern and western corners of this intersection were formerly occupied by a Mobil service station and a Phillips service station, and are currently occupied by a commercial building and an automotive repair shop, respectively. A Chevron service station is also currently present adjacent to the southern corner of the intersection, approximately 200 feet southwest of the 76 station. Current 76 station facilities include a station building, four dispenser islands, and two underground storage tanks (USTs) located in a common pit in the western corner of the site. A waste oil UST is also present behind the station building. Eleven groundwater monitoring wells are present at and in the immediate site vicinity. Locations of pertinent site features are shown on Figure 2.

Well Search Results

The site is situated on terrain gently sloping to the south/southwest, and the nearest surface waters are Estudillo Canal, located approximately 2,800 feet south, and San Leandro Creek, located approximately 1.4 miles south. Estudillo Creek flows toward the west and is predominantly channeled, while San Leandro Creek flows toward the southwest and ultimately drains into San Francisco Bay. Based on historical groundwater monitoring results, groundwater flow is toward the south/southwest.

Based on a review of data provided from a 0.5 mile well search performed by the Alameda County Public Works Agency (ACPWA), the following sensitive receptors were identified in the site vicinity. There are 25 water wells located within ½ mile of the site (Figure 1). Two of the wells are domestic, and the remaining 23 wells are irrigation wells (Table 1). The two domestic wells are located approximately 1,500 feet to the south and 2,500 feet to the southeast, respectively. The nearest irrigation well to the site is located approximately 500 feet east of the site (crossgradient).

Based on these data, there is a very low probability that impacted groundwater at the site has traveled the necessary distance to impact the downgradient domestic wells.

Risk-Based Corrective Action (RBCA)

Tier 1 of the RBCA process involves comparison of the site constituent concentrations to generic Risk-Based Screening Levels (RBSL) to evaluate whether further evaluation and/or active remediation is warranted. RBSL values are derived from standard exposure equations and reasonable maximum exposure (RME) estimates per U.S. EPA guidelines. RBSL concentrations are designed to be protective of human health even if exposure occurs directly within the onsite area of impacted soil or groundwater, and inherently provides conservative estimates of potential threats to human health and the environment. According to the RBCA process, if Tier 1 limits are not exceeded, the user may proceed directly to compliance monitoring and/or no further action. However, if these defined screening levels are exceeded, the affected media may be addressed by:

1. remediating to the generic Tier 1 limits, if practical
2. conducting Tier 2 evaluation to develop site-specific remediation goals, if required by the results of the evaluation
3. implementing an interim remedial action to abate risk "hot spots"

GR compared the site-specific soil and groundwater analytical data to the Regional Water Quality Control Board (RWQCB) – San Francisco Bay Region Tier 1 limits and determined that the Tier 1 limits were exceeded. Therefore, GR utilized the Groundwater Services Inc. RBCA Toolkit for Chemical Releases (version 1.3a) to perform a Tier 2 evaluation for the site.

Tier 2 analysis evaluates baseline risks both on and offsite, utilizing site specific soil, groundwater and air parameters. Additionally, Tier 2 analysis allow the use of transport models in calculating risks and cleanup standards related to offsite receptors, and utilizes Site Specific Target Levels (SSTLs). An SSTL is a chemical of concern (COC) concentration limit (clean-up level) in the source medium derived by multiplying the risk-based exposure limit at the point of exposure by the natural attenuation factor for the exposure pathway.

Site Parameters

Complete exposure pathways are those that could pose a reasonable potential for contaminant contact with human or environmental receptors. Under Tier 2 RBCA, both onsite and offsite receptors apply. For the purpose of this Tier 2 evaluation, onsite commercial and offsite residential exposure pathways with a risk factor of 10^{-6} were evaluated for the site. Groundwater beneath and in the site vicinity is not used for drinking water purposes, however, a residential irrigation well is located approximately 500 feet east (crossgradient) of the site. Therefore, groundwater ingestion and subsurface soil leaching to groundwater (ingestion) exposure pathways were evaluated as a worst case scenario. The following risk pathways were evaluated:

- Subsurface soil and groundwater volatilization to indoor and outdoor air inhalation
- Ingestion and dermal contact from groundwater, surficial and subsurface soils
- Construction worker exposure to soil and air
- Offsite groundwater ingestion and air inhalation

Where available, site specific physical data were used in this RBCA evaluation. Analyses of soil physical parameters are included in Appendix A. Site specific parameters included:

- Affected soil area (9,600 ft^2)
- Depth to top of affected soil (3.5 ft)
- Thickness of affected subsurface soils (6 ft)
- Soil moisture content (17%)
- Soil dry bulk density (1.58 g/cc)
- Total porosity (0.38%)
- Soil pH (6.68)
- Groundwater pH (6.80)

- Soil hydraulic conductivity (3.5^{-2} cm/d)
- Length of affected soil parallel to wind (120 ft)
- Length of affected soil parallel to groundwater flow (120 ft)
- Fraction organic carbon in soil (0.006)
- Fraction organic carbon in saturated zone (0.00035)
- Hydraulic conductivity (0.0484 cm/d)
- Groundwater gradient (0.016 ft/ft)
- Effective soil porosity (34.1%)
- Groundwater plume width (120 ft)
- Building volume/area ratio (10.4 ft)
- Foundation area (1620 ft^2)
- Foundation perimeter (176 ft)
- Foundation crack fraction (0.001)

The depth of groundwater is estimated to be approximately 10 feet below ground surface (GR Fourth Quarter Event of November 7, 2002, Groundwater Monitoring and Sampling Report). Based on the site being entirely paved, GR estimated the net rainfall infiltration at 3 in/year. Where appropriate and consistent with site conditions, ASTM default values were used. The COCs were evaluated with a conservative 95% Upper Control Limit (UCL) on the mean concentration, as well as the California adjusted oral slope factor for benzene (0.1) for this RBCA analysis.

TPHg was evaluated by inputting each TPHg value into the most toxic fraction (C8 - C10 aromatic) which is the most conservative estimate (Total Petroleum Hydrocarbon Criteria Working Group Series, Volume 5, June 1999) Additional TPHg concentrations from a water sample collected from well MW-5 (collected February 4, 2003) were placed into seven hydrocarbon chain fractions as reported by the laboratory. The laboratory data is attached in Appendix A. The results of the TPHg fraction analysis were utilized to proportion the historical (1991) soil data into representative fraction percentages.

Results of RBCA Analysis

Based on information from previous site investigations and current groundwater monitoring and sampling data, the Tier 2 RBCA program evaluated the complete exposure pathways identified at the site (Appendix B, Tier 2 Baseline Risk Summary Table). The RBCA program findings for the identified pathways are:

- outdoor and indoor air exposures with cumulative risk factors of 1.8^{-8} and 1.5^{-7};
- groundwater ingestion with a cumulative risk factor of 2.9^{-105}; and
- soil exposure with a cumulative risk factor of 7.6^{-9}

Using the residential risk factor of 1.0^{-6} and site conditions, the SSTLs for BTEX, MtBE and TPHg were determined to be below established Tier 2 SSTLs (Appendix B, SSTL Values) for all pathways. Pertinent input and output data including site specific parameters used in the analysis are presented in Appendix B.

Conclusions And Recommendations

GR performed the RBCA evaluation for the assessment and response to petroleum hydrocarbons in the subsurface soil and groundwater beneath the subject site. A Tier 2 evaluation was performed utilizing available site specific data. The results of these analyses confirm that current site conditions do not exceed the calculated Tier 2 SSTLs specific to the site (Appendix B). Since a commercial service station is presently operating at the site, it is expected that commercial use will continue in the future. It is GR's understanding that as of January 1, 2001, ConocoPhillips no longer distributes fuel containing MtBE to service stations in northern California. Additionally, it is anticipated that residual dissolved concentrations of petroleum hydrocarbons will continue to attenuate over time, thereby also lowering the associated risk over time. The Tier 2 evaluation verifies that there are no risks associated with the current or future uses of the building presently at the site, and that there are no risks to the occupants of the residential properties neighboring the site.

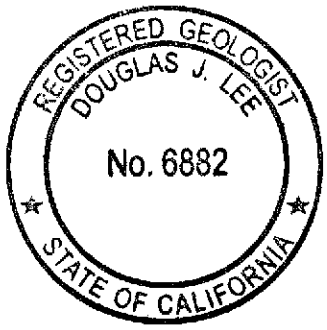
According to the RBCA decision making process, further work would not be warranted to protect against human exposures. The Tier 2 evaluation determined that no additional investigation or remediation is required at the site. Based on the RBCA program findings presented in this report, and that the groundwater beneath and in the vicinity of the site is not used for drinking water purposes, it is GR's opinion that the site should be considered for case closure.

If you have any questions or comments on the enclosed materials please feel free to contact us at 707-789-3255.

Gettler-Ryan Inc.

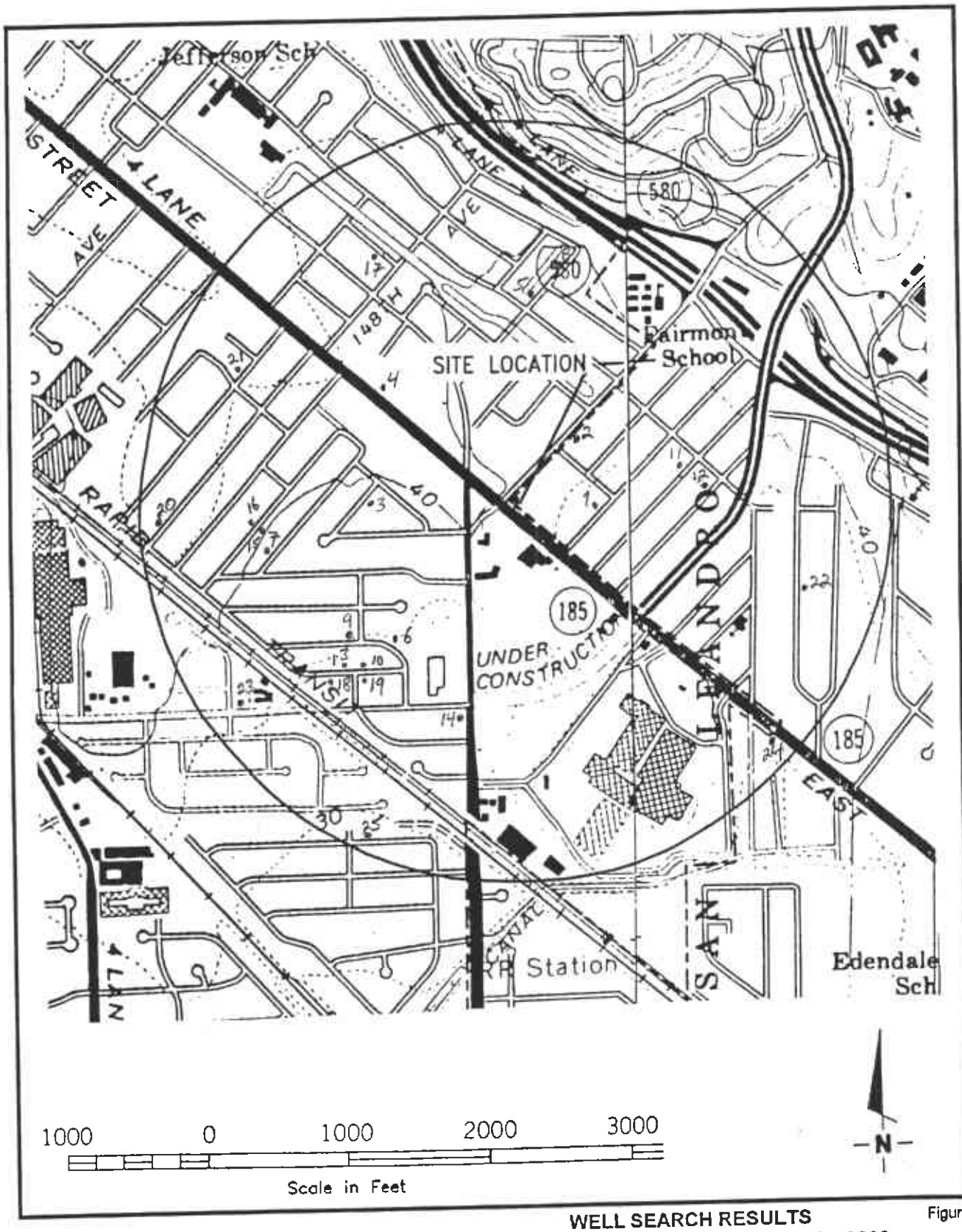
Jed A. Douglas
Senior Geologist

Douglas J. Lee
Senior Geologist
R.G. 6882



Attachments:

Figure 1:	Vicinity Map/Well Search Results
Figure 2:	Site Plan
Table 1:	Well Search Data
Appendix A:	Laboratory Analytical Data
Appendix B:	Tier 2 RBCA Input/Output Data



Gettler - Ryan Inc.

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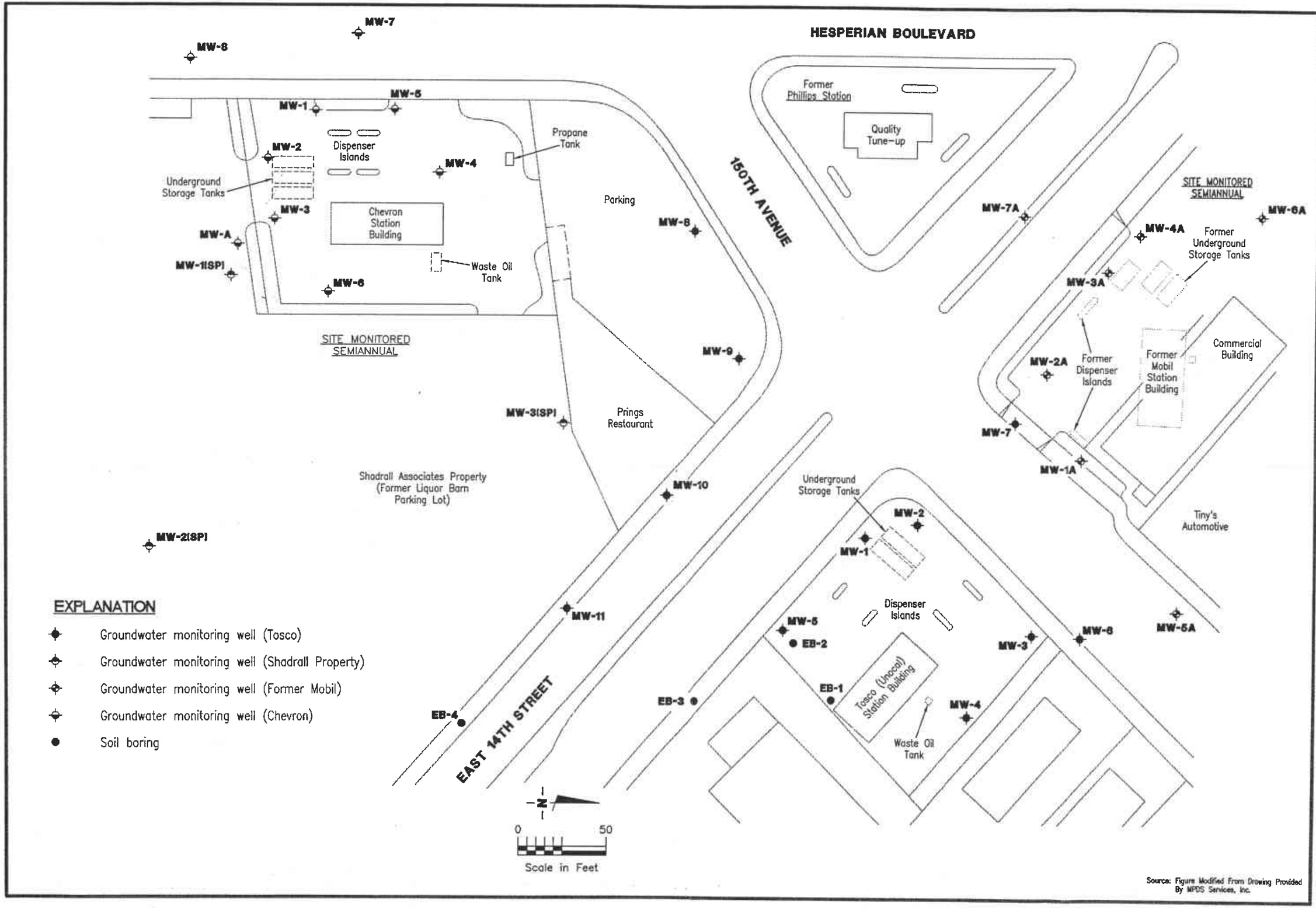
(925) 551-7555

WELL SEARCH RESULTS
Tosco (76) Service Station No. 3292
15008 East 14th Street
San Leandro, California

Figure
1

Job Number	Date
140071.03	01/00



Source: Figure Modified From Drawing Provided By MPDS Services, Inc.

FIGURE 2

SITE PLAN
Tosco 76 Branded Facility No. 3292
15008 East 14th Street
San Leandro, California

DATE
March, 1999

REVISED DATE

REVIEWED BY

JOB NUMBER
140071.02

Gettler - Ryan Inc.
6747 Sierra Ct., Suite J
Dublin, CA 94568
(925) 551-7555

Table 1 - Well Search Data for ConocoPhillips (76) Service Station No. 3292
15008 East 14th Street, San Leandro
Data provided by Alameda County Public Works Agency

MAP ID	Address	Owner	City	Drill Date	Elev	Total Depth (FT)	Water Depth (FT)	Diam (IN)	Use	APPROX EAST (FT)	APPROX NORTH (FT)	APPROXIMATE DISTANCE FROM SITE (FT)
	14994 E 14th St	BP Oil Company	SLE	2/94	0	24	15	2	MON	1529088	443006	**94**
	14994 E 14th St	BP Oil Company	SLE	2/94	0	23	15	2	MON	1529088	443006	**94**
	14994 E. 14th St	BP Oil Company	SLE	6/95	0	24	10	4	MON	1529088	442996	**105**
	14994 E. 14th St	BP Oil Company	SLE	6/95	0	24	14	2	MON	1529088	442996	**105**
	14994 E. 14th St	BP Oil Company	SLE	6/95	0	24	14	2	MON	1529088	442996	**105**
	14994 E. 14th St	BP Oil Company	SLE	6/95	0	24	10	4	MON	1529088	442996	**105**
	150TH AVE & E. 14TH ST	C & H DEVELOPMENT CO	SLE	Mar-88	0	19	11	2	MON	1529108	442938	**162**
	15008 E.14th St.	Unocal #3292 MW-10	SLE	8/92	0	20	14	2	MON	1529206	442900	**227**
	15008 E.14th St.	Unocal #3292 MW-11	SLE	8/92	0	20	14	2	MON	1529206	442900	**227**
	15008 East 14th St.	Unocal S/S #3292 MW6	SLE	5/92	0	20	11	2	MON	1529204	442897	**228**
	15008 East 14th St.	Unocal S/S #3292 MW7	SLE	5/92	0	22	11	2	MON	1529204	442897	**228**
	15008 East 14th St.	Unocal S/S #3292 MW8	SLE	5/92	0	20	12	2	MON	1529204	442897	**228**
	15008 East 14th St.	Unocal S/S #3292 MW9	SLE	5/92	0	19	11	2	MON	1529204	442897	**228**
	15008 East 14th St.	Unocal Corporation	SLE	8/92	0	20	14	2	MON	1529205	442897	**228**
	15008 East 14th St.	Unocal Corporation	SLE	8/92	0	20	14	2	MON	1529205	442897	**228**
	15008 E 14th St	Unocal Corporation	SLE	1/91	0	21	20	6	BOR*	1529206	442894	**231**
	15008 E 14th St	Unocal Corporation	SLE	Oct-90	0	0	0	10	BOR*	1529206	442894	**231**
	15008 E 14th St	Unocal Corporation	SLE	4/91	37	19	12	2	MON	1529206	442894	**231**
	15008 E 14th St	Unocal Corporation	SLE	4/91	37	20	12	2	MON	1529206	442894	**231**
	15008 E 14th St	Unocal Corporation	SLE	4/91	37	23	12	2	MON	1529206	442894	**231**
	15002 HESPERIAN BLVD	CHEVRON U.S.A. INC.	SLE	May-88	0	23	13	4	MON	1528905	442682	**462**
	15002 HESPERIAN BLVD.	CHEVRON U.S.A. INC.	SLE	May-88	0	22	13	4	MON	1528905	442682	**462**
	15002 HESPERIAN BLVD.	CHEVRON U.S.A. INC.	SLE	May-88	0	21	12	4	MON	1528905	442682	**462**
	15002 HESPERIAN BVLD	CHEVRON STATION #92013	SLE	May-88	0	23	14	4	MON	1528905	442682	**462**
	15002 HESPERIAN BVLD	CHEVRON STATION #92013	SLE	May-88	0	18	13	4	MON	1528905	442682	**462**
	15002 HESPERIAN BVLD	CHEVRON STATION #92013	SLE	May-88	0	17	12	4	MON	1528905	442682	**462**
	15035 East 14th Street	Triequity	SLE	Oct-90	0	20	10	2	MON	1529331	442692	**468**
	15035 East 14th Street	Triequity	SLE	Oct-90	0	21	14	2	TES	1529331	442692	**468**
	15035 East 14th Street	Triequity	SLE	Oct-90	0	21	14	2	TES	1529331	442692	**468**
1	1479 151ST AVE	FREDIN	SLE	/54	28	25	0	10	IRR	1529351	442670	**497**
	14883 E 14th St	Federighi & Company	SLE	Dec-96	0	20	12	2	MON	1528652	443321	**499**
	14883 E 14th St	Federighi & Company	SLE	Dec-96	0	20	11	2	MON	1528652	443321	**499**
	14883 E 14th St	Federighi & Company	SLE	Dec-96	0	20	10	2	MON	1528652	443321	**499**
	14883 E 14th St	Federighi & Company	SLE	Dec-96	0	20	10	8	MON	1528652	443321	**499**
2	1524 150TH AVE	STANLEY	SLE	?	32	30	0	6	IRR	1529619	443420	**610**
3	1268 BETTY AVE	FRANK MIQUEL	SLE	5/77	0	32	0	0	IRR	1528137	442971	**972**
4	14830 E. 14TH ST	M.F. NUNES	SLE	/20	0	**100**	0	8	IRR	1528294	443731	**1023**

NOTE: DUE TO METHOD OF LOCATING WELLS AND THEN TRANSLATING TO NORTHING AND EASTING COORDINATES, THE ERROR IN THIS SEARCH CAN BE 500 FEET OR MORE (ACPWA).

Table 1 - Well Search Data for ConocoPhillips (76) Service Station No. 3292
15008 East 14th Street, San Leandro
Data provided by Alameda County Public Works Agency

MAP ID	Address	Owner	City	Drill Date	Elev	Total Depth (FT)	Water Depth (FT)	Diam (IN)	Use	APPROX EAST (FT)	APPROX NORTH (FT)	APPROXIMATE DISTANCE FROM SITE (FT)
	14822 E. 14TH ST	IVAN CORNELIUS	SLE	Jul-86	0	30	15	0	BOR	1528244	443777	**1092**
	15051 HESPERIAN BLVD	RALPH H. GOODELL	SLE	Oct-86	0	0	0	0	DES	1528846	441986	**1143**
5	1614 HALSEY AV	JOHN DEBURN	SLE	5/77	0	0	20	0	IRR	1529371	444296	**1227**
6	1052 DILLOW ST	WM. DENNIS	SLE	Nov-77	0	60	17	8	IRR	1528392	441933	**1365**
7	1252 DOROTHY AVE	ROBERTS	SLE	?	38	24	0	6	IRR	1527683	442749	**1459**
	1784 150th Av	Shell Oil Company	SLE	3/95	40	27	16	2	MON	1530191	444114	**1490**
8	1725 HALSEY AV	DELFINA FARIAS	SLE	?	0	40	20	6	IRR	1529508	444540	**1496**
9	988 DILLO ST	R.M. ADAMS	SLE	/50	32	40	0	6	IRR	1527974	442060	**1533**
10	14982 WESTERN AV	EDMUND BOTELITO	SLE	1/78	0	30	0	6	IRR	1528193	441855	**1541**
11	1571 152ND AVE	ALLEN	SLE	/57	28	40	0	4	IRR	1530642	442699	**1593**
12	1573 153RD AVE	PAUL FEARON	SLE	?	0	30	12	6	IRR	1530642	442699	**1593**
	153RD & E 14TH ST	PG&E	SLE	6/73	0	**120**	0	0	CAT	1530642	442699	**1593**
	15120 Hesperian Blvd	USA Petroleum	SLE	9/89	0	12	10	2	BOR*	1528899	441500	**1613**
	15120 HESPERIAN BLVD	SHELL OIL	SLE	Feb-87	0	20	9	3	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD	SHELL OIL	SLE	Feb-87	0	20	9	3	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD	SHELL OIL	SLE	Feb-87	0	21	9	3	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD	SHELL OIL	SLE	Feb-87	0	20	0	3	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD	SHELL OIL	SLE	Feb-87	0	20	9	3	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD.	WESTFIELD INC.	SLE	Sep-89	0	22	11	4	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD.	WESTFIELD INC.	SLE	Jul-89	0	22	11	4	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD.	WEST FIELD INC.	SLE	Jul-89	0	22	10	4	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD.	WESTFIELD INC.	SLE	Aug-89	0	22	10	4	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD.	WESTFIELD INC.	SLE	Jul-89	0	22	10	4	MON	1528899	441500	**1613**
	15120 HESPERIAN BLVD.	WESTFIELD INC.	SLE	Sep-89	0	22	11	4	MON	1528899	441500	**1613**
	15135 Hesperian Blvd	USA Petroleum MW-2-P	SLE	9/92	0	27	10	4	MON	1528899	441500	**1613**
	15135 Hesperian Blvd	USA Petroleum MW-3-P	SLE	9/92	0	27	9	4	MON	1528899	441500	**1613**
	15135 Hesperian Blvd	USA Petroleum MW-4-P	SLE	Aug-92	0	27	10	4	MON	1528899	441500	**1613**
	15135 Hesperian Blvd	USA Petroleum MW-5-P	SLE	8/92	0	27	10	4	MON	1528899	441500	**1613**
	15135 Hesperian Blvd	USA Petroleum MW-6-P	SLE	8/92	0	27	9	4	MON	1528899	441500	**1613**
	15135 Hesperian Blvd	USA Petroleum MW-7-P	SLE	8/92	0	27	10	4	MON	1528899	441500	**1613**
	15444 Hesperian Blvd	Hesperian Properties	SLE	5/94	0	20	12	2	MON	1528898	441444	**1669**
	15444 Hesperian Blvd	Hesperian Properties	SLE	5/94	0	20	12	2	MON	1528898	441444	**1669**
13	14970 WESTERN AVE	HERBERT HOWARD	SLE	3/77	0	37	15	6	IRR	1527975	441849	**1683**
	1784 150th Avenue	Shell Oil Company	SLE	2/92	46	45	20	4	MON	1530425	444142	**1685**
	1784 150th Avenue	Shell Oil Company	SLE	2/92	52	42	26	4	MON	1530425	444142	**1685**
14*	15803 HESPERIAN BLVD	GREENWOOD CORP.	SLE	31-Dec	11	**511**	0	12	DOM+	1528861	441421	**1696**
15	1264 MARGERY AVE	FRANK FREITAS	SLE	5/77	0	49	19	6	IRR	1527406	442824	**1717**

NOTE: DUE TO METHOD OF LOCATING WELLS AND THEN TRANSLATING TO NORTHING AND EASTING COORDINATES, THE ERROR IN THIS SEARCH CAN BE 500 FEET OR MORE (ACPWA).

Table 1 - Well Search Data for ConocoPhillips (76) Service Station No. 3292
15008 East 14th Street, San Leandro
Data provided by Alameda County Public Works Agency

MAP ID	Address	Owner	City	Drill Date	Elev	Total Depth (FT)	Water Depth (FT)	Diam (IN)	Use	APPROX EAST (FT)	APPROX NORTH (FT)	APPROXIMATE DISTANCE FROM SITE (FT)
	15840 HESPERIAN BLVD.	?	SLE	Feb-89	0	0	10	60	DES	1528885	441375	**1739**
16	1261 MARGERY ST	WM. MCCABE	SLE	5/77	0	45	15	6	IRR	1527346	442855	**1771**
17	14753 CRAFT AV	HOWARD GREEN	SLE	7/77	0	35	20	6	IRR	1528274	444731	**1828**
	1784 150th Avenue	Shell Oil Company	SLE	3/90	0	45	25	4	MON	1530753	444034	**1899**
	15015 FREEDOM AVE	DENNY'S RESTAURANT	SLE	4/76	0	0	0	0	GEO*	1530753	444034	**1899**
	15101 Freedom Avenue	Mohammad A. Mashhoon	SLE	9/89	0	20	0	2	MON	1530844	443872	**1907**
	15101 Freedom Avenue	Mohammad A. Mashhoon	SLE	9/89	0	20	0	2	MON	1530844	443872	**1907**
	GRAVEL RD	A.J. PITCKA	SLE	?	100	47	0	8	IRR	1527264	442517	**1926**
18	14941 WESTERN AVE	MCCUTCHEON	SLE	/55	28	36	0	6	IRR	1527550	441905	**1957**
	3000 HALCOLM AVE	LYAL RICHOLS	SLE	7/46	0	**197**	0	10	DOM	1528142	441369	**1979**
19	14978 WESTERN AVE	STANLEY BOONE	CSV	3/77	0	40	15	4	IRR	1528142	441369	**1979**
	15135 Hesperian Blvd	ARCO Products Co.	SLE	9/92	0	16	11	4	MON	1528827	441010	**2108**
	15135 Hesperian Blvd	ARCO Products Co.	SLE	9/92	0	16	10	4	MON	1528827	441010	**2108**
	15135 Hesperian Blvd	ARCO Products Co.	SLE	9/92	0	15	10	8	MON	1528827	441010	**2108**
	15135 Hesperian Blvd	ARCO Products Co.	SLE	9/92	0	18	11	4	MON	1528827	441010	**2108**
	15135 Hesperian Blvd	ARCO #2162 VW-1	SLE	6/91	30	11	10	2	EXT	1528815	441008	**2112**
	15135 Hesperian Blvd	ARCO #2162 VW-2	SLE	6/91	30	10	10	2	EXT	1528815	441008	**2112**
	FOOTHILL BLVD	CITY CENTER OFFICE TOWER	HAY	Aug-85	0	40	28	0	BOR	1530865	444436	**2214**
	HESPERIAN	TWIN NURSERY	SLE	?	31	0	0	0	IRR	1528861	440872	**2240**
	HESPERIAN BLVD	TWIN NURSERY	SLE	?	30	0	0	8	ABN	1528861	440872	**2240**
	HESPERIAN & LEWELLING	EXXON OIL USA	SLE	8/77	0	50	0	0	CAT	1528861	440872	**2240**
	1211 147 AV	JUSTINO	SLE	?	0	65	0	8	IRR	1526933	442503	**2248**
20	1227-148TH AV	JOHN TENENTE	SLE	8/58	0	61	0	0	IRR	1526933	442503	**2248**
	1268 BARGERY ST	AARON GEISER	SLE	5/77	0	48	18	6	IRR	1526933	442503	**2248**
21	1315 147 AV	?	SLE	6/77	0	53	21	6	IRR	1526948	443866	**2284**
22	1584 ORIOLE AVE	HARWOOD	SLE	?	27	0	0	0	IRR	1530642	441369	**2318**
	14500 East 14th Street	Coramarie Allenbaugh	SLE	Nov-89	48	35	26	2	MON	1527229	444649	**2429**
	14500 East 14th Street	Coramarie Allenbaugh	SLE	Nov-89	49	36	27	2	MON	1527229	444649	**2429**
	14500 East 14th Street	Coramarie Allenbaugh	SLE	Nov-89	50	35	27	2	MON	1527229	444649	**2429**
	14500 East 14th Street	Coramarie Allenbaugh	SLE	Nov-89	49	35	27	2	MON	1527229	444649	**2429**
	14500 EAST 14TH ST.	CORAMARIE ALLENBAUGH	SLE	Apr-89	49	33	25	2	MON	1527229	444649	**2429**
	14500 EAST 14TH ST.	CORAMARIE ALLENBAUGH	SLE	Apr-89	49	38	26	2	MON	1527229	444649	**2429**
	14500 EAST 14TH ST.	CORAMARIE ALLENBAUGH	SLE	Apr-89	49	33	26	2	MON	1527229	444649	**2429**
	14500 EAST 14TH ST.	CORAMARIE ALLENBAUGH	SLE	Apr-89	50	33	26	2	MON	1527229	444649	**2429**
	14500 EAST 14TH ST.	CORAMARIE ALLENBAUGH	SLE	Apr-89	49	34	26	2	MON	1527229	444649	**2429**
	BAYFAIR SHOPPING CEN.AD	?	SLE	Nov-77	0	54	0	0	GEO	1529340	440653	**2459**
23	2824 HALYCON DR	MALCOM STORM	SLE	/38	40	125	0	6	IRR	1527099	441585	**2509**

NOTE: DUE TO METHOD OF LOCATING WELLS AND THEN TRANSLATING TO NORTHING AND EASTING COORDINATES, THE ERROR IN THIS SEARCH CAN BE 500 FEET OR MORE (ACPWA).

Table 1 - Well Search Data for ConocoPhillips (76) Service Station No. 3292
15008 East 14th Street, San Leandro
Data provided by Alameda County Public Works Agency

MAP ID	Address	Owner	City	Drill Date	Elev	Total Depth (FT)	Water Depth (FT)	Diam (IN)	Use	APPROX EAST (FT)	APPROX NORTH (FT)	APPROXIMATE DISTANCE FROM SITE (FT)
	15741 E. 14TH ST	A.M. KING	SLE	7/48	0	**141**	67	10	?	1530915	441292	**2561**
24	2780 HALYCON DR	ROBERT HAUSKINS	SLE	?	0	96	0	0	DOM	1526959	441585	**2623**
25	479 NABOR ST	B.J. MOORE	SLE	/50	0	22	7	4	IRR	1528179	440635	**2632**
	1245 145TH AVE	ROBERT MATTHEWS	SLE	6/77	0	61	21	6	IRR	1526624	444123	**2679**
	1500 Thrush Ave.	Robert Narvo (Narvo Nurs)	SLE	Nov-90	9	18	14	2	MON	1531322	441439	**2774**
	1500 Thrush Ave.	Robert Narvo (Narvo Nurs)	SLE	Nov-90	33	17	7	2	MON	1531322	441439	**2774**
	1500 Thrush Ave.	Robert Narvo (Narvo Nurs)	SLE	Nov-90	33	17	7	2	MON	1531322	441439	**2774**
	1500 Thrush Ave.	Nelson Maples/Narou MW1	SLE	3/93	0	18	0	2	DES	1531322	441432	**2779**
	1500 Thrush Ave.	Nelson Maples/Narou MW2	SLE	3/93	0	18	0	2	DES	1531322	441432	**2779**
	1500 Thrush Ave.	Nelson Maples/Narou MW3	SLE	3/93	0	18	0	2	DES	1531322	441432	**2779**
	15641 FOOTHILL BLVD	MARTINELLI	SLE	?	100	0	0	0	ABN	1531900	442726	**2825**
	15241 UPTON AVE	MONTE MOORE	SLE	/57	26	50	0	6	IRR	1528585	440251	**2895**
	14441 WASHINGTON AV	AVANSINO-MORTENSEN NURS.	SLE	/31	34	**235**	0	12	IRR	1526929	441135	**2928**
	100 HALCYON DR	GENERAL FOODS	SLE	Jun-86	0	32	16	2	MON	1526929	441135	**2928**
	100 HALCYON DR	GENERAL FOODS	SLE	Jun-86	0	30	16	2	MON	1526929	441135	**2928**
	100 HALCYON DR	GENERAL FOODS	SLE	Jun-86	0	31	17	2	MON	1526929	441135	**2928**
	100 HALCYON DR	GENERAL FOODS	SLE	Jun-86	0	29	17	2	MON	1526929	441135	**2928**
	1200 144TH AV	MERCHORA LAMAS	SLE	5/77	0	58	18	6	IRR	1526354	444130	**2933**
	14390 3.14 ST	DOROTHY GIACOMETTI	SLE	/24	0	94	19	10	DOM	1526948	445135	**2962**
	E. 14th St. && Thrush Ave	C & H Development Co.	SLE	3/93	0	18	0	2	DES	1531229	441038	**2964**
	15803 East 14th St.	Unocal Corporation	SLE	5/91	0	20	7	2	MON	1531259	440971	**3033**
	15803 East 14th Street	Unocal Corporation	SLE	3/91	0	0	0	7	BOR*	1531259	440971	**3033**
	15803 East 14th St.	Unocal #6277 MW-5	SLE	3/93	0	21	16	2	MON	1531277	440959	**3053**
	15803 East 14th St.	Unocal #6277 MW-6	SLE	3/93	0	21	10	2	MON	1531277	440959	**3053**
	15400 FOOTHILL BLVD	FAIRMONT HOSPITAL	SLE	9/87	130	21	0	6	BOR	1532054	444063	**3107**
	15400 FOOTHILL BLVD	BASSETT	SLE	7/52	0	**138**	38	12	DOM	1532054	444063	**3107**
	15400 FOOTHILL BVLD	FAIRMONT HOSPITAL	SLE	Jul-88	0	17	0	2	MON	1532054	444063	**3107**
	15400 FOOTHILL BVLD	FAIRMONT HOSPITAL	SLE	Jun-88	0	17	0	2	MON	1532054	444063	**3107**
	15400 FOOTHILL BVLD	FAIRMONT HOSPITAL	SLE	Jun-88	0	15	0	2	MON	1532054	444063	**3107**
	159th & Mono Ave	PG&E	SLE	Dec-91	0	**122**	0	0	OTH	1531928	441429	**3284**
	15803 East 14th Street	Unocal Corporation	SLE	3/90	0	25	0	2	DES	1531911	441369	**3301**
	15803 E. 14TH ST	UNOCAL	SLE	Mar-89	0	10	0	2	BOR	1531911	441369	**3301**
	1575 159TH AVE	MARY WELSH	SLE	/24	42	32	0	8	IRR	1531911	441369	**3301**
	1570 MONO AVE	MAGNAINI	SLE	/27	40	40	0	10	ABN	1531911	441369	**3301**
	15803 E. 14TH ST.	UNOCAL CORP.	SLE	May-89	0	25	11	2	MON	1531911	441369	**3301**
	15803 E. 14TH ST.	UNOCAL CORP.	SLE	May-89	0	24	11	2	MON	1531911	441369	**3301**
	15803 E. 14TH ST.	UNOCAL CORP.	SLE	May-89	0	25	11	2	MON	1531911	441369	**3301**

NOTE: DUE TO METHOD OF LOCATING WELLS AND THEN TRANSLATING TO NORTHING AND EASTING COORDINATES, THE ERROR IN THIS SEARCH CAN BE 500 FEET OR MORE (ACPWA).

Table 1 - Well Search Data for ConocoPhillips (76) Service Station No. 3292
15008 East 14th Street, San Leandro
Data provided by Alameda County Public Works Agency

MAP ID	Address	Owner	City	Drill Date	Elev	Total Depth (FT)	Water Depth (FT)	Diam (IN)	Use	APPROX EAST (FT)	APPROX NORTH (FT)	APPROXIMATE DISTANCE FROM SITE (FT)
	15803 E. 14TH ST	UNOCAL CORP.	SLE	May-89	0	25	11	2	MON	1531911	441369	**3301**
	15803 E 14TH ST	UNOCAL CORP.	SLE	May-89	0	24	12	2	MON	1531911	441369	**3301**
	15803 E. 14TH ST	UNOCAL CORP.	SLE	May-89	0	24	11	2	MON	1531911	441369	**3301**
	15803 E. 14TH ST	UNOCAL CORP.	SLE	May-89	0	25	11	2	MON	1531911	441369	**3301**
	15803 E. 14TH ST.	UNOCAL CORP.	SLE	May-89	0	24	12	2	MON	1531911	441369	**3301**
	14278 E 14th St	Pegasus Commercial	SLE	2/92	0	80	25	0	DES	1526550	445258	**3340**
	14311 LARK ST.	SLE SCHOOL DISTRICT	SLE	May-89	0	51	24	6	BOR	1527306	445939	**3358**
	15801 E. 14TH ST	LEE DUGAN	SLE	8/49	32	**148**	0	8	IRR	1530642	440100	**3373**
	877 MOONEY AV & CONNOLL	WALSH	SLZ	/57	33	30	0	4	IRR	1530642	440100	**3373**
	15803 EAST 14TH STREET	UNOCAL SERVICE STATION	SLE		0	0	0	0		1530642	440100	**3373**
	900 143rd Ave.	First Nationwide Bank MW6	SLE	Oct-92	41	25	19	2	MON	1525666	443650	**3478**
	900 143rd Ave.	First Nationwide Bank MW7	SLE	Oct-92	38	25	17	2	MON	1525666	443650	**3478**
	900 143rd Ave	First Nationwide BankMW1A	SLE	6/91	41	30	19	2	MON	1525663	443652	**3481**
	900 143rd Ave	First Nationwide BankMW2A	SLE	6/91	40	25	19	2	MON	1525663	443652	**3481**
	900 143rd Ave	First Nationwide BankMW3A	SLE	6/91	39	25	17	2	MON	1525663	443652	**3481**
	900 143rd Ave	First Nationwide BankMW4A	SLE	6/91	39	25	18	2	MON	1525663	443652	**3481**
	900 143rd Ave	First Nationwide BankMW5A	SLE	6/91	0	25	22	2	MON	1525663	443652	**3481**

Explanation
Mon = monitoring
Bor = boring
Tes = test
Irr = irrigation
Des = destroyed
Cat = cathodic protection
Dom = domestic
* = based on distance from site and northing and easting data, address interpreted as 15083 Hesperian Blvd.

NOTE: DUE TO METHOD OF LOCATING WELLS AND THEN TRANSLATING TO
NORTHING AND EASTING COORDINATES, THE ERROR IN THIS SEARCH CAN BE 500 FEET OR MORE (ACPWA).

Sequoia Analytical

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21 February, 2003

Jed Douglas
Gettler - Ryan Inc.
1364 North Mc Dowell Blvd., Suite B2
Petaluma, CA 94954-1116

RE: TOSCO/PHILLIPS
Sequoia Work Order: P302032

Enclosed are the results of analyses for samples received by the laboratory on 02/04/03 16:45. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Angelee Cari

Angelee Cari
Project Manager

CA ELAP Certificate #2374

Sequoia Analytical

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Gettler - Ryan Inc.	Project: TOSCO/PHILLIPS	P302032
1364 North Mc Dowell Blvd., Suite B2	Project Number: 3292/15008 E. 14th St., San Leandro, Ca.	**Reported:**
Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

ANALYTICAL REPORT FOR SAMPLES

Sample ID	Laboratory ID	Matrix	Date Sampled	Date Received
MW-5	P302032-01	Water	02/04/03 11:30	02/04/03 16:45

Sequoia Analytical

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Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

Volatile Petroleum Hydrocarbons by WDOE TPH Policy Method

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (P302032-01) Water	**Sampled: 02/04/03 11:30**	**Received: 02/04/03 16:45**							
C5-C6 Aliphatics	**1770**	500	ug/l	10	3B18004	02/18/03	02/18/03	WA MTCA-VPH	
C6-C8 Aliphatics	**1410**	500	"	"	"	"	"	"	
C8-C10 Aliphatics	ND	500	"	"	"	"	"	"	
C10-C12 Aliphatics	**781**	500	"	"	"	"	"	"	
C8-C10 Aromatics	**3750**	500	"	"	"	"	"	"	
C10-C12 Aromatics	**4010**	500	"	"	"	"	"	"	
C12-C13 Aromatics	**1300**	500	"	"	"	"	"	"	
Total VPH (TVPH)	**13000**	500	"	"	"	"	"	"	
Surrogate: 4-BFB (FID)		*%*	*60-140*		"	"	"	"	*S-02*
Surrogate: 4-BFB (PID)		*149 %*	*62-120*		"	"	"	"	*S-04*

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Gettler - Ryan Inc.	Project: TOSCO/PHILLIPS	P302032
1364 North Mc Dowell Blvd., Suite B2	Project Number: 3292/15008 E. 14th St., San Leandro, Ca.	**Reported:**
Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

BTEX, MTBE, Naphthalene, and n-Hexane by WA VPH

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (P302032-01) Water Sampled: 02/04/03 11:30 Received: 02/04/03 16:45									
Methyl tert-butyl ether	ND	50.0	ug/l	10	3B10047	02/11/03	02/12/03	EPA 8260B	
Benzene	ND	10.0	"	"	"	"	"	"	
Toluene	ND	10.0	"	"	"	"	"	"	
Ethylbenzene	**921**	10.0	"	"	"	"	"	"	
m,p-Xylene	**58.6**	20.0	"	"	"	"	"	"	
o-Xylene	ND	10.0	"	"	"	"	"	"	
Naphthalene	**880**	10.0	"	"	"	"	"	"	
n-Hexane	**87.3**	20.0	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*99.5 %*	*73-137*		"	"	"	"	
Surrogate: Toluene-d8		*100 %*	*75-124*		"	"	"	"	
Surrogate: 4-BFB		*96.0 %*	*77-120*		"	"	"	"	

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Gettler - Ryan Inc.	Project: TOSCO/PHILLIPS	P302032
1364 North Mc Dowell Blvd., Suite B2	Project Number: 3292/15008 E. 14th St., San Leandro, Ca.	**Reported:**
Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

Gasoline\BTEX\Oxygenates by EPA method 8260B

Sequoia Analytical - Sacramento

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Prepared	Analyzed	Method	Notes
MW-5 (P302032-01) Water Sampled: 02/04/03 11:30 Received: 02/04/03 16:45									
Benzene	ND	10	ug/l	20	3020220	02/18/03	02/18/03	EPA 8260B	
Toluene	ND	10	"	"	"	"	"	"	
Ethylbenzene	**1100**	10	"	"	"	"	"	"	
Xylenes (total)	**55**	10	"	"	"	"	"	"	
Methyl tert-butyl ether	**12**	10	"	"	"	"	"	"	
Gasoline (C6-C10)	**7900**	1000	"	"	"	"	"	"	
Surrogate: 1,2-DCA-d4		*117 %*		*60-140*	"	"	"	"	
Surrogate: Toluene-d8		*102 %*		*60-140*	"	"	"	"	
Surrogate: 4-BFB		*100 %*		*60-140*	"	"	"	"	

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Gettler - Ryan Inc.	Project: TOSCO/PHILLIPS	P302032
1364 North Mc Dowell Blvd., Suite B2	Project Number: 3292/15008 E. 14th St., San Leandro, Ca.	**Reported:**
Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

Volatile Petroleum Hydrocarbons by WDOE TPH Policy Method - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3B18004 - EPA 5030B (P/T)										
Blank (3B18004-BLK1)				Prepared & Analyzed: 02/18/03						
C5-C6 Aliphatics	ND	50.0	ug/l							
C6-C8 Aliphatics	ND	50.0	"							
C8-C10 Aliphatics	ND	50.0	"							
C10-C12 Aliphatics	ND	50.0	"							
C8-C10 Aromatics	ND	50.0	"							
C10-C12 Aromatics	ND	50.0	"							
C12-C13 Aromatics	ND	50.0	"							
Total VPH (TVPH)	ND	50.0	"							
Surrogate: 4-BFB (FID)	*43.1*		"	*48.0*		*89.8*	*60-140*			
Surrogate: 4-BFB (PID)	*43.7*		"	*48.0*		*91.0*	*62-120*			
Laboratory Control Sample (3B18004-BS1)				Prepared & Analyzed: 02/18/03						
Total VPH (TVPH)	203	50.0	ug/l	200		102	70-130			
Surrogate: 4-BFB (FID)	*42.0*		"	*48.0*		*87.5*	*60-140*			
Surrogate: 4-BFB (PID)	*44.3*		"	*48.0*		*92.3*	*62-120*			
Laboratory Control Sample Dup (3B18004-BSD1)				Prepared & Analyzed: 02/18/03						
Total VPH (TVPH)	190	50.0	ug/l	200		95.0	70-130	6.62	25	
Surrogate: 4-BFB (FID)	*43.0*		"	*48.0*		*89.6*	*60-140*			
Surrogate: 4-BFB (PID)	*43.9*		"	*48.0*		*91.5*	*62-120*			
Matrix Spike (3B18004-MS1)	**Source: B3B0081-02**			Prepared & Analyzed: 02/18/03						
Total VPH (TVPH)	186	50.0	ug/l	200	0.00	93.0	70-130			
Surrogate: 4-BFB (FID)	*41.3*		"	*48.0*		*86.0*	*60-140*			
Surrogate: 4-BFB (PID)	*44.1*		"	*48.0*		*91.9*	*62-120*			
Matrix Spike Dup (3B18004-MSD1)	**Source: B3B0081-02**			Prepared & Analyzed: 02/18/03						
Total VPH (TVPH)	189	50.0	ug/l	200	0.00	94.5	70-130	1.60	25	
Surrogate: 4-BFB (FID)	*42.1*		"	*48.0*		*87.7*	*60-140*			

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Gettler - Ryan Inc.	Project: TOSCO/PHILLIPS	P302032
1364 North Mc Dowell Blvd., Suite B2	Project Number: 3292/15008 E. 14th St., San Leandro, Ca.	**Reported:**
Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

Volatile Petroleum Hydrocarbons by WDOE TPH Policy Method - Quality Control

North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3B18004 - EPA 5030B (P/T)										
Matrix Spike Dup (3B18004-MSD1)	**Source: B3B0081-02**		Prepared & Analyzed: 02/18/03							
Surrogate: 4-BFB (PID)	*43.7*		*ug/l*	*48.0*		*91.0*	*62-120*			

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1364 North Mc Dowell Blvd., Suite B2	Project Number: 3292/15008 E. 14th St., San Leandro, Ca.	**Reported:**
Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

BTEX, MTBE, Naphthalene, and n-Hexane by WA VPH - Quality Control
North Creek Analytical - Bothell

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Notes
Batch 3B10047 - EPA 5030B										
Blank (3B10047-BLK1)				Prepared & Analyzed: 02/11/03						
Methyl tert-butyl ether	ND	5.00	ug/l							
Benzene	ND	1.00	"							
Toluene	ND	1.00	"							
Ethylbenzene	ND	1.00	"							
m,p-Xylene	ND	2.00	"							
o-Xylene	ND	1.00	"							
Naphthalene	ND	1.00	"							
n-Hexane	ND	2.00	"							
Surrogate: 1,2-DCA-d4	*40.5*		"	*40.0*		*101*	*73-137*			
Surrogate: Toluene-d8	*40.1*		"	*40.0*		*100*	*75-124*			
Surrogate: 4-BFB	*39.6*		"	*40.0*		*99.0*	*77-120*			
Laboratory Control Sample (3B10047-BS1)				Prepared & Analyzed: 02/11/03						
Benzene	17.2	1.00	ug/l	20.0		86.0	80-120			
Toluene	17.8	1.00	"	20.0		89.0	80-120			
Surrogate: 1,2-DCA-d4	*40.4*		"	*40.0*		*101*	*73-137*			
Surrogate: Toluene-d8	*40.8*		"	*40.0*		*102*	*75-124*			
Surrogate: 4-BFB	*39.2*		"	*40.0*		*98.0*	*77-120*			
Laboratory Control Sample Dup (3B10047-BSD1)				Prepared & Analyzed: 02/11/03						
Benzene	16.9	1.00	ug/l	20.0		84.5	80-120	1.76	20	
Toluene	17.1	1.00	"	20.0		85.5	80-120	4.01	20	
Surrogate: 1,2-DCA-d4	*40.5*		"	*40.0*		*101*	*73-137*			
Surrogate: Toluene-d8	*40.4*		"	*40.0*		*101*	*75-124*			
Surrogate: 4-BFB	*37.1*		"	*40.0*		*92.8*	*77-120*			

Sequoia Analytical

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Gettler - Ryan Inc.	Project: TOSCO/PHILLIPS	P302032
1364 North Mc Dowell Blvd., Suite B2	Project Number: 3292/15008 E. 14th St., San Leandro, Ca.	**Reported:**
Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

Gasoline\BTEX\Oxygenates 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 3020220 - EPA 5030B [P/T]										
Blank (3020220-BLK1)			Prepared & Analyzed: 02/18/03							
Benzene	ND	0.50	ug/l							
Toluene	ND	0.50	"							
Ethylbenzene	ND	0.50	"							
Xylenes (total)	ND	0.50	"							
Methyl tert-butyl ether	ND	0.50	"							
Gasoline (C6-C10)	ND	50	"							
Surrogate: 1,2-DCA-d4	*29.4*		"	*25.0*		*118*	*60-140*			
Surrogate: Toluene-d8	*26.3*		"	*25.0*		*105*	*60-140*			
Surrogate: 4-BFB	*24.4*		"	*25.0*		*98*	*60-140*			
Laboratory Control Sample (3020220-BS1)			Prepared & Analyzed: 02/18/03							
Benzene	13.3	0.50	ug/l	13.6		98	70-130			
Toluene	74.6	0.50	"	83.4		89	70-130			
Methyl tert-butyl ether	20.3	0.50	"	22.4		91	60-140			
Gasoline (C6-C10)	994	50	"	1100		90	70-130			
Surrogate: 1,2-DCA-d4	*30.4*		"	*25.0*		*122*	*60-140*			
Surrogate: Toluene-d8	*26.2*		"	*25.0*		*105*	*60-140*			
Surrogate: 4-BFB	*27.0*		"	*25.0*		*108*	*60-140*			
Matrix Spike (3020220-MS1)	**Source: S302170-14**		Prepared: 02/18/03 Analyzed: 02/19/03							
Benzene	13.5	0.50	ug/l	13.6	ND	99	70-130			
Toluene	75.3	0.50	"	83.4	0.78	89	70-130			
Methyl tert-butyl ether	22.9	0.50	"	22.4	ND	102	60-140			
Gasoline (C6-C10)	953	50	"	1100	ND	87	60-140			
Surrogate: 1,2-DCA-d4	*32.2*		"	*25.0*		*129*	*60-140*			
Surrogate: Toluene-d8	*26.1*		"	*25.0*		*104*	*60-140*			
Surrogate: 4-BFB	*26.7*		"	*25.0*		*107*	*60-140*			

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Gettler - Ryan Inc.	Project: TOSCO/PHILLIPS	P302032
1364 North Mc Dowell Blvd., Suite B2	Project Number: 3292/15008 E. 14th St., San Leandro, Ca.	**Reported:**
Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

Gasoline\BTEX\Oxygenates 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 3020220 - EPA 5030B [P/T]										
Matrix Spike Dup (3020220-MSD1)	**Source: S302170-14**			Prepared: 02/18/03		Analyzed: 02/19/03				
Benzene	14.9	0.50	ug/l	13.6	ND	110	70-130	10	25	
Toluene	85.0	0.50	"	83.4	0.78	101	70-130	12	25	
Methyl tert-butyl ether	24.6	0.50	"	22.4	ND	110	60-140	7	25	
Gasoline (C6-C10)	1070	50	"	1100	ND	97	60-140	12	25	
Surrogate: 1,2-DCA-d4	*31.2*		"	*25.0*		*125*	*60-140*			
Surrogate: Toluene-d8	*26.0*		"	*25.0*		*104*	*60-140*			
Surrogate: 4-BFB	*26.5*		"	*25.0*		*106*	*60-140*			

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Gettler - Ryan Inc.	Project: TOSCO/PHILLIPS	P302032
1364 North Mc Dowell Blvd., Suite B2	Project Number: 3292/15008 E. 14th St., San Leandro, Ca.	**Reported:**
Petaluma CA, 94954-1116	Project Manager: Jed Douglas	02/21/03 15:37

Notes and Definitions

S-02	The surrogate recovery for this sample cannot be accurately quantified due to interference from coeluting organic compounds present in the sample.
S-04	The surrogate recovery for this sample is outside of established control limits due to a sample matrix effect.
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

№ 007407

TOSCO

☐ 885 Jarvis Drive • Morgan Hill, CA 95037 • (408) 776-9600 • FAX (408) 782-6308
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600 • FAX (916) 921-0100
☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (925) 988-9600 • FAX (925) 988-9673
☒ 1455 McDowell Blvd. North, Suite D • Petaluma, CA 94954 • (707) 792-1865 • FAX (707) 792-0342
☐ 1551 Industrial Road • San Carlos, CA 94070 • (650) 232-9600 • FAX (650) 232-9612

Consultant Company: Gettler-Ryan Inc.	Tosco Engineer: Dave Devitt
Address: 1364 N. McDowell Blvd Suite B2	Site #: 3292 - 140071.01
City: Petaluma State: CA Zip Code: 94954	Site Address: 15008 E. 14th Street
Telephone: 707-781-3255 Fax #: 707-789-3218	City, State: San Leandro, CA
Report To: Jed Douglas Sampler: Jeremy Smith	QC Data: ☒ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☒ 10 Work Days ☐ 5 Work Days ☐ 3 Work Days ☐ 2 Work Days ☐ 1 Work Day ☐ 2-8 Hours

☐ Drinking Water ☐ Waste Water ☐ Other

Project Coding: 01-000-031711

Analyses Requested

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Sequoia's Sample #	TPHg/BTEX/MTBE 8260	TPH Diesel (8015)	TOG (418.1)	Oxygenates (6) 8260	Oxygenates (6)+ EDB 1,2 DCA (8260)	VPH-WaMTCA					Comments
1. MW-5	2/4/03 11:30	water	6	VOA's	302082-01	X					X					0.5 reporting
2.																limit for 8260
3.																Aliphatic-
4.																5-6, 6-8, 8-10,
5.																10-12.
6.																Aromatic-
7.	COOLER CUSTODY SEALS INTACT ☐															5-7, 7-8,
8.	NOT INTACT ☐															8-10, 10-12
9.	COOLER TEMPERATURE 6.0 °c															
10.																

Relinquished By: Jeremy Smith	Date: 2/4/03	Time: 4:45pm	Received By:	Date: 2/4/03	Time: 1645
Relinquished By:	Date:	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By:	Date:	Time:

Were Samples Received in Good Condition? ☒ Yes ☐ No Samples on Ice? ☒ Yes ☐ No Method of Shipment Drop off Page 1 of 1

To be completed upon receipt of report:

1) Were the analyses requested on the Chain of Custody reported? ☐ Yes ☐ No If no, what analyses are still needed? _____

2) Was the report issued within the requested turnaround time? ☐ Yes ☐ No If no, what was the turnaround time? _____

Approved by: Signature: Company: Date:

Pink - Client
Yellow - Sequoia
White - Sequoia

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Doug Lee

Client Proj. ID: Unocal 3292, 140071.02
Sample Descript: EB1-7.5
Matrix: SOLID
Analysis Method: 8015Mod/8020
Lab Number: 9805743-01

Sampled: 05/07/98
Received: 05/11/98
Extracted: 05/15/98
Analyzed: 05/20/98
Reported: 05/27/98

QC Batch Number: GC051598BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	111
4-Bromofluorobenzene	60	140	91

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Unocal 3292, 140071.02	Sampled: 05/07/98
6747 Sierra Court Suite J	Sample Descript: EB2-7.5	Received: 05/11/98
Dublin, CA 94568	Matrix: SOLID	Extracted: 05/15/98
	Analysis Method: 8015Mod/8020	Analyzed: 05/20/98
Attention: Doug Lee	Lab Number: 9805743-02	Reported: 05/27/98

QC Batch Number: GC051598BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	109
4-Bromofluorobenzene	60	140	83

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Unocal 3292, 140071.02	Sampled: 05/07/98
6747 Sierra Court Suite J	Sample Descript: EB3-7.0	Received: 05/11/98
Dublin, CA 94568	Matrix: SOLID	Extracted: 05/15/98
	Analysis Method: 8015Mod/8020	Analyzed: 05/20/98
Attention: Doug Lee	Lab Number: 9805743-03	Reported: 05/27/98

QC Batch Number: GC051598BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	105
4-Bromofluorobenzene	60	140	90

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Unocal 3292, 140071.02	Sampled: 05/07/98
6747 Sierra Court Suite J	Sample Descript: EB4-5.5	Received: 05/11/98
Dublin, CA 94568	Matrix: SOLID	Extracted: 05/15/98
	Analysis Method: 8015Mod/8020	Analyzed: 05/20/98
Attention: Doug Lee	Lab Number: 9805743-04	Reported: 05/27/98

QC Batch Number: GC051598BTEXEXA
Instrument ID: GCHP07

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit mg/Kg	Sample Results mg/Kg
TPPH as Gas	1.0	N.D.
Methyl t-Butyl Ether	0.025	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes (Total)	0.0050	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	107
4-Bromofluorobenzene	60	140	77

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Unocal 3292, 140071.02	Sampled: 05/07/98
6747 Sierra Court Suite J	Sample Descript: EB-1	Received: 05/11/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/20/98
Attention: Doug Lee	Lab Number: 9805743-05	Reported: 05/27/98

QC Batch Number: GC052098BTEX06A
Instrument ID: GCHP06

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**140**
Methyl t-Butyl Ether	**2.5**	**3.4**
Benzene	**0.50**	**1.0**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		**GAS**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	98

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court Suite J
Dublin, CA 94568

Attention: Doug Lee

Client Proj. ID: Unocal 3292, 140071.02
Sample Descript: EB-2
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9805743-06

Sampled: 05/07/98
Received: 05/11/98

Analyzed: 05/21/98
Reported: 05/27/98

QC Batch Number: GC052198BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	1000	10000
Methyl t-Butyl Ether	50	260
Benzene	10	N.D.
Toluene	10	N.D.
Ethyl Benzene	10	370
Xylenes (Total)	10	35
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	97

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Unocal 3292, 140071.02	Sampled: 05/07/98
6747 Sierra Court Suite J	Sample Descript: EB-3	Received: 05/11/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/21/98
Attention: Doug Lee	Lab Number: 9805743-07	Reported: 05/27/98

QC Batch Number: GC052198BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**570**
Methyl t-Butyl Ether	**2.5**	**7.9**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	**0.50**	**13**
Xylenes (Total)	**0.50**	**3.2**
Chromatogram Pattern:		**GAS**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	107

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Unocal 3292, 140071.02	Sampled: 05/07/98
6747 Sierra Court Suite J	Sample Descript: EB-4	Received: 05/11/98
Dublin, CA 94568	Matrix: LIQUID	
	Analysis Method: 8015Mod/8020	Analyzed: 05/21/98
Attention: Doug Lee	Lab Number: 9805743-08	Reported: 05/27/98

QC Batch Number: GC052198BTEX02A
Instrument ID: GCHP02

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	250	2000
Methyl t-Butyl Ether	12	300
Benzene	2.5	23
Toluene	2.5	N.D.
Ethyl Benzene	2.5	4.0
Xylenes (Total)	2.5	N.D.
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	112

Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL - ELAP #1210

Tod Granicher
Project Manager

Sequoia Analytical

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Gettler Ryan/Geostrategies
6747 Sierra Court, Ste. J
Dublin, CA 94568
Attention: Doug Lee

Client Project ID: Unocal 3292, 140071.02

QC Sample Group: 9805743

Reported: May 31, 1998

QUALITY CONTROL DATA REPORT

Matrix:	Solid
Method:	EPA 8015
Analyst:	R. GECKLER
ANALYTE	Gasoline

QC Batch #: GC051598BTEXEXA

Sample No.:	GS9805703-1
Date Prepared:	5/15/98
Date Analyzed:	5/18/98
Instrument I.D.#:	GCHP1
Sample Conc., mg/Kg:	N.D.
Conc. Spiked, mg/Kg:	5.0
Matrix Spike, mg/Kg:	5.1
% Recovery:	102
Matrix Spike Duplicate, mg/Kg:	5.6
% Recovery:	112
Relative % Difference:	9.3
RPD Control Limits:	0-25

LCS Batch#: GSBLK051598A

Date Prepared:	5/15/98
Date Analyzed:	5/18/98
Instrument I.D.#:	GCHP1
Conc. Spiked, mg/Kg:	5.0
Recovery, mg/Kg:	5.3
LCS % Recovery:	106

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
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819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342

Gettler Ryan/Geostrategies
6747 Sierra Court, Ste. J
Dublin, CA 94568
Attention: Doug Lee

Client Project ID: Unocal 3292, 140071.02

QC Sample Group: 9805743

Reported: May 31, 1998

QUALITY CONTROL DATA REPORT

Matrix:	Liquid
Method:	EPA 8015
Analyst:	R. Geckler
ANALYTE	Gasoline

QC Batch #: GC052098BTEX06A

Sample No.:	9805C13-02
Date Prepared:	5/20/98
Date Analyzed:	5/20/98
Instrument I.D.#:	GCHP-06
Sample Conc., ug/L:	N.D.
Conc. Spiked, ug/L:	250
Matrix Spike, ug/L:	180
% Recovery:	72
Matrix Spike Duplicate, ug/L:	200
% Recovery:	80
Relative % Difference:	11
RPD Control Limits:	0-25

LCS Batch#: GC052098BTEX06A

Date Prepared:	5/20/98
Date Analyzed:	5/20/98
Instrument I.D.#:	GCHP-06
Conc. Spiked, ug/L:	250
LCS Recovery, ug/L:	220
LCS % Recovery:	88

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (510) 988-9600, FAX (510) 988-9673
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Gettler Ryan/Geostrategies
6747 Sierra Court, Ste. J
Dublin, CA 94568
Attention: Doug Lee

Client Project ID: Unocal 3292, 140071.02

QC Sample Group: 9805743

Reported: May 31, 1998

QUALITY CONTROL DATA REPORT

Matrix:	Liquid			
Method:	EPA 8020			
Analyst:	C. Demartini			
ANALYTE	Benzene	Toluene	Ethylbenzene	Xylenes
QC Batch #:	GC052198BTEX02A			
Sample No.:	GW9805C13-3			
Date Prepared:	5/21/98	5/21/98	5/21/98	5/21/98
Date Analyzed:	5/21/98	5/21/98	5/21/98	5/21/98
Instrument I.D.#:	GCHP02	GCHP02	GCHP02	GCHP02
Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	10	10	10	30
Matrix Spike, ug/L:	8.2	8.0	8.2	25
% Recovery:	82	80	82	83
Matrix Spike Duplicate, ug/L:	8.1	7.9	8.1	25
% Recovery:	81	79	81	83
Relative % Difference:	1.2	1.3	1.2	0.0
RPD Control Limits:	0-25	0-25	0-25	0-25

LCS Batch#:	GAWBLK052198A			
Date Prepared:	5/21/98	5/21/98	5/21/98	5/21/98
Date Analyzed:	5/21/98	5/21/98	5/21/98	5/21/98
Instrument I.D.#:	GCHP02	GCHP02	GCHP02	GCHP02
Conc. Spiked, ug/L:	10	10	10	30
LCS Recovery, ug/L:	8.4	8.2	8.5	26
LCS % Recovery:	84	82	85	87

Percent Recovery Control Limits:

MS/MSD	60-140	60-140	60-140	60-140
LCS	70-130	70-130	70-130	70-130

Quality Assurance Statement: All standard operating procedures and quality control requirements have been met.

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

Please Note:
The LCS is a control sample of known, interferent free matrix that is analyzed using the same reagents, preparation, and analytical methods employed for the samples. The matrix spike is an aliquot of sample fortified with known quantities of specific compounds and subjected to the entire analytical procedure. If the recovery of analytes from the matrix spike does not fall within specified control limits due to matrix interference, the LCS recovery is to be used to validate the batch.

Sequoia Analytical

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Gettler Ryan/Geostrategies	Client Proj. ID: Unocal 3292, 140071.02	Received: 05/11/98
6747 Sierra Court Suite J		
Dublin, CA 94568	Lab Proj. ID: 9805743	Reported: 05/27/98
Attention: Doug Lee		

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 13 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Tod Granicher
Project Manager

UNOCAL 76

☑ 680 Chesapeake Drive • Redwood City, CA 94063 • (415) 364-9600
☐ 819 Striker Ave., Suite 8 • Sacramento, CA 95834 • (916) 921-9600
☐ 404 N. Wiget Lane • Walnut Creek, CA 94598 • (510) 988-9600
☐ 18939 120th Ave., N.E., Suite 101 • Bothell, WA 98011 • (206) 481-9200
☐ East 11115 Montgomery, Suite B • Spokane, WA 99206 • (509) 924-9200
☐ 15055 S.W. Sequoia Pkwy, Suite 110 • Portland, OR 97222 • (503) 624-9800

Consultant Company: Gettler-Ryan Inc.	Project Name: 140071.02
Address: 6747 Sierra Ct, Ste J	UNOCAL Project Manager: Edward Ralston
City: Dublin State: CA Zip Code: 94568	AFE #:
Telephone: (925) 551-7555 FAX #: (925) 551-7888	Site #, City, State: #3292, 15008 E. 14th Street, San Leandro
Report To: Doug Lee Sampler: B. Sieminski	QC Data: ☑ Level D (Standard) ☐ Level C ☐ Level B ☐ Level A

Turnaround Time: ☑ 10 Work Days ☐ 5 Work Days ☐ 3 Work Days ☐ 2 Work Days ☐ 1 Work Day ☐ 2-8 Hours

CODE: ☐ Misc. ☑ Detect. ☐ Eval. ☐ Remed. ☐ Demol. ☐ Closure

☐ Drinking Water ☐ Waste Water ☑ Other

Analyses Requested 980 5743

Client Sample I.D.	Date/Time Sampled	Matrix Desc.	# of Cont.	Cont. Type	Laboratory Sample #	TPH gas/BTEX/MTBE	Comments
1. EB1-3.5	05/07/98	S	1	2" tube	1	X	
2. EB2-7.5	05/07/98	S	1	"	2	X	
3. EB3-7.0	05/07/98	S	1	"	3	X	
4. EB4-5.5	05/07/98	S	1	"	4	X	
5. EB-1	05/07/98	W	3	VOA	5	X	
6. EB-2	05/07/98	W	3	"	6	X	
7. EB-3	05/07/98	W	3	"	7	X	
8. EB-4	05/07/98	W	3	"	8	X	
9.							
10.							

Relinquished By: Barbara Sieminski	Date: 05/11/98	Time: 10:30	Received By:	Date: 5/11/98	Time: 10:30
Relinquished By:	Date: 5/11/98	Time:	Received By:	Date:	Time:
Relinquished By:	Date:	Time:	Received By Lab: Ann Dunn	Date: 5/11/98	Time: 1159

Were Samples Received in Good Condition? ☐ Yes ☐ No Samples on Ice? ☐ Yes ☐ No Method of Shipment _____ Page __ of __

To be completed upon receipt of report:
1) Were the analyses requested on the Chain of Custody reported? ☐ Yes ☐ No If no, what analyses are still needed? _____
2) Was the report issued within the requested turnaround time? ☐ Yes ☐ No If no, what was the turnaround time? _____

Approved by: _____ Signature: _____ Company: _____ Date: _____

Pink - Client
Yellow - Laboratory
White - Laboratory

PTS Laboratories, Inc.

Geotechnical Services

8100 Secura Way • Santa Fe Springs • CA 90670
Phone (562) 907-3607 • Fax (562) 907-3610

June 15, 1998

Mr. Doug Lee
Gettler Ryan
6747 Sierra Ct. Suite J
Dublin, CA 94568

Re: 140071.02
PTS File: 28222

Dear Mr. Lee:

Enclosed are final data for samples submitted from your Project #140071.02. All analyses were performed by applicable ASTM, EPA or API. Samples will be retained for 30 days before disposal unless other arrangements are made.

We appreciate the opportunity to be of service and trust these data will prove beneficial in the development of this project. Please feel free to call myself or Larry Kunkel, District Manager, should you have any questions or require additional information.

Sincerely,

PTS Laboratories, Inc.

Rick Young
Project Manager

LK/vk

encl.

PHYSICAL PROPERTIES DATA

(METHODOLOGY: ASTM D2216, EPA 9045, ASTM D2937, API RP40, EPA 9100, Walkley Black)

PROJECT NAME: TOSCO 76 FACILITY # 3292
PROJECT NO: 140071.02

SAMPLE ID.	DEPTH, ft.	SAMPLE ORIENT. (1)	MOISTURE CONTENT (% wt)	SOIL pH	DENSITY		EFFECTIVE POROSITY, % Vb	25.0 PSI CONFINING STRESS		TOTAL ORGANIC CONTENT mg/kg
					BULK (g/cc)	GRAIN (g/cc)		NATIVE STATE EFFECTIVE PERMEABILITY TO WATER (millidarcy)	NATIVE STATE EFFECTIVE HYDRAULIC CONDUCTIVITY (cm/s)	
EB1-5	N/A	V	18.2	6.70	1.54	2.56	39.8	0.167	1.62E-07	8400
EB1-6.5	N/A	V	16.5	6.68	1.63	2.58	37.0	0.269	2.63E-07	3600
EB1-9.5	N/A	V	19.3	6.68	1.70	2.57	34.1	0.499	4.84E-07	350

(1) Sample Orientation: H = Horizontal; V = Vertical

Vb = Bulk Volume, cc
Pv = Pore Volume, cc
ND = Not Detected

PTS Laboratories, Inc.

Gettler-Ryan, Inc.
PTS File No: 28222

PARTICLE SIZE SUMMARY

(METHODOLOGY: ASTM D4464)

PROJECT NAME: Tosco 76 Facility #3292
PROJECT NO: 140071.02

Sample ID	Depth, ft.	Description USCS/ASTM (1)	Median Grain Size mm	Particle Size Distribution, wt. percent						Silt & Clay
				Gravel	Sand Size			Silt	Clay	
					Coarse	Medium	Fine			
EB1-9.5	9.5-10	Silt	0.034	0.00	0.00	0.82	26.29	61.13	11.76	72.89
EB1-6.5	6.5-7	Silt	0.037	0.00	0.00	1.75	26.28	60.59	11.37	71.96
EB1-5	5-5.5	Silt	0.039	0.00	0.00	0.07	29.70	59.60	10.63	70.23

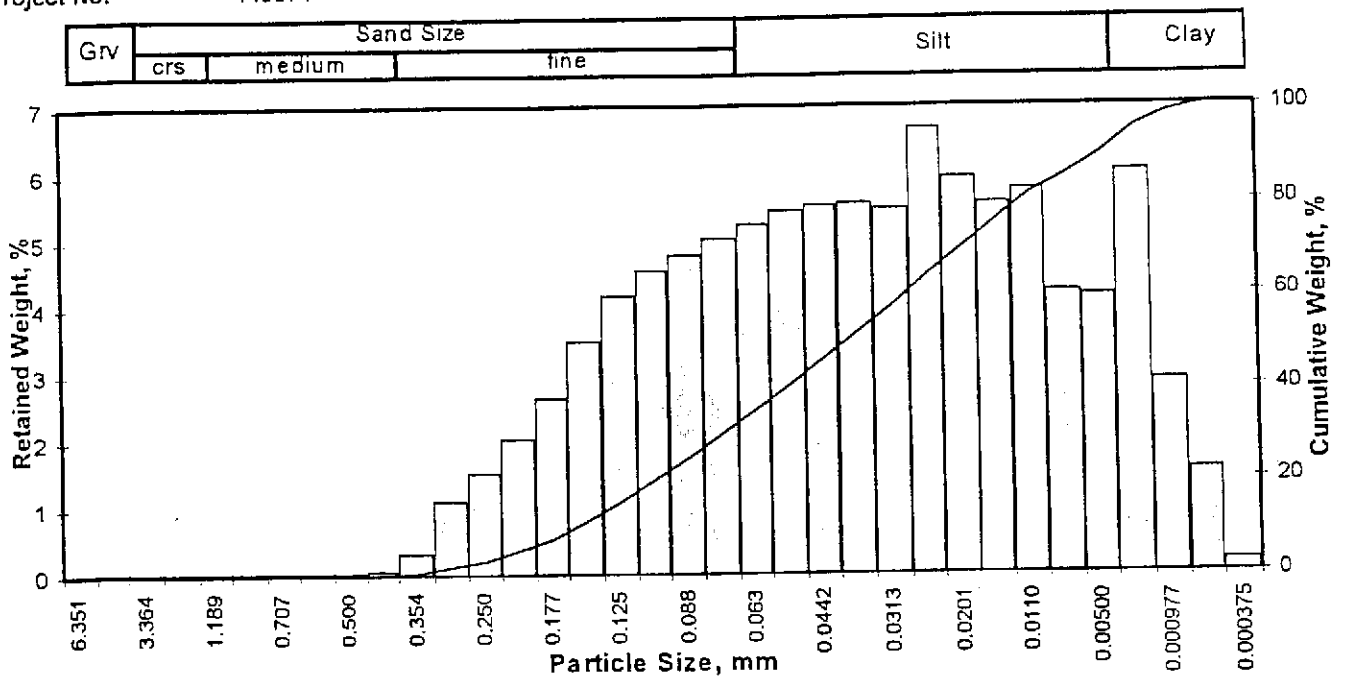
(1) based on Mean from Trask

PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client: Gettler-Ryan, Inc.
Project: Tosco 76 Facility #3292
Project No: 140071

PTS File No: 28222
Sample ID: EB1-5
Depth, ft: 5-5.5



Opening		Phi of	U.S.	Sample Weight,	Incremental Weight,	Cumulative Weight,
Inches	Millimeters	Screen	No.	grams	percent	percent
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.00	0.00	0.00
0.0331	0.841	0.25	20	0.00	0.00	0.00
0.0278	0.707	0.50	25	0.00	0.00	0.00
0.0234	0.595	0.75	30	0.00	0.00	0.00
0.0197	0.500	1.00	35	0.00	0.00	0.00
0.0166	0.420	1.25	40	0.06	0.06	0.07
0.0139	0.354	1.50	45	0.31	0.31	0.38
0.0117	0.297	1.75	50	1.12	1.12	1.50
0.0098	0.250	2.00	60	1.54	1.54	3.04
0.0083	0.210	2.25	70	2.03	2.03	5.07
0.0070	0.177	2.50	80	2.65	2.65	7.72
0.0059	0.149	2.75	100	3.51	3.51	11.23
0.0049	0.125	3.00	120	4.17	4.17	15.40
0.0041	0.105	3.25	140	4.56	4.56	19.96
0.0035	0.088	3.50	170	4.79	4.79	24.75
0.0029	0.074	3.75	200	5.02	5.02	29.77
0.0025	0.063	4.00	230	5.24	5.24	35.01
0.0021	0.053	4.25	270	5.43	5.43	40.44
0.00174	0.0442	4.50	325	5.53	5.53	45.97
0.00146	0.0372	4.75	400	5.56	5.56	51.53
0.00123	0.0313	5.00	450	5.46	5.46	56.99
0.000986	0.0250	5.32	500	6.68	6.68	63.67
0.000790	0.0201	5.64	635	5.95	5.95	69.62
0.000615	0.0156	6.00		5.56	5.56	75.18
0.000435	0.0110	6.50		5.76	5.76	80.94
0.000308	0.00781	7.00		4.25	4.25	85.19
0.000197	0.00500	7.65		4.18	4.18	89.37
0.000077	0.00195	9.00		6.02	6.02	95.39
0.000038	0.000977	10.00		2.88	2.88	98.27
0.000019	0.000488	11.00		1.57	1.57	99.84
0.000015	0.000375	11.38		0.16	0.16	100.00
TOTALS				100.00	100.00	100.00

Cumulative Weight Percent greater than			
Weight	Phi	Particle Size	
percent	Value	Inches	Millimeters
5	2.24	0.0083	0.211
10	2.66	0.0062	0.158
16	3.03	0.0048	0.122
25	3.51	0.0034	0.088
40	4.23	0.0021	0.053
50	4.68	0.0015	0.039
60	5.14	0.0011	0.028
75	5.99	0.0006	0.016
84	6.86	0.0003	0.009
90	7.79	0.0002	0.005
95	8.91	0.0001	0.002

Measure	Trask	Inman	Folk-Ward
Median, phi	4.68	4.68	4.68
Median, in.	0.0015	0.0015	0.0015
Median, mm	0.039	0.039	0.039
Mean, phi	4.27	4.95	4.86
Mean, in.	0.0020	0.0013	0.0014
Mean, mm	0.052	0.032	0.034
Sorting	0.424	1.914	1.968
Skewness	0.953	0.139	0.204
Kurtosis	0.234	0.743	1.104
Grain Size Description (ASTM-USCS Scale)		Silt (based on Mean from Trask)	

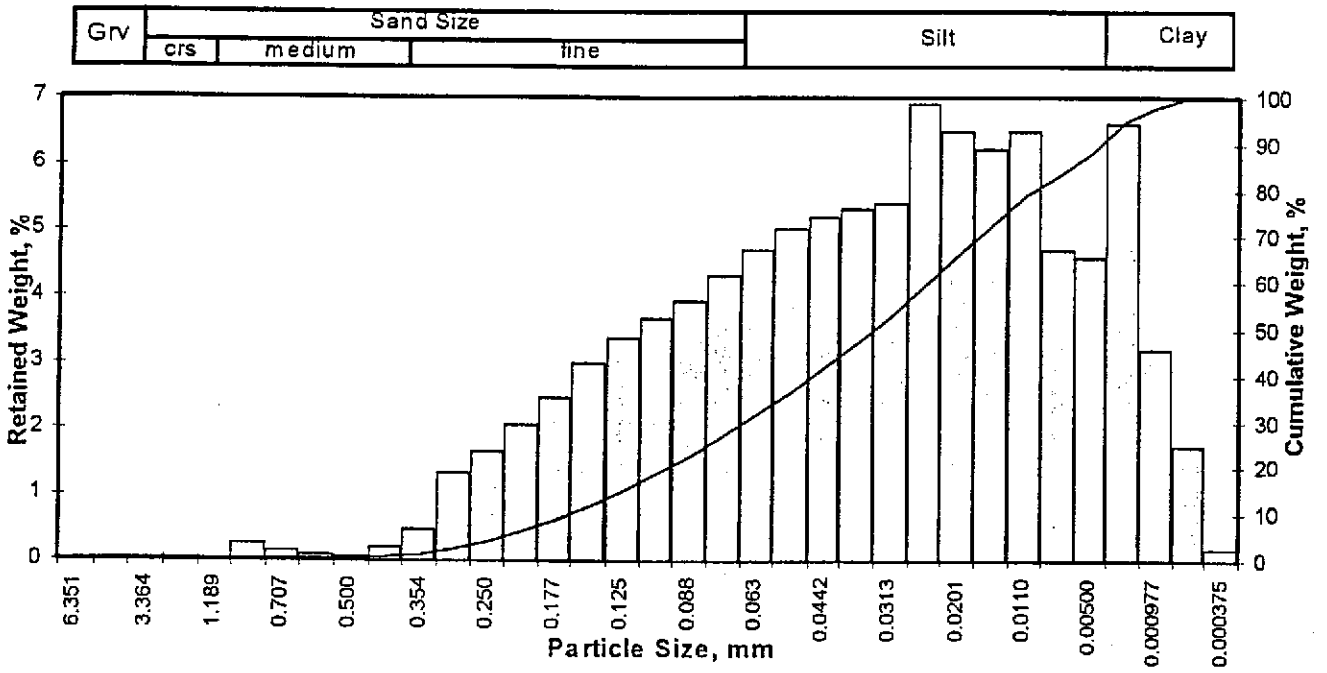
Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	0.07
Fine Sand	200	29.70
Silt	>0.005 mm	59.60
Clay	<0.005 mm	10.63
	Total	100

Phone: (562) 907-3607
Fax: (562) 907-3610

PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client:	Gettler-Ryan, Inc.	**PTS File No:**	28222
Project:	Tosco 76 Facility #3292	**Sample ID:**	EB1-9.5
Project No:	140071	**Depth, ft:**	9.5-10



Opening (Inches)	Opening (Millimeters)	Phi of Screen	U.S. No.	Sample Weight, grams	Incremental Weight, percent	Cumulative Weight, percent
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.04	0.04	0.04
0.0331	0.841	0.25	20	0.28	0.28	0.32
0.0278	0.707	0.50	25	0.14	0.14	0.46
0.0234	0.595	0.75	30	0.08	0.08	0.54
0.0197	0.500	1.00	35	0.07	0.07	0.61
0.0166	0.420	1.25	40	0.21	0.21	0.82
0.0139	0.354	1.50	45	0.48	0.48	1.30
0.0117	0.297	1.75	50	1.31	1.31	2.61
0.0098	0.250	2.00	60	1.66	1.66	4.27
0.0083	0.210	2.25	70	2.07	2.07	6.34
0.0070	0.177	2.50	80	2.48	2.48	8.82
0.0059	0.149	2.75	100	2.99	2.99	11.81
0.0049	0.125	3.00	120	3.38	3.38	15.19
0.0041	0.105	3.25	140	3.67	3.67	18.85
0.0035	0.088	3.50	170	3.94	3.94	22.79
0.0029	0.074	3.75	200	4.32	4.32	27.11
0.0025	0.063	4.00	230	4.72	4.72	31.83
0.0021	0.053	4.25	270	5.03	5.03	36.86
0.00174	0.0442	4.50	325	5.21	5.21	42.07
0.00146	0.0372	4.75	400	5.32	5.32	47.39
0.00123	0.0313	5.00	450	5.40	5.40	52.79
0.000986	0.0250	5.32	500	6.92	6.92	59.71
0.000790	0.0201	5.64	635	6.49	6.49	66.20
0.000615	0.0156	6.00		6.24	6.24	72.44
0.000435	0.0110	6.50		6.51	6.51	78.94
0.000308	0.00781	7.00		4.72	4.72	83.66
0.000197	0.00500	7.65		4.58	4.58	88.24
0.000077	0.00195	9.00		6.63	6.63	94.87
0.000038	0.000977	10.00		3.20	3.20	98.07
0.000019	0.000488	11.00		1.75	1.75	99.82
0.000015	0.000375	11.38		0.18	0.18	100.00
TOTALS				100.02	100.00	100.00

Cumulative Weight Percent greater than			
Weight percent	Phi Value	Particle Size (Inches)	Particle Size (Millimeters)
5	2.09	0.0093	0.235
10	2.60	0.0065	0.165
16	3.06	0.0047	0.120
25	3.63	0.0032	0.081
40	4.40	0.0019	0.047
50	4.87	0.0013	0.034
60	5.33	0.0010	0.025
75	6.20	0.0005	0.014
84	7.05	0.0003	0.008
90	8.00	0.0002	0.004
95	9.04	0.0001	0.002

Measure	Trask	Inman	Folk-Ward
Median, phi	4.87	4.87	4.87
Median, in.	0.0013	0.0013	0.0013
Median, mm	0.034	0.034	0.034
Mean, phi	4.40	5.05	4.99
Mean, in.	0.0019	0.0012	0.0012
Mean, mm	0.047	0.030	0.031
Sorting	0.410	1.996	2.051
Skewness	0.972	0.090	0.145
Kurtosis	0.209	0.741	1.109

Grain Size Description (ASTM-USCS Scale)	Silt (based on Mean from Trask)

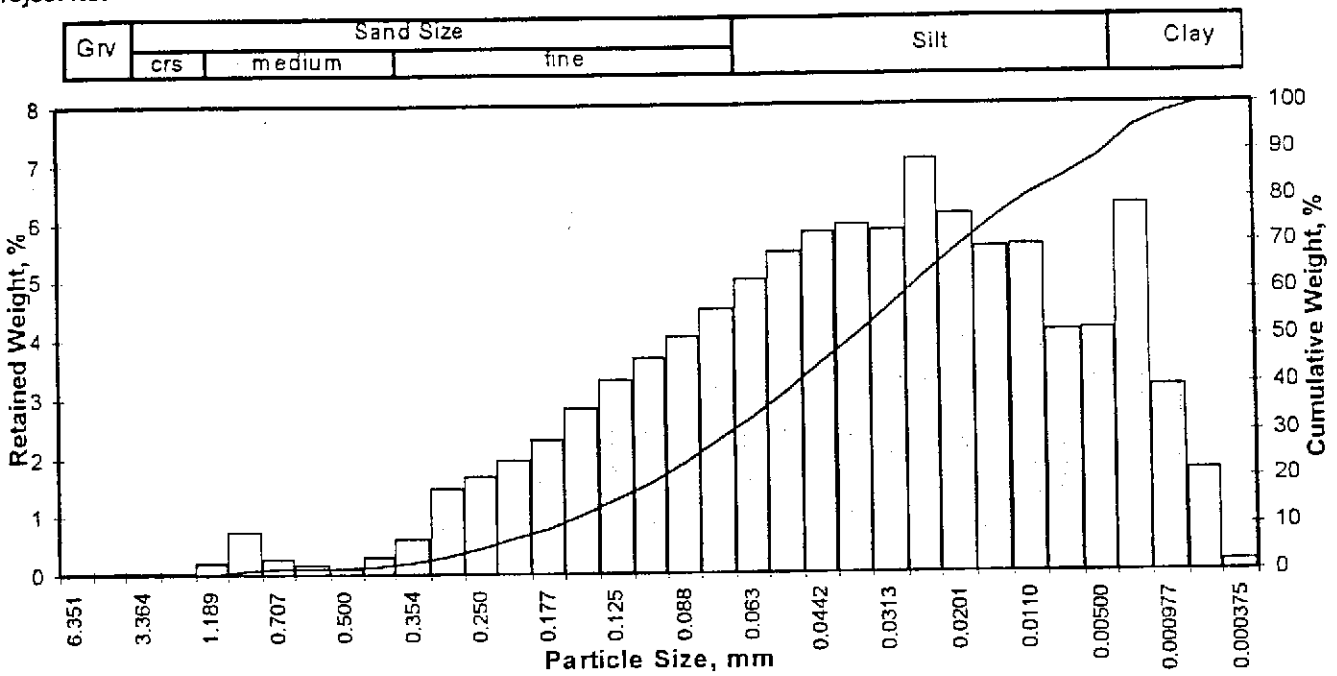
Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	0.82
Fine Sand	200	26.29
Silt	>0.005 mm	61.13
Clay	<0.005 mm	11.76
	Total	100

Phone: (562) 907-3607 Fax: (562) 907-3610

PTS Laboratories, Inc.

Particle Size Analysis - ASTM D4464M

Client:	Gettler-Ryan, Inc.	**PTS File No:**	28222
Project:	Tosco 76 Facility #3292	**Sample ID:**	EB1-6.5
Project No:	140071	**Depth, ft:**	6.5-7



Opening		Phi of	U.S.	Sample Weight,	Incremental Weight,	Cumulative Weight,
Inches	Millimeters	Screen	No.	grams	percent	percent
0.2500	6.351	-2.67	1/4	0.00	0.00	0.00
0.1873	4.757	-2.25	4	0.00	0.00	0.00
0.1324	3.364	-1.75	6	0.00	0.00	0.00
0.0787	2.000	-1.00	10	0.00	0.00	0.00
0.0468	1.189	-0.25	16	0.20	0.20	0.20
0.0331	0.841	0.25	20	0.73	0.73	0.93
0.0278	0.707	0.50	25	0.28	0.28	1.20
0.0234	0.595	0.75	30	0.15	0.15	1.36
0.0197	0.500	1.00	35	0.11	0.11	1.46
0.0166	0.420	1.25	40	0.29	0.29	1.75
0.0139	0.354	1.50	45	0.59	0.59	2.34
0.0117	0.297	1.75	50	1.47	1.47	3.81
0.0098	0.250	2.00	60	1.68	1.68	5.49
0.0083	0.210	2.25	70	1.94	1.94	7.43
0.0070	0.177	2.50	80	2.27	2.27	9.70
0.0059	0.149	2.75	100	2.83	2.83	12.53
0.0049	0.125	3.00	120	3.30	3.30	15.83
0.0041	0.105	3.25	140	3.68	3.68	19.51
0.0035	0.088	3.50	170	4.03	4.03	23.54
0.0029	0.074	3.75	200	4.49	4.49	28.04
0.0025	0.063	4.00	230	5.01	5.01	33.05
0.0021	0.053	4.25	270	5.48	5.48	38.53
0.00174	0.0442	4.50	325	5.81	5.81	44.34
0.00146	0.0372	4.75	400	5.94	5.94	50.28
0.00123	0.0313	5.00	450	5.85	5.85	56.13
0.000986	0.0250	5.32	500	7.06	7.06	63.19
0.000790	0.0201	5.64	635	6.11	6.11	69.30
0.000615	0.0156	6.00		5.54	5.54	74.84
0.000435	0.0110	6.50		5.58	5.58	80.42
0.000308	0.00781	7.00		4.09	4.09	84.51
0.000197	0.00500	7.65		4.12	4.12	88.63
0.000077	0.00195	9.00		6.30	6.30	94.93
0.000038	0.000977	10.00		3.15	3.15	98.08
0.000019	0.000488	11.00		1.74	1.74	99.82
0.000015	0.000375	11.38		0.18	0.18	100.00
TOTALS				99.99	100.00	100.00

Cumulative Weight Percent greater than			
Weight	Phi	Particle Size	
percent	Value	Inches	Millimeters
5	1.93	0.0104	0.263
10	2.53	0.0068	0.174
16	3.01	0.0049	0.124
25	3.58	0.0033	0.084
40	4.31	0.0020	0.050
50	4.74	0.0015	0.037
60	5.18	0.0011	0.028
75	6.01	0.0006	0.015
84	6.94	0.0003	0.008
90	7.94	0.0002	0.004
95	9.02	0.0001	0.002

Measure	Trask	Inman	Folk-Ward
Median, phi	4.74	4.74	4.74
Median, in.	0.0015	0.0015	0.0015
Median, mm	0.037	0.037	0.037
Mean, phi	4.34	4.97	4.90
Mean, in.	0.0019	0.0013	0.0013
Mean, mm	0.050	0.032	0.034
Sorting	0.430	1.963	2.057
Skewness	0.960	0.120	0.164
Kurtosis	0.201	0.807	1.195
Grain Size Description (ASTM-USCS Scale)		Silt (based on Mean from Trask)	

Description	Retained on Sieve #	Weight Percent
Gravel	4	0.00
Coarse Sand	10	0.00
Medium Sand	40	1.75
Fine Sand	200	26.28
Silt	>0.005 mm	60.59
Clay	<0.005 mm	11.37
	Total	100

Phone: (562) 907-3607
Fax: (562) 907-3610

DATE PTS FILE # 28222 CHAIN OF CUSTODY RECORD PAGE 1 OF 1

PTS Laboratories, Inc.
8100 Secura Way
Santa Fe Springs, CA 90670
Ph: (310) 907-3607 • Fax: (310) 907-3610

COMPANY: GETTLER-RYAN INC.
PROJECT MANAGER: DOUG LEE
PROJECT NAME: TOSCO 76 FACILITY #3282
FAX NUMBER: (925) 551-7888
PROJECT NUMBER: 140071.02
PHONE NUMBER: (925) 551-7555
SITE LOCATION: 15005 E. 14TH STREET, SAN LEANDRO, CA
ADDRESS:
SAMPLER SIGNATURE: Barbara Sieminski

ANALYSIS REQUEST

PO#

SPECIAL HANDLING
24 HOURS 5 DAYS
72 HOURS NORMAL
OTHER

SAMPLE CONDITIONS
RECEIVED ON ICE YES/NO
SEALED YES/NO
OTHER YES/NO

SAMPLE ID NUMBER	DATE	TIME	DEPTH, FT	PHYSICAL PROPERTIES PACKAGE, API RP40	MOISTURE CONTENT, ASTM D2216	POROSITY, API RP40	GRAIN DENSITY, API RP40	BULK DENSITY, ~~API RP40~~ ASTM D2937	AIR PERMEABILITY, API RP40	SPECIFIC RETENTION/YEILD ASTM D425	CATION EXCHANGE CAPACITY, EPA 9080	SOIL pH, EPA 9045	GRAIN SIZE: DRY; 400 MESH	GRAIN SIZE: WET/DRY, 20 MICRON	GRAIN SIZE: LASER; 1 MICRON + SIEVE	HYDRAULIC CONDUCTIVITY, EPA 9100, API RP40	TOC: ~~EPA 9060~~ WALKLEY - BLACK	PERMEABILITY V - ASTM D5084	NUMBER OF SAMPLES
EB1-5	5/7/98		5-5.5		X	X		X				X			X		X	X	
EB1-6.5	↓		6.5-7		↓	↓		X				↓			↓		↓	↓	
EB1-9.5	↓		9.5-10		↓	↓		X				↓			↓		↓	↓	

COMMENTS

1. RELINQUISHED BY	2. RECEIVED BY	3. RELINQUISHED BY	4. RECEIVED BY
Barbara Sieminski			
COMPANY: Gettler-Ryan Inc	COMPANY: GETTLER-RYAN INC.	COMPANY: GETTLER-RYAN INC.	COMPANY: PTS Labs
DATE: 05/08/98 TIME: 1 10 PM	DATE: 5-8-98 TIME: 1:10 PM	DATE: 5-8-98 TIME: 3:00 PM	DATE: 5/27/98 TIME: 0946

Table 1. Analytical Results - Tosco 76 Branded Facility No. 3292, 15008 East 14th Street, San Leandro, California.

Sample ID	Depth (feet)	Date	TPHg	B	T	E	X	MTBE	Moisture %	Organic Content %	Density Bulk gm/cc	Density Grain gm/cc	Porosity %
			<——— ppm ———>										
Soil Samples													
EB1-5	5.0	05/07/98	—	—	—	—	—	—	18.2	8,400	1.54	2.56	39.8
EB1-6.5	6.5	05/07/98	—	—	—	—	—	—	16.5	3,600	1.63	2.58	37.0
EB1-7.5	7.5	05/07/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	—	—	—	—	—
EB1-9.5	9.5	05/07/98	—	—	—	—	—	—	19.3	350	1.70	2.57	34.1
EB2-7.5	7.5	05/07/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	—	—	—	—	—
EB3-7.0	7.0	05/07/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	—	—	—	—	—
EB4-5.5	5.5	05/07/98	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.025	—	—	—	—	—
			<——— ppb ———>										
Grab Groundwater Samples													
EB-1	—	05/07/98	140	1.0	<0.50	<0.050	<0.050	3.4	—	—	—	—	—
EB-2	—	05/07/98	11,000	<10	<10	370	35	260	—	—	—	—	—
EB-3	—	05/07/98	570	<0.50	<0.50	13	3.2	7.9	—	—	—	—	—
EB-4	—	05/07/98	2,000	23	<2.5	4.0	<2.5	300	—	—	—	—	—

EXPLANATION:

TPHg = Total Petroleum Hydrocarbons as gasoline
MTBE = Methyl t-Butyl Ether
ppm = Parts per million
gm/cc = grams per cubic centimeter
— = Not analyzed/not applicable

ANALYTICAL METHODS:

TPHg = EPA Method 8015Mod
Benzene, toluene, ethylbenzene, xylenes, MTBE = EPA Method 8020
Porosity = API RP-40
Density = D-2937
Moisture content = D-2216
Organic Content = Walkley-Black

ANALYTICAL LABORATORY:

Sequoia Analytical (ELAP #1210)

GEOTECHNICAL LABORATORY:

PTS Laboratories

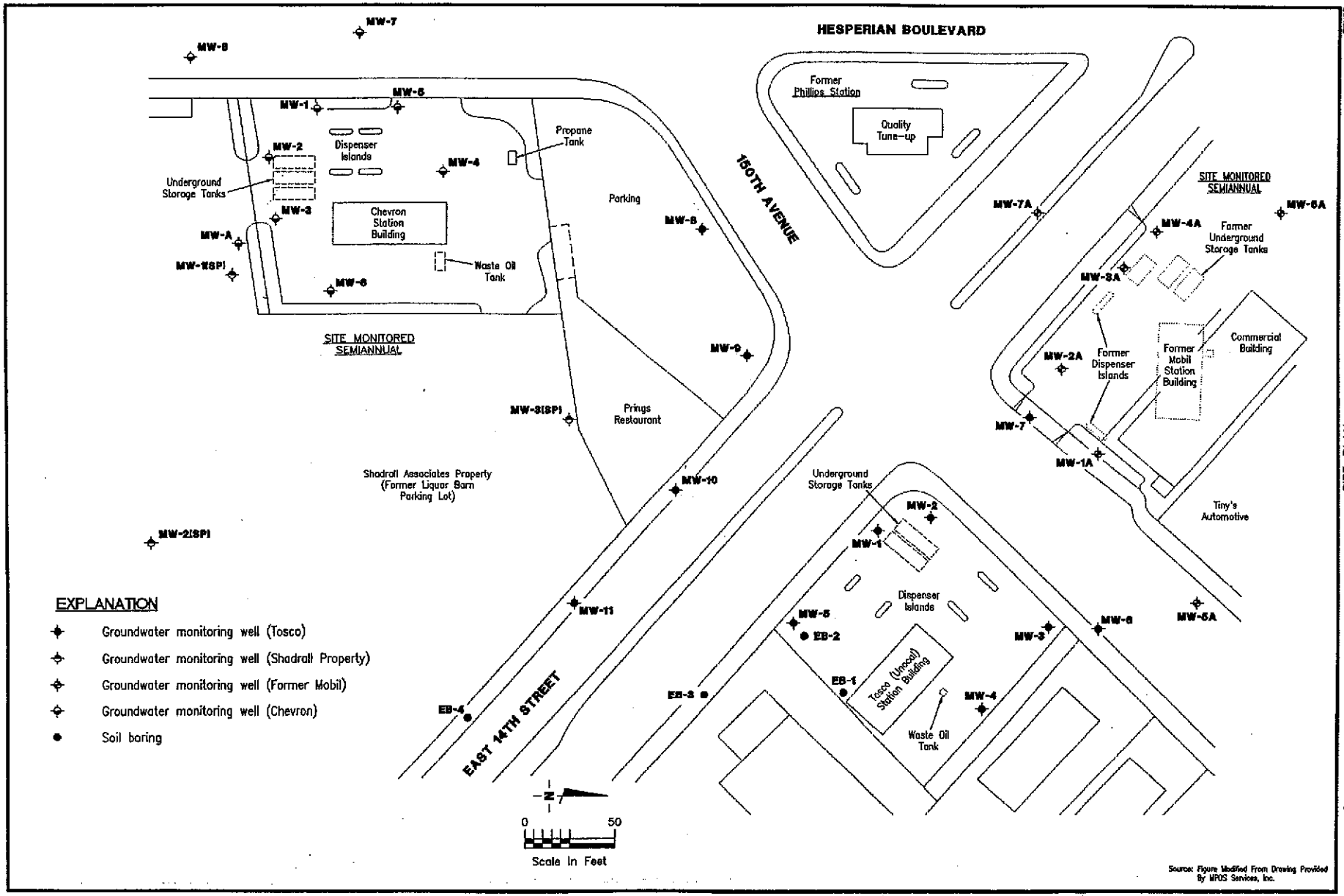


FIGURE 2

SITE PLAN
Tosco 76 Branded Facility No. 3292
15008 East 14th Street
San Leandro, California

DATE March, 1999

REVISED DATE

REVIEWED BY

JOB NUMBER 140071.02

Gettler - Ryan Inc.
6747 Sierra Ct., Suite J
Dublin, CA 94568
(925) 551-7555

KEI-J91-0102.R1
March 6, 1991

TABLE 1

SUMMARY OF LABORATORY ANALYSES
SOIL

(Collected on January 16, and
February 11 & 12, 1991)

Sample	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethylbenzene
A1	15.5	2,600	7.1	55	170	55
A2	16.0	290	1.3	1.1	1.2	1.5
B1	15.5	840	1.5	2.7	9.9	1.3
B2	15.0	150	1.6	3.3	11	2.0
P1	3.5	ND	0.0072	0.019	0.026	ND
P2	4.75	1.2	0.014	0.041	0.11	0.019
P3	3.75	ND	ND	ND	ND	ND
P4	3.75	ND	ND	ND	ND	ND
P5	3.5	ND	ND	ND	ND	ND
P6	5	ND	ND	ND	ND	ND
P7	5	7.1	0.89	0.23	0.70	0.57
P8	3.5	ND	ND	ND	ND	ND
P9	7.5	130	0.068	0.37	0.076	0.66
WO1*	8.25	ND	ND	ND	ND	ND
Detection Limits		1.0	0.0050	0.0050	0.0050	0.0050

ND = Non-detectable.

* TOG, TPH as diesel and all EPA method 8010 constituents and metals were non-detectable except for zinc, which showed 31 ppm.

Results in parts per million (ppm), unless otherwise indicated.

KEI-P91-0102.R5
July 14, 1992

TABLE 3

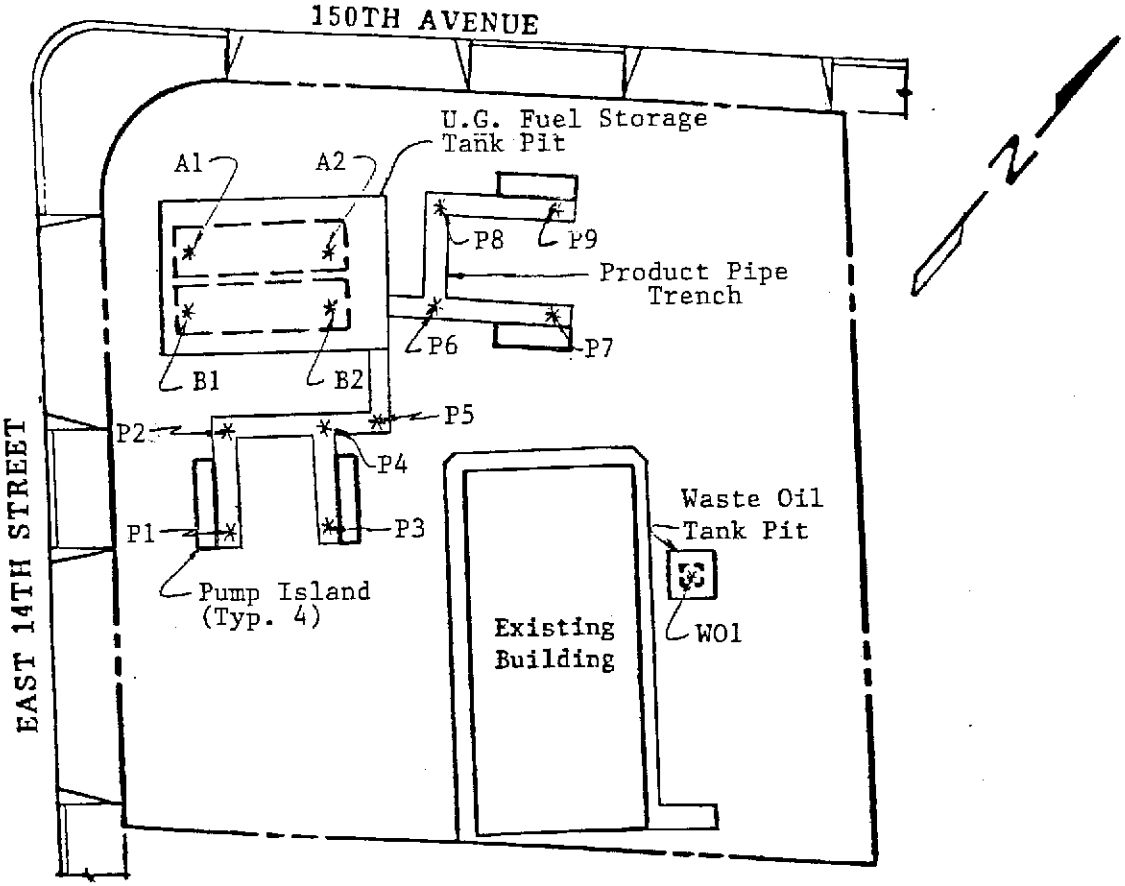
SUMMARY OF LABORATORY ANALYSES
SOIL

Date	Sample Number	Depth (feet)	TPH as Gasoline	Benzene	Toluene	Xylenes	Ethyl-benzene
4/23/91	MW1(5)	5.0	ND	ND	ND	0.0070	ND
	MW1(10)	10.0	82	0.20	0.23	0.31	0.14
	MW1(12)	12.0	420	1.2	1.3	0.72	0.78
	MW2(5)	5.0	ND	ND	ND	0.022	0.0085
	MW2(10)	10.0	2.2	0.089	ND	0.0064	ND
	MW2(12)	12.0	12	ND	0.017	0.075	0.14
	MW3(5)	5.0	ND	ND	ND	ND	ND
	MW3(10)	10.0	1.4	0.015	0.0051	0.014	ND
	MW3(13)	13.0	3.5	0.026	0.026	0.030	0.0088
	MW4(5)	5.0	ND	ND	ND	ND	ND
	MW4(10)	10.0	ND	ND	ND	0.0060	ND
	MW4(13)	13.0	ND	ND	ND	0.012	0.0088
	MW5(5)	5.0	ND	ND	ND	ND	ND
	MW5(10)	10.0	7.7	0.029	0.14	0.090	0.13
	MW5(14.5)	14.5	620	6.8	4.4	75	18
5/05/92	MW6(5.5)	5.5	ND	ND	ND	ND	ND
	MW6(10.5)	10.5	ND	ND	ND	ND	ND
	MW7(9)	9.0	280	0.45	0.45	23	7.2
	MW7(12.5)	12.5	540	1.9	0.47	47	15
5/06/92	MW8(5)	5.0	ND	ND	ND	ND	ND
	MW8(10)	10.0	ND	ND	ND	ND	ND
	MW8(11.5)	11.5	ND	ND	ND	ND	ND
	MW8(13.5)	13.5	1.2	0.011	0.0054	0.014	ND
	MW9(5)	5.0	ND	ND	0.0053	0.014	ND
	MW9(10)	10.0	ND	ND	ND	0.0078	ND
	MW9(12)	12.0	ND	ND	ND	0.0074	ND
Detection Limits			1.0	0.0050	0.0050	0.0050	0.0050

ND = Non-detectable.

Results in parts per million (ppm), unless otherwise indicated.

KAPREALIAN ENGINEERING, INC.
Consulting Engineers
P.O. BOX 996 • BENICIA, CA 94510
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



SITE PLAN
Figure 2

LEGEND

* Sample Point Location

Unocal S/S #3292
15008 E. 14th Street
San Leandro, CA

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled: 4/23-4/24/91
P.O. Box 996	Matrix Descript:	Soil	Received: Apr 25, 1991
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed: May 1, 1991
Attention: Mardo Kaprealian, P.E.	First Sample #:	104-0864	Reported: May 13, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
104-0864	MW1(5)	N.D.	N.D.	N.D.	N.D.	0.0070
104-0865	MW1(10)	82	0.20	0.23	0.14	0.31
104-0866	MW1(12)	420	1.2	1.3	0.78	0.72
104-0867	MW2(5)	N.D.	N.D.	N.D.	0.0085	0.022
104-0868	MW2(10)	2.2	0.0089	N.D.	N.D.	0.0064
104-0869	MW2(12)	12	N.D.	0.017	0.14	0.075
104-0870	MW3(5)	N.D.	N.D.	N.D.	N.D.	N.D.
104-0871	MW3(10)	1.4	0.015	0.0051	N.D.	0.014
104-0872	MW3(13)	3.5	0.026	0.026	0.0088	0.030
104-0873	MW4(5)	N.D.	N.D.	N.D.	N.D.	N.D.
Detection Limits:		**1.0**	**0.0050**	**0.0050**	**0.0050**	**0.0050**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled:	Apr 24, 1991
P.O. Box 996	Matrix Descript:	Soil	Received:	Apr 25, 1991
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed:	May 1, 1991
Attention: Mardo Kaprealian, P.E.	First Sample #:	104-0874	Reported:	May 13, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons mg/kg (ppm)	Benzene mg/kg (ppm)	Toluene mg/kg (ppm)	Ethyl Benzene mg/kg (ppm)	Xylenes mg/kg (ppm)
104-0874	MW4(10)	N.D.	N.D.	N.D.	N.D.	0.0060
104-0875	MW4(13)	N.D.	N.D.	N.D.	0.0088	0.012
104-0876	MW5(5)	N.D.	N.D.	N.D.	N.D.	N.D.
104-0877	MW5(10)	7.7	0.029	0.14	0.13	0.090
104-0878	MW5(14.5)	620	6.8	4.4	18	75
Detection Limits:		**1.0**	**0.0050**	**0.0050**	**0.0050**	**0.0050**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled: - - - - - -
P.O. Box 996	Sample Descript.:	Blank	Received: - - - - - -
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed: May 1, 1991
Attention: Mardo Kaprealian, P.E.	Lab Number:	- - - - - -	Reported: May 13, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit mg/kg (ppm)	Sample Results mg/kg (ppm)
Low to Medium Boiling Point Hydrocarbons	1.0	N.D.
Benzene	0.0050	N.D.
Toluene	0.0050	N.D.
Ethyl Benzene	0.0050	N.D.
Xylenes	0.0050	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

SEQUOIA ANALYTICAL

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Kaprealian Engineering, Inc.
P.O. Box 996
Benicia, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: Unocal, 15008 E. 14th St., San Leandro
QC Sample Group: 1040864-78
Reported: May 13, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
Reporting Units:	ppm	ppm	ppm	ppm
Date Analyzed:	May 1, 1991	May 1, 1991	May 1, 1991	May 1, 1991
QC Sample #:	104-0864	104-0864	104-0864	104-0864
Sample Conc.:	N.D.	N.D.	N.D.	0.0070
Spike Conc. Added:	0.40	0.40	0.40	1.2
Conc. Matrix Spike:	0.42	0.40	0.36	1.1
Matrix Spike % Recovery:	110	100	90	92
Conc. Matrix Spike Dup.:	0.44	0.38	0.36	1.1
Matrix Spike Duplicate % Recovery:	110	95	90	92
Relative % Difference:	4.6	5.1	0	0

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

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Attention: Mardo Kaprealian, P.E.

Client Project ID: Unocal, 15008 E. 14th St., San Leandro
QC Sample Group: 1040864-78
Reported: May 13, 1991

QUALITY CONTROL DATA REPORT

SURROGATE

Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	J.F.	J.F.	J.F.	J.F.	J.F.	J.F.	J.F.
Reporting Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Date Analyzed:	May 1, 1991	May 1, 1991	May 1, 1991	May 1, 1991	May 1, 1991	May 1, 1991	May 1, 1991
QC Sample #:	104-0864	104-0865	104-0866	104-0867	104-0868	104-0869	104-0870
Surrogate % Recovery:	89	80	71	89	90	93	92

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

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Kaprealian Engineering, Inc.
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Benicia, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: Unocal, 15008 E. 14th St., San Leandro
QC Sample Group: 1040864-78
Reported: May 13, 1991

QUALITY CONTROL DATA REPORT

SURROGATE

Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	J.F.	J.F.	J.F.	J.F.	J.F.	J.F.	J.F.
Reporting Units:	ppm	ppm	ppm	ppm	ppm	ppm	ppm
Date Analyzed:	May 1, 1991	May 1, 1991	May 1, 1991	May 1, 1991	May 1, 1991	May 1, 1991	May 1, 1991
QC Sample #:	104-0871	104-0872	104-0873	104-0874	104-0875	104-0876	104-0877
Surrogate % Recovery:	92	91	92	90	100	98	93

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.
P.O. Box 996
Benicia, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: Unocal, 15008 E. 14th St., San Leandro
QC Sample Group:
Reported: May 13, 1991

QUALITY CONTROL DATA REPORT

SURROGATE

Method:	EPA8015/8020	EPA8015/8020
Analyst:	J.F.	J.F.
Reporting Units:	ppm	ppm
Date Analyzed:	May 1, 1991	May 1, 1991
QC Sample #:	104-0878	Blank
Surrogate % Recovery:	100	94

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: Wade Weston
WITNESSING AGENCY:

SITE NAME & ADDRESS: Unocal - San Leandro
15008 E 14th ST.

ANALYSES REQUESTED: TPH-G/BTXE

TURN AROUND TIME: Regular

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	TPH-G/BTXE	REMARKS
MW1-(5)	4/24/91		✓		✓		1	See Sample ID #	✓	10408864
MW1-(10)	"		✓		✓		1		✓	865
MW1-(12)	"		✓		✓		1		✓	866
MW2-(5)	"		✓		✓		1		✓	867
MW2-(10)	"		✓		✓		1		✓	868
MW2-(12)	"		✓		✓		1		✓	869
MW3-(5)	4/23/91		✓		✓		1		✓	870
MW3-(10)	"		✓		✓		1		✓	871
MW3-(13)	"		✓		✓		1		✓	872

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Wade Weston	4/25/91 930	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? yes
2. Will samples remain refrigerated until analyzed? yes
3. Did any samples received for analysis have head space? n/a
4. Were samples in appropriate containers and properly packaged? yes

Signature | Title: PM | Date: 4/25/91

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: Wade Weston
WITNESSING AGENCY:

SITE NAME & ADDRESS: Unocal- San Leandro
15008 E. 14th ST.

ANALYSES REQUESTED: TPH-G/BTXE

TURN AROUND TIME: Regular

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	REMARKS
MW4-(5)	4/23/91		✓		✓		1	See Sample ID*	1040873
MW4-(10)	"		✓		✓		1		874
MW4-(13)	"		✓		✓		1		875
MW5-(5)	"		✓		✓		1		876
MW5-(10)	"		✓		✓		1		877
MW5-(14.5)	"		✓		✓		1		878

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Wade Weston	4/25 9:30	
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)
Relinquished by: (Signature)	Date/Time	Received by: (Signature)

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? yes
2. Will samples remain refrigerated until analyzed? yes
3. Did any samples received for analysis have head space? n/a
4. Were samples in appropriate containers and properly packaged? yes

Signature | Title: PM | Date: 4/25/91

SEQUOIA ANALYTICAL

1900 Bates Avenue • Suite LM • Concord, California 94520
(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled:	May 4, 1991
P.O. Box 996	Matrix Descript:	Water	Received:	May 8, 1991
Benicia, CA 94510	Analysis Method:	EPA 5030/8015/8020	Analyzed:	May 16, 1991
Attention: Mardo Kaprealian, P.E.	First Sample #:	105-0261 AB	Reported:	May 22, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS with BTEX DISTINCTION (EPA 8015/8020)

Sample Number	Sample Description	Low/Medium B.P. Hydrocarbons µg/L (ppb)	Benzene µg/L (ppb)	Toluene µg/L (ppb)	Ethyl Benzene µg/L (ppb)	Xylenes µg/L (ppb)
105-0261 AB	MW-1	31,000	74	20	920	1,500
105-0262 AB	MW-2	19,000	6.6	1.4	460	630
105-0263 AB	MW-3	9,100	2.0	N.D.	55	180
105-0264 AB	MW-4	6,300	N.D.	N.D.	2.8	61
105-0265 AB	MW-5	69,000	1,400	2,500	3,500	15,000
Detection Limits:		**30**	**0.30**	**0.30**	**0.30**	**0.30**

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

SEQUOIA ANALYTICAL

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(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.	Client Project ID:	Unocal, 15008 E. 14th St., San Leandro	Sampled: - - - - - -
P.O. Box 996	Sample Descript.:	D I Blank	Received: - - - - - -
Benicia, CA 94510	Analysis Method:	EPA 5030/ 8015/8020	Analyzed: May 16, 1991
Attention: Mardo Kaprealian, P.E.	Lab Number:	- - - - - -	Reported: May 22, 1991

TOTAL PETROLEUM FUEL HYDROCARBONS WITH BTEX DISTINCTION (EPA 8015/8020)

Analyte	Detection Limit µg/L (ppb)	Sample Results µg/L (ppb)
Low to Medium Boiling Point Hydrocarbons	30	N.D.
Benzene	0.30	N.D.
Toluene	0.30	N.D.
Ethyl Benzene	0.30	N.D.
Xylenes	0.30	N.D.

Low to Medium Boiling Point Hydrocarbons are quantitated against a gasoline standard.
Analytes reported as N.D. were not present above the stated limit of detection.

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

SEQUOIA ANALYTICAL

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Kaprealian Engineering, Inc.
P.O. Box 996
Benicia, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: Unocal, 15008 E. 14th St., San Leandro
QC Sample Group: 1050261-65
Reported: May 22, 1991

QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
Reporting Units:	ppb	ppb	ppb	ppb
Date Analyzed:	May 16, 1991	May 16, 1991	May 16, 1991	May 16, 1991
QC Sample #:	105-0092	105-0092	105-0092	105-0092
Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	20	20	20	60
Conc. Matrix Spike:	21	20	21	61
Matrix Spike % Recovery:	110	100	110	100
Conc. Matrix Spike Dup.:	21	20	21	62
Matrix Spike Duplicate % Recovery:	110	100	110	100
Relative % Difference:	0	0	0	1.6

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery: $\frac{\text{Conc. of M.S. - Conc. of Sample}}{\text{Spike Conc. Added}} \times 100$

Relative % Difference: $\frac{\text{Conc. of M.S. - Conc. of M.S.D.}}{\text{(Conc. of M.S. + Conc. of M.S.D.) / 2}} \times 100$

SEQUOIA ANALYTICAL

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(415) 686-9600 • FAX (415) 686-9689

Kaprealian Engineering, Inc.
P.O. Box 996
Benicia, CA 94510
Attention: Mardo Kaprealian, P.E.

Client Project ID: Unocal, 15008 E. 14th St., San Leandro
QC Sample Group: 1050261-65
Reported: May 22, 1991

QUALITY CONTROL DATA REPORT

SURROGATE

Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha	J. Fontecha
Reporting Units:	ppb	ppb	ppb	ppb	ppb	ppb
Date Analyzed:	May 16, 1991	May 16, 1991	May 16, 1991	May 16, 1991	May 16, 1991	May 16, 1991
Sample #:	105-0261	105-0262	105-0263	105-0264	105-0265	Blank
Surrogate % Recovery:	97	97	92	94	100	100

SEQUOIA ANALYTICAL

Belinda C. Vega
Laboratory Director

% Recovery:	Conc. of M.S. - Conc. of Sample / Spike Conc. Added	x 100
Relative % Difference:	Conc. of M.S. - Conc. of M.S.D. / (Conc. of M.S. + Conc. of M.S.D.) / 2	x 100

KAPREALIAN ENGINEERING, INC.

CHAIN OF CUSTODY

SAMPLER: JOE

WITNESSING AGENCY:

SITE NAME & ADDRESS: Unocal / San Leandro, 15008 E. 14th

ANALYSES REQUESTED: TPH G, BTEX

TURN AROUND TIME: Regular

SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	ANALYSES REQUESTED	REMARKS
MW-1	5/6/91	11:50		✓	✓		2	MW	✓ 1050261 AB	VOAs - preserved
MW-2	"	12:10		✓	✓		2	"	✓ 262	
MW-3	"	12:30		✓	✓		2	"	✓ 263	
MW-4	"	12:30		✓	✓		2	"	✓ 264	
MW-5	"	12:30		✓	✓		2	"	✓ 265	

Relinquished by: (Signature)	Date/Time	Received by: (Signature)
[signature]	5/6/91 1430	[signature]
[signature]	5/8 1555	
[signature]	5/6/91 1830	[signature]

The following MUST BE completed by the laboratory accepting samples for analysis:

1. Have all samples received for analysis been stored in ice? yes
2. Will samples remain refrigerated until analyzed? yes
3. Did any samples received for analysis have head space? no
4. Were samples in appropriate containers and properly packaged? yes

BS	[illegible]	5/6/91
Signature	Title	Date

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 180105
Site Address: 15008 East 14Th Street Event Date: 11-07-02 (inclusive)
City: San Leandro, CA Sampler: Joe

Well ID MW-1 Well Condition: OK
Well Diameter 2 in.
Total Depth 18.95 ft.
Depth to Water 11.53 ft.

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

7.42 xVF 0.17 = 1.26 x3 (case volume) = Estimated Purge Volume: 4 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 1030 Weather Conditions: Showers
Sample Time/Date: 1045 / 11-27-02 Water Color: clear Odor: yes
Purging Flow Rate: 0.5gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) X 100	Temperature (C°F)	D.O. (mg/L)	ORP (mV)
1034	1	6.68	3.56	64.1	1.84	
1037	2.5	6.72	4.10	63.2		
1040	4	6.79	4.15	63.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-1	5 x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 180105
Site Address: 15008 East 14Th Street Event Date: 11-7-02 (inclusive)
City: San Leandro, CA Sampler: Joe

Well ID MW-2 Well Condition: O.K.
Well Diameter 2 in.
Total Depth 19.10 ft.
Depth to Water 11.16 ft.

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

7.94 xVF 0.17 = 1.35 x3 (case volume) = Estimated Purge Volume: 4 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 1052 Weather Conditions: Showers
Sample Time/Date: 1115 / 11-7-02 Water Color: clear Odor: yes
Purging Flow Rate: 0.5 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) x1000	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
1101	1	7.10	1.21	62.9	1.13	
1104	2.5	6.82	1.28	63.1		
1107	4	6.84	1.32	63.0		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2	5 x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 180105
Site Address: 15008 East 14Th Street Event Date: 11-7-02 (inclusive)
City: San Leandro, CA Sampler: Joe

Well ID MW-3 Well Condition: O.K.
Well Diameter 2 in.
Total Depth 22.15 ft.
Depth to Water 10.89 ft.

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

_____ xVF ~~0.17~~ = _____ x3 (case volume) = Estimated Purge Volume: _____ 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ gal
Amt Removed from Well: _____ gal
Product Transferred to: _____

Start Time (purge): _____ Weather Conditions: 5 showers
Sample Time/Date: / Water Color: ~~clear~~ Odor: _____
Purging Flow Rate: _____ 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)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS: M. only

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility #: Tosco #3292 | Job Number: 180105
Site Address: 15008 East 14Th Street | Event Date: 11.7-02 (inclusive)
City: San Leandro, CA | Sampler: Joe

Well ID: MW-4 | Well Condition: O.K.
Well Diameter: 2 in.
Total Depth: 19.60 ft.
Depth to Water: 10.44 ft.

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

_____ xVF _____ = _____ x3 (case volume) = Estimated Purge Volume: _____ 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: _____ gal
Amt Removed from Well: _____ gal
Product Transferred to: _____

Start Time (purge): _____ | Weather Conditions: showers
Sample Time/Date: / | Water Color: _____ | Odor: _____
Purging Flow Rate: _____ 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)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS: m. only

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 180105
Site Address: 15008 East 14Th Street Event Date: 11-7-02 (inclusive)
City: San Leandro, CA Sampler: Joe

Well ID MW-5 Well Condition: O.K.
Well Diameter 2 in.
Total Depth 22.15 ft.
Depth to Water 10.83 ft.

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

11.32 xVF 0.17 = 1.92 x3 (case volume) = Estimated Purge Volume: 6 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 1120 Weather Conditions: showers
Sample Time/Date: 1140 / 11-7-02 Water Color: clear Odor: yes
Purging Flow Rate: .5 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) X1000	Temperature (C°F)	D.O. (mg/L)	ORP (mV)
1125	2	6.58	0.65	63.0	1.04	
1128	4	6.64	0.62	63.1		
1132	6	6.72	0.64	62.9		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-5	5 x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING
FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 180105

Site Address: 15008 East 14Th Street Event Date: 11-7-02 (inclusive)

City: San Leandro, CA Sampler: JOT

Well ID MW-6

Well Diameter 2 in.

Total Depth 20.15 ft.

Depth to Water 9.93 ft.

Well Condition: O.K.

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

_____ xVF _____ = _____ x3 (case volume) = Estimated Purge Volume: _____ 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 / Absorbant Sock (circle one)

Amt Removed from Skimmer: _____ gal

Amt Removed from Well: _____ gal

Product Transferred to: _____

Start Time (purge): _____ Weather Conditions: _____

Sample Time/Date: _____ / _____ Water Color: _____ Odor: _____

Purging Flow Rate: _____ 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)

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-	x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS: Monly

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tesco #3292 Job Number: 180105
Site Address: 15008 East 14Th Street Event Date: 11-7-02 (inclusive)
City: San Leandro, CA Sampler: Joe

Well ID MW-7 Well Condition: O K.
Well Diameter 2 in.
Total Depth 21.20 ft.
Depth to Water 10.95 ft.

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

10.25 xVF 0.17 = 1.74 x3 (case volume) = Estimated Purge Volume: 5.5 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: - 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): 1004 Weather Conditions: Showers
Sample Time/Date: 1023 / 11-7-02 Water Color: clear Odor: YES
Purging Flow Rate: 0.3 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)
1010	1.5	7.24	2.86	64.0	1.26	
1014	3.5	7.20	2.90	63.6		
1018	5.5	7.31	2.91	63.4		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-7	5 x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 180105
Site Address: 15008 East 14Th Street Event Date: 11-7-02 (inclusive)
City: San Leandro, CA Sampler: Joe

Well ID MW-8 Well Condition: O.K.
Well Diameter 2 in.
Total Depth 19.10 ft.
Depth to Water 11.97 ft.

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

7.13 xVF 0.17 = 1.21 x3 (case volume) = Estimated Purge Volume: 4 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 0802 Weather Conditions: Showers
Sample Time/Date: 0822 / 11-7-02 Water Color: clear Odor: Some
Purging Flow Rate: 0.3 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) X 1000	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
0810	1	7.43	4.97	62.6	1.74	
0813	2.5	7.21	5.16	63.0		
0816	4	7.15	5.24	63.2		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-8	5 x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 180105
Site Address: 15008 East 14Th Street Event Date: 11-7-02 (inclusive)
City: San Leandro, CA Sampler: Joe

Well ID MW-9 Well Condition: O.K.
Well Diameter 2 in.
Total Depth 19.10 ft.
Depth to Water 11.56 ft.

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

7.54 xVF 0.17 = 1.28 x3 (case volume) = Estimated Purge Volume: 4 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 0930 Weather Conditions: Showers
Sample Time/Date: 0953 / 11.7.02 Water Color: clear Odor: yes
Purging Flow Rate: 0.5 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) x100	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
0936	1	7.52	2.65	63.5	1.32	
0940	2.5	7.10	2.66	63.4		
0944	4	7.07	2.68	63.7		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-9	5 x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 160105
Site Address: 15008 East 14Th Street Event Date: 11-7-02 (inclusive)
City: San Leandro, CA Sampler: SDL

Well ID MW-10 Well Condition: O.K.
Well Diameter 2 in.
Total Depth 19.00 ft.
Depth to Water 11.32 ft.

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

7.68 xVF 0.17 = 1.31 x3 (case volume) = Estimated Purge Volume: 4 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 0830 Weather Conditions: Showers
Sample Time/Date: 0850 / 11-7-02 Water Color: clear Odor: yes
Purging Flow Rate: 0.5 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) x100	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
0835	1	7.14	6.18	64.0	0.97	
0839	2.5	7.20	5.42	63.6		
0842	4	7.25	5.48	63.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-10	5 x voa vial	YES.	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 180105
Site Address: 15008 East 14Th Street Event Date: 11.7-02 (inclusive)
City: San Leandro, CA Sampler: Joe

Well ID MW-11 Well Condition: O.K
Well Diameter 2 in.
Total Depth 19.00 ft.
Depth to Water 10.77 ft.

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

8.23 xVF 0.17 = 1.40 x3 (case volume) = Estimated Purge Volume: 4.5 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 0900 Weather Conditions: Showers
Sample Time/Date: 0920 / 11-7-02 Water Color: Clear Odor: Yes
Purging Flow Rate: 0.5 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) x 1000	Temperature (C°F)	D.O. (mg/L)	ORP (mV)
0906	1.5	6.76	2.89	64.1	1.17	
0910	3	6.77	2.96	63.6		
0913	4.5	6.78	3.07	63.1		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-11	5 x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #3292 | Job Number: 180105
Site Address: 15008 East 14Th Street | Event Date: 11-7-02 (inclusive)
City: San Leandro, CA | Sampler: Joe

Well ID: MW-2(SP) | Well Condition: OIC -
Well Diameter: 2 in.
Total Depth: 20.85 ft.
Depth to Water: 11.12 ft.

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

9.73 x VF 0.17 = 1.65 x3 (case volume) = Estimated Purge Volume: 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 0705 | Weather Conditions: Showers
Sample Time/Date: 0730 11.7-02 | Water Color: clear | Odor: mild
Purging Flow Rate: 0.5 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)
0710	1.5	7.38	6.75 (1850)	62.5	1.21	
0713	3	7.30	6.76	62.6		
0718	5	7.32	6.74	62.9		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-2(SP)	5 x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

GETTLER-RYAN INC.

WELL MONITORING/SAMPLING FIELD DATA SHEET

Client/Facility #: Tosco #3292 Job Number: 180105
Site Address: 15008 East 14Th Street Event Date: 11-7-02 (inclusive)
City: San Leandro, CA Sampler: Sac

Well ID MW-3(SP) Well Condition: O.K.
Well Diameter 2 in.
Total Depth 20.75 ft.
Depth to Water 11.33 ft.

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

9.4 xVF 0.17 = 1.60 x3 (case volume) = Estimated Purge Volume: 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 / Absorbant Sock (circle one)
Amt Removed from Skimmer: gal
Amt Removed from Well: gal
Product Transferred to:

Start Time (purge): 0736 Weather Conditions: Showers
Sample Time/Date: 0752 / 11-7-02 Water Color: Clear Odor: Yes
Purging Flow Rate: 0.5 gpm. Sediment Description:
Did well de-water? If yes, Time: Volume: gal.

Time (2400 hr.)	Volume (gal.)	pH	Conductivity (umhos/cm) X 100	Temperature (C/F)	D.O. (mg/L)	ORP (mV)
0740	1.5	7.16	3.38	63.8	1.10	
0742	3	6.91	3.42	64.0		
0747	5	6.85	3.51	63.9		

LABORATORY INFORMATION

SAMPLE ID	(#) CONTAINER	REFRIG.	PRESERV. TYPE	LABORATORY	ANALYSES
MW-3(SP)	5 x voa vial	YES	HCL	STL Pleasanton	TPH-G/BTEX/MTBE/8 Oxy's(8260)

COMMENTS:

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

Gettler-Ryan Inc., Chain-of-Custody

Tosco Corp./
Phillips 66 Co.
100 Crow Canyon Place
Suite 400
San Ramon, CA 94583

Facility Number #3292
Facility Address 15008 EAST 14TH STREET, SAN LEANDRO, CA
Global ID 1136 Project 180105.80
Client Contact MR. DAVID B. DEWITT
Phone (925) 277-2384

Laboratory Name STL - PLEASANTON, CA
Consultant GETTLER-RYAN, INC. DEANNA L. HARDING
Address 6747 SIERRA CT., SUITE J, DUBLIN CA 94568
Phone (925) 551-7555 Fax (925) 551-7899
Samples Collected by JOE AJEMIAN

SAMPLE ID	Number of Containers Matrix	S = Soil A = Air W = Water C = Charcoal	Sample Preservation	Date/Time (2400 Hrs)	TPH-GAS/BTEX/MTBE EPA 8015/8021B	TPH-DIESEL EPA 8015	TPH-DIESEL w/Silica gel EPA 8015	TPH-GAS EPA 8015	TPH-GAS/BTEX/MTBE EPA 8260	OXYGENATES EPA 8260	METHANOL EPA 8015	TOTAL OIL & GREASE EPA 5520	METALS Cd, Cr, Pb, Zn, Ni	NITRATE/SULFATE/ALKALINITY EPA 300 SERIES	HVOC'S (8010) EPA 8021B	VOC'S (8240) EPA 8260	SVOC'S EPA 8270					Remarks
QA	1	W	HCL	11-7-02					✓													
MW-1	5	"	"	" 1045					✓	✓												
MW-2	"	"	"	" 1115					✓	✓												
MW-5	"	"	"	" 1140					✓	✓												
MW-7	"	"	"	" 1023					✓	✓												
MW-8	"	"	"	" 0822					✓	✓												
MW-9	"	"	"	" 0953					✓	✓												
MW-10	"	"	"	" 0850					✓	✓												
MW-11	"	"	"	" 0920					✓	✓												
MW-2(GP)	"	"	"	" 0730					✓	✓												
MW-3(GP)	"	"	"	" 0752					✓	✓												

~~QA~~
Run 8 Oxy's by 8260 on highest 8260 MTBE hit.

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

	Organization	Date/Time	Received By (Signature)	Organization	Date/Time	Iced Y/N
Relinquished By (Signature)		11-7-02				
Relinquished By (Signature)						
Relinquished By (Signature)			Received For Laboratory By (Signature)		11-11-02	0850

Turn Around Time (Circle Choice)
24 Hrs.
48 Hrs.
72 Hrs.
5 Days
10 Days
As Contracted

Submission#: 2002-11-0261

November 24, 2002

SEVERN TRENT LABORATORY

STL San Francisco
1220 Quarry Ln
Pleasanton CA 94566

Tel.: (925) 484-1919
Fax: (925) 484-1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP#:2496

Gettler Ryan
6747 Sierra Court Suite J
Dublin, CA 94568
Attn.: Deanna Harding
Project#: 180105.80
Project: Tosco #3292
Site: 15008 E. 14th Street
San Leandro, CA

Dear Ms. Harding,

Attached is our report for your samples received on 11/11/2002 08:50
This report has been reviewed and approved for release. Reproduction of this report is permitted only in its entirety.

Please note that any unused portion of the samples will be discarded after 12/26/2002 unless you have requested otherwise.
We appreciate the opportunity to be of service to you. If you have any questions, please call me at (925) 484-1919.
You can also contact me via email. My email address is: tgranicher@stl-inc.com

Sincerely,

Tod Granicher
Project Manager

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

Gettler Ryan

Attn.: Deanna Harding
6747 Sierra Court Suite J
Dublin, CA 94568
Phone: (925) 551-7444 Fax: (925) 551-7899

Project: 180105.80
Tosco #3292

Received: 11/11/2002 08:50

Site: 15008 E. 14th Street
San Leandro, CA

SEVERN TRENT LABORATORY

STL San Francisco
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Pleasanton, CA 94566

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www.chromalab.com

CA DHS ELAP# 2496

Samples Reported

Sample Name	Date Sampled	Matrix	Lab #
QA	11/07/2002	Water	1
MW-1	11/07/2002 10:45	Water	2
MW-2	11/07/2002 11:15	Water	3
MW-5	11/07/2002 11:40	Water	4
MW-7	11/07/2002 10:23	Water	5
MW-8	11/07/2002 08:22	Water	6
MW-9	11/07/2002 09:53	Water	7
MW-10	11/07/2002 08:50	Water	8
MW-11	11/07/2002 09:20	Water	9
MW-2(SP)	11/07/2002 07:30	Water	10
MW-3(SP)	11/07/2002 07:52	Water	11

Gas/BTEX Fuel Oxygenates by 8260B

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CA DHS ELAP# 2496

Gettler Ryan

Attn.: Deanna Harding
6747 Sierra Court Suite J
Dublin, CA 94568
Phone: (925) 551-7444 Fax: (925) 551-7899

Project: 180105.80
Tosco #3292

Received: 11/11/2002 08:50

Site: 15008 E. 14th Street
San Leandro, CA

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	**QA**	Lab ID:	2002-11-0261 - 1
Sampled:	11/07/2002	Extracted:	11/18/2002 19:46
Matrix:	Water	QC Batch#:	2002/11/18-01.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/18/2002 19:46	
Benzene	ND	0.50	ug/L	1.00	11/18/2002 19:46	
Toluene	0.58	0.50	ug/L	1.00	11/18/2002 19:46	
Ethylbenzene	ND	0.50	ug/L	1.00	11/18/2002 19:46	
Total xylenes	ND	1.0	ug/L	1.00	11/18/2002 19:46	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	11/18/2002 19:46	
Surrogates(s)						
1,2-Dichloroethane-d4	97.5	76-114	%	1.00	11/18/2002 19:46	
Toluene-d8	102.7	88-110	%	1.00	11/18/2002 19:46	

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

Gettler Ryan

Attn.: Deanna Harding
6747 Sierra Court Suite J
Dublin, CA 94568
Phone: (925) 551-7444 Fax: (925) 551-7899

Project: 180105.80
Tosco #3292

Received: 11/11/2002 08:50

Site: 15008 E. 14th Street
San Leandro, CA

SEVERN TRENT LABORATORY

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

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www.chromalab.com

CA DHS ELAP# 2496

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	**MW-1**	Lab ID:	2002-11-0261 - 2
Sampled:	11/07/2002 10:45	Extracted:	11/19/2002 17:21
Matrix:	Water	QC Batch#:	2002/11/19-02.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2200	250	ug/L	5.00	11/19/2002 17:21	g
Benzene	ND	2.5	ug/L	5.00	11/19/2002 17:21	
Toluene	ND	2.5	ug/L	5.00	11/19/2002 17:21	
Ethylbenzene	4.6	2.5	ug/L	5.00	11/19/2002 17:21	
Total xylenes	ND	5.0	ug/L	5.00	11/19/2002 17:21	
tert-Butyl alcohol (TBA)	ND	500	ug/L	5.00	11/19/2002 17:21	
Methyl tert-butyl ether (MTBE)	20	10	ug/L	5.00	11/19/2002 17:21	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	5.00	11/19/2002 17:21	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	5.00	11/19/2002 17:21	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	5.00	11/19/2002 17:21	
1,2-DCA	ND	10	ug/L	5.00	11/19/2002 17:21	
EDB	ND	10	ug/L	5.00	11/19/2002 17:21	
Ethanol	ND	2500	ug/L	5.00	11/19/2002 17:21	
Surrogates(s)						
1,2-Dichloroethane-d4	92.7	76-114	%	5.00	11/19/2002 17:21	
Toluene-d8	104.2	88-110	%	5.00	11/19/2002 17:21	

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

Gettler Ryan
Attn.: Deanna Harding
6747 Sierra Court Suite J
Dublin, CA 94568
Phone: (925) 551-7444 Fax: (925) 551-7899

Project: 180105.80
Tosco #3292

Received: 11/11/2002 08:50

Site: 15008 E. 14th Street
San Leandro, CA

SEVERN TRENT LABORATORY
STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

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CA DHS ELAP# 2496

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	**MW-2**	Lab ID:	2002-11-0261 - 3
Sampled:	11/07/2002 11:15	Extracted:	11/19/2002 17:43
Matrix:	Water	QC Batch#:	2002/11/19-02.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	1100	250	ug/L	5.00	11/19/2002 17:43	g
Benzene	ND	2.5	ug/L	5.00	11/19/2002 17:43	
Toluene	ND	2.5	ug/L	5.00	11/19/2002 17:43	
Ethylbenzene	ND	2.5	ug/L	5.00	11/19/2002 17:43	
Total xylenes	ND	5.0	ug/L	5.00	11/19/2002 17:43	
tert-Butyl alcohol (TBA)	ND	500	ug/L	5.00	11/19/2002 17:43	
Methyl tert-butyl ether (MTBE)	ND	10	ug/L	5.00	11/19/2002 17:43	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	5.00	11/19/2002 17:43	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	5.00	11/19/2002 17:43	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	5.00	11/19/2002 17:43	
1,2-DCA	ND	10	ug/L	5.00	11/19/2002 17:43	
EDB	ND	10	ug/L	5.00	11/19/2002 17:43	
Ethanol	ND	2500	ug/L	5.00	11/19/2002 17:43	
Surrogates(s)						
1,2-Dichloroethane-d4	98.1	76-114	%	5.00	11/19/2002 17:43	
Toluene-d8	104.5	88-110	%	5.00	11/19/2002 17:43	

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

Gettler Ryan

Attn.: Deanna Harding
6747 Sierra Court Suite J
Dublin, CA 94568
Phone: (925) 551-7444 Fax: (925) 551-7899

Project: 180105.80
Tosco #3292

Received: 11/11/2002 08:50

Site: 15008 E. 14th Street
San Leandro, CA

SEVERN TRENT LABORATORY

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1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
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www.chromalab.com

CA DHS ELAP# 2496

Prep(s): 5030B
Sample ID: **MW-5**
Sampled: 11/07/2002 11:40
Matrix: Water

Test(s): 8260FAB
Lab ID: 2002-11-0261-4
Extracted: 11/20/2002 13:16
QC Batch#: 2002/11/20-01.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	8000	250	ug/L	5.00	11/20/2002 13:16	g
Benzene	ND	2.5	ug/L	5.00	11/20/2002 13:16	
Toluene	ND	2.5	ug/L	5.00	11/20/2002 13:16	
Ethylbenzene	650	2.5	ug/L	5.00	11/20/2002 13:16	
Total xylenes	ND	5.0	ug/L	5.00	11/20/2002 13:16	
tert-Butyl alcohol (TBA)	ND	500	ug/L	5.00	11/20/2002 13:16	
Methyl tert-butyl ether (MTBE)	ND	10	ug/L	5.00	11/20/2002 13:16	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	5.00	11/20/2002 13:16	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	5.00	11/20/2002 13:16	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	5.00	11/20/2002 13:16	
1,2-DCA	ND	10	ug/L	5.00	11/20/2002 13:16	
EDB	ND	10	ug/L	5.00	11/20/2002 13:16	
Ethanol	ND	2500	ug/L	5.00	11/20/2002 13:16	
Surrogates(s)						
1,2-Dichloroethane-d4	96.1	76-114	%	5.00	11/20/2002 13:16	
Toluene-d8	98.9	88-110	%	5.00	11/20/2002 13:16	

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

Gettler Ryan

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Project: 180105.80
Tosco #3292

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CA DHS ELAP# 2496

Prep(s): 5030B
Sample ID: **MW-7**
Sampled: 11/07/2002 10:23
Matrix: Water

Test(s): 8260FAB
Lab ID: 2002-11-0261 - 5
Extracted: 11/20/2002 13:42
QC Batch#: 2002/11/20-01.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	3400	50	ug/L	1.00	11/20/2002 13:42	g
Benzene	3.1	0.50	ug/L	1.00	11/20/2002 13:42	
Toluene	ND	0.50	ug/L	1.00	11/20/2002 13:42	
Ethylbenzene	25	0.50	ug/L	1.00	11/20/2002 13:42	
Total xylenes	7.8	1.0	ug/L	1.00	11/20/2002 13:42	
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	11/20/2002 13:42	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	11/20/2002 13:42	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	11/20/2002 13:42	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	11/20/2002 13:42	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	11/20/2002 13:42	
1,2-DCA	ND	2.0	ug/L	1.00	11/20/2002 13:42	
EDB	ND	2.0	ug/L	1.00	11/20/2002 13:42	
Ethanol	ND	500	ug/L	1.00	11/20/2002 13:42	
Surrogates(s)						
1,2-Dichloroethane-d4	92.6	76-114	%	1.00	11/20/2002 13:42	
Toluene-d8	96.4	88-110	%	1.00	11/20/2002 13:42	

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

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CA DHS ELAP# 2496

Prep(s): 5030B
Sample ID: **MW-8**
Sampled: 11/07/2002 08:22
Matrix: Water

Test(s): 8260FAB
Lab ID: 2002-11-0261 - 6
Extracted: 11/19/2002 18:47
QC Batch#: 2002/11/19-02.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	200	50	ug/L	1.00	11/19/2002 18:47	g
Benzene	ND	0.50	ug/L	1.00	11/19/2002 18:47	
Toluene	ND	0.50	ug/L	1.00	11/19/2002 18:47	
Ethylbenzene	ND	0.50	ug/L	1.00	11/19/2002 18:47	
Total xylenes	ND	1.0	ug/L	1.00	11/19/2002 18:47	
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	11/19/2002 18:47	
Methyl tert-butyl ether (MTBE)	5.0	2.0	ug/L	1.00	11/19/2002 18:47	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	11/19/2002 18:47	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	11/19/2002 18:47	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	11/19/2002 18:47	
1,2-DCA	ND	2.0	ug/L	1.00	11/19/2002 18:47	
EDB	ND	2.0	ug/L	1.00	11/19/2002 18:47	
Ethanol	ND	500	ug/L	1.00	11/19/2002 18:47	
Surrogates(s)						
1,2-Dichloroethane-d4	96.5	76-114	%	1.00	11/19/2002 18:47	
Toluene-d8	105.9	88-110	%	1.00	11/19/2002 18:47	

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

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CA DHS ELAP# 2496

Prep(s): 5030B
Sample ID: **MW-9**
Sampled: 11/07/2002 09:53
Matrix: Water

Test(s): 8260FAB
Lab ID: 2002-11-0261 - 7
Extracted: 11/20/2002 14:04
QC Batch#: 2002/11/20-01.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	250	50	ug/L	1.00	11/20/2002 14:04	g
Benzene	ND	0.50	ug/L	1.00	11/20/2002 14:04	
Toluene	ND	0.50	ug/L	1.00	11/20/2002 14:04	
Ethylbenzene	ND	0.50	ug/L	1.00	11/20/2002 14:04	
Total xylenes	ND	1.0	ug/L	1.00	11/20/2002 14:04	
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	11/20/2002 14:04	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	1.00	11/20/2002 14:04	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	11/20/2002 14:04	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	11/20/2002 14:04	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	11/20/2002 14:04	
1,2-DCA	ND	2.0	ug/L	1.00	11/20/2002 14:04	
EDB	ND	2.0	ug/L	1.00	11/20/2002 14:04	
Ethanol	ND	500	ug/L	1.00	11/20/2002 14:04	
Surrogates(s)						
1,2-Dichloroethane-d4	90.1	76-114	%	1.00	11/20/2002 14:04	
Toluene-d8	103.9	88-110	%	1.00	11/20/2002 14:04	

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

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CA DHS ELAP# 2496

Prep(s): 5030B
Sample ID: **MW-10**
Sampled: 11/07/2002 08:50
Matrix: Water

Test(s): 8260FAB
Lab ID: 2002-11-0261 - 8
Extracted: 11/19/2002 19:30
QC Batch#: 2002/11/19-02.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	3500	250	ug/L	5.00	11/19/2002 19:30	g
Benzene	ND	2.5	ug/L	5.00	11/19/2002 19:30	
Toluene	ND	2.5	ug/L	5.00	11/19/2002 19:30	
Ethylbenzene	ND	2.5	ug/L	5.00	11/19/2002 19:30	
Total xylenes	ND	5.0	ug/L	5.00	11/19/2002 19:30	
tert-Butyl alcohol (TBA)	ND	500	ug/L	5.00	11/19/2002 19:30	
Methyl tert-butyl ether (MTBE)	ND	10	ug/L	5.00	11/19/2002 19:30	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	5.00	11/19/2002 19:30	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	5.00	11/19/2002 19:30	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	5.00	11/19/2002 19:30	
1,2-DCA	ND	10	ug/L	5.00	11/19/2002 19:30	
EDB	ND	10	ug/L	5.00	11/19/2002 19:30	
Ethanol	ND	2500	ug/L	5.00	11/19/2002 19:30	
Surrogates(s)						
1,2-Dichloroethane-d4	98.6	76-114	%	5.00	11/19/2002 19:30	
Toluene-d8	103.9	88-110	%	5.00	11/19/2002 19:30	

Gas/BTEX Fuel Oxygenates by 8260B

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CA DHS ELAP# 2496

Prep(s): 5030B
Sample ID: **MW-11**
Sampled: 11/07/2002 09:20
Matrix: Water

Test(s): 8260FAB
Lab ID: 2002-11-0261 - 9
Extracted: 11/20/2002 14:25
QC Batch#: 2002/11/20-01.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	550	250	ug/L	5.00	11/20/2002 14:25	g
Benzene	ND	2.5	ug/L	5.00	11/20/2002 14:25	
Toluene	ND	2.5	ug/L	5.00	11/20/2002 14:25	
Ethylbenzene	ND	2.5	ug/L	5.00	11/20/2002 14:25	
Total xylenes	ND	5.0	ug/L	5.00	11/20/2002 14:25	
tert-Butyl alcohol (TBA)	ND	500	ug/L	5.00	11/20/2002 14:25	
Methyl tert-butyl ether (MTBE)	330	10	ug/L	5.00	11/20/2002 14:25	
Di-isopropyl Ether (DIPE)	ND	10	ug/L	5.00	11/20/2002 14:25	
Ethyl tert-butyl ether (ETBE)	ND	10	ug/L	5.00	11/20/2002 14:25	
tert-Amyl methyl ether (TAME)	ND	10	ug/L	5.00	11/20/2002 14:25	
1,2-DCA	ND	10	ug/L	5.00	11/20/2002 14:25	
EDB	ND	10	ug/L	5.00	11/20/2002 14:25	
Ethanol	ND	2500	ug/L	5.00	11/20/2002 14:25	
Surrogates(s)						
1,2-Dichloroethane-d4	91.4	76-114	%	5.00	11/20/2002 14:25	
Toluene-d8	99.3	88-110	%	5.00	11/20/2002 14:25	

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

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CA DHS ELAP# 2496

Prep(s):	5030B	Test(s):	8260FAB
Sample ID:	**MW-2(SP)**	Lab ID:	2002-11-0261 - 10
Sampled:	11/07/2002 07:30	Extracted:	11/20/2002 14:47
Matrix:	Water	QC Batch#:	2002/11/20-01.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	ND	50	ug/L	1.00	11/20/2002 14:47	
Benzene	ND	0.50	ug/L	1.00	11/20/2002 14:47	
Toluene	ND	0.50	ug/L	1.00	11/20/2002 14:47	
Ethylbenzene	ND	0.50	ug/L	1.00	11/20/2002 14:47	
Total xylenes	ND	1.0	ug/L	1.00	11/20/2002 14:47	
tert-Butyl alcohol (TBA)	ND	100	ug/L	1.00	11/20/2002 14:47	
Methyl tert-butyl ether (MTBE)	5.4	2.0	ug/L	1.00	11/20/2002 14:47	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	1.00	11/20/2002 14:47	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	1.00	11/20/2002 14:47	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	1.00	11/20/2002 14:47	
1,2-DCA	ND	2.0	ug/L	1.00	11/20/2002 14:47	
EDB	ND	2.0	ug/L	1.00	11/20/2002 14:47	
Ethanol	ND	500	ug/L	1.00	11/20/2002 14:47	
Surrogates(s)						
1,2-Dichloroethane-d4	95.5	76-114	%	1.00	11/20/2002 14:47	
Toluene-d8	99.5	88-110	%	1.00	11/20/2002 14:47	

Gas/BTEX Fuel Oxygenates by 8260B

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CA DHS ELAP# 2496

Prep(s): 5030B
Sample ID: **MW-3(SP)**
Sampled: 11/07/2002 07:52
Matrix: Water

Test(s): 8260FAB
Lab ID: 2002-11-0261 - 11
Extracted: 11/19/2002 21:18
QC Batch#: 2002/11/19-02.27

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Gasoline	2600	500	ug/L	10.00	11/19/2002 21:18	g
Benzene	ND	5.0	ug/L	10.00	11/19/2002 21:18	
Toluene	ND	5.0	ug/L	10.00	11/19/2002 21:18	
Ethylbenzene	ND	5.0	ug/L	10.00	11/19/2002 21:18	
Total xylenes	ND	10	ug/L	10.00	11/19/2002 21:18	
tert-Butyl alcohol (TBA)	ND	1000	ug/L	10.00	11/19/2002 21:18	
Methyl tert-butyl ether (MTBE)	ND	20	ug/L	10.00	11/19/2002 21:18	
Di-isopropyl Ether (DIPE)	ND	20	ug/L	10.00	11/19/2002 21:18	
Ethyl tert-butyl ether (ETBE)	ND	20	ug/L	10.00	11/19/2002 21:18	
tert-Amyl methyl ether (TAME)	ND	20	ug/L	10.00	11/19/2002 21:18	
1,2-DCA	ND	20	ug/L	10.00	11/19/2002 21:18	
EDB	ND	20	ug/L	10.00	11/19/2002 21:18	
Ethanol	ND	5000	ug/L	10.00	11/19/2002 21:18	
Surrogates(s)						
1,2-Dichloroethane-d4	96.8	76-114	%	10.00	11/19/2002 21:18	
Toluene-d8	103.2	88-110	%	10.00	11/19/2002 21:18	

Submission #: 2002-11-0261

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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030B
Method Blank
MB: 2002/11/18-01.27-005

Water

Test(s): 8260FAB
QC Batch # 2002/11/18-01.27
Date Extracted: 11/18/2002 13:07

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/18/2002 13:07	
Benzene	ND	0.5	ug/L	11/18/2002 13:07	
Toluene	ND	0.5	ug/L	11/18/2002 13:07	
Ethylbenzene	ND	0.5	ug/L	11/18/2002 13:07	
Total xylenes	ND	1.0	ug/L	11/18/2002 13:07	
tert-Butyl alcohol (TBA)	ND	100	ug/L	11/18/2002 13:07	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	11/18/2002 13:07	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	11/18/2002 13:07	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	11/18/2002 13:07	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	11/18/2002 13:07	
1,2-DCA	ND	2.0	ug/L	11/18/2002 13:07	
EDB	ND	2.0	ug/L	11/18/2002 13:07	
Ethanol	ND	500	ug/L	11/18/2002 13:07	
Surrogates(s)					
1,2-Dichloroethane-d4	95.0	76-114	%	11/18/2002 13:07	
Toluene-d8	99.1	88-110	%	11/18/2002 13:07	

Gas/BTEX Fuel Oxygenates by 8260B

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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030B
Method Blank
MB: 2002/11/19-02.27-032

Water

Test(s): 8260FAB
QC Batch # 2002/11/19-02.27
Date Extracted: 11/19/2002 16:35

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/19/2002 16:35	
Benzene	ND	0.5	ug/L	11/19/2002 16:35	
Toluene	ND	0.5	ug/L	11/19/2002 16:35	
Ethylbenzene	ND	0.5	ug/L	11/19/2002 16:35	
Total xylenes	ND	1.0	ug/L	11/19/2002 16:35	
tert-Butyl alcohol (TBA)	ND	100	ug/L	11/19/2002 16:35	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	11/19/2002 16:35	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	11/19/2002 16:35	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	11/19/2002 16:35	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	11/19/2002 16:35	
1,2-DCA	ND	2.0	ug/L	11/19/2002 16:35	
EDB	ND	2.0	ug/L	11/19/2002 16:35	
Ethanol	ND	500	ug/L	11/19/2002 16:35	
Surrogates(s)					
1,2-Dichloroethane-d4	94.0	76-114	%	11/19/2002 16:35	
Toluene-d8	104.0	88-110	%	11/19/2002 16:35	

Submission #: 2002-11-0261

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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030B
Method Blank
MB: 2002/11/20-01.27-005

Water

Test(s): 8260FAB
QC Batch # 2002/11/20-01.27
Date Extracted: 11/20/2002 11:50

Compound	Conc.	RL	Unit	Analyzed	Flag
Gasoline	ND	50	ug/L	11/20/2002 11:50	
Benzene	ND	0.5	ug/L	11/20/2002 11:50	
Toluene	ND	0.5	ug/L	11/20/2002 11:50	
Ethylbenzene	ND	0.5	ug/L	11/20/2002 11:50	
Total xylenes	ND	1.0	ug/L	11/20/2002 11:50	
tert-Butyl alcohol (TBA)	ND	100	ug/L	11/20/2002 11:50	
Methyl tert-butyl ether (MTBE)	ND	2.0	ug/L	11/20/2002 11:50	
Di-isopropyl Ether (DIPE)	ND	2.0	ug/L	11/20/2002 11:50	
Ethyl tert-butyl ether (ETBE)	ND	2.0	ug/L	11/20/2002 11:50	
tert-Amyl methyl ether (TAME)	ND	2.0	ug/L	11/20/2002 11:50	
1,2-DCA	ND	2.0	ug/L	11/20/2002 11:50	
EDB	ND	2.0	ug/L	11/20/2002 11:50	
Ethanol	ND	500	ug/L	11/20/2002 11:50	
Surrogates(s)					
1,2-Dichloroethane-d4	93.0	76-114	%	11/20/2002 11:50	
Toluene-d8	99.1	88-110	%	11/20/2002 11:50	

Submission #: 2002-11-0261

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Site: 15008 E. 14th Street
San Leandro, CA

SEVERN TRENT LABORATORY

STL San Francisco
1220 Quarry Lane
Pleasanton, CA 94566

Tel: (925) 484-1919
Fax: (925) 484-1096
www.stl-inc.com
www.chromalab.com

CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030B Test(s): 8260FAB

Laboratory Control Spike **Water** **QC Batch # 2002/11/18-01.27**

LCS 2002/11/18-01.27-040 Extracted: 11/18/2002 Analyzed: 11/18/2002 14:23
LCSD 2002/11/18-01.27-004 Extracted: 11/18/2002 Analyzed: 11/18/2002 12:46

Compound	Conc. ug/L		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	17.5	18.7	25.0	70.0	74.8	6.6	69-129	20		
Toluene	19.8	20.6	25.0	79.2	82.4	13.5	70-130	20		
Methyl tert-butyl ether (MTBE)	21.3	20.9	25.0	85.2	83.6	16.6	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	462	464	500	92.4	92.8		76-114			
Toluene-d8	492	505	500	98.4	101.0		88-110			

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

Gettler Ryan

Attn.: Deanna Harding
6747 Sierra Court Suite J
Dublin, CA 94568
Phone: (925) 551-7444 Fax: (925) 551-7899

Project: 180105.80
Tosco #3292

Received: 11/11/2002 08:50

Site: 15008 E. 14th Street
San Leandro, CA

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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030B

Test(s): 8260FAB

Laboratory Control Spike **Water** **QC Batch # 2002/11/19-02.27**

LCS 2002/11/19-02.27-029 Extracted: 11/19/2002 Analyzed: 11/19/2002 15:44

LCSD 2002/11/19-02.27-030 Extracted: 11/19/2002 Analyzed: 11/19/2002 16:12

Compound	Conc. ug/L		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	27.6	26.5	25.0	110.4	106.0	4.1	69-129	20		
Toluene	26.9	26.9	25.0	107.6	107.6	0.0	70-130	20		
Methyl tert-butyl ether (MTBE)	30.5	25.0	25.0	122.0	100.0	19.8	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	491	471	500	98.2	94.2		76-114	0		
Toluene-d8	505	503	500	101.0	100.6		88-110	0		

Gas/BTEX Fuel Oxygenates by 8260B

Gettler Ryan

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6747 Sierra Court Suite J
Dublin, CA 94568
Phone: (925) 551-7444 Fax: (925) 551-7899

Project: 180105.80
Tosco #3292

Received: 11/11/2002 08:50

Site: 15008 E. 14th Street
San Leandro, CA

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www.chromalab.com

CA DHS ELAP# 2496

Legend and Notes

Result Flag

g

Hydrocarbon reported in the gasoline range does not match our gasoline standard.

Submission #: 2002-11-0261

Gas/BTEX Fuel Oxygenates by 8260B

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Project: 180105.80
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CA DHS ELAP# 2496

Batch QC Report

Prep(s): 5030B Test(s): 8260FAB

Laboratory Control Spike **Water** **QC Batch # 2002/11/20-01.27**

LCS 2002/11/20-01.27-003 Extracted: 11/20/2002 Analyzed: 11/20/2002 10:58
LCSD 2002/11/20-01.27-004 Extracted: 11/20/2002 Analyzed: 11/20/2002 11:28

Compound	Conc. ug/L		Exp.Conc.	Recovery		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD	%	Rec.	RPD	LCS	LCSD
Benzene	26.7	28.3	25.0	106.8	113.2	5.8	69-129	20		
Toluene	26.6	27.6	25.0	106.4	110.4	3.7	70-130	20		
Methyl tert-butyl ether (MTBE)	31.5	33.6	25.0	126.0	134.4	6.5	65-165	20		
Surrogates(s)										
1,2-Dichloroethane-d4	474	472	500	94.8	94.4		76-114			
Toluene-d8	505	505	500	101.0	101.0		88-110			

APPENDIX B

TIER 2 RBCA INPUT/OUTPUT DATA

Main Screen

RBCA Tool Kit for Chemical Releases
Version 1.3a © 2000

1. Project Information

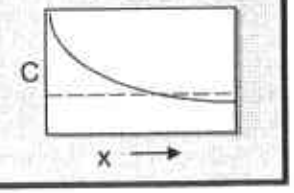
Site Name:	Tosco 76 Station No. 3292
Location:	15008 E. 14th St, San Leandro, CA
Compl. By:	J. Douglas
Date:	27-Feb-03
Job ID:	140071.3

2. Which Type of RBCA Analysis?

○ **Tier 1**

Generic Values
On-Site
Exposure

◉ **Tier 2**



Site-Specific Values
On- or Off-Site Exposure

3. Calculation Options

Affects which input data are required

☑ *Baseline Risks (Forward mode)*

☑ *RBCA Cleanup Standards (Backward mode)*

4. RBCA Evaluation Process

Prepare Input Data

Data Complete? (■= yes, ■= no)

- ■□ Exposure Pathways
- ■□ Constituents of Concern (COCs)
- ■□ Transport Models
- ■□ Soil Parameters
- ■□ GW Parameters
- ■□ Air Parameters

Review Output

- Exposure Flowchart
- COC Chem. Parameters
- Input Data Summary
- User-Spec. COC Data...
- Transient Domenico Analysis...
- Baseline Risks...
- Cleanup Standards...

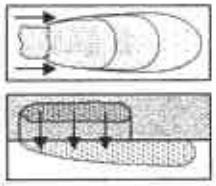
5. Commands and Options

New Site	Load Data...	Save Data As...	Quit
Print Sheet	Set Units	Custom Chem. Data...	*Help*

Exposure Pathway Identification

Site Name: Tosco 76 Station No. 3292
Location: 15008 E. 14th St, San Leandro, CA
Compl. By: J. Douglas
Job ID: 140071.3 Date: 27-Feb-03

1. Groundwater Exposure



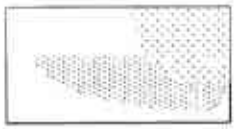
Groundwater Ingestion/ Surface Water Impact

Receptor	MCL	Res.	None
Type:	On-site	Off-site1	Off-site2

Source Media:

Distance to GW receptors

☑ Affected Groundwater	0	500		(ft)
	On-site	Off-site1	Off-site2	
☑ Affected Soils Leaching to Groundwater	0	500		(ft)

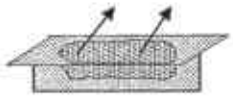


☐
☐
☐

Enter ALP Criteria

2. Surface Soil Exposure

Direct Ingestion and Dermal Contact

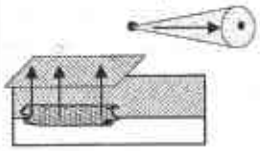


Receptor	Res.	No off-site receptors
Type:	On-site	

Construction Worker ☑

3. Air Exposure

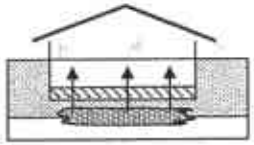
Volatilization and Particulates to Outdoor Air Inhalation



Receptor	Res.	Res.	None
Type:	On-site	Off-site1	Off-site2
	0	50	(ft)

Construction worker ☐

☑ Affected Soils--Volatilization to Ambient Outdoor Air
☑ Affected Groundwater--Volatilization to Ambient Outdoor Air
☐ Affected Surface Soils--Particulates to Ambient Outdoor Air



Volatilization to Indoor Air Inhalation

Receptor	Com.	No off-site receptors
Type:	On-site	

☑ Affected Soils--Volatilization to Enclosed Space
☑ Affected Groundwater--Volatilization to Enclosed Space

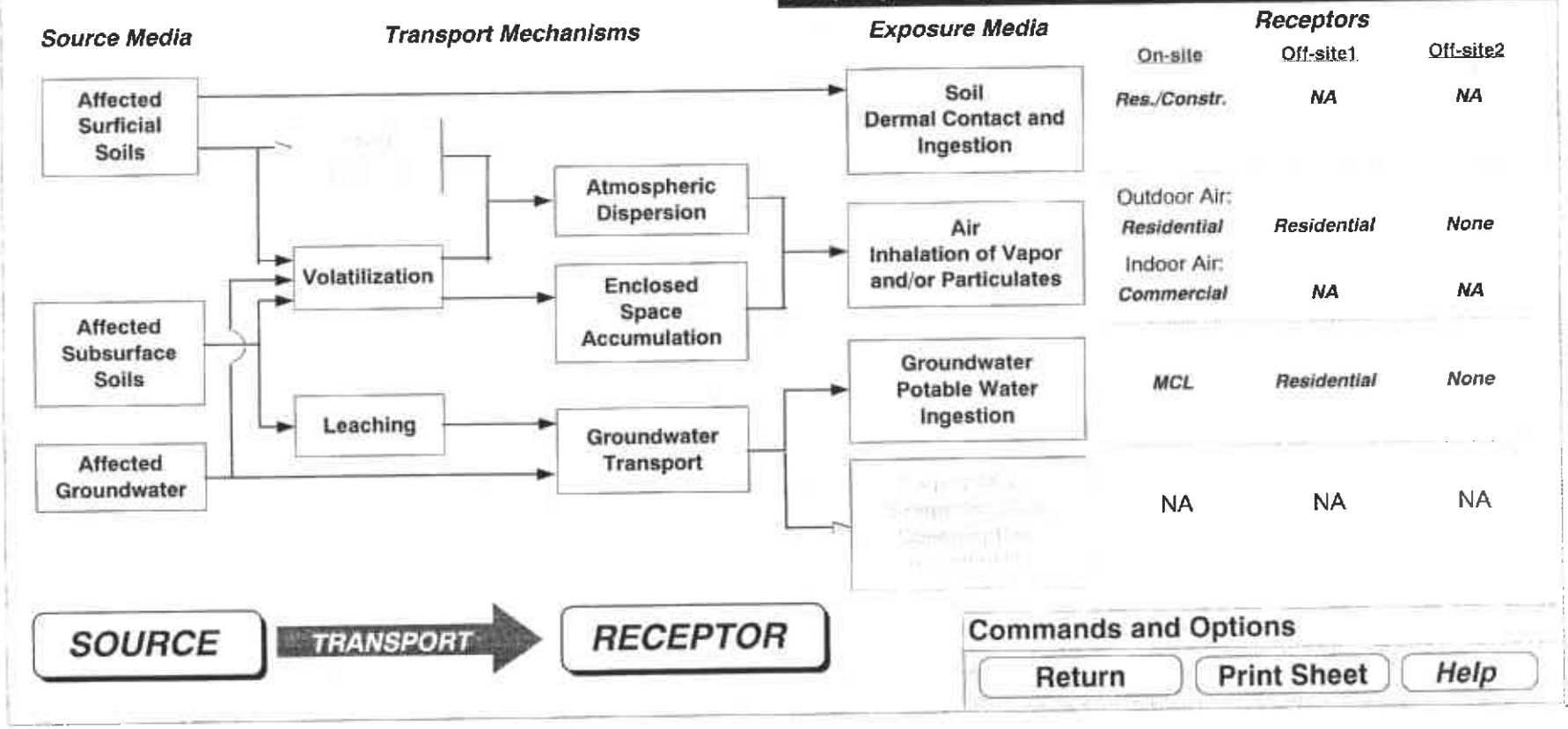
4. Commands and Options

Main Screen | Print Sheet | Set Units | Help

■ □ Exposure Factors & Target Risks | Exposure Flowchart

Exposure Pathway Flowchart

Site Name: Tosco 76 Station No. 3292 | Job ID: 140071.3
Location: 15008 E. 14th St, San Leandro, CA | Date: 27-Feb-03
Compl. By: J. Douglas



Commands and Options

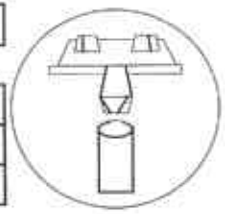
Return | Print Sheet | Help

Exposure Factors and Target Risk Limits

Site Name: Tosco 76 Station No. 3292
Location: 15008 E. 14th St, San Leandro, CA
Compl. By: J. Douglas
Job ID: 140071.3 Date: 27-Feb-03

1. Exposure Parameters

		Residential			Commercial	
Age Adjustment?		Adult	(Age 0-6)	(Age 0-16)	Chronic	Construc.
Averaging time, carcinogens (yr)		70				
Averaging time, non-carcinogens (yr)		30			25	1
Body weight (kg)		70	15	35	70	
Exposure duration (yr)		30	6	16	25	1
Exposure frequency (days/yr)		350			250	180
Dermal exposure frequency (days/yr)		350			250	
Skin surface area, soil contact (cm^2)	☐	5800		2023	5800	5800
Soil dermal adherence factor ($mg/cm^4/day$)		1				
Water ingestion rate (L/day)		2			1	
Soil ingestion rate (mg/day)	☐	100	200		50	100
Swimming exposure time (hr/event)		3				
Swimming event frequency (events/yr)		12	12	12		
Swimming water ingestion rate (L/hr)	☐	0.05	0.5			
Skin surface area, swimming (cm^2)	☐	23000		8100		
Fish consumption rate (kg/day)		0.025				
Contaminated fish fraction (unitless)		1				



2. Risk Goal Calculation Options

- ○ Individual Constituent Risk Goals Only
- ◉ Individual and Cumulative Risk Goals

3. Target Health Risk Limits

	Individual	Cumulative
Target Risk (Class A/B carcins.)	1.0E-6	1.0E-5
Target Risk (Class C carcinogens)	1.0E-5	
Target Hazard Quotient	1.0E+0	
Target Hazard Index		1.0E+0

4. Commands and Options

Return to Exposure Pathways

Use Default Values

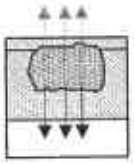
Print Sheet

Help

Transport Modeling Options

Site Name: Tosco 76 Station No. 3292 | Job ID: 140071.3
Location: 15008 E. 14th St, San Leandro, CA | Date: 27-Feb-03
Compl. By: J. Douglas

1. Vertical Transport, Surface Soil Column



Outdoor Air Volatilization Factors (?)

- ○ Surface soil volatilization model only
- ◉ Combination surface soil/Johnson & Ettinger models
  - Thickness of surface soil zone: 10 *(ft)*
- ○ User-specified VF from other model — Enter VF Values

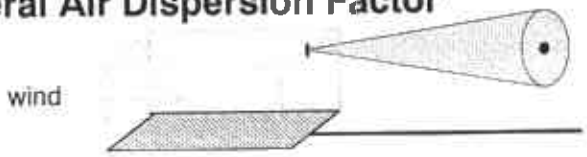
Indoor Air Volatilization Factors (?)

- ◉ Johnson & Ettinger model
- ○ User-specified VF from other model — Enter VF Values

Soil-to-Groundwater Leaching Factor

- ◉ ASTM Model (?)
  - ☑ Apply Soil Attenuation Model (SAM)
  - ☑ Allow first-order biodecay — ■□ Enter Decay Rates
- ○ User-specified LF from other model — Enter LF Values

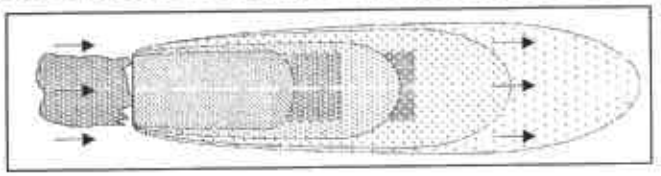
2. Lateral Air Dispersion Factor



(?)

- ◉ 3-D Gaussian dispersion model — Off-site 1: 1.00E+0 | Off-site 2: 1.00E+0 *(-)*
- ○ User-Specified ADF

3. Groundwater Dilution Attenuation Factor



Calculate DAF using Domenico Model (?)

- ○ Domenico equation with dispersion only (no biodegradation)
- ◉ Domenico equation first-order decay — ■□ Enter Decay Rates
- ○ Modified Domenico equation using electron acceptor superposition — Enter Site Data

Enter Directly

— or —

User-Specified DAF Values

- ○ DAF values from other model or site data — Enter DAF Values

4. Commands and Options

Main Screen | **Print Sheet** | ***Help***

RBCA Tool Kit for Chemical Releases, Version 1.3a

Site Name: Tosco 76 Station No. 3292 | Job ID: 140071.3
Location: 15008 E. 14th St, San Leandro, CA | Date: 27-Feb-03
Compl. By: J. Douglas

Commands and Options

Return | Print Sheet | Paste Default Values | Help

Constituent Half-Life Values

Constituent	Saturated Zone Half-Life (day)	Saturated Zone First-Order Decay Coeffecient (1/day)	Unsaturated Zone Half-Life (day)	Unsaturated Zone First-Order Decay Coeffecient (1/day)
Benzene*	7.2E+2	9.6E-4	7.2E+2	9.6E-4
Toluene	2.8E+1	2.5E-2	2.8E+1	2.5E-2
Ethylbenzene	2.3E+2	3.0E-3	2.3E+2	3.0E-3
Xylene (mixed isomers)	3.6E+2	1.9E-3	3.6E+2	1.9E-3
Methyl t-Butyl ether*	3.6E+2	1.9E-3	1.8E+2	3.9E-3
TPH - Aliph >C05-C06	3.6E+2	1.9E-3	3.6E+2	1.9E-3
TPH - Aliph >C06-C08	3.6E+2	1.9E-3	3.6E+2	1.9E-3
TPH - Aliph >C08-C10	3.6E+2	1.9E-3	3.6E+2	1.9E-3
TPH - Aliph >C10-C12	3.6E+2	1.9E-3	3.6E+2	1.9E-3
TPH - Arom >C08-C10	3.6E+2	1.9E-3	3.6E+2	1.9E-3
TPH - Arom >C10-C12	3.6E+2	1.9E-3	3.6E+2	1.9E-3
TPH - Arom >C12-C16	3.6E+2	1.9E-3	3.6E+2	1.9E-3

Site-Specific Soil Parameters

Site Name: Tosco 76 Station No. 3292 | Job ID: 140071.3
Location: 15008 E. 14th St, San Leandro, CA | Date: 27-Feb-03
Compl. By: J. Douglas

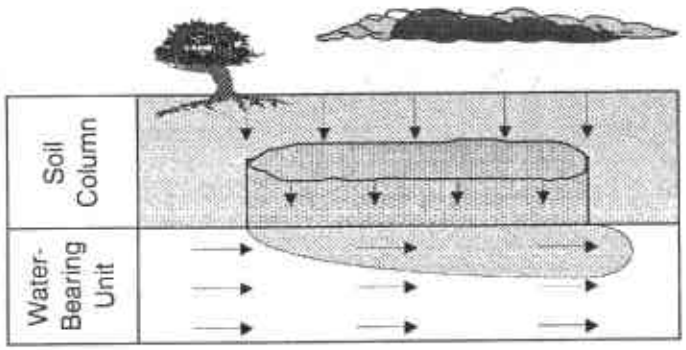
1. Soil Source Zone Characteristics

Hydrogeology

	General Case	Construction	
Depth to water-bearing unit	10		(ft)
Capillary zone thickness	0.691666667		(ft)
Soil column thickness	9.308333333		(ft)

Affected Soil Zone

Depth to top of affected soils	3.5		(ft)
Depth to base of affected soils	9.5		(ft)
Affected soil area	9600	9600	(ft^2)
Length of affected soil parallel to assumed wind direction	120	120	(ft)
Length of affected soil parallel to assumed GW flow direction	120		(ft)



2. Surface Soil Column

	Vadose Zone		Capillary Fringe	
	or	Calculate	or	
Total porosity	0.38			(-)
Volumetric water content	0.17	0.193		(-)
Volumetric air content	0.21	0.187		(-)
Dry bulk density	1.6			(kg/L)
Vertical hydraulic conductivity	3.5E-2			(cm/d)
Vapor permeability	1.1E-14			(ft^2)
Capillary zone thickness	6.9E-1			(ft)

Net Rainfall Infiltration

Net infiltration estimate	3		(in/yr)
or	Calculate	or	

Partitioning Parameters

Fraction organic carbon	0.006	(-)
Soil/water pH	6.68	(-)

3. Commands and Options

Main Screen | Use Default Values | Print Sheet
Set Units | | Help

Site-Specific Groundwater Parameters

Site Name: Tosco 76 Station No. 3292 | Job ID: 140071.3
Location: 15008 E. 14th St, San Leandro, CA | Date: 27-Feb-03
Compl. By: J. Douglas

1. Water-Bearing Unit

Hydrogeology

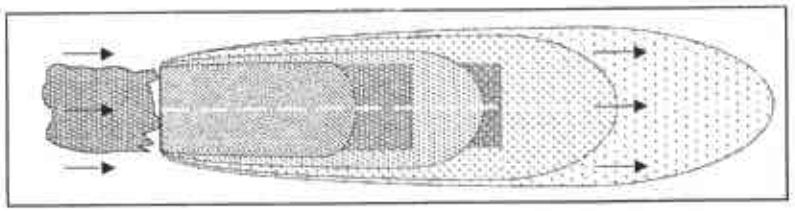
Groundwater Darcy velocity	7.7E-4	(cm/d)
Groundwater seepage velocity	2.3E-3	(cm/d)
or Enter Directly	or	
Hydraulic conductivity	4.8E-2	(cm/d)
Hydraulic gradient	1.6E-2	(-)
Effective porosity	0.34	(-)

Sorption

Fraction organic carbon--saturated zone	0.00035	(-)
Groundwater pH	6.80	(-)

2. Groundwater Source Zone

Groundwater plume width at source	120	(ft)
Plume (mixing zone) thickness at source	6.56167979	(ft)
or Calculate	or	



3. Groundwater Dispersion

Model: ASTM Default

	GW Ingestion Off-site 1		Soil Leaching to GW Off-site 1		
Distance to GW receptors	500		500		(ft)
or Enter Directly	or		or		
Longitudinal dispersivity	50		50		(ft)
Transverse dispersivity	16.5		16.5		(ft)
Vertical dispersivity	2.5		2.5		(ft)

5. Commands and Options

Main Screen | Use Default Values | Print Sheet
Set Units | | Help

Site-Specific Air Parameters

Site Name: Tosco 76 Station No. 3292 | Job ID: 140071.3
Location: 15008 E. 14th St, San Leandro, CA | Date: 27-Feb-03
Compl. By: J. Douglas

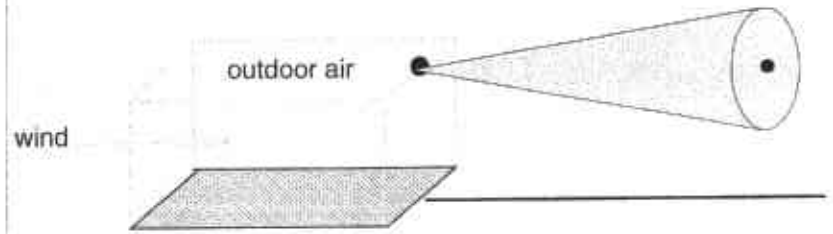
1. Outdoor Air Pathway

Dispersion in Air

	Off-site 1		
Distance to offsite air receptor	50		(ft)
or Enter Directly	↓ or		
Horizontal dispersivity	5.86		(ft)
Vertical dispersivity	4.01		(ft)

Air Source Zone

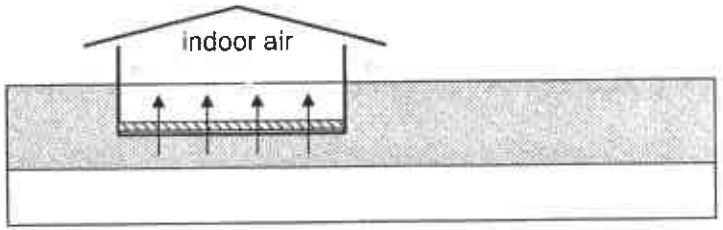
Air mixing zone height	6.56167979	(ft)
Ambient air velocity in mixing zone	7.381889764	(ft/s)



2. Indoor Air Pathway

Building Parameters

		Commercial	
Building volume/area ratio		10.4	(ft)
Foundation area		1620	(ft^2)
Foundation perimeter		176	(ft)
Building air exchange rate		2.3E-4	(1/s)
Depth to bottom of foundation slab		0.49213	(ft)
Convective air flow through cracks		0.0E+0	(ft^3/s)
Foundation thickness	0.492125984		(ft)
Foundation crack fraction	0.001		(-)
Volumetric water content of cracks	0.12		(-)
Volumetric air content of cracks	0.26		(-)
Indoor/Outdoor differential pressure	0		(g/cm/s^2)



3. Commands and Options

Main Screen | Use Default Values | Print Sheet
Set Units | | Help

RBCA SITE ASSESSMENT

Input Parameter Summary

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA

Completed By: J. Douglas
Date Completed: 27-Feb-03

Job ID: 140071.3

Exposure Parameters		Residential			Commercial/Industrial	
		Adult	(1-6yrs)	(1-16 yrs)	Chronic	Construc.
AT_c	Averaging time for carcinogens (yr)	70				
AT_n	Averaging time for non-carcinogens (yr)	30			25	1
BW	Body weight (kg)	70	15	35	70	
ED	Exposure duration (yr)	30	6	16	25	1
τ	Averaging time for vapor flux (yr)	30			25	1
EF	Exposure frequency (days/yr)	350			250	180
EF_D	Exposure frequency for dermal exposure	350			250	
IR_w	Ingestion rate of water (L/day)	2			1	
IR_s	Ingestion rate of soil (mg/day)	100	200		50	100
SA	Skin surface area (dermal) (cm^2)	5800		2023	5800	5800
M	Soil to skin adherence factor	1				
ET_{swim}	Swimming exposure time (hr/event)	3				
EV_{swim}	Swimming event frequency (events/yr)	12	12	12		
IR_{swim}	Water ingestion while swimming (L/hr)	0.05	0.5			
SA_{swim}	Skin surface area for swimming (cm^2)	23000		8100		
IR_{fish}	Ingestion rate of fish (kg/yr)	0.025				
F_{fish}	Contaminated fish fraction (unitless)	1				

Complete Exposure Pathways and Receptors	On-site	Off-site 1	Off-site 2
Groundwater:			
Groundwater Ingestion	MCL	Residential	None
Soil Leaching to Groundwater Ingestion	MCL	Residential	None
Applicable Surface Water Exposure Routes:			
Swimming			NA
Fish Consumption			NA
Aquatic Life Protection			NA
Soil:			
Direct Ingestion and Dermal Contact	Res./Constr.		
Outdoor Air:			
Particulates from Surface Soils	None	None	None
Volatilization from Soils	Residential	Residential	None
Volatilization from Groundwater	Residential	Residential	None
Indoor Air:			
Volatilization from Subsurface Soils	Commercial	NA	NA
Volatilization from Groundwater	Commercial	NA	NA

Receptor Distance from Source Media	On-site	Off-site 1	Off-site 2	(Units)
Groundwater receptor	0	500	NA	(ft)
Soil leaching to groundwater receptor	0	500	NA	(ft)
Outdoor air inhalation receptor	0	50	NA	(ft)

Target Health Risk Values		Individual	Cumulative
TR_{ca}	Target Risk (class A&B carcinogens)	1.0E-6	1.0E-5
TR_c	Target Risk (class C carcinogens)	1.0E-5	
THQ	Target Hazard Quotient (non-carcinogenic risk)	1.0E+0	1.0E+0

Modeling Options	
RBCA tier	Tier 2
Outdoor air volatilization model	Surface & subsurface models
Indoor air volatilization model	Johnson & Ettinger model
Soil leaching model	ASTM leaching model
Use soil attenuation model (SAM) for leachate?	Yes
Air dilution factor	3-D Gaussian dispersion
Groundwater dilution-attenuation factor	Domenico model w/ biodeg

NOTE: NA = Not applicable

Surface Parameters		General	Construction	(Units)
A	Source zone area	9.8E+3	NA	(ft^2)
W	Length of source-zone area parallel to wind	1.2E+2	NA	(ft)
W_{gw}	Length of source-zone area parallel to GW flow	1.2E+2		(ft)
U_{air}	Ambient air velocity in mixing zone	7.4E+0		(ft/s)
δ_{air}	Air mixing zone height	6.8E+0		(ft)
P_e	Areal particulate emission rate	NA		(g/cm^2/s)
L_{ss}	Thickness of affected surface soils	1.0E+1		(ft)

Surface Soil Column Parameters		Value			(Units)
h_{cap}	Capillary zone thickness	6.9E-1			(ft)
h_v	Vadose zone thickness	9.3E+0			(ft)
ρ_s	Soil bulk density	1.6E+0			(g/cm^3)
f_{oc}	Fraction organic carbon	6.0E-3			(-)
θ_T	Soil total porosity	3.8E-1			(-)
K_{vs}	Vertical hydraulic conductivity	3.5E-2			(cm/d)
k_v	Vapor permeability	1.1E-14			(ft^2)
L_{gw}	Depth to groundwater	1.0E+1			(ft)
L_s	Depth to top of affected soils	3.5E+0			(ft)
L_{base}	Depth to base of affected soils	9.5E+0			(ft)
L_{subs}	Thickness of affected soils	6.0E+0			(ft)
pH	Soil/groundwater pH	6.7E+0			(-)
		capillary	vadose	foundation	
θ_w	Volumetric water content	0.193	0.17	0.12	(-)
θ_a	Volumetric air content	0.187	0.21	0.26	(-)

Building Parameters		Residential	Commercial	(Units)
L_b	Building volume/area ratio	NA	1.04E+1	(ft)
A_b	Foundation area	NA	1.62E+3	(ft^2)
X_{crk}	Foundation perimeter	NA	1.76E+2	(ft)
ER	Building air exchange rate	NA	2.30E-4	(1/s)
L_{crk}	Foundation thickness	NA	4.92E-1	(ft)
Z_{crk}	Depth to bottom of foundation slab	NA	4.92E-1	(ft)
η	Foundation crack fraction	NA	1.00E-3	(-)
dP	Indoor/outdoor differential pressure	NA	0.00E+0	(g/cm/s^2)
U_b	Convective air flow through slab	NA	0.00E+0	(ft^3/s)

Groundwater Parameters		Value	(Units)
δ_{gw}	Groundwater mixing zone depth	6.6E+0	(ft)
I_f	Net groundwater infiltration rate	3.0E+0	(in/yr)
U_{gw}	Groundwater Darcy velocity	7.7E-4	(cm/d)
V_{gw}	Groundwater seepage velocity	2.3E-3	(cm/d)
K_s	Saturated hydraulic conductivity	4.8E-2	(cm/d)
i	Groundwater gradient	1.6E-2	(-)
S_w	Width of groundwater source zone	1.2E+2	(ft)
S_d	Depth of groundwater source zone	6.6E+0	(ft)
υ_{eff}	Effective porosity in water-bearing unit	3.4E-1	(-)
f_{oc-sat}	Fraction organic carbon in water-bearing unit	3.5E-4	(-)
pH_{sat}	Groundwater pH	6.6E+0	(-)
	Biodegradation considered?	1st Order	

Transport Parameters		Off-site 1	Off-site 2	Off-site 1	Off-site 2	(Units)
Lateral Groundwater Transport		Groundwater Ingestion		Soil Leaching to GW		
α_x	Longitudinal dispersivity	5.0E+1	NA	5.0E+1	NA	(ft)
α_y	Transverse dispersivity	1.7E+1	NA	1.7E+1	NA	(ft)
α_z	Vertical dispersivity	2.5E+0	NA	2.5E+0	NA	(ft)
Lateral Outdoor Air Transport		Soil to Outdoor Air Inhal.		GW to Outdoor Air Inhal.		
σ_y	Transverse dispersion coefficient	5.9E+0	NA	5.9E+0	NA	(ft)
σ_z	Vertical dispersion coefficient	4.0E+0	NA	4.0E+0	NA	(ft)
ADF	Air dispersion factor	1.0E+0	NA	1.0E+0	NA	(-)

Surface Water Parameters		Off-site 2	(Units)
Q_{sw}	Surface water flowrate	NA	(ft^3/s)
W_{gs}	Width of GW plume at SW discharge	NA	(ft)
δ_{gs}	Thickness of GW plume at SW discharge	NA	(ft)
DF_{sw}	Groundwater-to-surface water dilution factor	NA	(-)

RBCA SITE ASSESSMENT | **Baseline Risk Summary-All Pathways**

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA

Completed By: J. Douglas
Date Completed: 27-Feb-03

TIER 2 BASELINE RISK SUMMARY TABLE

	BASELINE CARCINOGENIC RISK					BASELINE TOXIC EFFECTS				
	Individual COC Risk		Cumulative COC Risk		Risk Limit(s) Exceeded?	Hazard Quotient		Hazard Index		Toxicity Limit(s) Exceeded?
EXPOSURE PATHWAY	Maximum Value	Target Risk	Total Value	Target Risk		Maximum Value	Applicable Limit	Total Value	Applicable Limit	
OUTDOOR AIR EXPOSURE PATHWAYS										
Complete:	1.8E-8	1.0E-6	1.8E-8	1.0E-5	☐	9.1E-2	1.0E+0	1.6E-1	1.0E+0	☐
INDOOR AIR EXPOSURE PATHWAYS										
Complete:	1.5E-7	1.0E-6	1.5E-7	1.0E-5	☐	4.6E-1	1.0E+0	7.8E-1	1.0E+0	☐
SOIL EXPOSURE PATHWAYS										
Complete:	7.6E-9	1.0E-6	7.6E-9	1.0E-5	☐	1.8E-1	1.0E+0	2.5E-1	1.0E+0	☐
GROUNDWATER EXPOSURE PATHWAYS										
Complete:	2.9E-105	1.0E-6	2.9E-105	1.0E-5	☐	6.7E-100	1.0E+0	1.1E-99	1.0E+0	☐
SURFACE WATER EXPOSURE PATHWAYS										
Complete:	NA	NA	NA	NA	☐	NA	NA	NA	NA	☐

CRITICAL EXPOSURE PATHWAY (Maximum Values From Complete Pathways)										
	1.5E-7	*1.0E-6*	*1.5E-7*	*1.0E-5*	☐	*4.6E-1*	*1.0E+0*	*7.8E-1*	*1.0E+0*	☐
	Indoor Air		*Indoor Air*			*Indoor Air*		*Indoor Air*		

RBCA Tool Kit for Chemical Releases, Version 1.3a

Site Name: Tosco 76 Station No. 3292 | Job ID: 140071.3
Location: 15008 E. 14th St, San Leandro, CA | Date: 27-Feb-03
Compl. By: J. Douglas

Commands and Options: Main Screen | Print Sheet | Help

Source Media Constituents of Concern (COCs)

☐ Apply Raoult's Law ?

Selected COCs

COC Select: Sort List: ?

Add/Insert | Top | MoveUp
Delete | Bottom | MoveDown

Representative COC Concentration ?

Selected COCs	Groundwater Source Zone (mg/L)	note	Soil Source Zone (mg/kg)	note
Benzene*	2.4E-2		1.3E-2	
Toluene	6.0E-3		1.6E-2	
Ethylbenzene	1.4E-1		1.8E-2	
Xylene (mixed isomers)	1.7E-2		2.2E-2	
Methyl t-Butyl ether*	5.8E-2		1.3E-2	
TPH - Aliph >C05-C06	1.8E+0		7.8E+1	
TPH - Aliph >C06-C08	1.4E+0		6.1E+1	
TPH - Aliph >C08-C10	2.5E-1		5.0E-1	
TPH - Aliph >C10-C12	7.8E-1		3.3E+1	
TPH - Arom >C08-C10	9.7E+0		1.3E+0	
TPH - Arom >C10-C12	4.0E+0		1.7E+2	
TPH - Arom >C12-C16	1.3E+0		5.6E+1	

Enter Directly | ■ □ Enter Site Data (Groundwater Source Zone)
Enter Directly | ■ □ Enter Site Data (Soil Source Zone)

* = Chemical with user-specified data

Commands and Options

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Site Name: Tosco 76 Station No. 3292 Job ID: 140071.3
Location: 15008 E. 14th St, San Leandro, CA Date: 27-Feb-03
Compl. By: J. Douglas

Groundwater Source Zone Concentration Calculator

UCL Percentile: 95%

Paste Defaults | Mean Option

Constituent	Detection Limit (mg/L)	No. of Samples	No. of Detects	Estimated Distribution of Data	Max. Conc. (mg/L)	Mean Conc. (mg/L)	UCL on Mean (mg/L)
Benzene*	5.0E-2	11	11	Lognormal	8.6E-2	9.4E-3	2.4E-2
Toluene	2.0E-3	11	11	Normal	1.3E-2	4.1E-3	6.0E-3
Ethylbenzene	2.0E-3	11	11	Lognormal	1.5E+0	3.2E-2	1.4E-1
Xylene (mixed isomers)	2.0E-3	11	11	Lognormal	4.5E-1	6.8E-3	1.7E-2
Methyl t-Butyl ether*	2.0E-3	11	11	Lognormal	1.7E-1	2.8E-2	5.8E-2
TPH - Aliph >C05-C06	5.0E-1	1	1	-	1.8E+0	1.8E+0	NA
TPH - Aliph >C06-C08	5.0E-1	1	1	-	1.4E+0	1.4E+0	NA
TPH - Aliph >C08-C10	5.0E-1	1	1	-	2.5E-1	2.5E-1	NA
TPH - Aliph >C10-C12	5.0E-1	1	1	-	7.8E-1	7.8E-1	NA
TPH - Arom >C08-C10	2.0E-3	11	11	Normal	2.3E+1	6.4E+0	9.7E+0
TPH - Arom >C10-C12	5.0E-1	1	1	-	4.0E+0	4.0E+0	NA
TPH - Arom >C12-C16	5.0E-1	1	1	-	1.3E+0	1.3E+0	NA

* = Chemical with user-specified data

Enter Analytical Data from Groundwater Source Zone (up to 50 Data Points)

Analytical Data

	1	2	3	4	5	6	7	8	9	10	11	12	13
ID	MW-1	MW-1	MW-1	MW-1	MW-2	MW-2	MW-2	MW-2	MW-5	MW-5	MW-5		
Date	7-Nov-02	26-Aug-02	10-May-02	21-Feb-02	7-Nov-02	26-Aug-02	10-May-02	21-Feb-02	7-Nov-02	10-May-02	4-Feb-03		
	(mg/L)	*(mg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*	*(mg/L)*
	1.25E-3	5.00E-3	6.70E-2	7.30E-2	1.25E-3	2.50E-3	3.00E-2	3.30E-2	1.25E-3	8.60E-2	5.00E-3		
	1.25E-3	5.00E-3	6.70E-3	5.00E-3	1.25E-3	2.50E-3	2.50E-3	2.50E-3	1.25E-3	1.25E-2	5.00E-3		
	4.60E-3	6.20E-2	5.80E-2	1.00E-1	1.25E-3	2.50E-3	2.50E-3	2.50E-3	6.50E-1	1.50E+0	1.10E+0		
	2.50E-3	1.00E-2	2.50E-3	5.00E-3	2.50E-3	5.00E-3	2.50E-3	2.50E-3	2.50E-3	4.50E-1	5.50E-2		
	2.00E-2	1.20E-1	2.50E-2	1.70E-1	5.00E-3	1.00E-2	2.50E-2	1.00E-1	5.00E-3	1.25E-1	1.20E-2		
											1.77E+0		
											1.41E+0		
											2.50E-1		
											7.81E-1		
	2.20E+0	9.20E+0	6.00E+0	7.40E+0	1.10E+0	4.40E+0	2.30E+0	2.70E+0	8.00E+0	2.30E+1	3.75E+0		
											4.01E+0		
											1.30E+0		

Commands and Options

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Site Name: Tosco 76 Station No. 3292 Job ID: 140071.3
Location: 15008 E. 14th St, San Leandro, CA Date: 27-Feb-03
Compl. By: J. Douglas

Soil Source Zone Concentration Calculator

UCL Percentile: 95%

Paste Defaults | Mean Option

Constituent	Detection Limit (mg/kg)	No. of Samples	No. of Detects	Estimated Distribution of Data	Max. Conc. (mg/kg)	Mean Conc. (mg/kg)	UCL on Mean (mg/kg)
Benzene*	5.0E-3	14	14	Lognormal	8.9E-1	5.9E-3	1.3E-2
Toluene	5.0E-3	14	14	Lognormal	3.7E-1	7.0E-3	1.6E-2
Ethylbenzene	5.0E-3	14	14	Lognormal	6.6E-1	6.9E-3	1.8E-2
Xylene (mixed isomers)	5.0E-3	14	14	Lognormal	7.0E-1	9.3E-3	2.2E-2
Methyl t-Butyl ether*	2.5E-2	2	2	Normal	1.3E-2	1.3E-2	1.3E-2
TPH - Aliph >C05-C06	1.0E+0	3	3	Lognormal	1.8E+1	1.4E+0	7.8E+1
TPH - Aliph >C06-C08	1.0E+0	3	3	Lognormal	1.4E+1	1.1E+0	6.1E+1
TPH - Aliph >C08-C10	1.0E+0	3	3	Normal	5.0E-1	5.0E-1	5.0E-1
TPH - Aliph >C10-C12	1.0E+0	3	3	Lognormal	7.8E+0	6.2E-1	3.3E+1
TPH - Arom >C08-C10	1.0E+0	14	14	Lognormal	3.8E+1	7.3E-1	1.3E+0
TPH - Arom >C10-C12	1.0E+0	3	3	Lognormal	4.0E+1	3.2E+0	1.7E+2
TPH - Arom >C12-C16	1.0E+0	3	3	Lognormal	1.3E+1	1.0E+0	5.6E+1

* = Chemical with user-specified data

Enter Analytical Data from
Soil Source Zone
(up to 50 Data Points)

Analytical Data

	1	2	3	4	5	6	7	8	9	10	11	12	13
ID	EB1-7.5	EB2-7.5	MW1-5	MW2-5	MW5-5	P1-3.5	P2-4.75	P3-3.75	P4-3.75	P5-3.5	P6-5	P7-5	P8-3.5
Date	7-May-98	7-May-98	23-Apr-91	23-Apr-91	23-Apr-91	11-Feb-91	11-Feb-91	11-Feb-91	11-Feb-91	11-Feb-91	11-Feb-91	11-Feb-91	11-Feb-91
	(mg/kg)	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*
	2.50E-3	2.50E-3	2.50E-3	2.50E-3	2.50E-3	7.20E-3	1.40E-2	2.50E-3	2.50E-3	2.50E-3	2.50E-3	8.90E-1	2.50E-3
	2.50E-3	2.50E-3	2.50E-3	2.50E-3	2.50E-3	1.90E-2	4.10E-2	2.50E-3	2.50E-3	2.50E-3	2.50E-3	2.30E-1	2.50E-3
	2.50E-3	2.50E-3	2.50E-3	8.50E-3	2.50E-3	2.50E-3	1.90E-2	2.50E-3	2.50E-3	2.50E-3	2.50E-3	5.70E-1	2.50E-3
	2.50E-3	2.50E-3	7.00E-3	2.20E-2	2.50E-3	2.60E-2	1.10E-1	2.50E-3	2.50E-3	2.50E-3	2.50E-3	7.00E-1	2.50E-3
	1.25E-2	1.25E-2											
							1.68E-1					9.94E-1	
							1.32E-1					7.81E-1	
							5.00E-1					5.00E-1	
							7.20E-2					4.26E-1	
	5.00E-1	5.00E-1	5.00E-1	5.00E-1	5.00E-1	5.00E-1	3.48E-1	5.00E-1	5.00E-1	5.00E-1	5.00E-1	2.06E+0	5.00E-1
							3.72E-1					2.20E+0	
							1.20E-1					7.10E-1	

Analytical Data

14	15	16	17	18	19	20	21	22	23	24	25	26	27
P9-7.5													
11-Feb-91													
(mg/kg)	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*	*(mg/kg)*
6.80E-2													
3.70E-1													
6.60E-1													
7.60E-2													
1.82E+1													
1.43E+1													
5.00E-1													
7.80E+0													
3.77E+1													
4.03E+1													
1.30E+1													

CHEMICAL DATA FOR SELECTED COCs

Physical Property Data

Constituent	CAS Number	type	Molecular Weight (g/mole) MW	ref	Diffusion Coefficients in air (cm2/s) Dair	ref	Diffusion Coefficients in water (cm2/s) Dwat	ref	log (Koc) or log(Kd) (@ 20 - 25 C) log(L/kg) partition		ref	Henry's Law Constant (@ 20 - 25 C) (atm-m3/mol)	(unitless)	ref	Vapor Pressure (@ 20 - 25 C) (mm Hg)	ref	Solubility (@ 20 - 25 C) (mg/L)	ref	acid pKa	base pKb	ref
Benzene*	71-43-2	A	78.1	PS	8.80E-02	PS	9.80E-06	PS	1.77	Koc	PS	5.55E-03	2.29E-01	PS	9.52E+01	PS	1.75E+03	PS	-	-	-
Toluene	108-88-3	A	92.4	5	8.50E-02	A	9.40E-06	A	2.13	Koc	A	6.30E-03	2.60E-01	A	3.00E+01	4	5.15E+02	29	-	-	-
Ethylbenzene	100-41-4	A	106.2	PS	7.50E-02	PS	7.80E-06	PS	2.56	Koc	PS	7.88E-03	3.25E-01	PS	1.00E+01	PS	1.69E+02	PS	-	-	-
Xylene (mixed isomers)	1330-20-7	A	106.2	5	7.20E-02	A	8.50E-06	A	2.38	Koc	A	7.03E-03	2.90E-01	A	7.00E+00	4	1.98E+02	5	-	-	-
Methyl t-Butyl ether*	1634-04-4	O	88.146	5	7.92E-02	6	9.41E-05	7	1.08	Koc	A	5.77E-04	2.38E-02	-	2.49E+02	-	4.80E+04	A	-	-	-
TPH - Aliph >C05-C06	0-00-0	T	81	T	1.00E-01	T	1.00E-05	T	2.90	Koc	T	7.88E-01	3.25E+01	T	2.66E+02	-	3.60E+01	T	-	-	-
TPH - Aliph >C06-C08	0-00-0	T	100	T	1.00E-01	T	1.00E-05	T	3.60	Koc	T	1.17E+00	4.81E+01	T	4.79E+01	-	5.40E+00	T	-	-	-
TPH - Aliph >C08-C10	0-00-0	T	130	T	1.00E-01	T	1.00E-05	T	4.50	Koc	T	1.90E+00	7.85E+01	T	4.79E+00	-	4.30E-01	T	-	-	-
TPH - Aliph >C10-C12	0-00-0	T	160	T	1.00E-01	T	1.00E-05	T	5.40	Koc	T	2.96E+00	1.22E+02	T	4.79E-01	-	3.40E-02	T	-	-	-
TPH - Arom >C08-C10	0-00-0	T	120	T	1.00E-01	T	1.00E-05	T	3.20	Koc	T	1.16E-02	4.80E-01	T	4.79E+00	-	6.50E+01	T	-	-	-
TPH - Arom >C10-C12	0-00-0	T	130	T	1.00E-01	T	1.00E-05	T	3.40	Koc	T	3.28E-03	1.35E-01	T	4.79E-01	-	2.50E+01	T	-	-	-
TPH - Arom >C12-C16	0-00-0	T	150	T	1.00E-01	T	1.00E-05	T	3.70	Koc	T	1.24E-03	5.12E-02	T	3.65E-02	-	5.80E+00	T	-	-	-

* = Chemical with user-specified data

Site Name: Tosco 76 Station No. 3292

Site Location: 15008 E. 14th St, San Leandro, CA

Completed By: J. Douglas

Date Completed: 27-Feb-03

Job ID: 140071.3

CHEMICAL DATA FOR SELECTED COCs

Toxicity Data

Constituent	Reference Dose (mg/kg/day) Oral RfD_oral	ref	Dermal RfD_dermal (mg/kg/day)	ref	Reference Conc. (mg/m3) Inhalation RfC_inhal	ref	Slope Factors 1/(mg/kg/day) Oral SF_oral	ref	Dermal SF_dermal 1/(mg/kg/day)	ref	Unit Risk Factor 1/(µg/m3) Inhalation URF_inhal	ref	EPA Weight of Evidence	Is Constituent Carcinogenic ?
Benzene*	3.00E-03	R	-	-	5.95E-03	R	1.00E-01	PS	2.99E-02	TX	8.29E-06	PS	A	TRUE
Toluene	2.00E-01	A,R	1.60E-01	TX	4.00E-01	A,R	-	-	-	-	-	-	D	FALSE
Ethylbenzene	1.00E-01	PS	9.70E-02	TX	1.00E+00	PS	-	-	-	-	-	-	D	FALSE
Xylene (mixed isomers)	2.00E+00	A,R	1.84E+00	TX	7.00E+00	A	-	-	-	-	-	-	D	FALSE
Methyl t-Butyl ether*	1.00E-02	31	8.00E-03	0.01	3.00E+00	R	-	-	-	-	-	-	-	FALSE
TPH - Aliph >C05-C06	5.00E+00	T	-	-	1.84E+01	T	-	-	-	-	-	-	D	FALSE
TPH - Aliph >C06-C08	5.00E+00	T	-	-	1.84E+01	T	-	-	-	-	-	-	D	FALSE
TPH - Aliph >C08-C10	1.00E-01	T	-	-	1.00E+00	T	-	-	-	-	-	-	D	FALSE
TPH - Aliph >C10-C12	1.00E-01	T	-	-	1.00E+00	T	-	-	-	-	-	-	D	FALSE
TPH - Arom >C08-C10	4.00E-02	T	-	-	2.00E-01	T	-	-	-	-	-	-	D	FALSE
TPH - Arom >C10-C12	4.00E-02	T	-	-	2.00E-01	T	-	-	-	-	-	-	D	FALSE
TPH - Arom >C12-C16	4.00E-02	T	-	-	2.00E-01	T	-	-	-	-	-	-	D	FALSE

* = Chemical with user-specifiec

Site Name: Tosco 76 Station Nc

Site Location: 15008 E. 14th

Miscellaneous Chemical Data

Constituent	Maximum Contaminant Level MCL (mg/L)	ref	Time-Weighted Average Workplace Criteria TWA (mg/m3)	ref	Aquatic Life Prot. Criteria AQL (mg/L)	ref	Bioconcentration Factor (L-wat/kg-fish)
Benzene*	1.00E-03	-	3.25E+00	-	-	-	12.6
Toluene	1.00E+00	56 FR 3526 (30 Jan 91)	1.47E+02	ACGIH	-	-	70
Ethylbenzene	7.00E-01	56 FR 3526 (30 Jan 91)	4.35E+02	PS	-	-	1
Xylene (mixed isomers)	1.00E+01	56 FR 3526 (30 Jan 91)	4.34E+02	ACGIH	-	-	1
Methyl t-Butyl ether*	1.30E-02	-	6.00E+01	NIOSH	-	-	1
TPH - Aliph >C05-C06	-	-	-	-	-	-	1
TPH - Aliph >C06-C08	-	-	-	-	-	-	1
TPH - Aliph >C08-C10	-	-	-	-	-	-	1
TPH - Aliph >C10-C12	-	-	-	-	-	-	1
TPH - Arom >C08-C10	-	-	-	-	-	-	1
TPH - Arom >C10-C12	-	-	-	-	-	-	1
TPH - Arom >C12-C16	-	-	-	-	-	-	1

* = Chemical with user-specifiec

Site Name: Tosco 76 Station Nc

Site Location: 15008 E. 14th

CHEMICAL DATA FOR SELECTED COCs

Miscellaneous Chemical Data

Constituent	Dermal Relative Absorp. Factor (unitless)	Water Dermal Permeability Data: Dermal Permeability Coeff. (cm/hr)	Lag time for Dermal Exposure (hr)	Critical Exposure Time (hr)	Relative Contr of Derm Perm Coeff (unitless)	Water/Skin Derm Adsorp Factor (cm/event)	ref	Detection Limits: Groundwater (mg/L)	ref	Soil (mg/kg)	ref	Half Life (First-Order Decay) (days): Saturated	Unsaturated	ref
Benzene*	0.5	0.021	0.26	0.63	0.013	7.3E-2	D	0.002	S	0.005	S	720	720	H
Toluene	0.5	0.045	0.32	0.77	0.054	1.6E-1	D	0.002	S	0.005	S	28	28	H
Ethylbenzene	0.5	0.074	0.39	1.3	0.14	2.7E-1	D	0.002	S	0.005	S	228	228	H
Xylene (mixed isomers)	0.5	0.08	0.39	1.4	0.16	2.9E-1	D	0.005	S	0.005	S	360	360	H
Methyl t-Butyl ether*	0.5	-	-	-	-	-	-	-	-	-	-	360	180	H
TPH - Aliph >C05-C06	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH - Aliph >C06-C08	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH - Aliph >C08-C10	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH - Aliph >C10-C12	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C08-C10	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C10-C12	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-
TPH - Arom >C12-C16	0.5	-	-	-	-	-	-	-	-	-	-	-	-	-

* = Chemical with user-specifiec

Site Name: Tosco 76 Station Nc

Site Location: 15006 E. 14th

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAY IS ACTIVE)

SURFACE SOILS (3.5 - 9.5 ft):

VAPOR INHALATION

Constituents of Concern	1) Source Medium	2) NAF Value (m^3/kg) Receptor				3) Exposure Medium Outdoor Air: POE Conc. (mg/m^3) (1) / (2)			
	Soil Conc (mg/kg)	On-site (0 ft)		Off-site 1 (50 ft)	Off-site 2 (0 ft)	On-site (0 ft)		Off-site 1 (50 ft)	Off-site 2 (0 ft)
		Residential	Construction Worker	Residential	None	Residential	Construction Worker	Residential	None
Benzene*	1.3E-2	3.7E+4		3.7E+4		3.6E-7		3.6E-7	
Toluene	1.6E-2	3.7E+4		3.7E+4		4.5E-7		4.5E-7	
Ethylbenzene	1.8E-2	3.7E+4		3.7E+4		4.8E-7		4.8E-7	
Xylene (mixed isomers)	2.2E-2	3.7E+4		3.7E+4		6.1E-7		6.1E-7	
Methyl t-Butyl ether*	1.3E-2	3.7E+4		3.7E+4		3.4E-7		3.4E-7	
TPH - Aliph >C05-C06	7.8E+1	3.7E+4		3.7E+4		2.1E-3		2.1E-3	
TPH - Aliph >C06-C08	6.1E+1	3.7E+4		3.7E+4		1.7E-3		1.7E-3	
TPH - Aliph >C08-C10	5.0E-1	3.7E+4		3.7E+4		1.4E-5		1.4E-5	
TPH - Aliph >C10-C12	3.3E+1	3.7E+4		3.7E+4		9.1E-4		9.1E-4	
TPH - Arom >C08-C10	1.3E+0	3.7E+4		3.7E+4		3.5E-5		3.5E-5	
TPH - Arom >C10-C12	1.7E+2	4.5E+4		4.5E+4		3.8E-3		3.8E-3	
TPH - Arom >C12-C16	5.6E+1	1.0E+5		1.0E+5		5.4E-4		5.4E-4	

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS

SURFACE SOILS (3.5 - 9.5 ft):

VAPOR INHALATION (cont'd)

Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)				5) Average Inhalation Exposure Concentration (mg/m^3) (3) X (4)			
	On-site (0 ft)		Off-site 1 (50 ft)	Off-site 2 (0 ft)	On-site (0 ft)		Off-site 1 (50 ft)	Off-site 2 (0 ft)
	Residential	Construction Worker	Residential	None	Residential	Construction Worker	Residential	None
Benzene*	4.1E-1		4.1E-1		1.5E-7		1.5E-7	
Toluene	9.6E-1		9.6E-1		4.3E-7		4.3E-7	
Ethylbenzene	9.6E-1		9.6E-1		4.6E-7		4.6E-7	
Xylene (mixed isomers)	9.6E-1		9.6E-1		5.8E-7		5.8E-7	
Methyl t-Butyl ether*	9.6E-1		9.6E-1		3.3E-7		3.3E-7	
TPH - Aliph >C05-C06	9.6E-1		9.6E-1		2.0E-3		2.0E-3	
TPH - Aliph >C06-C08	9.6E-1		9.6E-1		1.6E-3		1.6E-3	
TPH - Aliph >C08-C10	9.6E-1		9.6E-1		1.3E-5		1.3E-5	
TPH - Aliph >C10-C12	9.6E-1		9.6E-1		8.7E-4		8.7E-4	
TPH - Arom >C08-C10	9.6E-1		9.6E-1		3.4E-5		3.4E-5	
TPH - Arom >C10-C12	9.6E-1		9.6E-1		3.7E-3		3.7E-3	
TPH - Arom >C12-C16	9.6E-1		9.6E-1		5.1E-4		5.1E-4	

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS ☐ (CHECKED IF PATHWAY IS ACTIVE)

SUBSURFACE SOILS (10 - 9.5 ft):

VAPOR INHALATION

Constituents of Concern	1) Source Medium	2) NAF Value (m^3/kg) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m^3) (1) / (2)		
	Soil Conc. (mg/kg)	On-site (0 ft) Residential	Off-site 1 (50 ft) Residential	Off-site 2 (0 ft) None	On-site (0 ft) Residential	Off-site 1 (50 ft) Residential	Off-site 2 (0 ft) None
Benzene*	1.3E-2						
Toluene	1.6E-2						
Ethylbenzene	1.8E-2						
Xylene (mixed isomers)	2.2E-2						
Methyl t-Butyl ether*	1.3E-2						
TPH - Aliph >C05-C06	7.8E+1						
TPH - Aliph >C06-C08	6.1E+1						
TPH - Aliph >C08-C10	5.0E-1						
TPH - Aliph >C10-C12	3.3E+1						
TPH - Arom >C08-C10	1.3E+0						
TPH - Arom >C10-C12	1.7E+2						
TPH - Arom >C12-C16	5.6E+1						

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS

SUBSURFACE SOILS (10 - 9.5 ft)

VAPOR INHALATION (cont'd)

Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m^3) (3) X (4)		
	On-site (0 ft) Residential	Off-site 1 (50 ft) Residential	Off-site 2 (0 ft) None	On-site (0 ft) Residential	Off-site 1 (50 ft) Residential	Off-site 2 (0 ft) None
Benzene*						
Toluene						
Ethylbenzene						
Xylene (mixed isomers)						
Methyl t-Butyl ether*						
TPH - Aliph >C05-C06						
TPH - Aliph >C06-C08						
TPH - Aliph >C08-C10						
TPH - Aliph >C10-C12						
TPH - Arom >C08-C10						
TPH - Arom >C10-C12						
TPH - Arom >C12-C16						

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAY IS ACTIVE)

GROUNDWATER: VAPOR INHALATION

Exposure Concentration

Constituents of Concern	1) Source Medium	2) NAF Value (m^3/L) Receptor			3) Exposure Medium Outdoor Air: POE Conc. (mg/m^3) (1) / (2)		
	Groundwater Conc. (mg/L)	On-site (0 ft) Residential	Off-site 1 (50 ft) Residential	Off-site 2 (0 ft) None	On-site (0 ft) Residential	Off-site 1 (50 ft) Residential	Off-site 2 (0 ft) None
Benzene*	2.4E-2	5.0E+3	5.0E+3		4.9E-6	4.9E-6	
Toluene	6.0E-3	4.6E+3	4.6E+3		1.3E-6	1.3E-6	
Ethylbenzene	1.4E-1	4.1E+3	4.1E+3		3.3E-5	3.3E-5	
Xylene (mixed isomers)	1.7E-2	4.8E+3	4.8E+3		3.5E-6	3.5E-6	
Methyl t-Butyl ether*	5.8E-2	5.2E+4	5.2E+4		1.1E-6	1.1E-6	
TPH - Aliph >C05-C06	1.8E+0	3.1E+1	3.1E+1		5.7E-2	5.7E-2	
TPH - Aliph >C06-C08	1.4E+0	2.1E+1	2.1E+1		6.7E-2	6.7E-2	
TPH - Aliph >C08-C10	2.5E-1	1.3E+1	1.3E+1		1.9E-2	1.9E-2	
TPH - Aliph >C10-C12	7.8E-1	8.3E+0	8.3E+0		9.4E-2	9.4E-2	
TPH - Arom >C08-C10	9.7E+0	2.1E+3	2.1E+3		4.6E-3	4.6E-3	
TPH - Arom >C10-C12	4.0E+0	7.5E+3	7.5E+3		5.4E-4	5.4E-4	
TPH - Arom >C12-C16	1.3E+0	2.0E+4	2.0E+4		6.6E-5	6.6E-5	

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS

GROUNDWATER: VAPOR

INHALATION (cont'd)

Constituents of Concern	4) Exposure Multiplier (EFxED)/(ATx365) (unitless)			5) Average Inhalation Exposure Concentration (mg/m^3) (3) X (4)		
	On-site (0 ft) Residential	Off-site 1 (50 ft) Residential	Off-site 2 (0 ft) None	On-site (0 ft) Residential	Off-site 1 (50 ft) Residential	Off-site 2 (0 ft) None
Benzene*	4.1E-1	4.1E-1		2.0E-6	2.0E-6	
Toluene	9.6E-1	9.6E-1		1.2E-6	1.2E-6	
Ethylbenzene	9.6E-1	9.6E-1		3.2E-5	3.2E-5	
Xylene (mixed isomers)	9.6E-1	9.6E-1		3.4E-6	3.4E-6	
Methyl t-Butyl ether*	9.6E-1	9.6E-1		1.1E-6	1.1E-6	
TPH - Aliph >C05-C06	9.6E-1	9.6E-1		5.5E-2	5.5E-2	
TPH - Aliph >C06-C08	9.6E-1	9.6E-1		6.4E-2	6.4E-2	
TPH - Aliph >C08-C10	9.6E-1	9.6E-1		1.9E-2	1.9E-2	
TPH - Aliph >C10-C12	9.6E-1	9.6E-1		9.1E-2	9.1E-2	
TPH - Arom >C08-C10	9.6E-1	9.6E-1		4.4E-3	4.4E-3	
TPH - Arom >C10-C12	9.6E-1	9.6E-1		5.1E-4	5.1E-4	
TPH - Arom >C12-C16	9.6E-1	9.6E-1		6.3E-5	6.3E-5	

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr)

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS

TOTAL PATHWAY EXPOSURE (mg/m^3)

(Sum average exposure concentrations from soil and groundwater routes.)

Constituents of Concern	On-site (0 ft) Residential	On-site (0 ft) Construction Worker	Off-site 1 (50 ft) Residential	Off-site 2 (0 ft) None
Benzene*	2.2E-6		2.2E-6	
Toluene	1.7E-6		1.7E-6	
Ethylbenzene	3.3E-5		3.3E-5	
Xylene (mixed isomers)	4.0E-6		4.0E-6	
Methyl t-Butyl ether*	1.4E-6		1.4E-6	
TPH - Aliph >C05-C06	5.7E-2		5.7E-2	
TPH - Aliph >C06-C08	6.6E-2		6.6E-2	
TPH - Aliph >C08-C10	1.9E-2		1.9E-2	
TPH - Aliph >C10-C12	9.1E-2		9.1E-2	
TPH - Arom >C08-C10	4.5E-3		4.5E-3	
TPH - Arom >C10-C12	4.2E-3		4.2E-3	
TPH - Arom >C12-C16	5.8E-4		5.8E-4	

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISK CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAYS ARE ACTIVE)

CARCINOGENIC RISK

Constituents of Concern	(1) EPA Carcinogenic Classification	(2) Total Carcinogenic Exposure (mg/m^3)				(3) Inhalation Unit Risk Factor (µg/m^3)^-1	(4) Individual COC Risk (2) x (3) x 1000			
		On-site (0 ft)		Off-site 1 (50 ft)	Off-site 2 (0 ft)		On-site (0 ft)		Off-site 1 (50 ft)	Off-site 2 (0 ft)
		Residential	Construction Worker	Residential	None		Residential	Construction Worker	Residential	None
Benzene*	A	2.2E-6		2.2E-6		8.3E-6	1.8E-8		1.8E-8	
Toluene	D									
Ethylbenzene	D									
Xylene (mixed isomers)	D									
Methyl t-Butyl ether*	-									
TPH - Aliph >C05-C06	D									
TPH - Aliph >C06-C08	D									
TPH - Aliph >C08-C10	D									
TPH - Aliph >C10-C12	D									
TPH - Arom >C08-C10	D									
TPH - Arom >C10-C12	D									
TPH - Arom >C12-C16	D									
Total Pathway Carcinogenic Risk =							**1.8E-8**		**1.8E-8**	

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA

Completed By: J. Douglas
Date Completed: 27-Feb-03

Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISK CALCULATION

OUTDOOR AIR EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAYS ARE ACTIVE)

TOXIC EFFECTS

Constituents of Concern	(5) Total Toxicant Exposure (mg/m^3)				(6) Inhalation Reference Conc. (mg/m^3)	(7) Individual COC Hazard Quotient (5) / (6)			
	On-site (0 ft)		Off-site 1 (50 ft)	Off-site 2 (0 ft)		On-site (0 ft)		Off-site 1 (50 ft)	Off-site 2 (0 ft)
	Residential	Construction Worker	Residential	None		Residential	Construction Worker	Residential	None
Benzene*	5.0E-6		5.0E-6		6.0E-3	8.5E-4		8.5E-4	
Toluene	1.7E-6		1.7E-6		4.0E-1	4.2E-6		4.2E-6	
Ethylbenzene	3.3E-5		3.3E-5		1.0E+0	3.3E-5		3.3E-5	
Xylene (mixed isomers)	4.0E-6		4.0E-6		7.0E+0	5.7E-7		5.7E-7	
Methyl t-Butyl ether*	1.4E-6		1.4E-6		3.0E+0	4.6E-7		4.6E-7	
TPH - Aliph >C05-C06	5.7E-2		5.7E-2		1.8E+1	3.1E-3		3.1E-3	
TPH - Aliph >C06-C08	6.6E-2		6.6E-2		1.8E+1	3.6E-3		3.6E-3	
TPH - Aliph >C08-C10	1.9E-2		1.9E-2		1.0E+0	1.9E-2		1.9E-2	
TPH - Aliph >C10-C12	9.1E-2		9.1E-2		1.0E+0	9.1E-2		9.1E-2	
TPH - Arom >C08-C10	4.5E-3		4.5E-3		2.0E-1	2.2E-2		2.2E-2	
TPH - Arom >C10-C12	4.2E-3		4.2E-3		2.0E-1	2.1E-2		2.1E-2	
TPH - Arom >C12-C16	5.8E-4		5.8E-4		2.0E-1	2.9E-3		2.9E-3	
Total Pathway Hazard Index =						**1.6E-1**		**1.6E-1**	

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA

Completed By: J. Douglas
Date Completed: 27-Feb-03

Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAY IS ACTIVE)

SOILS (3.5 - 9.5 ft): VAPOR INTRUSION INTO ON-SITE BUILDINGS

Constituents of Concern	1) Source Medium Soil Conc. (mg/kg)	2) NAF Value (m^3/kg) Receptor Commercial	3) Exposure Medium Indoor Air: POE Conc. (mg/m^3) (1) / (2) Commercial	4) Exposure Multiplier (EFxED)/(ATx365) (unitless) Commercial	5) Average Inhalation Exposure Concentration (mg/m^3) (3) X (4) Commercial
Benzene*	1.3E-2	3.5E+2	3.9E-5	2.4E-1	9.5E-6
Toluene	1.6E-2	6.1E+2	2.7E-5	6.8E-1	1.8E-5
Ethylbenzene	1.8E-2	1.4E+3	1.3E-5	6.8E-1	9.0E-6
Xylene (mixed isomers)	2.2E-2	1.1E+3	2.1E-5	6.8E-1	1.4E-5
Methyl t-Butyl ether*	1.3E-2	1.4E+3	9.2E-6	6.8E-1	6.3E-6
TPH - Aliph >C05-C06	7.8E+1	2.0E+2	4.0E-1	6.8E-1	2.7E-1
TPH - Aliph >C06-C08	6.1E+1	2.0E+2	3.1E-1	6.8E-1	2.1E-1
TPH - Aliph >C08-C10	5.0E-1	3.6E+2	1.4E-3	6.8E-1	9.5E-4
TPH - Aliph >C10-C12	3.3E+1	1.8E+3	1.9E-2	6.8E-1	1.3E-2
TPH - Arom >C08-C10	1.3E+0	2.9E+3	4.5E-4	6.8E-1	3.1E-4
TPH - Arom >C10-C12	1.7E+2	1.6E+4	1.1E-2	6.8E-1	7.4E-3
TPH - Arom >C12-C16	5.6E+1	8.4E+4	6.7E-4	6.8E-1	4.6E-4

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAY IS ACTIVE)

GROUNDWATER: VAPOR INTRUSION INTO ON-SITE BUILDINGS

Constituents of Concern	Exposure Concentration 1) Source Medium Groundwater Conc. (mg/L)	2) NAF Value (m^3/L) Receptor Commercial	3) Exposure Medium Indoor Air: POE Conc. (mg/m^3) (1) / (2) Commercial	4) Exposure Multiplier (EFxED)/(ATx365) (unitless) Commercial	5) Average Inhalation Exposure Concentration (mg/m^3) (3) X (4) Commercial
Benzene*	2.4E-2	7.3E+2	3.4E-5	2.4E-1	8.3E-6
Toluene	6.0E-3	6.6E+2	9.0E-6	6.8E-1	6.2E-6
Ethylbenzene	1.4E-1	6.0E+2	2.3E-4	6.8E-1	1.6E-4
Xylene (mixed isomers)	1.7E-2	7.0E+2	2.4E-5	6.8E-1	1.7E-5
Methyl t-Butyl ether*	5.8E-2	7.7E+3	7.5E-6	6.8E-1	5.1E-6
TPH - Aliph >C05-C06	1.8E+0	4.5E+0	3.9E-1	6.8E-1	2.7E-1
TPH - Aliph >C06-C08	1.4E+0	3.0E+0	4.6E-1	6.8E-1	3.2E-1
TPH - Aliph >C08-C10	2.5E-1	1.9E+0	1.3E-1	6.8E-1	9.2E-2
TPH - Aliph >C10-C12	7.8E-1	1.2E+0	6.5E-1	6.8E-1	4.5E-1
TPH - Arom >C08-C10	9.7E+0	3.0E+2	3.2E-2	6.8E-1	2.2E-2
TPH - Arom >C10-C12	4.0E+0	1.1E+3	3.7E-3	6.8E-1	2.5E-3
TPH - Arom >C12-C16	1.3E+0	2.9E+3	4.6E-4	6.8E-1	3.1E-4

NOTE: AT = Averaging time (days) EF = Exposure frequency (days/yr) ED = Exposure duration (yr) NAF = Natural attenuation factor POE = Point of exposure

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
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RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

INDOOR AIR EXPOSURE PATHWAYS

Constituents of Concern	TOTAL PATHWAY EXPOSURE (mg/m^3) *(Sum average exposure concentrations from soil and groundwater routes.)* Commercial
Benzene*	1.8E-5
Toluene	2.5E-5
Ethylbenzene	1.7E-4
Xylene (mixed isomers)	3.1E-5
Methyl t-Butyl ether*	1.1E-5
TPH - Aliph >C05-C06	5.4E-1
TPH - Aliph >C06-C08	5.3E-1
TPH - Aliph >C08-C10	9.3E-2
TPH - Aliph >C10-C12	4.6E-1
TPH - Arom >C08-C10	2.2E-2
TPH - Arom >C10-C12	9.9E-3
TPH - Arom >C12-C16	7.7E-4

Site Name: Tosco 76 Station No. 3292 Date Completed: 27-Feb-03
Site Location: 15008 E. 14th St, San Leandro, CA Job ID: 140071.3
Completed By: J. Douglas

RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISK CALCULATION

INDOOR AIR EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAYS ARE ACTIVE)

Constituents of Concern	(1) EPA Carcinogenic Classification	CARCINOGENIC RISK (2) Total Carcinogenic Exposure (mg/m^3) Commercial	(3) Inhalation Unit Risk Factor (µg/m^3)^-1	(4) Individual COC Risk (2) x (3) x 1000 Commercial
Benzene*	A	1.8E-5	8.3E-6	1.5E-7
Toluene	D			
Ethylbenzene	D			
Xylene (mixed isomers)	D			
Methyl t-Butyl ether*	-			
TPH - Aliph >C05-C06	D			
TPH - Aliph >C06-C08	D			
TPH - Aliph >C08-C10	D			
TPH - Aliph >C10-C12	D			
TPH - Arom >C08-C10	D			
TPH - Arom >C10-C12	D			
TPH - Arom >C12-C16	D			

Total Pathway Carcinogenic Risk = **1.5E-7**

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISC CALCULATION

INDOOR AIR EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAYS ARE ACTIVE)

Constituents of Concern	(5) Total Toxicant Exposure (mg/m^3) Commercial	(6) Inhalation Reference Concentration (mg/m^3)	(7) Individual COC Hazard Quotient (5) / (6) Commercial
	TOXIC EFFECTS		
Benzene*	5.0E-5	6.0E-3	8.3E-3
Toluene	2.5E-5	4.0E-1	6.1E-5
Ethylbenzene	1.7E-4	1.0E+0	1.7E-4
Xylene (mixed isomers)	3.1E-5	7.0E+0	4.4E-6
Methyl t-Butyl ether*	1.1E-5	3.0E+0	3.8E-6
TPH - Aliph >C05-C06	5.4E-1	1.8E+1	2.9E-2
TPH - Aliph >C06-C08	5.3E-1	1.8E+1	2.9E-2
TPH - Aliph >C08-C10	9.3E-2	1.0E+0	9.3E-2
TPH - Aliph >C10-C12	4.6E-1	1.0E+0	4.6E-1
TPH - Arom >C08-C10	2.2E-2	2.0E-1	1.1E-1
TPH - Arom >C10-C12	9.9E-3	2.0E-1	5.0E-2
TPH - Arom >C12-C16	7.7E-4	2.0E-1	3.8E-3

Total Pathway Hazard Index = **7.8E-1**

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

Site Name: Tosco 76 Station No. 3292 Site Location: 15008 E. 14th St, San Lean Completed By: J. Douglas Date Completed: 27-Feb-03

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

SOIL EXPOSURE PATHWAY ■ (CHECKED IF PATHWAY IS ACTIVE)

SURFACE SOILS OR SEDIMENTS:
ON-SITE INGESTION AND DERMAL CONTACT

Constituents of Concern	1) Source/Exposure Medium	2) Exposure Multiplier ((IR+SAxMxRAF)xEFxED/(BWxAT)) (kg/kg/day)		3) Average Daily Intake Rate (mg/kg/day) (1) x (2)	
	Surface Soil Conc (mg/kg)	Residential	Construction Worker	Residential	Construction Worker
Benzene*	1.3E-2	1.8E-5	4.2E-7	2.4E-7	5.6E-9
Toluene	1.6E-2	4.1E-5	2.9E-5	6.7E-7	4.8E-7
Ethylbenzene	1.8E-2	4.1E-5	2.9E-5	7.3E-7	5.2E-7
Xylene (mixed isomers)	2.2E-2	4.1E-5	2.9E-5	9.2E-7	6.5E-7
Methyl t-Butyl ether*	1.3E-2	4.1E-5	2.9E-5	5.1E-7	3.6E-7
TPH - Aliph >C05-C06	7.8E+1	4.1E-5	2.9E-5	3.2E-3	2.3E-3
TPH - Aliph >C06-C08	6.1E+1	4.1E-5	2.9E-5	2.5E-3	1.8E-3
TPH - Aliph >C08-C10	5.0E-1	4.1E-5	2.9E-5	2.1E-5	1.5E-5
TPH - Aliph >C10-C12	3.3E+1	4.1E-5	2.9E-5	1.4E-3	9.7E-4
TPH - Arom >C08-C10	1.3E+0	4.1E-5	2.9E-5	5.3E-5	3.8E-5
TPH - Arom >C10-C12	1.7E+2	4.1E-5	2.9E-5	7.1E-3	5.0E-3
TPH - Arom >C12-C16	5.6E+1	4.1E-5	2.9E-5	2.3E-3	1.6E-3

NOTE: RAF = Relative absorption factor (-) AT = Averaging time (days) ED = Exposure duration (yrs) IR = Soil ingestion rate (mg/day)
M = Adherence factor (mg/cm^2) BW = Body weight (kg) EF = Exposure frequency (days/yr) SA = Skin exposure area (cm^2/day)

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISK CALCULATION

SOIL EXPOSURE PATHWAY ■ (CHECKED IF PATHWAY IS ACTIVE)

CARCINOGENIC RISK

Constituents of Concern	(1) EPA Carcinogenic Classification	(2) Total Carcinogenic Intake Rate (mg/kg/day)				(3) Slope Factor (mg/kg/day)^-1		(4) Individual COC Risk	
		(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(a) Oral	(b) Dermal	(2a)x(3a) + (2b)x(3b)	(2c)x(3a) + (2d)x(3b)
		Residential		Construction Worker				Residential	Construction Worker
Benzene*	A	7.9E-9	2.3E-7	1.3E-10	5.4E-9	1.0E-1	3.0E-2	7.6E-9	1.8E-10
Toluene	D								
Ethylbenzene	D								
Xylene (mixed isomers)	D								
Methyl t-Butyl ether*	-								
TPH - Aliph >C05-C06	D								
TPH - Aliph >C06-C08	D								
TPH - Aliph >C08-C10	D								
TPH - Aliph >C10-C12	D								
TPH - Arom >C08-C10	D								
TPH - Arom >C10-C12	D								
TPH - Arom >C12-C16	D								

* No dermal slope factor available--oral slope factor used

Total Pathway Carcinogenic Risk = **7.6E-9** | **1.8E-10**

Site Name: Tosco 76 Station No. 3292
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RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISK CALCULATION

SOIL EXPOSURE PATHWAY ■ (CHECKED IF PATHWAY IS ACTIVE)

TOXIC EFFECTS

Constituents of Concern	(5) Total Toxicant Intake Rate (mg/kg/day)				(6) Oral Reference Dose (mg/kg-day)		(7) Individual COC Hazard Quotient	
	(a) via Ingestion	(b) via Dermal Contact	(c) via Ingestion	(d) via Dermal Contact	(a) Oral	(b) Dermal	(5a)/(6a) + (5b)/(6b)	(5c)/(6a) + (5d)/(6b)
	Residential		Construction Worker				Residential	Construction Worker
Benzene*	1.8E-8	5.3E-7	9.4E-9	3.8E-7	3.0E-3	3.0E-3*	1.8E-4	1.3E-4
Toluene	2.2E-8	6.5E-7	1.2E-8	4.7E-7	2.0E-1	1.6E-1	4.2E-6	3.0E-6
Ethylbenzene	2.4E-8	7.1E-7	1.3E-8	5.0E-7	1.0E-1	9.7E-2	7.5E-6	5.3E-6
Xylene (mixed isomers)	3.1E-8	8.9E-7	1.6E-8	6.4E-7	2.0E+0	1.8E+0	5.0E-7	3.5E-7
Methyl t-Butyl ether*	1.7E-8	5.0E-7	8.8E-9	3.5E-7	1.0E-2	8.0E-3	6.4E-5	4.5E-5
TPH - Aliph >C05-C06	1.1E-4	3.1E-3	5.5E-5	2.2E-3	5.0E+0	5.0E+0*	6.4E-4	4.5E-4
TPH - Aliph >C06-C08	8.4E-5	2.4E-3	4.3E-5	1.7E-3	5.0E+0	5.0E+0*	5.0E-4	3.6E-4
TPH - Aliph >C08-C10	6.8E-7	2.0E-5	3.5E-7	1.4E-5	1.0E-1	1.0E-1*	2.1E-4	1.5E-4
TPH - Aliph >C10-C12	4.6E-5	1.3E-3	2.4E-5	9.5E-4	1.0E-1	1.0E-1*	1.4E-2	9.7E-3
TPH - Arom >C08-C10	1.8E-6	5.1E-5	9.1E-7	3.7E-5	4.0E-2	4.0E-2*	1.3E-3	9.4E-4
TPH - Arom >C10-C12	2.4E-4	6.9E-3	1.2E-4	4.9E-3	4.0E-2	4.0E-2*	1.8E-1	1.3E-1
TPH - Arom >C12-C16	7.6E-5	2.2E-3	3.9E-5	1.6E-3	4.0E-2	4.0E-2*	5.7E-2	4.1E-2

* No dermal reference dose available--oral reference dose used

Total Pathway Hazard Index = **2.5E-1** | **1.8E-1**

Site Name: Tosco 76 Station No. 3292
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RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

GROUNDWATER EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAY IS ACTIVE)

SOILS (3.5 - 9.5 ft): LEACHING TO GROUNDWATER INGESTION

Constituents of Concern	1) Source Medium	2) NAF Value (L/kg) Receptor			3) Exposure Medium Groundwater POE Conc. (mg/L) (1)/(2)		
	Soil Conc. (mg/kg)	On-site (0 ft) MCL	Off-site 1 (500 ft) Residential	Off-site 2 (0 ft) None	On-site (0 ft) MCL	Off-site 1 (500 ft) Residential	Off-site 2 (0 ft) None
Benzene*	1.3E-2	3.9E+2	3.9E+102		3.4E-5	3.4E-105	
Toluene	1.6E-2	1.7E+143	1.7E+243		9.7E-146	9.8E-246	
Ethylbenzene	1.8E-2	3.2E+43	3.2E+143		5.6E-46	5.6E-146	
Xylene (mixed isomers)	2.2E-2	6.4E+18	6.4E+118		3.5E-21	3.5E-121	
Methyl t-Butyl ether*	1.3E-2	3.6E+3	3.6E+103		3.5E-6	3.5E-106	
TPH - Aliph >C05-C06	7.8E+1	1.4E+108	1.4E+208		5.8E-107	5.8E-207	
TPH - Aliph >C06-C08	6.1E+1	NA	NA				
TPH - Aliph >C08-C10	5.0E-1	NA	NA				
TPH - Aliph >C10-C12	3.3E+1	NA	NA				
TPH - Arom >C08-C10	1.3E+0	3.4E+114	3.4E+214		3.8E-115	3.8E-215	
TPH - Arom >C10-C12	1.7E+2	2.7E+179	2.7E+279		6.4E-178	6.4E-278	
TPH - Arom >C12-C16	5.6E+1	NA	NA				

* = Chemical with user-specified data

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: Tosco 76 Station No. 3292
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RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

GROUNDWATER EXPOSURE PATHWAYS

SOILS (3.5 - 9.5 ft): LEACHING TO GROUNDWATER INGESTION (cont'd)

Constituents of Concern	4) Exposure Multiplier (IRxEFxED)/(BWxAT) (L/kg-day)			5) Average Daily Intake Rate (mg/kg/day) (3) x (4)		
	On-site (0 ft) MCL	Off-site 1 (500 ft) Residential	Off-site 2 (0 ft) None	On-site (0 ft) MCL	Off-site 1 (500 ft) Residential	Off-site 2 (0 ft) None
Benzene*		1.2E-2			4.0E-107	
Toluene		2.7E-2			2.7E-247	
Ethylbenzene		2.7E-2			1.5E-147	
Xylene (mixed isomers)		2.7E-2			9.6E-123	
Methyl t-Butyl ether*		2.7E-2			9.6E-108	
TPH - Aliph >C05-C06		2.7E-2			1.6E-208	
TPH - Aliph >C06-C08		2.7E-2				
TPH - Aliph >C08-C10		2.7E-2				
TPH - Aliph >C10-C12		2.7E-2				
TPH - Arom >C08-C10		2.7E-2			1.0E-216	
TPH - Arom >C10-C12		2.7E-2			1.8E-279	
TPH - Arom >C12-C16		2.7E-2				

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) ED = Exposure duration (yr) IR = Ingestion rate (mg/day)
BW = Body weight (kg) EF = Exposure frequency (days/yr)

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA

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Date Completed: 27-Feb-03

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RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

GROUNDWATER EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAY IS ACTIVE)

GROUNDWATER: INGESTION

	1) Source Medium	2) NAF Value (unitless) Receptor			3) Exposure Medium Groundwater POE Conc. (mg/L) (1)/(2)		
Constituents of Concern	Groundwater Conc. (mg/L)	On-site (0 ft) MCL	Off-site 1 (500 ft) Residential	Off-site 2 (0 ft) None	On-site (0 ft) MCL	Off-site 1 (500 ft) Residential	Off-site 2 (0 ft) None
Benzene*	2.4E-2	1.0E+0	1.0E+100		2.4E-2	2.5E-102	
Toluene	6.0E-3	1.0E+0	1.0E+100		6.0E-3	6.0E-103	
Ethylbenzene	1.4E-1	1.0E+0	1.0E+100		1.4E-1	1.4E-101	
Xylene (mixed isomers)	1.7E-2	1.0E+0	1.0E+100		1.7E-2	1.7E-102	
Methyl t-Butyl ether*	5.8E-2	1.0E+0	1.0E+100		5.8E-2	5.8E-102	
TPH - Aliph >C05-C06	1.8E+0	1.0E+0	1.0E+100		1.8E+0	1.8E-100	
TPH - Aliph >C06-C08	1.4E+0	1.0E+0	1.0E+100		1.4E+0	1.4E-100	
TPH - Aliph >C08-C10	2.5E-1	1.0E+0	1.0E+100		2.5E-1	2.5E-101	
TPH - Aliph >C10-C12	7.8E-1	1.0E+0	1.0E+100		7.8E-1	7.8E-101	
TPH - Arom >C08-C10	9.7E+0	1.0E+0	1.0E+100		9.7E+0	9.7E-100	
TPH - Arom >C10-C12	4.0E+0	1.0E+0	1.0E+100		4.0E+0	4.0E-100	
TPH - Arom >C12-C16	1.3E+0	1.0E+0	1.0E+100		1.3E+0	1.3E-100	

NOTE: NAF = Natural attenuation factor POE = Point of exposure

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
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RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

GROUNDWATER EXPOSURE PATHWAYS

GROUNDWATER INGESTION (cont'd)

Constituents of Concern	4) Exposure Multiplier (IRxEFxED)/(BWxAT) (L/kg/day)			5) Average Daily Intake Rate (mg/kg/day) (3) x (4)		
	On-site (0 ft) MCL	Off-site 1 (500 ft) Residential	Off-site 2 (0 ft) None	On-site (0 ft) MCL	Off-site 1 (500 ft) Residential	Off-site 2 (0 ft) None
Benzene*		1.2E-2			2.9E-104	
Toluene		2.7E-2			1.6E-104	
Ethylbenzene		2.7E-2			3.8E-103	
Xylene (mixed isomers)		2.7E-2			4.7E-104	
Methyl t-Butyl ether*		2.7E-2			1.6E-103	
TPH - Aliph >C05-C06		2.7E-2			4.9E-102	
TPH - Aliph >C06-C08		2.7E-2			3.9E-102	
TPH - Aliph >C08-C10		2.7E-2			6.9E-103	
TPH - Aliph >C10-C12		2.7E-2			2.1E-102	
TPH - Arom >C08-C10		2.7E-2			2.7E-101	
TPH - Arom >C10-C12		2.7E-2			1.1E-101	
TPH - Arom >C12-C16		2.7E-2			3.6E-102	

* = Chemical with user-specified data

NOTE: AT = Averaging time (days) ED = Exposure duration (yr) IR = Ingestion rate (mg/day)
BW = Body weight (kg) EF = Exposure frequency (days/yr)

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA

Completed By: J. Douglas
Date Completed: 27-Feb-03

Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 EXPOSURE CONCENTRATION AND INTAKE CALCULATION

GROUNDWATER EXPOSURE PATHWAYS

MAXIMUM PATHWAY INTAKE (mg/kg/day)
(Maximum intake of active pathways soil leaching & groundwater routes.)

Constituents of Concern	On-site (0 ft) MCL	Off-site 1 Residential	Off-site 2 None
Benzene*		2.9E-104	
Toluene		1.6E-104	
Ethylbenzene		3.8E-103	
Xylene (mixed isomers)		4.7E-104	
Methyl t-Butyl ether*		1.6E-103	
TPH - Aliph >C05-C06		4.9E-102	
TPH - Aliph >C06-C08		3.9E-102	
TPH - Aliph >C08-C10		6.9E-103	
TPH - Aliph >C10-C12		2.1E-102	
TPH - Arom >C08-C10		2.7E-101	
TPH - Arom >C10-C12		1.1E-101	
TPH - Arom >C12-C16		3.6E-102	

* = Chemical with user-specified data

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISK CALCULATION

GROUNDWATER EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAYS ARE ACTIVE)

CARCINOGENIC RISK

Constituents of Concern	(1) EPA Carcinogenic Classification	(2) Maximum Carcinogenic Intake Rate (mg/kg/day)			(3) Oral Slope Factor (mg/kg-day)^-1	(4) Individual COC Risk (2) x (3)		
		On-site (0 ft) MCL	Off-site 1 Residential	Off-site 2 None		On-site (0 ft) MCL	Off-site 1 Residential	Off-site 2 None
Benzene*	A		2.9E-104		1.0E-1		2.9E-105	
Toluene	D							
Ethylbenzene	D							
Xylene (mixed isomers)	D							
Methyl t-Butyl ether*	-							
TPH - Aliph >C05-C06	D							
TPH - Aliph >C06-C08	D							
TPH - Aliph >C08-C10	D							
TPH - Aliph >C10-C12	D							
TPH - Arom >C08-C10	D							
TPH - Arom >C10-C12	D							
TPH - Arom >C12-C16	D							
Total Pathway Carcinogenic Risk =							**2.9E-105**	

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
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Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT

TIER 2 PATHWAY RISK CALCULATION

GROUNDWATER EXPOSURE PATHWAYS ■ (CHECKED IF PATHWAYS ARE ACTIVE)

TOXIC EFFECTS

Constituents of Concern	(5) Maximum Toxicant Intake Rate (mg/kg/day)			(6) Oral Reference Dose (mg/kg/day)	(7) Individual COC Hazard Quotient (5) / (6)		
	On-site (0 ft) MCL	Off-site 1 Residential	Off-site 2 None		On-site (0 ft) MCL	Off-site 1 Residential	Off-site 2 None
Benzene*		6.7E-104		3.0E-3		2.2E-101	
Toluene		1.6E-104		2.0E-1		8.2E-104	
Ethylbenzene		3.8E-103		1.0E-1		3.8E-102	
Xylene (mixed isomers)		4.7E-104		2.0E+0		2.3E-104	
Methyl t-Butyl ether*		1.6E-103		1.0E-2		1.6E-101	
TPH - Aliph >C05-C06		4.9E-102		5.0E+0		9.7E-103	
TPH - Aliph >C06-C08		3.9E-102		5.0E+0		7.7E-103	
TPH - Aliph >C08-C10		6.9E-103		1.0E-1		6.9E-102	
TPH - Aliph >C10-C12		2.1E-102		1.0E-1		2.1E-101	
TPH - Arom >C08-C10		2.7E-101		4.0E-2		6.7E-100	
TPH - Arom >C10-C12		1.1E-101		4.0E-2		2.7E-100	
TPH - Arom >C12-C16		3.6E-102		4.0E-2		8.9E-101	
Total Pathway Hazard Index =						**1.1E-99**	

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA
Completed By: J. Douglas

Date Completed: 27-Feb-03
Job ID: 140071.3

RBCA SITE ASSESSMENT | TPH Criteria SSTL Worksheet

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA

Completed By: J. Douglas
Date Completed: 27-Feb-03

Job ID: 140071.3

CALCULATION OF SSTL VALUES FOR TPH

CONSTITUENTS OF CONCERN		Mass Fractions		Representative Concentrations		Calculated Concentration Limits		Applicable SSTL Values	
		Soil	Groundwater	Soil	Groundwater	Residual Soil Concentration	Solubility	Soils (3.5 - 9.5 ft)	Groundwater
CAS No.	Name	(-)	(-)	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)	(mg/kg)	(mg/L)
0-00-0	TPH - Aliph >C05-C06	1.9E-1	9.2E-2	7.8E+1	1.8E+0	3.3E+2	3.6E+1	1.0E+5	>3.6E+1
0-00-0	TPH - Aliph >C06-C08	1.5E-1	7.3E-2	6.1E+1	1.4E+0	1.6E+2	5.4E+0	1.0E+5	>5.4E+0
0-00-0	TPH - Aliph >C08-C10	1.2E-3	1.3E-2	5.0E-1	2.5E-1	8.6E+1	4.3E-1	2.3E+3	>4.3E-1
0-00-0	TPH - Aliph >C10-C12	8.3E-2	4.1E-2	3.3E+1	7.8E-1	5.2E+1	3.4E-2	2.3E+3	>3.4E-2
0-00-0	TPH - Arom >C08-C10	3.2E-3	5.0E-1	1.3E+0	9.7E+0	6.3E+2	6.5E+1	8.6E+2	>6.5E+1
0-00-0	TPH - Arom >C10-C12	4.3E-1	2.1E-1	1.7E+2	4.0E+0	3.8E+2	2.5E+1	8.8E+2	>2.5E+1
0-00-0	TPH - Arom >C12-C16	1.4E-1	6.8E-2	5.6E+1	1.3E+0	1.8E+2	5.8E+0	9.3E+2	>5.8E+0
* = Chemical with user-specified data									
	Total	1.0E+0	1.0E+0	4.0E+2	1.9E+1		Total TPH SSTL value	8.5E+4	1.1E+2

">" indicates risk-based target concentration greater than constituent residual saturation value. NC = Not calculated.

RBCA SITE ASSESSMENT

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA

Completed By: J. Douglas
Date Completed: 27-Feb-03

Job ID: 140071.3

SOIL (3.5 - 9.5 ft) SSTL VALUES

Target Risk (Class A & B): 1.0E-6
Target Risk (Class C): 1.0E-5
Target Hazard Quotient: 1.0E+0

Groundwater DAF Option: Domenico - First Order (One-directional vert. dispersion)

SSTL Results For Complete Exposure Pathways ("X" if Complete)

CONSTITUENTS OF CONCERN		Representative Concentration	X	Soil Leaching to Groundwater Ingestion			X	Soil Vol. to Indoor Air	X	Soil Volatilization to Outdoor Air				X	Surface Soil Inhalation, Ingestion, Dermal Contact		Applicable SSTL	SSTL Exceeded?	Required CRF
			On-site (0 ft)	Off-site 1 (500 ft)	Off-site 2 (0 ft)		On-site (0 ft)		On-site (0 ft)			Off-site 1 (50 ft)	Off-site 2 (0 ft)		On-site (0 ft)				
CAS No.	Name	(mg/kg)	MCL	Residential	None		Commercial		Residential	Construction Worker		Residential	None		Residential	Construction Worker	(mg/kg)	"■" if yes	Only if "yes" left
71-43-2	Benzene*	1.3E-2	3.9E-1	>8.6E+2	NA		1.7E-1		1.1E+1	NA		1.1E+1	NA		1.5E+0	7.6E+1	1.7E-1	☐	<1
108-88-3	Toluene	1.6E-2	>4.9E+2	>4.9E+2	NA		3.6E+2		>4.9E+2	NA		>4.9E+2	NA		3.1E+3	5.5E+3	3.6E+2	☐	<1
100-41-4	Ethylbenzene	1.8E-2	>3.9E+2	>3.9E+2	NA		>3.9E+2		>3.9E+2	NA		>3.9E+2	NA		2.2E+3	3.3E+3	2.2E+3	☐	<1
1330-20-7	Xylene (mixed isomers)	2.2E-2	>3.1E+2	>3.1E+2	NA		>3.1E+2		>3.1E+2	NA		>3.1E+2	NA		3.8E+4	6.3E+4	3.8E+4	☐	<1
1634-04-4	Methyl t-Butyl ether*	1.3E-2	4.6E+1	>8.7E+3	NA		6.0E+3		>8.7E+3	NA		>8.7E+3	NA		2.0E+2	2.8E+2	4.6E+1	☐	<1
0-00-0	TPH - Aliph >C05-C06	7.8E+1	noMCL	>3.3E+2	NA		>3.3E+2		>3.3E+2	NA		>3.3E+2	NA		1.0E+5	1.7E+5	1.0E+5	☐	<1
0-00-0	TPH - Aliph >C06-C08	6.1E+1	noMCL	>1.6E+2	NA		>1.6E+2		>1.6E+2	NA		>1.6E+2	NA		1.0E+5	1.7E+5	1.0E+5	☐	<1
0-00-0	TPH - Aliph >C08-C10	5.0E-1	noMCL	>8.6E+1	NA		>8.6E+1		>8.6E+1	NA		>8.6E+1	NA		2.3E+3	3.4E+3	2.3E+3	☐	<1
0-00-0	TPH - Aliph >C10-C12	3.3E+1	noMCL	>5.2E+1	NA		>5.2E+1		>5.2E+1	NA		>5.2E+1	NA		2.3E+3	3.4E+3	2.3E+3	☐	<1
0-00-0	TPH - Arom >C08-C10	1.3E+0	noMCL	>6.3E+2	NA		>6.3E+2		>6.3E+2	NA		>6.3E+2	NA		8.6E+2	1.4E+3	8.6E+2	☐	<1
0-00-0	TPH - Arom >C10-C12	1.7E+2	noMCL	>3.8E+2	NA		>3.8E+2		>3.8E+2	NA		>3.8E+2	NA		8.8E+2	1.4E+3	8.8E+2	☐	<1
0-00-0	TPH - Arom >C12-C16	5.6E+1	noMCL	>1.8E+2	NA		>1.8E+2		>1.8E+2	NA		>1.8E+2	NA		9.3E+2	1.4E+3	9.3E+2	☐	<1

* = Chemical with user-specified data

">" indicates risk-based target concentration greater than constituent residual saturation value. NA = Not applicable. NC = Not calculated.

RBCA SITE ASSESSMENT

Site Name: Tosco 76 Station No. 3292
Site Location: 15008 E. 14th St, San Leandro, CA

Completed By: J. Douglas
Date Completed: 27-Feb-03

Job ID: 140071.3

GROUNDWATER SSTL VALUES

Target Risk (Class A & B) 1.0E-6
Target Risk (Class C) 1.0E-5
Target Hazard Quotient 1.0E+0

Groundwater DAF Option: Domenico - First Order (One-directional vert. dispersion)

SSTL Results For Complete Exposure Pathways ("X" If Complete)

CONSTITUENTS OF CONCERN		Representative Concentration	X Groundwater Ingestion			X GW Vol. to Indoor Air	X Groundwater Volatilization to Outdoor Air			Applicable SSTL	SSTL Exceeded ?	Required CRF
			On-site (0 ft)	Off-site 1 (500 ft)	Off-site 2 (0 ft)	On-site (0 ft)	On-site (0 ft)	Off-site 1 (50 ft)	Off-site 2 (0 ft)			Only if "yes" left
CAS No.	Name	(mg/L)	MCL	Residential	None	Commercial	Residential	Residential	None	(mg/L)	"■" if yes	
71-43-2	Benzene*	2.4E-2	1.0E-3	>1.8E+3	NA	3.6E-1	1.5E+0	1.5E+0	NA	1.0E-3	■	2.4E+1
108-88-3	Toluene	6.0E-3	1.0E+0	>5.2E+2	NA	3.9E+2	>5.2E+2	>5.2E+2	NA	1.0E+0	☐	<1
100-41-4	Ethylbenzene	1.4E-1	7.0E-1	>1.7E+2	NA	>1.7E+2	>1.7E+2	>1.7E+2	NA	7.0E-1	☐	<1
1330-20-7	Xylene (mixed isomers)	1.7E-2	1.0E+1	>2.0E+2	NA	>2.0E+2	>2.0E+2	>2.0E+2	NA	1.0E+1	☐	<1
1634-04-4	Methyl t-Butyl ether*	5.8E-2	1.3E-2	>4.8E+4	NA	3.4E+4	>4.8E+4	>4.8E+4	NA	1.3E-2	■	4.5E+0
0-00-0	TPH - Aliph >C05-C06	1.8E+0	noMCL	>3.6E+1	NA	>3.6E+1	>3.6E+1	>3.6E+1	NA	>3.6E+1	☐	NA
0-00-0	TPH - Aliph >C06-C08	1.4E+0	noMCL	>5.4E+0	NA	>5.4E+0	>5.4E+0	>5.4E+0	NA	>5.4E+0	☐	NA
0-00-0	TPH - Aliph >C08-C10	2.5E-1	noMCL	>4.3E-1	NA	>4.3E-1	>4.3E-1	>4.3E-1	NA	>4.3E-1	☐	NA
0-00-0	TPH - Aliph >C10-C12	7.8E-1	noMCL	>3.4E-2	NA	>3.4E-2	>3.4E-2	>3.4E-2	NA	>3.4E-2	☐	NA
0-00-0	TPH - Arom >C08-C10	9.7E+0	noMCL	>6.5E+1	NA	>6.5E+1	>6.5E+1	>6.5E+1	NA	>6.5E+1	☐	NA
0-00-0	TPH - Arom >C10-C12	4.0E+0	noMCL	>2.5E+1	NA	>2.5E+1	>2.5E+1	>2.5E+1	NA	>2.5E+1	☐	NA
0-00-0	TPH - Arom >C12-C16	1.3E+0	noMCL	>5.8E+0	NA	>5.8E+0	>5.8E+0	>5.8E+0	NA	>5.8E+0	☐	NA

* = Chemical with user-specified data

">" indicates risk-based target concentration greater than constituent solubility value. NA = Not applicable. NC = Not calculated.

RBCA SITE ASSESSMENT | **Cumulative Risk Worksheet**

Site Name: Tosco 76 Station No. 3292 | Completed By: J. Douglas | Job ID: 140071.3

Site Location: 15008 E. 14th St, San Leandro, CA | Date Completed: 27-Feb-03 | *1 OF 3*

CUMULATIVE RISK WORKSHEET

CONSTITUENTS OF CONCERN		Representative Concentration		Proposed CRF		Resultant Target Concentration	
CAS No.	Name	Soil (mg/kg)	Groundwater (mg/L)	Soil	GW	Soil (mg/kg)	Groundwater (mg/L)
71-43-2	Benzene*	1.3E-2	2.4E-2			1.3E-2	2.4E-2
108-88-3	Toluene	1.6E-2	6.0E-3			1.6E-2	6.0E-3
100-41-4	Ethylbenzene	1.8E-2	1.4E-1			1.8E-2	1.4E-1
1330-20-7	Xylene (mixed isomers)	2.2E-2	1.7E-2			2.2E-2	1.7E-2
1634-04-4	Methyl t-Butyl ether*	1.3E-2	5.8E-2			1.3E-2	5.8E-2
0-00-0	TPH - Aliph >C05-C06	7.8E+1	1.8E+0			7.8E+1	1.8E+0
0-00-0	TPH - Aliph >C06-C08	6.1E+1	1.4E+0			6.1E+1	1.4E+0
0-00-0	TPH - Aliph >C08-C10	5.0E-1	2.5E-1			5.0E-1	2.5E-1
0-00-0	TPH - Aliph >C10-C12	3.3E+1	7.8E-1			3.3E+1	7.8E-1
0-00-0	TPH - Arom >C08-C10	1.3E+0	9.7E+0			1.3E+0	9.7E+0
0-00-0	TPH - Arom >C10-C12	1.7E+2	4.0E+0			1.7E+2	4.0E+0
0-00-0	TPH - Arom >C12-C16	5.6E+1	1.3E+0			5.6E+1	1.3E+0

Cumulative Values:

RBCA SITE ASSESSMENT | **Cumulative Risk Worksheet**

Site Name: Tosco 76 Station No. 3292 | Site Name: Tosco 76 Station No. 3292 | Completed By: J. Douglas | Job ID: 140071.3

Site Location: 15008 E. 14th St, San Leandro, CA | Site Location: 15008 E. 14th St, San Leandro, CA | Date Completed: 27-Feb-03

CUMULATIVE RISK WORKSHEET

Cumulative Target Risk: 1.0E-5 Target Hazard Index: 1.0E+0

ON-SITE RECEPTORS

CONSTITUENTS OF CONCERN		Outdoor Air Exposure: Residential Target Risk: 1.0E-6 / 1.0E-5	Outdoor Air Exposure: Residential Target HQ: 1.0E+0	Indoor Air Exposure: Commercial Target Risk: 1.0E-6 / 1.0E-5	Indoor Air Exposure: Commercial Target HQ: 1.0E+0	Soil Exposure: Residential Target Risk: 1.0E-6 / 1.0E-5	Soil Exposure: Residential Target HQ: 1.0E+0	Groundwater Exposure: None Target Risk: 1.0E-6 / 1.0E-5	Groundwater Exposure: None Target HQ: 1.0E+0
CAS No.	Name	Carcinogenic Risk	Hazard Quotient	Carcinogenic Risk	Hazard Quotient	Carcinogenic Risk	Hazard Quotient	Carcinogenic Risk	Hazard Quotient
71-43-2	Benzene*	1.9E-8	9.0E-4	1.5E-7	8.3E-3	7.6E-9	1.8E-4		
108-88-3	Toluene		5.2E-6		6.1E-5		4.2E-6		
100-41-4	Ethylbenzene		3.3E-5		1.7E-4		7.5E-6		
1330-20-7	Xylene (mixed isomers)		6.5E-7		4.4E-6		5.0E-7		
1634-04-4	Methyl t-Butyl ether*		5.6E-7		3.8E-6		6.4E-5		
0-00-0	TPH - Aliph >C05-C06		3.2E-3		2.9E-2		6.4E-4		
0-00-0	TPH - Aliph >C06-C08		3.7E-3		2.9E-2		5.0E-4		
0-00-0	TPH - Aliph >C08-C10		1.9E-2		9.3E-2		2.1E-4		
0-00-0	TPH - Aliph >C10-C12		9.2E-2		4.6E-1		1.4E-2		
0-00-0	TPH - Arom >C08-C10		2.2E-2		1.1E-1		1.3E-3		
0-00-0	TPH - Arom >C10-C12		4.2E-2		5.0E-2		1.8E-1		
0-00-0	TPH - Arom >C12-C16		4.2E-3		3.8E-3		5.7E-2		
	Cumulative Values:	**1.9E-8**	**1.9E-1**	**1.5E-7**	**7.8E-1**	**7.6E-9**	**2.5E-1**	**0.0E+0**	**0.0E+0**

■ indicates risk level exceeding target risk

RBCA SITE ASSESSMENT | **Cumulative Risk Worksheet**

Site Name: Tosco 76 Station No. 3292 | Site Name: Tosco 76 Station No. 3292 | Completed By: J. Douglas | Job ID: 140071.3

Site Location: 15008 E. 14th St, San Leandro, CA | Site Location: 15008 E. 14th St, San Leandro, CA | Date Completed: 27-Feb-03 | *3 OF 3*

CUMULATIVE RISK WORKSHEET

Cumulative Target Risk: 1.0E-5 | Target Hazard Index: 1.0E+0

Groundwater DAF Option: Domenico - First Order

OFF-SITE RECEPTORS

CONSTITUENTS OF CONCERN		Outdoor Air Exposure:				Groundwater Exposure:			
		Residential (50 ft) Target Risk: 1.0E-6 / 1.0E-5	Residential (50 ft) Target HQ: 1.0E+0	None Target Risk: 1.0E-6 / 1.0E-5	None Target HQ: 1.0E+0	Residential (500 ft) Target Risk: 1.0E-6 / 1.0E-5	Residential (500 ft) Target HQ: 1.0E+0	None Target Risk: 1.0E-6 / 1.0E-5	None Target HQ: 1.0E+0
CAS No.	Name	Carcinogenic Risk	Hazard Quotient	Carcinogenic Risk	Hazard Quotient	Carcinogenic Risk	Hazard Quotient	Carcinogenic Risk	Hazard Quotient
71-43-2	Benzene*	1.9E-8	9.0E-4			2.9E-105	2.2E-101		
108-88-3	Toluene		5.2E-6				8.2E-104		
100-41-4	Ethylbenzene		3.3E-5				3.8E-102		
1330-20-7	Xylene (mixed isomers)		6.5E-7				2.3E-104		
1634-04-4	Methyl t-Butyl ether*		5.6E-7				1.6E-101		
0-00-0	TPH - Aliph >C05-C06		3.2E-3				9.7E-103		
0-00-0	TPH - Aliph >C06-C08		3.7E-3				7.7E-103		
0-00-0	TPH - Aliph >C08-C10		1.9E-2				6.9E-102		
0-00-0	TPH - Aliph >C10-C12		9.2E-2				2.1E-101		
0-00-0	TPH - Arom >C08-C10		2.2E-2				6.7E-100		
0-00-0	TPH - Arom >C10-C12		4.2E-2				2.7E-100		
0-00-0	TPH - Arom >C12-C16		4.2E-3				8.9E-101		
	Cumulative Values:	**1.9E-8**	**1.9E-1**	**0.0E+0**	**0.0E+0**	**2.9E-105**	**1.1E-99**	**0.0E+0**	**0.0E+0**

■ indicates risk level exceeding target risk

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.

Table 5

Joint Groundwater Monitoring Data

Chevron Facility #9-2013

15002 Hesperian Boulevard

San Leandro, California

EXPLANATIONS:

Groundwater monitoring data provided by Blaine Tech Services, Inc. Site monitored on a semi-annual basis.

TOC = Top of Casing

DTW = Depth to Water

(ft.) = Feet

GWE = Groundwater Elevation

(msl) = Mean sea level

-- = Not Available

Table 5
Joint Groundwater Monitoring Data
Chevron Facility #9-2013
15002 Hesperian Boulevard
San Leandro, California

WELL ID/ TOC*	DATE	DTW *(ft.)*	GWE *(msl)*
MW-1			
35.77	11/04/97	11.35	24.42
	05/15/98	8.11	27.66
	08/12/98	9.35	26.42
MW-2			
35.00	11/04/97	10.70	24.30
	05/15/98	7.63	27.37
	08/12/98	8.75	26.25
MW-3			
36.17	11/04/97	11.75	24.42
	05/15/98	8.75	27.42
	08/12/98	9.85	26.32
MW-4			
36.05	11/04/97	11.47	24.58
	05/15/98	8.27	27.78
	08/12/98	9.40	26.65
MW-5			
35.65	11/04/97	11.17	24.48
	05/15/98	7.92	27.73
	08/12/98	9.05	26.60
MW-6			
36.92	11/04/97	12.42	24.50
	05/15/98	9.45	27.47
	08/12/98	10.60	26.32
MW-7			
35.71	11/04/97	11.01	24.70
	05/15/98	8.11	27.60
	08/12/98	9.25	26.46
MW-8			
35.28	11/04/97	10.63	24.65
	05/15/98	7.98	27.30
	08/12/98	9.00	26.28
MW-A			
	11/04/97	11.45	--
	05/15/98	8.51	--
	08/12/98	9.60	--

Table 4

Joint Groundwater Monitoring Data

Former Mobil Facility #04-FGN
14994 East 14th Street
San Leandro, California

WELL ID/ TOC*	DATE	DTW *(ft.)*	GWE *(msl)*
MW-1A			
36.63	02/12/98	5.52	31.11
	08/12/98	8.80	27.83
MW-2A			
36.62	02/12/98	5.59	31.03
	08/12/98	8.85	27.77
MW-3A			
36.93	02/12/98	5.72	31.21
	08/12/98	9.05	27.88
MW-4A			
37.18	02/12/98	5.90	31.28
	08/12/98	9.21	27.97
MW-5A			
35.91	02/12/98	5.32	30.59
	08/12/98	8.19	27.72
MW-6A			
37.10	02/12/98	5.52	31.58
	08/12/98	8.91	28.19
MW-7A			
37.39	02/12/98	6.55	30.84
	08/12/98	9.65	27.74

EXPLANATIONS:

Groundwater monitoring data provided by Alton Geoscience. Site monitored on a semi-annual basis.

TOC = Top of Casing
DTW = Depth to Water
(ft.) = Feet
GWE = Groundwater Elevation
(msl) = Mean sea level

* TOC elevations have been surveyed relative to msl.

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

EXPLANATIONS:

TBA = Tertiary butyl alcohol

MTBE = Methyl tertiary butyl ether

DIPE = Di-isopropyl ether

ETBE = Ethyl tertiary butyl ether

TAME = Tertiary amyl methyl ether

1,2-DCA = 1,2-Dichlorothane

EDB = Ethylene Dibromide/1,2-Dibromoethane

(ppb) = Parts per billion

-- = Not Analyzed

ND = Not Detected

[1] Raised detection limit. Refer to analytical reports.

[2] Laboratory report indicates sample was analyzed outside of the EPA recommended holding time.

ANALYTICAL METHOD:

EPA Method 8260 for Oxygenate Compounds

Table 3

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-11	08/24/01	<5,000	<500	870	<10	<10	<10	<10	<10
	05/10/02[2]	<1,000	<200	270	<4.0	<4.0	<4.0	<4.0	<4.0
	08/26/02	<500	<100	170	<2.0	<2.0	<2.0	<2.0	<2.0
	11/07/02	**<2,500**	**<500**	**330**	**<10**	**<10**	**<10**	**<10**	**<10**
MW-2 (SP)	05/08/00	ND	ND	4.83	ND	ND	ND	ND	ND
	11/07/02	**<500**	**<100**	**5.4**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
MW-3 (SP)	05/08/00	ND	ND	ND	ND	ND	ND	ND	ND
	11/07/02	**<5,000**	**<1,000**	**<20**	**<20**	**<20**	**<20**	**<20**	**<20**

Table 3

Groundwater Analytical Results - Oxygenate Compounds

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID	DATE	ETHANOL (ppb)	TBA (ppb)	MTBE (ppb)	DIPE (ppb)	ETBE (ppb)	TAME (ppb)	1,2-DCA (ppb)	EDB (ppb)
MW-1	05/08/00	ND[1]	ND[1]	1,780	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	08/08/00	--	--	1,990[2]	--	--	--	--	--
	02/07/01	--	--	840	--	--	--	--	--
	05/09/01[2]	ND[1]	ND[1]	431	ND[1]	ND[1]	ND[1]	ND[1]	ND[1]
	11/16/01	<2,500	380	490	<5.0	<5.0	<5.0	<5.0	<5.0
	02/21/02	<1,200	<50	170	<2.5	<2.5	<2.5	<2.5	<2.5
	08/26/02	--	--	120	--	--	--	--	--
	11/07/02	**<2,500**	**<500**	**20**	**<10**	**<10**	**<10**	**<10**	**<10**
MW-2	08/26/02	--	--	<20	--	--	--	--	--
	11/07/02	**<2,500**	**<500**	**<10**	**<10**	**<10**	**<10**	**<10**	**<10**
MW-5	**11/07/02**	**<2,500**	**<500**	**<10**	**<10**	**<10**	**<10**	**<10**	**<10**
MW-7	**11/07/02**	**<500**	**<100**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
MW-8	**11/07/02**	**<500**	**<100**	**5.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
MW-9	08/26/02	--	--	<2.0	--	--	--	--	--
	11/07/02	**<500**	**<100**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**	**<2.0**
MW-10	08/26/02	--	--	<20	--	--	--	--	--
	11/07/02	**<2,500**	**<500**	**<10**	**<10**	**<10**	**<10**	**<10**	**<10**

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

EXPLANATIONS:

Dissolved oxygen concentrations prior to February 12, 1998, were compiled from reports prepared by MPDS Services, Inc.

(mg/L) = Milligrams per liter
-- = Not Measured/Not Analyzed
(SP) = Shadrall Property wells

♦ Measurements taken in field.

1 Wells located on Shadrall Property.

Table 2
Dissolved Oxygen Concentrations
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID	DATE	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-2 (SP)[1]	02/21/02	--	3.70	--
(cont)	05/10/02	--	0.70	--
	08/26/02	--	1.10	--
	11/07/02	**--**	**1.21**	**--**
MW-3 (SP)[1]	11/07/96	--	2.41	2.40
	02/11/97	--	--	2.55
	08/05/97	--	--	3.74
	11/04/97	--	--	2.95
	02/12/98	--	3.17	--
	05/15/98	--	4.06	--
	08/12/98	--	3.98	--
	11/12/98	--	3.39	--
	03/01/99	--	3.08	--
	05/12/99	--	2.77	--
	08/11/99	--	2.84	--
	11/04/99	--	2.43	--
	02/29/00	--	2.72	--
	05/08/00	--	2.22	--
	08/08/00	--	2.76	--
	11/06/00	--	2.59	--
	02/07/01	--	2.61	--
	05/09/01	--	2.36	--
	08/24/01	--	1.98	--
	11/16/01	--	2.29	--
	02/21/02	--	2.10	--
	05/10/02	--	0.60	--
	08/26/02	--	0.80	--
	11/07/02	**--**	**1.10**	**--**

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID	DATE	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-11 (cont)	02/10/97	--	--	2.18
	08/05/97	--	--	3.19
	11/04/97	--	--	2.01
	02/12/98	--	2.44	--
	05/15/98	--	1.80	--
	08/12/98	--	2.05	--
	11/12/98	--	1.67	--
	03/01/99	--	2.03	--
	05/12/99	--	2.14	--
	08/11/99	--	2.66	--
	11/04/99	--	2.60	--
	02/29/00	--	2.47	--
	05/08/00	--	2.70	--
	08/08/00	--	2.22	--
	11/06/00	--	3.16	--
	02/07/01	--	2.56	--
	05/09/01	--	2.82	--
	08/24/01	--	2.40	--
	11/16/01	--	2.17	--
	02/21/02	--	2.72	--
	05/10/02	--	0.50	--
	08/26/02	--	0.70	--
	11/07/02	--	**1.17**	--
MW-2 (SP)[1]	11/07/96	--	2.85	2.80
	02/11/97	--	--	2.73
	08/05/97	--	--	3.99
	11/04/97	--	--	3.06
	02/12/98	--	3.11	--
	05/15/98	--	3.97	--
	08/12/98	--	3.62	--
	11/12/98	--	4.19	--
	03/01/99	--	4.56	--
	05/12/99	--	3.92	--
	08/11/99	--	4.19	--
	11/04/99	--	3.85	--
	02/29/00	--	3.21	--
	05/08/00	--	3.96	--
	08/08/00	--	3.55	--
	11/06/00	--	4.11	--
	02/07/01	--	3.80	--
	05/09/01	--	3.95	--
	08/24/01	--	3.81	--
	11/16/01	--	4.05	--

Table 2
Dissolved Oxygen Concentrations
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID	DATE	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-9 (cont)	02/07/01	--	3.46	--
	05/09/01	--	4.33	--
	08/24/01	--	2.36	--
	11/16/01	--	2.48	--
	02/21/02	--	2.80	--
	05/10/02	--	0.60	--
	08/26/02	--	0.80	--
	11/07/02	--	**1.32**	--
MW-10	11/02/95	3.10	3.96	--
	02/08/96	--	2.88	--
	05/08/96	--	--	2.71
	08/09/96	--	2.63	--
	11/07/96	--	1.81	1.84
	02/10/97	--	--	2.03
	08/05/97	--	--	2.78
	11/04/97	--	--	2.11
	02/12/98	--	2.63	--
	05/15/98	--	2.24	--
	08/12/98	--	2.43	--
	11/12/98	--	2.66	--
	03/01/99	--	3.11	--
	05/12/99	--	2.77	--
	08/11/99	--	3.21	--
	11/04/99	--	3.12	--
	02/29/00	--	2.97	--
	05/08/00	--	2.63	--
	08/08/00	--	2.73	--
	11/06/00	--	3.10	--
	02/07/01	--	3.05	--
	05/09/01	--	3.38	--
	08/24/01	--	1.74	--
	11/16/01	--	2.27	--
	02/21/02	--	2.07	--
	05/10/02	--	0.60	--
	08/26/02	--	0.90	--
	11/07/02	--	**0.97**	--
MW-11	11/02/95	2.60	3.55	--
	02/08/96	--	2.19	--
	05/08/96	--	--	2.06
	08/09/96	--	2.11	--
	11/07/96	--	2.35	2.36

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID	DATE	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-8 (cont)	02/10/97	--	--	2.10
	08/05/97	--	--	3.04
	11/04/97	--	--	2.11
	02/12/98	--	1.98	--
	05/15/98	--	2.44	--
	08/12/98	--	2.83	--
	11/12/98	--	3.16	--
	03/01/99	--	2.81	--
	05/12/99	--	2.74	--
	08/11/99	--	3.04	--
	11/04/99	--	3.41	--
	02/29/00	--	3.77	--
	05/08/00	--	3.97	--
	08/08/00	--	3.59	--
	11/06/00	--	3.71	--
	02/07/01	--	3.19	--
	05/09/01	--	3.59	--
	08/24/01	--	2.67	--
	11/16/01	--	2.64	--
	02/21/02	--	2.88	--
	05/10/02	--	0.70	--
	08/26/02	--	1.00	--
	11/07/02	--	**1.74**	--
MW-9	11/02/95	--	--	--
	02/08/96	--	3.62	--
	05/08/96	--	--	2.20
	08/09/96	--	2.51	--
	11/07/96	--	2.06	2.02
	02/10/97	--	--	1.96
	08/05/97	--	--	2.57
	11/04/97	--	--	2.60
	02/12/98	--	2.27	--
	05/15/98	--	2.62	--
	08/12/98	--	1.90	--
	11/12/98	--	1.38	--
	03/01/99	--	1.78	--
	05/12/99	--	2.26	--
	08/11/99	--	2.42	--
	11/04/99	--	2.71	--
	02/29/00	--	3.05	--
	05/08/00	--	3.77	--
	08/08/00	--	3.39	--
	11/06/00	--	4.06	--

Table 2
Dissolved Oxygen Concentrations
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID	DATE	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-6 (cont)	05/15/98	--	5.28	--
	08/12/98	--	4.96	--
	11/12/98	--	5.36	--
	03/01/99	--	4.97	--
	05/12/99	--	5.47	--
	08/11/99	--	5.19	--
	11/04/99	--	5.38	--
MW-7	11/02/95	--	--	--
	02/08/96	--	2.67	--
	05/08/96	--	--	2.20
	08/09/96	--	2.37	--
	11/07/96	--	2.22	2.28
	02/11/97	--	--	2.33
	08/05/97	--	--	2.69
	11/04/97	--	--	2.82
	02/12/98	--	3.24	--
	05/15/98	--	2.95	--
	08/12/98	--	3.19	--
	11/12/98	--	2.04	--
	03/01/99	--	2.64	--
	05/12/99	--	3.05	--
	08/11/99	--	2.69	--
	11/04/99	--	2.47	--
	02/29/00	--	2.31	--
	05/08/00	--	2.16	--
	08/08/00	--	1.88	--
	11/06/00	--	1.96	--
	02/07/01	--	2.08	--
	05/09/01	--	1.81	--
	08/24/01	--	1.53	--
	11/16/01	--	1.92	--
	02/21/02	--	1.79	--
	05/10/02	--	0.70	--
	08/26/02	--	0.80	--
	11/07/02	--	**1.26**	--
MW-8	11/02/95	--	--	--
	02/08/96	--	3.85	--
	05/08/96	--	--	2.09
	08/09/96	--	2.56	--
	11/07/96	--	1.67	1.84

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID	DATE	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-4 (cont)	03/01/99	--	5.55	--
	05/12/99	--	5.64	--
	08/11/99	--	5.36	--
	11/04/99	--	4.95	--
MW-5	11/02/95	3.00	2.30	--
	02/08/96	--	2.35	--
	05/08/96	--	--	1.29
	08/09/96	--	2.19	--
	11/07/96	--	1.84	1.82
	02/10/97	--	--	2.07
	08/05/97	--	--	2.36
	11/04/97	--	--	1.99
	02/12/98	--	1.79	--
	05/15/98	--	1.66	--
	08/12/98	--	1.71	--
	11/12/98	--	1.81	--
	03/01/99	--	1.67	--
	05/12/99	--	1.73	--
	08/11/99	--	1.83	--
	11/04/99	--	1.77	--
	02/29/00	--	2.23	--
	05/08/00	--	2.58	--
	08/08/00	--	2.19	--
	11/06/00	--	1.85	--
	02/07/01	--	2.36	--
	05/09/01	--	2.18	--
	08/24/01	--	1.28	--
	11/16/01	--	1.89	--
	02/21/02	--	1.45	--
	05/10/02	--	0.50	--
	08/26/02	--	0.60	--
	11/07/02	--	**1.04**	--
MW-6	11/02/95	3.80	4.55	--
	02/08/96	--	3.77	--
	05/08/96	--	--	3.40
	08/09/96	--	3.53	--
	11/07/96	--	3.99	4.06
	02/10/97	--	--	3.85
	08/05/97	--	--	5.37
	11/04/97	--	--	3.67
	02/12/98	--	4.05	--

Table 2
Dissolved Oxygen Concentrations
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID	DATE	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-2 (cont)	11/04/99	--	1.90	--
	02/29/00	--	2.41	--
	05/08/00	--	2.14	--
	08/08/00	--	2.57	--
	11/06/00	--	1.94	--
	02/07/01	--	2.49	--
	05/09/01	--	2.66	--
	08/24/01	--	2.11	--
	11/16/01	--	2.34	--
	02/21/02	--	1.90	--
	05/10/02	--	0.80	--
	08/26/02	--	1.00	--
	11/07/02	--	**1.13**	--
MW-3	11/02/95	2.20	4.98	--
	02/08/96	--	2.78	--
	05/08/96	--	--	3.73
	08/09/96	--	3.29	--
	11/07/96	--	3.15	3.98
	02/10/97	--	--	3.59
	08/05/97	--	--	2.86
	11/04/97	--	--	2.95
	02/12/98	--	3.12	--
	05/15/98	--	3.97	--
	08/12/98	--	4.21	--
	03/01/99	--	4.56	--
	03/01/99	--	5.19	--
	05/12/99	--	3.87	--
	08/11/99	--	4.10	--
	11/04/99	--	4.41	--
MW-4	11/02/95	3.00	7.91	--
	02/08/96	--	2.66	--
	05/08/96	--	--	--
	08/09/96	--	2.92	--
	11/07/96	--	4.32	4.38
	02/10/97	--	--	3.87
	08/05/97	--	--	5.12
	11/04/97	--	--	3.98
	02/12/98	--	4.88	--
	05/15/98	--	5.13	--
	08/12/98	--	5.62	--
	11/12/98	--	5.76	--

Table 2

Dissolved Oxygen Concentrations

Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID	DATE	@ Laboratory (mg/L)	Before Purging (mg/L) ♦	After Purging (mg/L) ♦
MW-1	11/02/95	1.80	2.83	--
	02/08/96	--	2.58	--
	05/08/96	--	--	1.92
	08/09/96	--	2.14	--
	11/07/96	--	2.11	2.18
	02/11/97	--	--	2.05
	08/05/97	--	--	1.88
	11/04/97	--	--	2.67
	02/12/98	--	2.38	--
	05/15/98	--	2.12	--
	08/12/98	--	1.77	--
	11/12/98	--	1.55	--
	03/01/99	--	1.77	--
	05/12/99	--	1.86	--
	08/11/99	--	1.93	--
	11/04/99	--	2.10	--
	02/29/00	--	2.88	--
	05/08/00	--	3.11	--
	08/08/00	--	3.27	--
	11/06/00	--	3.67	--
	02/07/01	--	3.62	--
	05/09/01	--	3.29	--
	08/24/01	--	1.97	--
	11/16/01	--	2.56	--
	02/21/02	--	1.84	--
	05/10/02	--	0.70	--
	08/26/02	--	0.90	--
	11/07/02	--	**1.84**	--
MW-2	11/02/95	2.30	2.80	--
	02/08/96	--	2.21	--
	05/08/96	--	--	3.89
	08/09/96	--	3.36	--
	11/07/96	--	1.96	1.98
	02/11/97	--	--	2.12
	08/05/97	--	--	2.38
	11/04/97	--	--	2.18
	02/12/98	--	2.04	--
	05/15/98	--	2.33	--
	08/12/98	--	2.50	--
	11/12/98	--	1.90	--
	03/01/99	--	1.82	--
	05/12/99	--	2.32	--
	08/11/99	--	1.98	--

EXPLANATIONS: (cont)

18 MTBE by EPA Method 8260 analyzed past EPA recommended holding time.

19 Laboratory report indicates unidentified hydrocarbons C6-C12.

20 MTBE by EPA Method 8260 analyzed one day past the EPA recommended holding time; sample was inadvertently chosen for MTBE confirmation instead of MW-11.

21 TPH-G, BTEX and MTBE by EPA Method 8260.

22 Laboratory report indicates hydrocarbon pattern is present in the requested fuel quantitation range but does not resemble the pattern of the requested fuel.

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

EXPLANATIONS:

Groundwater monitoring data and laboratory analytical results prior to February 12, 1998, were compiled from reports prepared by MPDS Services, Inc.

TOC = Top of Casing
(ft.) = Feet
DTW = Depth to Water
S.I. = Screen Interval
(ft.bgs) = Feet Below Ground Surface
GWE = Groundwater Elevation
(msl) = Mean sea level

TPH-G = Total Petroleum Hydrocarbons as Gasoline
B = Benzene
T = Toluene
E = Ethylbenzene
X = Xylenes
MTBE = Methyl tertiary butyl ether
(ppb) = Parts per billion

ND = Not Detected
-- = Not Measured/Not Analyzed
(SP) = Shadrall Property wells
QA = Quality Assurance/Trip Blank

* TOC elevations are relative to msl, per a Benchmark located at the northwest corner of East 14th Street and 150th Avenue, (Elevation = 36.88 feet, msl). TOC elevations for MW-2 (SP) and MW-3 (SP) are relative to msl, per Chevron monitoring well MW-6 used as a benchmark, (Elevation = 36.92 feet, msl). East 14th Street and 150th Avenue, (Benchmark Elevation = 36.883 feet, msl). Prior to September 24, 1993, DTW measurements were taken from the top of the well covers.

1 Laboratory report indicates the hydrocarbons detected appeared to be a gasoline and non-gasoline mixture.
2 Laboratory report indicates the hydrocarbons detected did not appear to be gasoline.
3 The analytical results of the groundwater were inconsistent with the previous analytical results for this well. The laboratory re-analyzed the sample past hold time; therefore the results may be biased low.
4 The monitoring well was re-sampled on November 20, 1995. The vial containing the water sample collected from this well on November 2, 1995, was inadvertently broken by the laboratory.
5 All EPA Method 8010 constituents were ND.
6 The monitoring wells MW-8 and MW-11 were re-sampled on February 14, 1996. The vials containing the water samples collected from the wells on February 8, 1996, were inadvertently broken by the laboratory.
7 Detection limit raised. Refer to analytical reports.
8 Laboratory report indicates gasoline and unidentified hydrocarbons <C7.
9 Laboratory report indicates gasoline and discrete peaks C6-C12.
10 Laboratory report indicates gasoline and unidentified hydrocarbons C6-C8.
11 Laboratory report indicates weathered gasoline C6-C12.
12 MTBE by EPA Method 8260.
13 Laboratory report indicates unidentified hydrocarbons >C8.
14 Laboratory report indicates unidentified hydrocarbons >C6.
15 Laboratory report indicates weathered gas and unidentified hydrocarbons >C6.
16 Laboratory report indicates gasoline and unidentified hydrocarbons <C6.
17 Laboratory report indicates gasoline C6-C12.

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3 (SP)	05/09/01	9.79	11.0-21.0	26.03	3,350[11]	34.0	ND[7]	ND[7]	ND[7]	ND[7]
(cont)	08/24/01	11.09		24.73	SAMPLED SEMI-ANNUALLY			--	--	--
	11/16/01	11.29		24.53	3,300[11]	47	<10	<10	<10	<100
	02/21/02	9.19		26.63	--	--	--	--	--	--
	05/10/02	9.84		25.98	4,700[11]	55	<5.0	<5.0	<5.0	140
	08/26/02	10.95		24.87	SAMPLED SEMI-ANNUALLY			--	--	--
	11/07/02[21]	**11.33**		**24.49**	**2,600[22]**	**<5.0**	**<5.0**	**<5.0**	**<10**	**<20**
Trip Blank										
TB-LB	02/12/98	--	--	--	ND	ND	ND	ND	ND	ND
	05/15/98	--		--	ND	ND	ND	ND	ND	ND
	08/12/98	--		--	ND	ND	ND	ND	ND	ND
	11/12/98	--		--	ND	ND	0.68	ND	0.51	ND
	03/01/99	--		--	ND	ND	ND	ND	ND	ND
	05/12/99	--		--	ND	ND	ND	ND	ND	ND
	08/11/99	--		--	ND	ND	ND	ND	ND	ND
	11/04/99	--		--	ND	ND	ND	ND	ND	ND
	02/29/00	--		--	ND	ND	ND	ND	ND	ND
	05/08/00	--		--	ND	ND	ND	ND	ND	ND
	08/08/00	--		--	ND	ND	ND	ND	ND	ND
	11/06/00	--		--	ND	ND	ND	ND	ND	ND
	02/07/01	--		--	ND	ND	ND	ND	ND	ND
	05/09/01	--		--	ND	ND	ND	ND	ND	ND
	08/24/01	--		--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	11/16/01	--		--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	02/21/02	--		--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	05/10/02	--		--	<50	<0.50	<0.50	<0.50	<0.50	<5.0
	08/26/02[21]	--		--	<50	<0.50	<0.50	<0.50	<1.0	<2.0
QA	**11/07/02[21]**	--		--	**<50**	**<0.50**	**0.58**	**<0.50**	**<1.0**	**<2.0**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-2 (SP)	11/06/00	10.20	11.0-21.0	25.24	183[19]	ND	ND	ND	ND	ND
(cont)	02/07/01	9.70		25.74	--	--	--	--	--	--
	05/09/01	9.98		25.46	ND	ND	ND	ND	ND	ND
	08/24/01	11.15		24.29	SAMPLED SEMI-ANNUALLY			--	--	--
	11/16/01	11.31		24.13	250[19]	<0.50	<0.50	<0.50	<0.50	<5.0
	02/21/02	9.55		25.89	--	--	--	--	--	--
	05/10/02	10.01		25.43	180[19]	<0.50	<0.50	<0.50	0.71	10
	08/26/02	11.03		24.41	SAMPLED SEMI-ANNUALLY			--	--	--
	11/07/02[21]	**11.12**		**24.32**	**<50**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**5.4**
MW-3 (SP)										
35.81	05/08/96	8.73	11.0-21.0	27.08	4,700	7.9	36	13	4.0	42
	08/09/96	9.73		26.08	2,000	ND	14	7.6	ND	ND
	11/07/96	10.88		24.93	1,800	29	ND	ND	ND	40
	02/10-11/97	8.16		27.65	3,500	70	14	ND	ND	150
	05/07/97	9.35		26.46	3,100	48	ND	ND	ND	110
	08/05/97	10.44		25.37	3,200	43	5.7	ND	ND	61
	11/04/97	10.90		24.91	2,600	34	ND	ND	ND	53
	02/12/98	6.77		29.04	3,200	62	ND[7]	ND[7]	ND[7]	100
	05/15/98	8.02		27.80	ND	ND	ND	ND	ND	2.5
35.82	08/12/98	9.11		26.71	110	ND	4.1	ND	ND[7]	ND
	11/12/98	9.81		26.01	1,800[15]	37	2.8	ND[7]	ND[7]	55
	03/01/99	8.27		27.55	2,900[8]	12	3.6	ND[7]	ND[7]	110
	05/12/99	8.92		26.90	4,100[16]	34	ND[7]	ND[7]	ND[7]	45
	08/11/99	9.59		26.23	3,220	22.8	ND[7]	ND[7]	ND[7]	50.8
	11/04/99	10.86		24.96	2,460[11]	26.6	ND[7]	ND[7]	ND[7]	52.1
	02/29/00	7.92		27.90	SAMPLED SEMI-ANNUALLY			--	--	--
	05/08/00	9.07		26.75	1,080[19]	ND[7]	ND[7]	ND[7]	ND[7]	[7]ND/ND[12]
	08/08/00	9.86		25.96	--	--	--	--	--	--
	11/06/00	10.12		25.70	3,100[11]	35.0	ND[7]	ND[7]	ND[7]	95.7
	02/07/01	9.65		26.17	--	--	--	--	--	--

As of 11/07/02

Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-11	05/08/00	8.50	7.0-19.0	27.00	513[11]	3.56	ND[7]	1.11	ND[7]	1,320
(cont)	08/08/00	9.39		26.11	960[11]	10.0	1.28	ND[7]	ND[7]	1,600
	11/06/00	9.81		25.69	3,000[11]	17.7	ND[7]	ND[7]	ND[7]	1,280/1,360[12]
	02/07/01	9.16		26.34	1,600[17]	ND[7]	ND[7]	ND[7]	ND[7]	590
	05/09/01	9.51		25.99	1,010[11]	11.4	ND[7]	1.24	ND[7]	586
	08/29/01	10.78		24.72	3,100[11]	23	<5.0	<5.0	<5.0	840/870[12]
	11/16/01	10.95		24.55	1,000[11]	9.2	<2.0	<2.0	<2.0	600
	02/21/02	8.85		26.65	1,100[11]	7.4	<2.5	<2.5	<2.5	270
	05/10/02	9.51		25.99	910[11]	7.4	1.4	2.8	<12	330/270[18]
	08/26/02[21]	10.62		24.88	1,900	<0.50	<0.50	0.87	<1.0	170
	11/07/02[21]	**10.77**		**24.73**	**550[22]**	**<2.5**	**<2.5**	**<2.5**	**<5.0**	**330**
MW-2 (SP)										
35.44	05/08/96	9.12	11.0-21.0	26.32	540	0.68	21	1.0	1.7	ND
	08/09/96	9.98		25.46	170	ND	7.8	ND	ND	ND
	11/07/96	10.98		24.46	430	8.9	1.5	ND	ND	10
	02/10-11/97	8.63		26.81	230[2]	4.6	1.0	ND	ND	10
	05/07/97	9.58		25.86	ND	ND	ND	ND	ND	14
	08/05/97	10.62		24.82	360	5.5	50	ND	ND	ND
	11/04/97	11.06		24.38	280	2.9	13	ND	0.54	ND
	02/12/98	7.71		27.73	440[8]	10	1.6	ND	0.69	13
	05/15/98	8.50		26.94	540[8]	10	1.1	ND	1.1	15
	08/12/98	9.43		26.01	ND	ND	ND	ND	ND	ND
	11/12/98	9.98		25.46	300[14]	6.1	ND[7]	ND[7]	4.0	ND[7]
	03/01/99	8.70		26.74	57	ND	ND	ND	ND	4.5
	05/12/99	9.45		25.99	ND	ND	ND	ND	ND	5.0
	08/11/99	10.08		25.36	337	ND	ND	ND	ND	12.4
	11/04/99	10.91		24.53	317[11]	8.31	ND	ND	ND	7.81
	02/29/00	8.04		27.40	SAMPLED SEMI-ANNUALLY			--	--	--
	05/08/00	9.10		26.34	131[19]	ND	ND	ND	ND	ND/4.83[12]
	08/08/00	9.91		25.53	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-11 (cont)	05/21/93	9.40	7.0-19.0	26.43	7,100	64	ND	340	120	--
	06/22/93	9.87		25.96	--	--	--	--	--	--
	07/23/93	10.29		25.54	--	--	--	--	--	--
	08/23/93	10.73		25.10	5,400	68	ND	230	43	--
35.50	09/24/93	10.83		24.67	--	--	--	--	--	--
	11/23/93	11.28		24.22	3,400	105	ND	120	43	--
	02/24/94	9.20		26.30	4,600	170	ND	140	36	--
	05/25/94	9.94		25.56	1,400	49	ND	26	ND	--
	08/23/94	11.39		24.11	7,300	250	13	150	42	--
	11/23/94	10.67		24.83	5,800	250	10	120	22	--
	02/03/95	8.02		27.48	4,400	110	ND	150	37	--
	05/10/95	8.36		27.14	4,200	120	ND	170	38	--
	08/02/95	9.31		26.19	4,200	110	ND	110	22	--
	11/02/95	10.85		24.65	6,100	150	ND	78	6.8	6,200
	02/08/96	7.76		27.74	--	--	--	--	--	--
	02/14/96[6]	8.18		27.32	3,100	60	ND	98	ND	4,000
	05/08/96	8.50		27.00	3,500	120	ND	160	ND	6,400
	08/09/96	9.46		26.04	1,100	42	ND	15	ND	4,300
	11/07/96	10.58		24.92	2,900	57	ND	13	ND	3,400
	02/10-11/97	7.88		27.62	600	9.5	ND	ND	ND	3,100
	05/07/97	9.07		26.43	1,900	45	ND	31	ND	2,400
	08/05/97	10.23		25.27	2,100	35	ND	24	ND	1,800
	11/04/97	10.51		24.99	98	1.6	ND	ND	ND	ND
	02/12/98	6.59		28.91	670	12	ND[7]	ND[7]	ND[7]	1,400
	05/15/98	7.73		27.77	1,200[9]	7.9	ND[7]	30	ND[7]	1,600
35.50	08/12/98	8.85		26.65	1,600[11]	ND[7]	ND[7]	ND[7]	ND[7]	2,000
	11/12/98	9.52		25.98	1,700[13]	9.3	ND[7]	ND[7]	ND[7]	1,700
	03/01/99	8.00		27.50	530	4.9	ND[7]	ND[7]	ND[7]	870
	05/12/99	8.64		26.86	900	6.6	ND[7]	ND[7]	ND[7]	840
	08/11/99	9.92		25.58	1,660	5.52	ND[7]	ND[7]	ND[7]	764
	11/04/99	10.88		24.62	2,600[11]	8.71	ND[7]	2.76	ND[7]	1,490
	02/29/00	7.56		27.94	420[19]	ND	ND	ND	ND	1,010

As of 11/07/02

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-10	11/04/97	11.02	8.0-20.0	25.02	4,500	49	ND	63	ND	84
(cont)	02/12/98	6.85		29.19	6,200	98	ND[7]	91	ND[7]	420
36.02	05/15/98	8.05		27.97	7,200	84	ND[7]	84	ND[7]	260
	08/12/98	9.27		26.75	7,500	6.9	11	47	ND[7]	130
	11/12/98	10.03		25.99	4,200[13]	23	ND[7]	24	ND[7]	130
	03/01/99	8.56		27.46	5,900[8]	37	ND[7]	50	26	300
	05/12/99	8.92		27.10	7,400[16]	37	ND[7]	32	ND[7]	170
	08/11/99	10.10		25.92	5,060	38.1	ND[7]	12.9	ND[7]	75.5
	11/04/99	11.03		24.99	6,190[11]	76.7	8.01	13.4	ND[7]	234
	02/29/00	9.67		26.35	7,120[11]	27.8	ND[7]	24.7	ND[7]	208
	05/08/00	10.54		25.48	5,830[11]	51.7	10.6	24.7	24.8	142
	08/08/00	10.92		25.10	5,010[11]	50.6	ND[7]	13.9	ND[7]	113
	11/06/00	11.34		24.68	6,260[11]	47.9	ND[7]	12.5	ND[7]	118
	02/07/01	10.75		25.27	4,800[17]	56	10	ND[7]	ND[7]	780
	05/09/01	9.84		26.18	6,810[11]	52.4	ND[7]	ND[7]	ND[7]	161
	08/24/01	11.16		24.86	5,600[11]	56	<10	<10	<10	<100
	11/16/01	11.38		24.64	5,600[11]	49	<10	<10	<10	190
	02/21/02	9.20		26.82	5,000[11]	38	<5.0	8.5	<5.0	140
	05/10/02	9.87		26.15	5,300[11]	57	6.3	8.2	<5.0	<50
	08/26/02[21]	11.02		25.00	7,000	<5.0	<5.0	5.4	<10	<20
	11/07/02[21]	**11.32**		**24.70**	**3,500[22]**	**<2.5**	**<2.5**	**<2.5**	**<5.0**	**<10**
MW-11	08/20/92	--	7.0-19.0	--	4,600[1]	62	ND	ND	54	--
35.83	09/16/92	12.93		22.90	--	--	--	--	--	--
	10/12/92	13.30		22.53	--	--	--	--	--	--
	11/10/92	13.20		22.63	5,800	130	ND	260	42	--
	12/10/92	12.24		23.59	--	--	--	--	--	--
	01/15/93	9.23		26.60	--	--	--	--	--	--
	02/20/93	8.20		27.63	18,000	76	ND	1,000	630	--
	03/18/93	8.77		27.06	--	--	--	--	--	--
	04/20/93	8.86		26.97	--	--	--	--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-10	08/20/92	--	8.0-20.0	--	15,000	230	ND	1,000	350	--
36.26	09/16/92	13.28		22.98	--	--	--	--	--	--
	10/12/92	13.67		22.59	--	--	--	--	--	--
	11/10/92	13.59		22.67	15,000	300	42	3,500	330	--
	12/10/92	12.53		23.73	--	--	--	--	--	--
	01/15/93	9.60		26.66	--	--	--	--	--	--
	02/20/93	8.57		27.69	17,000	74	ND	1,000	620	--
	03/18/93	9.03		27.23	--	--	--	--	--	--
	04/20/93	9.09		27.17	--	--	--	--	--	--
	05/21/93	9.63		26.63	23,000	250	ND	3,000	240	--
	06/22/93	10.12		26.14	--	--	--	--	--	--
	07/23/93	10.54		25.72	--	--	--	--	--	--
	08/23/93	10.99		25.27	20,000	230	13	3,200	140	--
	09/24/93	11.17		24.87	--	--	--	--	--	--
36.04	11/23/93	11.67		24.37	18,000	300	10	2,800	110	--
	02/24/94	9.57		26.47	15,000	330	19	2,000	83	--
	05/25/94	10.32		25.72	14,000	240	ND	230	62	--
	08/23/94	11.81		24.23	16,000	250	41	1,800	74	--
	11/23/94	11.10		24.94	16,000	260	ND	1,600	49	--
	02/03/95	8.32		27.72	17,000	310	ND	1,500	93	--
	05/10/95	8.70		27.34	12,000	260	16	1,200	54	--
	08/02/95	9.55		26.49	8,900	240	ND	780	40	--
	11/02/95	11.03		25.01	9,300	190	ND	470	1.7	110
	02/08/96	8.05		27.99	9,700	170	ND	440	ND	ND
	05/08/96	8.70		27.34	7,100	100	ND	240	ND	43
	08/09/96	9.76		26.28	4,400	59	7.5	110	6.5	73
	11/07/96	10.92		25.12	6,300	65	ND	110	ND	130
	02/10-11/97	8.10		27.94	6,800	91	ND	100	ND	210
	05/07/97	9.28		26.76	4,800	76	ND	50	ND	160
	08/05/97	10.51		25.53	4,200	52	ND	40	ND	81

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-9	05/08/96	8.75	8.0-19.0	27.54	1,700	1.9	22	1.7	2.7	ND
(cont)	08/09/96	9.84		26.45	200	ND	4.5	ND	0.58	ND
	11/07/96	11.10		25.19	920	24	ND	ND	ND	ND
	02/10-11/97	8.15		28.14	580	14	2.4	ND	ND	16
	05/07/97	9.45		26.84	810	11	3.9	1.7	9.9	13
	08/05/97	10.70		25.59	850[1]	21	ND	ND	ND	33
	11/04/97	11.05		25.24	730	11	ND	5.1	11	ND
	02/12/98	6.60		29.69	820[8]	23	3.2	ND[7]	ND[7]	18
36.27	05/15/98	8.01		28.26	390	5.5	1.2	ND	13	13
	08/12/98	9.18		27.09	780	14	ND	0.52	ND	12
	11/12/98	9.91		26.36	180	6.3	ND	ND	0.62	8.1
	03/01/99	8.34		27.93	790[8]	24	ND	ND	1.7	32
	05/12/99	9.04		27.23	930[16]	13	2.2	1.2	1.5	10
	08/11/99	10.25		26.02	1,120	19.7	ND[7]	ND[7]	ND[7]	ND[7]
	11/04/99	11.10		25.17	756[11]	14.2	1.94	ND[7]	ND[7]	22.8
	02/29/00	8.12		28.15	955[19]	22.9	ND[7]	ND[7]	ND[7]	ND[7]
	05/08/00	9.09		27.18	895[19]	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]
	08/08/00	10.08		26.19	630[11]	18.2	ND[7]	ND[7]	ND[7]	ND[7]
	11/06/00	10.52		25.75	712[19]	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]
	02/07/01	9.78		26.49	750[17]	ND[7]	ND[7]	ND[7]	ND[7]	66
	05/09/01	9.98		26.29	704[19]	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]
	08/24/01	11.34		24.93	770[19]	<1.2	<1.2	<1.2	<1.2	<12
	11/16/01	11.63		24.64	540[19]	<1.0	<1.0	<1.0	<1.0	<10
	02/21/02	9.35		26.92	380[19]	<0.50	<0.50	<0.50	<0.50	<5.0
	05/10/02	10.00		26.27	300[19]	<0.50	0.67	<0.50	<0.50	<5.0
	08/26/02[21]	11.17		25.10	680	<0.50	<0.50	<0.50	<1.0	<2.0
	11/07/02[21]	**11.56**		**24.71**	**250[22]**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**<2.0**

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-8 (cont)	11/16/01	12.27	8.0-19.0	24.60	1,000[19]	<2.0	<2.0	<2.0	<2.0	<20
	02/21/02	10.03		26.84	--	--	--	--	--	--
	05/10/02	10.63		26.24	400[19]	<0.50	0.78	<0.50	<0.50	<5.0
	08/26/02	11.80		25.07	SAMPLED SEMI-ANNUALLY			--	--	--
	11/07/02[21]	**11.97**		**24.90**	**200[22]**	**<0.50**	**<0.50**	**<0.50**	**<1.0**	**5.0**
MW-9	05/19/92	--	8.0-19.0	--	8,100	11	ND	25	5.8	--
	08/20/92	--		--	3,800[1]	37	ND	ND	ND	--
36.92	09/16/92	13.90		23.02	--	--	--	--	--	--
	10/12/92	14.28		22.64	--	--	--	--	--	--
	11/10/92	14.22		22.70	4,200	ND	ND	21	23	--
	12/10/92	13.40		23.52	--	--	--	--	--	--
	01/15/93	10.24		26.68	--	--	--	--	--	--
	02/20/93	9.22		27.70	2,300	47	ND	32	ND	--
	03/18/93	9.55		27.37	--	--	--	--	--	--
	04/20/93	9.62		27.30	--	--	--	--	--	--
	05/21/93	10.16		26.76	3,200	32	ND	8.1	ND	--
	06/22/93	10.62		26.30	--	--	--	--	--	--
	07/23/93	11.07		25.85	--	--	--	--	--	--
	08/23/93	11.54		25.38	3,000	29	ND	ND	ND	--
	09/24/93	11.18		25.11	--	--	--	--	--	--
36.29	11/23/93	11.80		24.49	2,500	23	2.1	ND	ND	--
	02/24/94	9.74		26.55	2,900	35	ND	ND	ND	--
	05/25/94	10.48		25.81	ND	ND	ND	ND	ND	--
	08/23/94	11.99		24.30	2,800	28	32	ND	ND	--
	11/23/94	11.31		24.98	2,000	24	2.2	2.2	2.5	--
	02/03/95	8.45		27.84	2,100	26	2.5	ND	ND	--
	05/10/95	8.70		27.59	1,700	0.81	2.2	1.0	1.4	--
	08/02/95	9.75		26.54	1,900	26	6.6	ND	3.9	--
	11/02/95	11.16		25.13	1,600	ND	1.3	ND	ND	11
	02/08/96	8.15		28.14	1,900	ND	ND	ND	ND	ND

As of 11/07/02

Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-8	02/24/94	10.44	8.0-19.0	26.45	1,200	10	2.3	ND	3.2	--
(cont)	05/25/94	11.12		25.77	14,000	29	ND	ND	ND	--
	08/23/94	12.61		24.28	3,200	46	18	2.0	7.2	--
	11/23/94	11.98		24.91	1,700	34	ND	ND	3.1	--
	02/03/95	9.16		27.73	800	6.1	ND	ND	ND	--
	05/10/95	9.35		27.54	1,400	15	1.5	0.65	0.84	--
	08/02/95	10.40		26.49	690	8.3	1.9	ND	ND	--
	11/02/95	11.80		25.09	1,200	ND	1.9	0.56	ND	6.4
	02/08/96	8.98		27.91	--	--	--	--	--	--
	02/14/96[6]	9.24		27.65	650	9.0	1.2	ND	0.52	ND
	05/08/96	9.46		27.43	1,200	0.7	35	2.2	3.0	ND
	08/09/96	10.47		26.42	350	ND	12	0.81	0.95	ND
	11/07/96	11.71		25.18	1,000	23	ND	ND	ND	ND
	02/10-11/97	8.84		28.05	630	13	ND	ND	8.1	ND
	05/07/97	10.12		26.77	1,200[1]	26	3.4	ND	20	20
	08/05/97	11.26		25.63	590[1]	9.8	ND	ND	ND	ND
	11/04/97	11.58		25.31	640	14	1.9	5.7	11	ND
	02/12/98	7.34		29.55	770[8]	20	3.0	ND[7]	ND[7]	ND[7]
36.87	05/15/98	8.67		28.20	840[8]	10	ND[7]	ND[7]	3.1	ND[7]
	08/12/98	9.78		27.09	240[10]	0.75	ND	ND	ND	ND
	11/12/98	10.62		26.25	300	14	2.0	ND[7]	ND[7]	ND[7]
	03/01/99	9.02		27.85	1,100	22	4.6	2.1	4.9	12
	05/12/99	9.65		27.22	650	17	ND[7]	ND[7]	ND[7]	ND[7]
	08/11/99	10.85		26.02	168	6.68	ND	0.544	ND	ND
	11/04/99	11.72		25.15	1,010[11]	15.8	2.28	ND[7]	ND[7]	16.2
	02/29/00	8.25		28.62	SAMPLED SEMI-ANNUALLY			--	--	--
	05/08/00	9.21		27.66	199[19]	6.26	ND	ND	ND	ND
	08/08/00	10.35		26.52	--	--	--	--	--	--
	11/06/00	10.76		26.11	797[19]	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]
	02/07/01	10.16		26.71	--	--	--	--	--	--
	05/09/01	10.62		26.25	695[19]	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]
	08/24/01	11.97		24.90	SAMPLED SEMI-ANNUALLY			--	--	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-7 (cont)	08/11/99	9.44	11.0-21.5	26.62	4,700[17]	61.6	ND[7]	58.2	23.6	187
	11/04/99	10.38		25.68	5,980[11]	56.3	ND[7]	44.5	21.2	194
	02/29/00	7.06		29.00	SAMPLED SEMI-ANNUALLY			--	--	--
	05/08/00	8.15		27.91	6,600[11]	80.0	ND[7]	99.6	66.5	ND[7]
	08/08/00	9.21		26.85	--	--	--	--	--	--
	11/06/00	9.77		26.29	6,030[11]	56.3	ND[7]	156	63.1	281
	02/07/01	9.02		27.04	--	--	--	--	--	--
	05/09/01	9.38		26.68	7,460[11]	45.0	ND[7]	186	94.4	ND[7]
	08/24/01	10.73		25.33	SAMPLED SEMI-ANNUALLY			--	--	--
	11/16/01	10.97		25.09	8,000[11]	50	<10	61	18	<100
	02/21/02	8.60		27.46	--	--	--	--	--	--
	05/10/02	9.28		26.78	7,100[11]	<5.0	<5.0	140	63	<50
	08/26/02	10.40		25.66	SAMPLED SEMI-ANNUALLY			--	--	--
	11/07/02[21]	**10.95**		**25.11**	**3,400[22]**	**3.1**	**<0.50**	**25**	**7.8**	**<2.0**
MW-8	05/19/92	--	8.0-19.0	--	5,300	28	3.3	2.6	2.1	--
	08/20/92	--		--	3,500[1]	67	11	ND	ND	--
37.14	09/16/92	14.13		23.01	--	--	--	--	--	--
	10/12/92	14.51		22.63	--	--	--	--	--	--
	11/10/92	14.46		22.68	1,800	20	ND	ND	ND	--
	12/10/92	13.51		23.63	--	--	--	--	--	--
	01/15/93	10.50		26.64	--	--	--	--	--	--
	02/20/93	9.50		27.64	2,200	32	ND	42	5.0	--
	03/18/93	9.89		27.25	--	--	--	--	--	--
	04/20/93	9.91		27.23	--	--	--	--	--	--
	05/21/93	10.40		26.74	2,500	44	ND	ND	ND	--
	06/22/93	10.86		26.28	--	--	--	--	--	--
	07/23/93	11.29		25.85	--	--	--	--	--	--
	08/23/93	11.76		25.38	280[1]	49	4.5	ND	ND	--
36.89	09/24/93	12.00		24.89	--	--	--	--	--	--
	11/23/93	12.38		24.51	1,800	ND	3.4	ND	ND	--

As of 11/07/02

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-7	01/15/93	9.59	11.0-21.5	26.81	--	--	--	--	--	--
(cont)	02/20/93	8.55		27.85	1,800	37	4.6	11	7.7	--
	03/18/93	8.98		27.42	--	--	--	--	--	--
	04/20/93	8.52		27.88	--	--	--	--	--	--
	05/21/93	9.16		27.24	22,000	330	37	2,100	2,900	--
	06/22/93	9.66		26.74	--	--	--	--	--	--
	07/23/93	10.15		26.25	--	--	--	--	--	--
	08/23/93	10.65		25.75	33,000	360	ND	2,500	4,300	--
36.09	09/24/93	10.77		25.32	--	--	--	--	--	--
	11/23/93	11.28		24.81	19,000	310	30	2,500	2,300	--
	02/24/94[5]	8.95		27.14	16,000	220	19	2,400	3,200	--
	05/25/94	10.00		26.09	14,000	200	ND	1,500	1,800	--
	08/23/94	11.43		24.66	19,000	210	50	2,000	2,800	--
	11/23/94	10.69		25.40	10,000	220	ND	1,000	730	--
	02/03/95	7.49		28.60	26,000	170	ND	2,300	3,700	--
	05/10/95	7.88		28.21	1,300	13	1.5	170	230	--
	08/02/95	9.02		27.07	15,000	200	ND	2,200	2,000	--
	11/02/95	10.55		25.54	18,000	190	9.4	2,100	2,200	72
	02/08/96	7.13		28.96	19,000	150	ND	2,100	3,000	ND
	05/08/96	7.11		28.98	13,000	130	18	1,900	1,600	85
	08/09/96	9.07		27.02	11,000	67	ND	1,700	1,800	ND
	11/07/96	10.76		25.33	32,000	160	ND	3,300	8,400	570
	02/10-11/97	7.22		28.87	7,100	55	ND	ND	620	ND
	05/07/97	8.47		27.62	6,000	74	ND	560	330	250
	08/05/97	10.25		25.84	5,000	66	ND	420	240	ND
	11/04/97	10.69		25.40	20,000	67	ND	2,300	4,300	430
	02/12/98	5.02		31.07	5,500	95	ND[7]	150	110	ND[7]
36.06	05/15/98	6.98		29.08	1,300	ND[7]	ND[7]	69	64	88
	08/12/98	8.42		27.64	1,400	12	2.3	67	ND[7]	30
	11/12/98	9.10		26.96	6,300[13]	63	ND[7]	230	100	ND[7]
	03/01/99	7.14		28.92	1,000	24	ND[7]	23	26	39
	05/12/99	8.07		27.99	4,700	79	ND[7]	120	210	210

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-6 (cont) 35.68	11/07/96	10.12	8.0-20.0	25.55	ND	ND	ND	ND	ND	ND
	02/10-11/97	6.88		28.79	ND	ND	ND	ND	ND	ND
	05/07/97	8.32		27.35	ND	ND	1.1	ND	ND	ND
	08/05/97	9.64		26.03	55	0.79	ND	ND	ND	ND
	11/04/97	10.30		25.37	ND	ND	ND	ND	ND	ND
	02/12/98	5.10		30.57	ND	ND	ND	ND	ND	ND
	05/15/98	6.61		29.07	ND	ND	ND	ND	ND	ND
	08/12/98	8.02		27.66	ND	ND	ND	ND	ND	ND
	11/12/98	8.74		26.94	ND	ND	ND	ND	ND	ND
	03/01/99	7.22		28.46	ND	ND	ND	ND	ND	ND
	05/12/99	8.05		27.63	ND	ND	ND	ND	ND	ND
	08/11/99	9.53		26.15	ND	ND	ND	ND	ND	ND
	11/04/99	10.44		25.24	ND	ND	ND	ND	ND	ND
	02/29/00	NOT MONITORED/SAMPLED			--	--	--	--	--	--
	08/08/00	9.16		26.52	--	--	--	--	--	--
	11/06/00	9.28		26.40	--	--	--	--	--	--
	02/07/01	9.18		26.50	--	--	--	--	--	--
	05/09/01	8.76		26.92	--	--	--	--	--	--
	08/24/01	10.33		25.35	--	--	--	--	--	--
	11/16/01	9.97		25.71	--	--	--	--	--	--
	02/21/02	7.86		27.82	--	--	--	--	--	--
	05/10/02	8.93		26.75	--	--	--	--	--	--
	08/26/02	10.09		25.59	--	--	--	--	--	--
	11/07/02	**9.93**		**25.75**	--	--	--	--	--	--
MW-7 36.40	05/19/92	--	11.0-21.5	--	17,000	540	90	1,200	1,900	--
	08/20/92	--		--	13,000	460	54	ND	3,100	--
	09/16/92	13.23		23.17	--	--	--	--	--	--
	10/12/92	13.65		22.75	--	--	--	--	--	--
	11/10/92	13.54		22.86	1,800	74	ND	230	350	--
	12/10/92	12.52		23.88	--	--	--	--	--	--

Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-5	05/10/02	9.47	7.0-22.5	26.45	23,000[11]	86	<25	1,500	450	<250
(cont)	08/26/02	10.60		25.32	SAMPLED SEMI-ANNUALLY			--	--	--
	11/07/02[21]	**10.83**		**25.09**	**8,000[22]**	**<2.5**	**<2.5**	**650**	**<5.0**	**<10**
MW-6	05/19/92	--	8.0-20.0	--	1,300	2.0	2.1	ND	2.7	--
	08/20/92	--		--	280	8.4	ND	0.51	0.84	--
36.03	09/16/92	12.91		23.12	--	--	--	--	--	--
	10/12/92	13.28		22.75	--	--	--	--	--	--
	11/10/92	13.18		22.85	490	7.0	1.2	1.7	ND	--
	12/10/92	12.33		23.70	--	--	--	--	--	--
	01/15/93	9.25		26.78	--	--	--	--	--	--
	02/20/93	8.24		27.79	2,400	43	ND	33	2.0	--
	03/18/93	8.74		27.29	--	--	--	--	--	--
	04/20/93	8.12		27.91	--	--	--	--	--	--
	05/21/93	8.83		27.20	940	18	1.0	7.1	2.7	--
	06/22/93	9.38		26.65	--	--	--	--	--	--
	07/23/93	9.87		26.16	--	--	--	--	--	--
	08/23/93	10.35		25.68	1,000	9.4	2.3	5.0	2.3	--
35.67	09/24/93	10.34		25.33	--	--	--	--	--	--
	11/23/93	10.96		24.71	520	ND	1.7	1.9	0.82	--
	02/24/94[5]	8.39		27.28	810	12	ND	2.6	0.77	--
	05/25/94	9.55		26.12	500	11	ND	ND	0.73	--
	08/23/94	10.97		24.70	570	8.8	2.5	3.2	2.6	--
	11/23/94	10.21		25.46	460	6.4	1.1	1.9	1.1	--
	02/03/95	6.99		28.68	660	4.8	13	1.4	ND	--
	05/10/95	7.53		28.14	470	ND	0.65	1.4	0.67	--
	08/02/95	8.68		26.99	360	3.2	ND	1.6	ND	--
	11/02/95	10.20		25.47	470	ND	0.92	0.89	0.58	5.5
	02/08/96	6.66		29.01	450	3.1	ND	1.1	0.68	ND
	05/08/96	7.40		28.27	ND	ND	ND	ND	ND	ND
	08/09/96	8.72		26.95	ND	ND	ND	ND	ND	ND

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-5 (cont)	11/23/94	10.71	7.0-22.5	25.23	46,000	230	260	3,900	14,000	--
	02/03/95	7.69		28.25	56,000	140	330	3,500	13,000	--
	05/10/95	8.20		27.74	27,000	160	170	2,200	5,200	--
	08/02/95	9.23		26.71	65,000	260	300	3,500	12,000	--
	11/02/95	10.70		25.24	240	0.76	ND	1.1	ND	ND
	02/08/96	7.36		28.58	54,000	210	150	3,400	12,000	170
	05/08/96	8.25		27.69	52,000	170	200	3,600	11,000	170
	08/09/96	9.37		26.57	25,000	54	16	1,700	4,700	ND
	11/07/96	10.65		25.29	2,100	42	ND	9.3	ND	2,300
	02/10-11/97	7.63		28.31	15,000	46	29	1,400	4,100	ND
	05/07/97	8.98		26.96	38,000	120	ND	2,000	5,100	380
	08/05/97	11.08		24.86	310	1.0	ND	17	40	ND
	11/04/97	10.72		25.22	20,000	ND	ND	1,500	2,800	280
	02/12/98	6.08		29.86	33,000	120	ND[7]	1,700	3,800	ND[7]
35.92	05/15/98	7.40		28.52	30,000	ND[7]	ND[7]	2,200	4,900	ND[7]
	08/12/98	8.69		27.23	24,000	100	ND[7]	ND[7]	3,400	1,000
	11/12/98	9.48		26.44	13,000[13]	65	ND[7]	1,100	1,400	780
	03/01/99	7.54		28.38	29,000	75	ND[7]	2,000	4,100	690
	05/12/99	8.48		27.44	19,000	110	ND[7]	990	1,900	330
	08/11/99	9.74		26.18	24,300	ND[7]	ND[7]	1,540	1,740	ND[7]
	11/04/99	10.56		25.36	19,500[17]	37.1	ND[7]	1,300	1,030	ND[7]
	02/29/00	7.19		28.73	SAMPLED SEMI-ANNUALLY			--	--	--
	05/08/00	8.23		27.69	25,700[11]	37.6	ND[7]	2,020	3,500	ND[7]
	08/08/00	9.51		26.41	--	--	--	--	--	--
	11/06/00	10.04		25.88	14,100[11]	37.1	ND[7]	1,250	497	ND[7]
	02/07/01	9.23		26.69	--	--	--	--	--	--
	05/09/01	9.44		26.48	15,600[11]	ND[7]	ND[7]	1,290	476	ND[7]
	08/24/01	10.75		25.17	SAMPLED SEMI-ANNUALLY			--	--	--
	11/16/01	10.93		24.99	15,000[11]	40	<25	1,100	54	<250
	02/21/02	8.52		27.40	--	--	--	--	--	--

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Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-4	05/09/01	9.16	7.0-19.5	27.88	--	--	--	--	--	--
(cont)	08/24/01	11.80		25.24	--	--	--	--	--	--
	11/16/01	10.46		26.58	--	--	--	--	--	--
	02/21/02	9.37		27.67	--	--	--	--	--	--
	05/10/02	10.41		26.63	--	--	--	--	--	--
	08/26/02	11.55		25.49	--	--	--	--	--	--
	11/07/02	**10.44**		**26.60**	--	--	--	--	--	--
MW-5	05/04/91	--	7.0-22.5	--	69,000	1,400	2,500	3,500	15,000	--
	09/19/91	--		--	57,000	1,600	2,700	5,200	20,000	--
	12/18/91	--		--	31,000	1,600	3,100	4,800	19,000	--
	03/17/92	--		--	81,000	850	1,600	4,800	18,000	--
	05/19/92	--		--	84,000	760	1,500	4,000	17,000	--
	08/20/92	--		--	58,000	660	1,700	4,200	19,000	--
36.40	09/16/92	13.37		23.03	--	--	--	--	--	--
	10/12/92	13.75		22.65	--	--	--	--	--	--
	11/10/92	13.68		22.72	57,000	800	1,800	4,400	18,000	--
	12/10/92	12.58		23.82	--	--	--	--	--	--
	01/15/93	9.71		26.69	--	--	--	--	--	--
	02/20/93	8.69		27.71	17,000	75	ND	1,000	620	--
	03/18/93	9.16		27.24	--	--	--	--	--	--
	04/20/93	8.88		27.52	--	--	--	--	--	--
	05/21/93	9.56		26.84	55,000	ND	160	3,500	12,000	--
	06/22/93	10.05		26.35	--	--	--	--	--	--
	07/23/93	10.53		25.87	--	--	--	--	--	--
	08/23/93	10.98		25.42	61,000	340	380	3,600	14,000	--
35.94	09/24/93	10.94		25.00	--	--	--	--	--	--
	11/23/93	11.45		24.49	46,000	290	310	4,100	15,000	--
	02/24/94	9.02		26.92	57,000	140	400	4,400	16,000	--
	05/25/94	10.03		25.91	53,000	ND	ND	4,000	14,000	--
	08/23/94	11.57		24.37	61,000	360	380	4,800	17,000	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
	07/23/93	11.38	7.0-19.5	26.02	--	--	--	--	--	--
MW-4	08/23/93	11.86		25.54	1,200	5.0	ND	16	ND	--
(cont)	09/24/93	11.85		25.19	--	--	--	--	--	--
37.04	11/23/93	12.44		24.60	720	10	ND	8.7	ND	--
	02/24/94	9.89		27.15	1,300	8.9	ND	20	ND	--
	05/25/94	11.02		26.02	1,700	22	ND	4.5	ND	--
	08/23/94	12.57		24.47	690	9.2	1.3	7.1	1.9	--
	11/23/94	11.65		25.39	420	5.0	1.1	4.2	1.2	--
	02/03/95	8.52		28.52	620	6.4	ND	9.3	ND	--
	05/10/95	9.97		27.07	280	2.8	ND	2.7	2.4	--
	08/02/95	10.18		26.86	290	3.6	ND	2.8	ND	--
	11/02/95	11.67		25.37	42,000	390	210	2,800	6,300	270
	02/08/96	8.15		28.89	130	2.1	ND	1.5	0.69	ND
	05/08/96	INACCESSIBLE		--	--	--	--	--	--	--
	08/09/96	10.24		26.80	ND	ND	ND	ND	ND	ND
	11/07/96	11.58		25.46	ND	ND	ND	ND	ND	ND
	02/10-11/97	8.45		28.59	ND	ND	ND	ND	ND	ND
	05/07/97	9.85		27.19	ND	ND	ND	ND	ND	ND
	08/05/97	11.04		26.00	50	0.76	ND	ND	ND	ND
	11/04/97	11.46		25.58	ND	ND	ND	ND	ND	ND
	02/12/98	5.75		31.29	ND	ND	ND	ND	ND	ND
	05/15/98	7.28		29.76	ND	ND	ND	ND	ND	ND
37.04	08/12/98	9.85		27.19	ND	ND	ND	ND	ND	ND
	11/12/98	10.28		26.76	ND	ND	ND	ND	ND	ND
	03/01/99	8.51		28.53	ND	ND	ND	ND	ND	ND
	05/12/99	9.32		27.72	ND	ND	ND	ND	ND	ND
	08/11/99	10.65		26.39	ND	ND	ND	ND	ND	ND
	11/04/99	11.48		25.56	ND	ND	ND	ND	ND	ND
	02/29/00	NOT MONITORED/SAMPLED			--	--	--	--	--	--
	08/08/00	10.67		26.37	--	--	--	--	--	--
	11/06/00	10.56		26.48	--	--	--	--	--	--
	02/07/01	10.40		26.64	--	--	--	--	--	--

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Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3	05/12/99	8.92	7.0-22.5	27.50	ND	ND	ND	ND	ND	ND
(cont)	08/11/99	10.18		26.24	ND	ND	ND	ND	ND	ND
	11/04/99	11.06		25.36	ND	ND	ND	ND	ND	ND
	02/29/00	NOT MONITORED/SAMPLED			--	--	--	--	--	--
	08/08/00	10.03		26.39	--	--	--	--	--	--
	11/06/00	10.10		26.32	--	--	--	--	--	--
	02/07/01	9.81		26.61	--	--	--	--	--	--
	05/09/01	9.58		26.84	--	--	--	--	--	--
	08/24/01	11.12		25.30	--	--	--	--	--	--
	11/16/01	10.84		25.58	--	--	--	--	--	--
	02/21/02	8.68		27.74	--	--	--	--	--	--
	05/10/02	9.71		26.71	--	--	--	--	--	--
	08/26/02	10.85		25.57	--	--	--	--	--	--
	11/07/02	**10.89**		**25.53**	**--**	**--**	**--**	**--**	**--**	**--**
MW-4	05/04/91	--	7.0-19.5	--	6,300	ND	ND	2.8	61	--
	09/19/91	--		--	1,800	0.83	ND	54	46	--
	12/18/91	--		--	2,500	28	2.5	54	22	--
	03/17/92	--		--	1,800	3.7	1.4	90	21	--
	05/19/92	--		--	2,000	20	3.5	42	8.3	--
	08/20/92	--		--	1,000	15	ND	11	3.0	--
37.40	09/16/92	14.31		23.09	--	--	--	--	--	--
	10/12/92	14.72		22.68	--	--	--	--	--	--
	11/10/92	14.57		22.83	690	9.1	ND	16	2.8	--
	12/10/92	13.67		23.73	--	--	--	--	--	--
	01/15/93	10.62		26.78	--	--	--	--	--	--
	02/20/93	9.59		27.81	2,400	40	2.1	33	ND	--
	03/18/93	9.97		27.43	--	--	--	--	--	--
	04/20/93	9.67		27.73	--	--	--	--	--	--
	05/21/93	10.32		27.08	1,900	31	ND	20	4.5	--
	06/22/93	10.91		26.49	--	--	--	--	--	--

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Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-3	12/10/92	13.15	7.0-22.5	23.69	--	--	--	--	--	--
(cont)	01/15/93	10.07		26.77	--	--	--	--	--	--
	02/20/93	9.02		27.82	1,600	12	18	8.9	12	--
	03/18/93	9.50		27.34	--	--	--	--	--	--
	04/20/93	9.02		27.82	--	--	--	--	--	--
	05/21/93	9.70		27.14	2,600	42	ND	43	15	--
	06/22/93	10.28		26.56	--	--	--	--	--	--
	07/23/93	10.74		26.10	--	--	--	--	--	--
	08/23/93	11.24		25.60	2,900	25	ND	50	18	--
36.42	09/24/93	11.20		25.22	--	--	--	--	--	--
	11/23/93	11.78		24.64	2,300	34	ND	24	5.6	--
	02/24/94	9.21		27.21	3,400	46	ND	53	11	--
	05/25/94	10.34		26.08	1,400	20	ND	ND	ND	--
	08/23/94	11.88		24.54	2,900	37	49	14	2.9	--
	11/23/94	10.98		25.44	3,200	48	ND	22	ND	--
	02/03/95	7.82		28.60	780	13	ND	2.1	ND	--
	05/10/95	8.38		28.04	1,300	ND	ND	ND	ND	--
	08/02/95	9.49		26.93	1,500	6.3	ND	16	2.1	15
	11/02/95	11.00		25.42	1,100	5.2	2.1	7.4	0.5	ND
	02/08/96	7.41		29.01	450	ND	ND	ND	ND	ND
	05/08/96	8.20		28.22	590	ND	11	10	ND	ND
	08/09/96	9.53		26.89	ND	ND	ND	ND	ND	5.6
	11/07/96	10.96		25.46	140	1.2	ND	ND	ND	ND
	02/10-11/97	7.71		28.71	89	1.8	ND	ND	5.1	5.1
	05/07/97	9.17		27.25	52[2]	ND	ND	ND	ND	ND
	08/05/97	10.27		26.15	ND	ND	ND	ND	ND	6.2
	11/04/97	10.83		25.59	93	1.8	ND	ND	ND	2.7
	02/12/98	6.00		30.42	56	0.59	ND	ND	0.63	10
36.42	05/15/98	7.42		29.00	130[8]	0.68	ND	ND	ND	ND
	08/12/98	8.84		27.58	50	ND	ND	ND	ND	3.8
	11/12/98	9.57		26.85	60[13]	ND	ND	ND	ND	3.2
	03/01/99	8.74		27.68	66	ND	ND	ND	ND	

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Groundwater Monitoring Data and Analytical Results

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San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-2	11/04/97	10.65	7.0-19.5	25.69	1,200	16	ND	11	25	53
(cont)	02/12/98	6.20		30.14	630	12	ND[7]	7.3	ND[7]	48
36.30	05/15/98	7.50		28.80	3,600	19	ND[7]	33	ND[7]	72
	08/12/98	8.82		27.48	3,100	44	6.1	15	5.7	270
	11/12/98	9.60		26.70	3,200[13]	44	ND[7]	15	ND[7]	180
	03/01/99	7.81		28.49	3,600	45	6.2	7.5	ND[7]	570
	05/12/99	8.65		27.65	3,100	65	ND[7]	15	17	450
	08/11/99	9.95		26.35	3,260	33.6	ND[7]	ND[7]	ND[7]	154
	11/04/99	10.78		25.52	3,160[11]	38.9	7.10	ND[7]	ND[7]	120
	02/29/00	7.44		28.86	3,770[11]	13.5	ND[7]	12.0	ND[7]	105
	05/08/00	8.42		27.88	3,840[11]	ND[7]	ND[7]	9.54	ND[7]	ND[7]
	08/08/00	9.66		26.64	3,080[11]	40.8	ND[7]	ND[7]	ND[7]	149
	11/06/00	9.79		26.51	2,510[11]	38.8	4.42	ND[7]	ND[7]	82.6
	02/07/01	9.43		26.87	9,300[19]	140	120	71	140	790
	05/09/01	9.65		26.65	3,300[11]	37.9	ND[7]	ND[7]	ND[7]	120
	08/24/01	11.06		25.24	3,100[19]	<5.0	<5.0	<5.0	<5.0	<50
	11/16/01	11.19		25.11	2,200[11]	28	<5.0	<5.0	<5.0	76
	02/21/02	8.73		27.57	2,700[11]	33	<5.0	<5.0	<5.0	100
	05/10/02	9.71		26.59	2,300[11]	30	<5.0	<5.0	<5.0	<50
	08/26/02[21]	10.88		25.42	4,400	<5.0	<5.0	<5.0	<10	<20
	11/07/02[21]	**11.16**		**25.14**	**1,100[22]**	**<2.5**	**<2.5**	**<2.5**	**<5.0**	**<10**
MW-3	05/04/91	--	7.0-22.5	--	9,100	2.0	ND	55	180	--
	09/19/91	--		--	7,600	ND	13	190	170	--
	12/18/91	--		--	5,900	54	6.4	110	64	--
	03/17/92	--		--	5,800	66	7.5	100	58	--
	05/19/92	--		--	3,400	25	3.6	66	41	--
	08/20/92	--		--	4,500	58	ND	65	35	--
36.84	09/16/92	13.74		23.10	--	--	--	--	--	--
	10/12/92	14.13		22.71	--	--	--	--	--	--
	11/10/92	14.03		22.81	3,400	37	ND	85	34	--

Table 1

Groundwater Monitoring Data and Analytical Results

Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-2	05/19/92	--	7.0-19.5	--	17,000	140	87	680	170	--
(cont)	08/20/92	--		--	13,000	52	ND	660	70	--
36.89	09/16/92	13.80		23.09	--	--	--	--	--	--
	10/12/92	14.19		22.70	--	--	--	--	--	--
	11/10/92	14.06		22.83	11,000	36	7.2	570	45	--
	12/10/92	13.21		23.68	--	--	--	--	--	--
	01/15/93	10.12		26.77	--	--	--	--	--	--
	02/20/93	9.07		27.82	1,500	2.9	3.8	9.1	ND	--
	03/18/93	9.55		27.34	--	--	--	--	--	--
	04/20/93	9.19		27.70	--	--	--	--	--	--
	05/21/93	9.84		27.05	9,500	37	ND	470	62	--
	06/22/93	10.37		26.52	--	--	--	--	--	--
	07/23/93	10.83		26.06	--	--	--	--	--	--
	08/23/93	11.30		25.59	15,000	110	ND	590	64	--
	09/24/93	11.14		25.20	--	--	--	--	--	--
36.34	11/23/93	11.69		24.65	11,000	80	10	480	20	--
	02/24/94[5]	9.27		27.07	11,000	44	ND	580	32	--
	05/25/94	10.30		26.04	11,000	50	ND	400	22	--
	08/23/94	11.82		24.52	12,000	45	10	360	20	--
	11/23/94	10.97		25.37	15,000	61	24	440	ND	--
	02/03/95	7.87		28.47	9,700	5.7	ND	250	10	--
	05/10/95	8.38		27.96	7,500	56	4.7	310	33	--
	08/02/95	9.36		26.98	8,200	53	22	220	25	--
	11/02/95	10.95		25.39	5,000	56	4.5	170	7.7	110
	02/08/96	7.52		28.82	7,200	ND	ND	170	ND	ND
	05/08/96	8.21		28.13	8,400	5.6	9.0	170	10	130
	08/09/96	9.54		26.80	3,100	24	ND	80	ND	64
	11/07/96	10.69		25.65	36,000	140	ND	1,900	5,600	ND
	02/10-11/97	7.75		28.59	4,600	27	ND	53	ND	ND
	05/07/97	9.14		27.20	5,300	61	ND	78	20	180
	08/05/97	10.23		26.11	3,100	35	ND	13	ND	58

As of 11/07/02

Table 1
Groundwater Monitoring Data and Analytical Results
Tosco (Unocal) Service Station #3292
15008 East 14th Street
San Leandro, California

WELL ID/ TOC*(ft.)	DATE	DTW (ft.)	S.I. (ft.bgs)	GWE (msl)	TPH-G (ppb)	B (ppb)	T (ppb)	E (ppb)	X (ppb)	MTBE (ppb)
MW-1	11/07/96	10.74	7.0-19.0	25.63	38,000	140	ND	1,900	5,600	ND
(cont)	02/10-11/97	7.92		28.45	7,300	91	ND	170	68	1,700
	05/07/97	9.24		27.13	11,000	120	ND	470	110	1,200
	08/05/97	10.20		26.17	530[1]	5.9	ND	5.6	ND	430
	11/04/97	10.71		25.66	4,100	50	7.0	64	14	97
	02/12/98	6.27		30.10	8,500	160	ND[7]	550	ND[7]	1,900
36.34	05/15/98	7.62		28.72	5,600	57	ND[7]	290	ND[7]	1,500
	08/12/98	8.85		27.49	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]	5,800
	11/12/98	9.71		26.63	ND[7]	16	ND[7]	ND[7]	ND[7]	12,000/13,000[12]
	03/01/99	7.85		28.49	5,700	43	ND[7]	320	ND[7]	5,000/9,600[12]
	05/12/99	8.70		27.64	ND[7]	36	ND[7]	ND[7]	ND[7]	12,000/21,000[12]
	08/11/99	9.81		26.53	ND[7]	ND[7]	ND[7]	ND[7]	ND[7]	5,760/8,650[12]
	11/04/99	10.72		25.62	1,640[11]	11.0	ND[7]	ND[7]	ND[7]	3,330/3,630[18]
	02/29/00	7.31		29.03	195[19]	ND	ND	ND	ND	580/657[20]
	05/08/00	8.27		28.07	9,010[17]	60.5	ND[7]	402	ND[7]	2,260/1,780[12]
	08/08/00	9.85		26.49	2,060[17]	34.8	ND[7]	38.7	ND[7]	1,710/1,990[18]
	11/06/00	10.05		26.29	2,300[11]	19.3	ND[7]	4.37	ND[7]	592
	02/07/01	9.64		26.70	2,700[17]	25	ND[7]	38	ND[7]	1,500/840[12]
	05/09/01	9.81		26.53	5,550[11]	42.7	ND[7]	48.4	ND[7]	605/431[18]
	08/24/01	11.21		25.13	15,000[11]	130	<20	170	<20	820
	11/16/01	11.49		24.85	8,900[11]	65	<10	46	<10	640/490[12]
	02/21/02	8.93		27.41	7,400[11]	73	<10	100	<10	400/170[12]
	05/10/02	9.82		26.52	6,000[11]	67	6.7	58	<5.0	<50
	08/26/02[21]	11.03		25.31	9,200	<10	<10	62	<20	120
	11/07/02[21]	**11.53**		**24.81**	**2,200[22]**	**<2.5**	**<2.5**	**4.6**	**<5.0**	**20**
MW-2	05/04/91	--	7.0-19.5	--	19,000	6.6	1.4	460	630	--
	09/19/91	--		--	19,000	100	6.8	790	310	--
	12/18/91	--		--	10,000	110	5.1	420	96	--
	03/17/92	--		--	16,000	110	ND	730	220	--

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Tosco (Unocal) Service Station #3292

15008 East 14th Street

San Leandro, California

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MW-1	05/04/91	--	7.0-19.0	--	31,000	74	20	920	1,500	--
	09/19/91	--		--	26,000	130	16	1,300	1,800	--
	12/18/91	--		--	17,000	160	20	1,400	1,600	--
	03/17/92	--		--	23,000	320	19	1,000	940	--
	05/19/92	--		--	29,000	650	370	1,100	1,200	--
	08/20/92	--		--	18,000	230	22	640	950	--
36.72	09/16/92	13.67		23.05	--	--	--	--	--	--
	10/12/92	14.07		22.65	--	--	--	--	--	--
	11/10/92	13.96		22.76	18,000	220	ND	690	830	--
	12/10/92	13.15		23.57	--	--	--	--	--	--
	01/15/93	10.02		26.70	--	--	--	--	--	--
	02/20/93	9.01		27.71	19,000	190	ND	880	620	--
	03/18/93	9.48		27.24	--	--	--	--	--	--
	04/20/93	9.15		27.57	--	--	--	--	--	--
	05/21/93	9.80		26.92	27,000	150	200	1,200	950	--
	06/22/93	10.33		26.39	--	--	--	--	--	--
	07/23/93	10.79		25.93	--	--	--	--	--	--
	08/23/93	11.27		25.45	24,000	160	110	840	810	--
	09/24/93	11.35		25.02	--	--	--	--	--	--
36.37	11/23/93	11.84		24.53	18,000	210	63	900	620	--
	02/24/94	9.45		26.92	18,000	74	30	940	480	--
	05/25/94[3]	10.45		25.92	6,400	72	ND	170	67	--
	08/23/94	11.98		24.39	24,000	130	57	970	320	--
	11/23/94	11.17		25.20	23,000	180	44	970	270	--
	02/03/95	8.01		28.36	20,000	77	17	950	390	--
	05/10/95	8.51		27.86	16,000	230	27	880	630	--
	08/02/95	10.00		26.37	18,000	190	ND	860	590	--
	11/02/95	11.11		25.26	--	--	--	--	--	--
	11/20/95[4]	11.19		25.18	20,000	180	ND	960	450	970
	02/08/96	7.74		28.63	15,000	43	16	940	410	5,200
	05/08/96	8.50		27.87	16,000	37	16	930	410	1,600
	08/09/96	9.72		26.65	2,300	25	ND	77	39	1,200

As of 11/07/02