



October 9, 2014

**Jillian Holloway**  
Project Manager  
Marketing Business Unit

**Chevron Environmental  
Management Company**  
6101 Bollinger Canyon Road  
San Ramon, CA 94583  
Tel (925) 790-3513  
JillianHolloway@chevron.com

Mr. Keith Nowell  
Alameda County Health Care Services  
1131 Harbor Bay Parkway, Suite 250  
Alameda, California 94502

**RECEIVED**

*By Alameda County Environmental Health at 11:44 am, Oct 13, 2014*

**RE: Response to Comments Regarding Potential Case Closure**

2445 Castro Valley Boulevard, Castro Valley, California  
Fuel Leak Case No.: RO0002968

Dear Mr. Nowell,

I declare under penalty of perjury that to the best of my knowledge the information and/or recommendations contained in the attached report is/are true and correct.

If you have any questions or need additional information, please contact me at (925) 790-3513 or by e-mail me at [JillianHolloway@chevron.com](mailto:JillianHolloway@chevron.com).

Sincerely,

A handwritten signature in black ink that reads "Jillian Holloway".

Jillian Holloway  
Union Oil of California – Project Manager

Attachment  
Response to Comments Regarding Potential Case Closure



ARCADIS U.S., Inc.  
2000 Powell Street  
Suite 700  
Emeryville  
California 94608  
Tel 510 652 4500  
Fax 510 652 4906  
[www.arcadis-us.com](http://www.arcadis-us.com)

Mr. Keith Nowell  
Alameda County Health Care Services  
1131 harbor Bay Parkway, Suite 250  
Alameda, California 94502

ENVIRONMENT

Subject:  
Response to Comments Regarding Potential Case Closure, Fuel Leak Case No. RO0002968, Unocal #3072, 2445 Castro Valley Blvd., Castro Valley, CA 94546

Mr. Nowell:

Date:  
October 9, 2014

On behalf of Chevron Environmental Management Company's affiliate, Union Oil Company of California ("Union Oil"), ARCADIS U.S., Inc. (ARCADIS) is pleased to submit the response to comments for the following facility (site):

Contact:  
Katherine Brandt

Phone:  
510.596.9675

<u>Facility No.</u>	<u>Case No.</u>	<u>Location</u>
3072	RO0002968	2445 Castro Valley Boulevard Castro Valley, California

Email:  
Katherine.brandt@arcadis-us.com

In a letter from the Alameda County Department of Environmental Health (ACEH) dated September 22, 2014, the ACEH requested a response to their technical comment and to upload any technical reports supporting the response to comment to the State Water Resources Control Board's Geotracker website. The technical comment to be addressed to move this case toward closure is listed below. A response to the comment is provided in this letter with supporting documentation as attachments.

### Response to Comments

**Comment 1:** *The Addendum report states that three 10,000-gallon gasoline underground storage tanks (USTs), one 55-gallon waste oil UST, and associated product piping were removed and replaced in 1989. The Addendum later states that in November 1995, a leak in a diesel fuel dispenser fuel system occurred. The FSCM states ARCADIS review documents from the California Certified Unified Program Agency (CUPA). However, the FSCM does not identify a diesel tank being located at the site.*

Imagine the result

*As discussed in the April 17 meeting, it is unclear to ACEH how a diesel release occurred from gasoline USTs. Please provide a brief letter for our file clarifying the source of the diesel release.*

**Response:**

In Section 3.2.1, the Addendum (ARCADIS 2014) inadvertently identified all three 10,000-gallon USTs as being gasoline fuel only. Previous documents by others did not specify the distinction in the fuel dispensed from the UST with the exception of the 1991 KEI Quarterly Report and the 2005 Baseline Site Assessment Report (Appendix A). The correct description is two of the 10,000-gallon USTs were gasoline, and one 10,000-gallon UST was diesel. This is confirmed by excerpts from historical reports as shown below and is included as Appendix A.

*Excerpt from: Quarterly Report, KEI, dated July 15, 1991. Page 1, Paragraph 3.*

“KEI’s initial work at the site began on November 14, 1989, when KEI collected soil samples following the removal of three fuel storage tanks (10,000 gallon each – regular unleaded, super unleaded, and diesel), and one 550 gallon waste oil tank at the referenced site.”

*Excerpt from: Baseline Site Assessment Report, TRC, dated March 8, 2005. Page 1, Section 1, Site Overview.*

“Active service station with two 10,000-gallon gasoline USTs, one 10,000-gallon diesel UST, and one 550-gallon waste-oil UST, and three dispenser islands.”

The attached reports will be uploaded to the ACEH FTP site and Geotracker using the specified naming convention below:

- RO002968\_CORRES\_L\_2014-10-08

Sincerely,

ARCADIS U.S., Inc.

*Katherine Brandt*



Katherine Brandt  
Certified Project Manager

References:

ARCADIS. 2014. *Conceptual Site Model and Request for Low-Threat Closure Addendum*, January 30.

Copies:

Ms. Jillian Holloway, Union Oil (electronic copy only)  
Netaj LLC, Property Owners

Attachments:

Appendix A: Release History Documents





**KAPREALIAN ENGINEERING, INC.**  
**Consulting Engineers**

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

FILE #	3072	SS	<input checked="" type="checkbox"/>	BP	
RPT	QM	<input checked="" type="checkbox"/>	TRANSMITTAL		
INC.	2	3	4	5	6

KEI-P89-1106.QR3  
July 15, 1991

Unocal Corporation  
2000 Crow Canyon Place, Suite 400  
San Ramon, CA 94583

Attention: Mr. Ron Bock

RE: Quarterly Report  
Unocal Service Station #3072  
2445 Castro Valley Boulevard  
Castro Valley, California

Dear Mr. Bock:

This report presents the results of the third quarter of monitoring and sampling of the monitoring wells at the referenced site by Kaprealian Engineering, Inc. (KEI), per proposal KEI-P89-1106.P3 dated June 11, 1990. The wells are currently monitored monthly and sampled on a quarterly basis. This report covers the work performed by KEI from April through June, 1991.

SITE DESCRIPTION AND BACKGROUND

The subject site is presently used as a gasoline station and auto care facility. The subject site is situated on gently sloping, northeast trending topography, and is located near the base of the northeast flank of a series of low lying, northwest trending foothills separating Castro Valley from Hayward. The site is located at the southern corner of the intersection of Castro Valley Boulevard with Strobridge Avenue, and is situated approximately 1,200 feet southwest of an unnamed drainage. A Location Map and Site Plans are attached to this report.

KEI's initial work at the site began on November 14, 1989, when KEI collected soil samples following the removal of three fuel storage tanks (10,000 gallon each - regular unleaded, super unleaded, and diesel), and one 550 gallon waste oil tank at the referenced site. All of the tanks were made of steel. Two small holes were observed in the regular unleaded gasoline tank. Extensive pitting, but no holes, was observed in the super unleaded gasoline tank. The diesel tank had been treated and wrapped prior to installation, and therefore it was not possible to assess the condition of the tank at the time of removal. No apparent holes or cracks were observed in the waste oil tank. The soil samples (designated as A1, A2, B1, B2, C1 and C2) under the fuel storage tanks were collected at a

depth of 13.5 feet. The soil sample (W01) under the waste oil tank was collected at a depth of 10.5 feet. All soil samples were analyzed by Sequoia Analytical Laboratory in Redwood City, California. The samples collected under the fuel storage tanks were analyzed for total petroleum hydrocarbons (TPH) as gasoline, and benzene, toluene, xylenes and ethylbenzene (BTX&E). In addition, the two samples collected from under the diesel tank were analyzed for TPH as diesel. Analytical results of soil samples collected from beneath the fuel tanks showed levels of TPH as gasoline ranging from non-detectable to 11 ppm, with non-detectable BTX&E concentrations in each case. TPH as diesel concentrations were non-detectable for the two samples collected beneath the diesel tank. The soil sample collected from under the waste oil tank was analyzed for TPH as gasoline, BTX&E, TPH as diesel, total oil and grease (TOG), EPA method 8010 compounds, EPA method 8270 compounds, and the metals cadmium, chromium, lead and zinc. Analytical results of the soil sample collected from beneath the waste oil tank showed TPH as gasoline at 5.9 ppm, metals ranging from non-detectable to 45 ppm, 55 ppb of 1,1-dichloroethene, and non-detectable levels of all other constituents analyzed. Analytical results are summarized in Table 9, and sample point locations are as shown on the attached Site Plan, Figure 2.

On November 16, 1989, KEI collected six sidewall soil samples (designated as SW1 through SW6) and a water sample (designated as W1) from the fuel tank pit. The tank pit water level was measured to be 11.5 feet below the ground surface. The sidewall soil samples were collected approximately 6 to 12-inches above the tank pit water level. All samples were analyzed for TPH as gasoline and BTX&E. Three of the six sidewall soil samples (labeled SW2, SW3 and SW4) and the water sample (labeled W1) were also analyzed for TPH as diesel. Analytical results of the soil samples collected from the fuel tank pit showed TPH as gasoline ranging from non-detectable to 29 ppm for four of the six samples, with samples SW1 and SW4 showing 140 ppm and 160 ppm, respectively. TPH as diesel levels were non-detectable for two of the sidewall samples with sample SW4 showing 24 ppm. Analytical results of the water sample collected from the fuel tank pit showed 11,000 ppb of TPH as diesel, 26,000 ppb of TPH as gasoline, and 670 ppb of benzene. Analytical results of the soil samples are summarized in Table 9, and the water sample is summarized in Table 10. Sample point locations are as shown on the attached Site Plan, Figure 2.

On November 28, 1989, KEI returned to the site to meet with the representative of the Alameda County Health Care Services Agency (ACHCS) to clarify ACHCS' guidelines as applied to the subject site for fuel tank pit excavation and sampling. In response to the meeting, KEI submitted a Phase I work plan (KEI-P89-1106.P1) dated November 30, 1989, to define the extent of contamination in the

vicinity of the tank pit. The work plan was approved by the ACHCS in a letter dated December 8, 1989.

On December 22, 1989, KEI returned to the site after further excavation to collect additional sidewall soil samples from the fuel tank pit. Soil was excavated from the north, east and south sides of the pit. Sidewall soil samples, designated as SW1(17), SW2(17), SW7, SW8, SW9, SW10, SW11 and SW3(13), were collected at depths of approximately 9 or 11 feet, and analyzed on-site by Mobile Chem Labs, Inc., of Lafayette, California, a state-certified mobile laboratory. After excavation, TPH as gasoline was detected at concentrations of 1,500 ppm and 1,900 ppm on the northerly wall of the pit, at concentrations ranging from 3.0 ppm to 1,700 ppm on the easterly wall, and at 410 ppm on the southerly wall. Analytical results are summarized in Table 8, and sample point locations are as shown on the attached Site Plan, Figure 3.

Based on the analytical results, KEI recommended the installation of nine exploratory borings to further define the extent of the soil contamination. Documentation of soil sample collection and sample analytical results are presented in KEI's work plan/proposal (KEI-P89-1106.P2) dated January 8, 1990.

On January 18 and 19, 1990, three two-inch diameter monitoring wells (designated as MW1, MW2 and MW3 on the attached Site Plan, Figure 1) were installed at the site. The monitoring wells were drilled and completed to total depths ranging from 22 to 30 feet. Ground water was encountered at depths ranging from 9 to 20.5 feet beneath the surface during drilling. The wells were developed on January 22 and 23, 1990, and initially sampled on March 22, 1990.

Samples were analyzed for TPH as gasoline by EPA method 5030 in conjunction with modified 8015, and BTX&E by EPA method 8020. Analytical results of the soil samples, collected from the borings for monitoring wells MW1, MW2 and MW3, indicated non-detectable levels of TPH as gasoline and BTX&E in all soil samples, except for sample MW1(5), which showed 2.8 ppm of TPH as gasoline, 0.051 ppm of benzene, and 0.11 ppm of ethylbenzene. Analytical results of the ground water samples collected from monitoring wells MW2 and MW3 indicated non-detectable levels of TPH as gasoline and BTX&E. In well MW1, TPH as gasoline and benzene were detected at 32 ppb and 4.2 ppb, respectively. Analytical results of the soil samples are summarized in Table 7, and water samples are summarized in Table 2. Documentation of well installation, sample collection, and sample results are presented in KEI's report (KEI-J89-1106.R7) dated April 12, 1990.

KEI-P89-1106.QR3

July 15, 1991

Page 4

On February 14, 1990, three soil samples, labeled P1, P2 and P3, were collected from the product pipe trenches at depths ranging from 2.5 to 4 feet. The soil samples were analyzed for TPH as gasoline and BTX&E. Analytical results of samples collected from the pipe trench indicated levels of TPH as gasoline ranging from 6.0 ppm to 87 ppm, and benzene levels ranging from 0.23 ppm to 0.47 ppm. Results of the soil analyses are summarized in Table 6. Soil sample locations are shown on the attached Site Plan, Figure 4. Documentation of sample collection and sample results are presented in KEI's report (KEI-J89-1106.R5) dated March 6, 1990.

KEI returned to the site on March 9, 1990 when three sidewall soil samples, labeled SWB, SWC and SWD, were collected from the sidewalls of the waste oil tank at depths of 8 to 9 feet. The waste oil tank pit had been excavated to a depth of 11 to 12 feet. The soil samples were analyzed for TPH as gasoline, BTX&E, TPH as diesel, TOG, and EPA method 8010 compounds. Analytical results of the soil samples (SWB, SWC and SWD), collected from sidewalls of the waste oil tank pit, indicated non-detectable levels of TOG and all EPA method 8010 constituents for each of the three samples. The analytical results indicated non-detectable levels of TPH as gasoline and BTX&E for samples SWC and SWD, while SWB showed 37 ppm of TPH as gasoline, with 0.10 ppm of benzene. TPH as diesel levels were non-detectable for sample SWC, with both SWB and SWD less than 10 ppm. Results of the soil samples are summarized in Table 5. Soil sample point locations are as shown on the attached Site Plan, Figure 5. Documentation of sample collection, and sample results are presented in KEI's report (KEI-J89-1106.R6) dated April 13, 1990.

On April 24 and 25, 1990, the previously recommended exploratory borings (designated as EB1 through EB8 on the attached Site Plan, Figure 1) were drilled at the site. The eight borings were drilled and/or sampled to depths of 10.5 to 15 feet below grade. Ground water was encountered at depths of approximately 10 to 14 feet beneath the surface in each boring except EB4 where ground water was not encountered. Drilling was generally stopped about 1 to 2 feet after intersecting the first water table, except for EB4, which was terminated at a depth of 14.5 feet when ground water was not encountered. A water sample was collected from boring EB5 only. All borings were backfilled to the surface with neat cement.

Samples were analyzed at Sequoia Analytical Laboratory in Redwood City, California. Soil samples from all borings and the water sample from EB5 were analyzed for TPH as gasoline using EPA method 5030 in conjunction with modified 8015, and BTX&E using EPA method 8020. The results of soil analyses are summarized in Table 4, and the results of the water analyses are summarized in Table 10.

KEI-P89-1106.QR3  
July 15, 1991  
Page 5

Analytical results of the soil samples, collected from the eight exploratory borings (EB1 through EB8), indicated non-detectable levels of TPH as gasoline in all samples, except EB1(9.5), EB4(14), EB6(5), EB7(5) and EB8(5), in which the levels ranged from 1.7 ppm to 5.0 ppm. Benzene was detected in all soil samples at levels ranging from 0.0053 ppm to 0.023 ppm. The analytical results of the water sample collected from boring EB5 immediately after drilling, indicated a level of TPH as gasoline at 5,900 ppb, with a level of benzene at 840 ppb.

Based on the analytical results, KEI recommended the installation of two additional monitoring wells to further define the extent of ground water contamination. In addition, KEI recommended the implementation of monthly monitoring and quarterly sampling of the existing monitoring wells. Results of the exploratory drilling and soil sampling activities are presented in KEI's report (KEI-J89-1106.R8) dated June 11, 1990.

On August 13, 1990, two two-inch diameter monitoring wells (designated as MW4 and MW5 on the attached Site Plan, Figure 1) were installed at the site. The two wells were drilled and completed to total depths ranging from 23.5 to 24 feet. Ground water was encountered at depths ranging from 10 to 14.5 feet beneath the surface during drilling. The new wells (MW4 and MW5) were developed on August 20, 1990, and all wells were sampled on August 27, 1990.

Water from all wells (MW1 through MW5) and selected soil samples from the borings for wells MW4 and MW5 were analyzed at Sequoia Analytical Laboratory, Redwood City, California. The samples were analyzed for TPH as gasoline by EPA method 5030 in conjunction with modified 8015 and BTX&E by EPA method 8020.

Analytical results of the soil samples, collected from the borings for monitoring wells MW4 and MW5, indicated non-detectable levels of TPH as gasoline and BTX&E in all analyzed samples. The analytical results of the water samples collected from the wells showed non-detectable levels of TPH as gasoline in all wells. Benzene was detected in wells MW1, MW3 and MW4 at levels of 3.2 ppb, 1.1 ppb and 0.34 ppb, respectively. Results of the soil analyses are summarized in Table 3, and the water analyses in Table 2. Documentation of well installation, sample collection, and sample results are presented in KEI's report (KEI-P89-1106.R9) dated September 28, 1990. Based on the analytical results, KEI recommended continuation of the monthly monitoring and quarterly sampling program.

#### RECENT FIELD ACTIVITIES

The five wells (MW1 through MW5) were monitored three times and sampled once during the quarter. During monitoring, the wells were checked for depth to water and presence of free product and sheen. No free product or sheen was noted in any of the wells during the quarter. Monitoring data are summarized in Table 1.

Water samples were collected from the wells on June 12, 1991. Prior to sampling, the wells were purged of 15 gallons each using a bailer. Samples were then collected using a clean Teflon bailer. Samples were decanted into clean VOA vials and/or one liter amber bottles as appropriate which were sealed with Teflon-lined screw caps and stored in a cooler on ice until delivery to the state certified laboratory.

#### HYDROLOGY AND GEOLOGY

Based on the water level data gathered during the quarter, ground water flow direction appeared to be predominantly toward the northeast, varying from a northwest flow direction at the northwestern portion of the site to an approximately eastern flow direction at the southeastern portion of the site on June 12, 1991. This flow direction is relatively similar to the flow direction determined on March 11, 1991, except for a more northerly flow direction at the northwestern portion of the site. The average hydraulic gradient at the site on June 12, 1991 was approximately 0.012. Water levels have fluctuated during the quarter, showing a net decrease of 0.08 to 0.26 feet in wells MW1, MW3 and MW4, and a net increase of 0.51 to 0.53 feet in wells MW2 and MW5, since March 11, 1991. The measured depth to ground water at the site on June 12, 1991, ranged between 6.34 and 8.66 feet below grade.

Based on review of regional geologic maps (U.S. Geological Survey Open-File Report 80-540 "Preliminary Geologic Map of the Hayward Quadrangle, Alameda and Contra Costs Counties, California" by T.W. Dibblee, Jr., 1980), the subject site is underlain by Quaternary-age alluvium. Mapped bedrock outcrops adjacent to the site include the marine Panoche Formation (Kpc), which is described as a conglomerate generally composed of granite, diorite, quartzite and black chert cobbles in a sandstone matrix and the Knoxville Formation (JKK), which is described as consisting of dark micaceous shale with minor thin sandstone.

Also, the site is situated approximately 3,000 feet northeast of the mapped trace of the active Hayward Fault; 1,900 feet southwest of the concealed mapped trace of the East Chabot Fault; and 1,800 feet northeast of the mapped trace (northern terminous?) of the West Chabot Fault.

As exposed in the underground tank pit excavation, the earth materials at the subject site consist of artificial fill materials at the surface which are typically 1 to 2 feet thick, and locally vary up to a maximum of about 9 feet at the original east wall of the pit excavation prior to additional excavation. These fill materials are in turn underlain by dark gray, silty clay soil materials, which are about 2.5 feet thick. The soil materials are underlain by greenish-brown to yellowish-brown, highly weathered to slightly weathered shale, which varies from soft to moderately hard with abundant fractures (both clay healed and relatively open).

The results of the drilling activities at the site indicated that bedrock materials underlying the site are composed of brown and gray shale, which is slightly to highly weathered. The depth to the bedrock materials appears to vary considerably from about 5 to 6 feet below grade in the vicinity of well MW1 and boring EB2, to about 21.5 feet in the vicinity of well MW2, to greater than 22 feet in the vicinity of well MW3 (maximum depth explored). However, bedrock commonly underlies that site at a depth of about 8 to 10 feet as encountered in the majority of the borings at the site and as exposed in the old tank pit excavation.

#### ANALYTICAL RESULTS

Ground water samples were analyzed at Sequoia Analytical Laboratory in Concord, California, and were accompanied by properly executed Chain of Custody documentation. The samples were analyzed for TPH as gasoline using EPA method 5030 in conjunction with modified 8015, and BTX&E using EPA method 8020.

Analytical results of the ground water samples, collected from monitoring wells MW1 through MW5, indicate non-detectable levels of TPH as gasoline and benzene, except for 0.66 ppb of benzene detected in well MW1. Results of the analyses are summarized in Table 2. Copies of the analytical results and Chain of Custody documentation are attached to this report.

#### DISCUSSION AND RECOMMENDATIONS

Based on the analytical results collected and evaluated to date and no evidence of free product or sheen in any of the wells, KEI recommends the continuation of the current monitoring and sampling program of the existing wells per KEI's proposal (KEI-P89-1106.P3) dated June 11, 1990.

#### DISTRIBUTION

A copy of this report should be sent to the ACHCS, and to the Regional Water Quality Control Board, San Francisco Bay Region.

KEI-P89-1106.QR3  
July 15, 1991  
Page 8

#### LIMITATIONS

Environmental changes, either naturally-occurring or artificially-induced, may cause changes in ground water levels and flow paths, thereby changing the extent and concentration of any contaminants.

Our studies assume that the field and laboratory data are reasonably representative of the site as a whole, and assume that subsurface conditions are reasonably conducive to interpolation and extrapolation.

The results of this study are based on the data obtained from the field and laboratory analyses obtained from a state certified laboratory. We have analyzed this data using what we believe to be currently applicable engineering techniques and principles in the Northern California region. We make no warranty, either expressed or implied, regarding the above, including laboratory analyses, except that our services have been performed in accordance with generally accepted professional principles and practices existing for such work.



KEI-P89-1106.QR3  
July 15, 1991  
Page 9

If you have any questions regarding this report, please do not hesitate to call me at (707) 746-6915.

Sincerely,

Kaprealian Engineering, Inc.



Thomas J. Berkins  
Senior Environmental Engineer



Don R. Braun  
Certified Engineering Geologist

License No. 1310  
Exp. Date 6/30/92



Timothy R. Ross  
Project Manager

\bam

Attachments: Tables 1 through 10  
Location Map  
Site Plans - Figures 1 through 5  
Laboratory Analyses  
Chain of Custody documentation

KEI-P89-1106.QR3  
 July 15, 1991

TABLE 1

SUMMARY OF MONITORING DATA

<u>Well No.</u>	<u>Ground Water Elevation (feet)</u>	<u>Depth to Water (feet)</u>	<u>Product Thickness (feet)</u>	<u>Sheen</u>	<u>Water Purged (gallons)</u>	<u>Product Purged</u>
<b>(Monitored and Sampled on June 12, 1991)</b>						
MW1	172.41	8.66	0	No	15	0
MW2	173.95	8.33	0	No	15	0
MW3	172.17	6.34	0	No	15	0
MW4	172.62	6.63	0	No	15	0
MW5	172.40	6.62	0	No	15	0
<b>(Monitored on May 10, 1991)</b>						
MW1	172.62	8.45	0	No	0	0
MW2	173.55	8.73	0	No	0	0
MW3	172.57	5.94	0	No	0	0
MW4	172.84	6.41	0	No	0	0
MW5	172.01	7.01	0	No	0	0
<b>(Monitored on April 11, 1991)</b>						
MW1	172.89	8.18	0	No	0	0
MW2	174.38	7.90	0	No	0	0
MW3	172.74	5.77	0	No	0	0
MW4	173.04	6.21	0	No	0	0
MW5	172.06	6.96	0	No	0	0

<u>Well #</u>	<u>Surface Elevation* (feet)</u>
MW1	181.07
MW2	182.28
MW3	178.51
MW4	179.25
MW5	179.02

\* Elevation of top of well covers surveyed to Mean Sea Level (MSL).

KEI-P89-1106.QR3  
July 15, 1991

TABLE 2  
SUMMARY OF LABORATORY ANALYSES  
WATER

<u>Date</u>	<u>Sample Number</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
6/12/91	MW1	ND	0.66	ND	ND	ND
	MW2	ND	ND	0.46	0.44	ND
	MW3	ND	ND	ND	ND	ND
	MW4	ND	ND	ND	0.48	ND
	MW5	ND	ND	ND	0.32	ND
3/11/91	MW1	ND	0.90	ND	ND	ND
	MW2	ND	ND	ND	ND	ND
	MW3	ND	ND	ND	ND	ND
	MW4	44	0.74	ND	0.15	3.2
	MW5	ND	ND	ND	ND	ND
12/12/90	MW1	34	1.6	ND	ND	ND
	MW2	ND	ND	ND	ND	ND
	MW3	ND	ND	ND	ND	ND
	MW4	ND	0.73	ND	ND	ND
	MW5	ND	ND	ND	ND	ND
8/27/90	MW1	ND	3.2	ND	ND	ND
	MW2	ND	ND	ND	ND	ND
	MW3	ND	1.1	0.50	0.89	0.54
	MW4	ND	0.34	ND	ND	ND
	MW5	ND	ND	ND	ND	ND
3/22/90	MW1	32	4.2	ND	1.1	0.36
	MW2	ND	ND	ND	ND	ND
	MW3	ND	ND	ND	ND	ND
	MW4*	ND	ND	ND	ND	ND
Detection Limits		30	0.3	0.3	0.3	0.3

\* Sample MW4 is a duplicate of sample MW2 only on date indicated.

ND = Non-detectable.

Results in parts per billion (ppb), unless otherwise indicated.

KEI-P89-1106.QR3  
July 15, 1991

TABLE 3  
SUMMARY OF LABORATORY ANALYSES  
SOIL

<u>Date</u>	<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-benzene</u>
8/13/90	MW4 (5)	5	ND	ND	ND	ND	ND
	MW5 (9.5)	9.5	ND	ND	ND	ND	ND
	MW5 (13.5)	13.5	ND	ND	ND	ND	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.

KEI-P89-1106.QR3  
July 15, 1991

TABLE 4  
SUMMARY OF LABORATORY ANALYSES  
SOIL

<u>Date</u>	<u>Sample Number</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
4/24/90	EB1(5)	ND	0.0063	0.042	0.011	ND
&	EB1(9.5)	4.9	0.0078	0.24	0.11	0.028
4/25/90	EB1(13.5)	ND	0.0087	0.048	ND	ND
	EB2(5)	ND	0.0053	0.020	0.013	0.0068
	EB2(10)	ND	0.0059	0.026	0.013	0.0050
	EB3(5)	ND	0.0069	0.031	0.017	ND
	EB3(9)	ND	0.0093	0.023	ND	ND
	EB4(5)	ND	0.0091	0.034	ND	ND
	EB4(10)	ND	0.0090	0.27	ND	ND
	EB4(14)	1.7	0.0079	0.43	ND	ND
	EB5(5)	ND	0.0095	0.015	ND	ND
	EB6(5)	5.0	0.066	0.021	0.11	0.032
	EB6(10)	ND	0.0086	0.060	0.014	0.0052
	EB6(13)	ND	0.0080	0.16	0.24	0.0092
	EB7(5)	3.0	0.040	0.056	0.073	0.034
	EB7(9.5)	ND	0.0081	0.078	0.025	0.015
	EB7(13.5)	ND	0.0054	0.085	0.012	ND
	EB8(5)	2.7	0.023	0.067	0.078	0.013
	EB8(10)	ND	0.0072	0.056	0.019	0.0050
	Detection Limits	1.0	0.0050	0.0050	0.0050	0.0050

ND = Non-detectable.

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

KEI-P89-1106.QR3  
July 15, 1991

TABLE 5  
SUMMARY OF LABORATORY ANALYSES  
SOIL

<u>Date</u>	<u>Sample</u>	<u>Depth (feet)</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl- benzene</u>
3/09/90	SWB*	8.0	<10	37	0.10	0.10	0.74	0.25
	SWC*	9.0	ND	ND	ND	ND	ND	ND
	SWD*	9.0	<10	ND	ND	ND	ND	ND
Detection Limits			1.0	1.0	0.05	0.1	0.1	0.1

\* TOG and all EPA method 8010 constituents were non-detectable.

ND = Non-detectable.

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

KEI-P89-1106.QR3  
July 15, 1991

TABLE 6  
SUMMARY OF LABORATORY ANALYSES  
SOIL

<u>Date</u>	<u>Sample</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl- benzene</u>
2/14/90	P1	4.0	87	0.33	0.17	10	2.3
	P2	2.5	6.0	0.23	ND	0.33	0.11
	P3	3.0	10	0.47	0.11	1.1	0.32
Detection Limits			1.0	0.05	0.1	0.1	0.1

ND = Non-detectable.

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

KEI-P89-1106.QR3  
July 15, 1991

TABLE 7  
SUMMARY OF LABORATORY ANALYSES  
SOIL

<u>Date</u>	<u>Sample Number</u>	<u>Depth (feet)</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethylbenzene</u>
1/18/90	MW1 (5)	5.0	2.8	0.051	ND	ND	0.11
	MW1 (6.5)	6.5	ND	ND	ND	ND	ND
	MW1 (10.0)	10.0	ND	ND	ND	ND	ND
	MW2 (5)	5.0	ND	ND	ND	ND	ND
	MW2 (6.5)	6.5	ND	ND	ND	ND	ND
	MW2 (9.0)	9.0	ND	ND	ND	ND	ND
	MW2 (10)	10.0	ND	ND	ND	ND	ND
	MW2 (15)	15.0	ND	ND	ND	ND	ND
	MW2 (16.5)	16.5	ND	ND	ND	ND	ND
	MW2 (20)	20.0	ND	ND	ND	ND	ND
	MW3 (5)	5.0	ND	ND	ND	ND	ND
	MW3 (6.5)	6.5	ND	ND	ND	ND	ND
	MW3 (9)	9.0	ND	ND	ND	ND	ND
	Detection Limits		1.0	0.05	0.1	0.1	0.1

ND = Non-detectable.

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



KEI-P89-1106.QR3  
July 15, 1991

TABLE 8  
SUMMARY OF LABORATORY ANALYSES  
SOIL

<u>Date</u>	<u>Sample</u>	<u>Depth (feet)</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl- benzene</u>
12/22/89	SW1(17)	11	ND	1,900	14	24	120	28
	SW2(17)	11	ND	1,500	17	29	92	23
	SW7	9	ND	1,700	16	33	110	26
	SW8	9	ND	200	2.6	0.9	7.7	5.0
	SW3(13)	9	ND	690	11	11	28	11
	SW9	9	ND	3.0	0.2	0.1	0.1	ND
	SW10	9	ND	500	4.0	5.9	22	6.9
	SW4(11)	9	ND	410	2.7	3.9	19	3.8
Detection Limits			1.0	1.0	0.1	0.1	0.1	0.1

ND = Non-detectable.

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

KEI-P89-1106.QR3  
 July 15, 1991

TABLE 9  
 SUMMARY OF LABORATORY ANALYSES  
 SOIL

<u>Date</u>	<u>Sample</u>	<u>Depth (feet)</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-benzene</u>
11/14/89	A1	13.5	ND	2.4	ND	ND	ND	ND
&	A2	13.5	ND	ND	ND	ND	ND	ND
11/16/89	B1	13.5	--	1.9	ND	ND	ND	ND
	B2	13.5	--	11	ND	ND	ND	ND
	C1	13.5	--	1.5	ND	ND	ND	ND
	C2	13.5	--	7.5	ND	ND	ND	ND
	SW1	10.5	--	140	0.31	0.12	3.0	0.88
	SW2	10.5	ND	ND	ND	ND	ND	ND
	SW3	10.5	ND	ND	ND	ND	ND	ND
	SW4	9.5	24	160	0.33	6.4	30	9.4
	SW5	9.5	--	3.5	0.06	0.27	0.76	0.19
	SW6	10	--	29	0.12	0.21	2.0	0.58
	WO1(11)*	11	ND	5.9	ND	ND	ND	ND
<u>Detection Limits</u>			1.0	1.0	0.05	0.1	0.1	0.1

\* TOG and all EPA method 8270 constituents were non-detectable. All EPA method 8010 constituents were non-detectable, except 1,1-dichloroethene at 55 ppb. Metal concentrations were as follows: cadmium was detected at 2.5 ppm, chromium at 39 ppm, lead at 1.1 ppm, and zinc at 45 ppm.

ND = Non-detectable.

-- Indicates analysis not performed.

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

KEI-P89-1106.QR3  
July 15, 1991

TABLE 10

SUMMARY OF LABORATORY ANALYSES  
WATER

<u>Date</u>	<u>Sample Number</u>	<u>TPH as Diesel</u>	<u>TPH as Gasoline</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Xylenes</u>	<u>Ethyl-benzene</u>
11/16/89	W1	11,000	26,000	670	1,100	9,100	120
4/25/90	EB5	--	5,900	840	34	73	100
Detection Limits		50	30	0.3	0.3	0.3	0.3

-- Indicates analysis not performed.

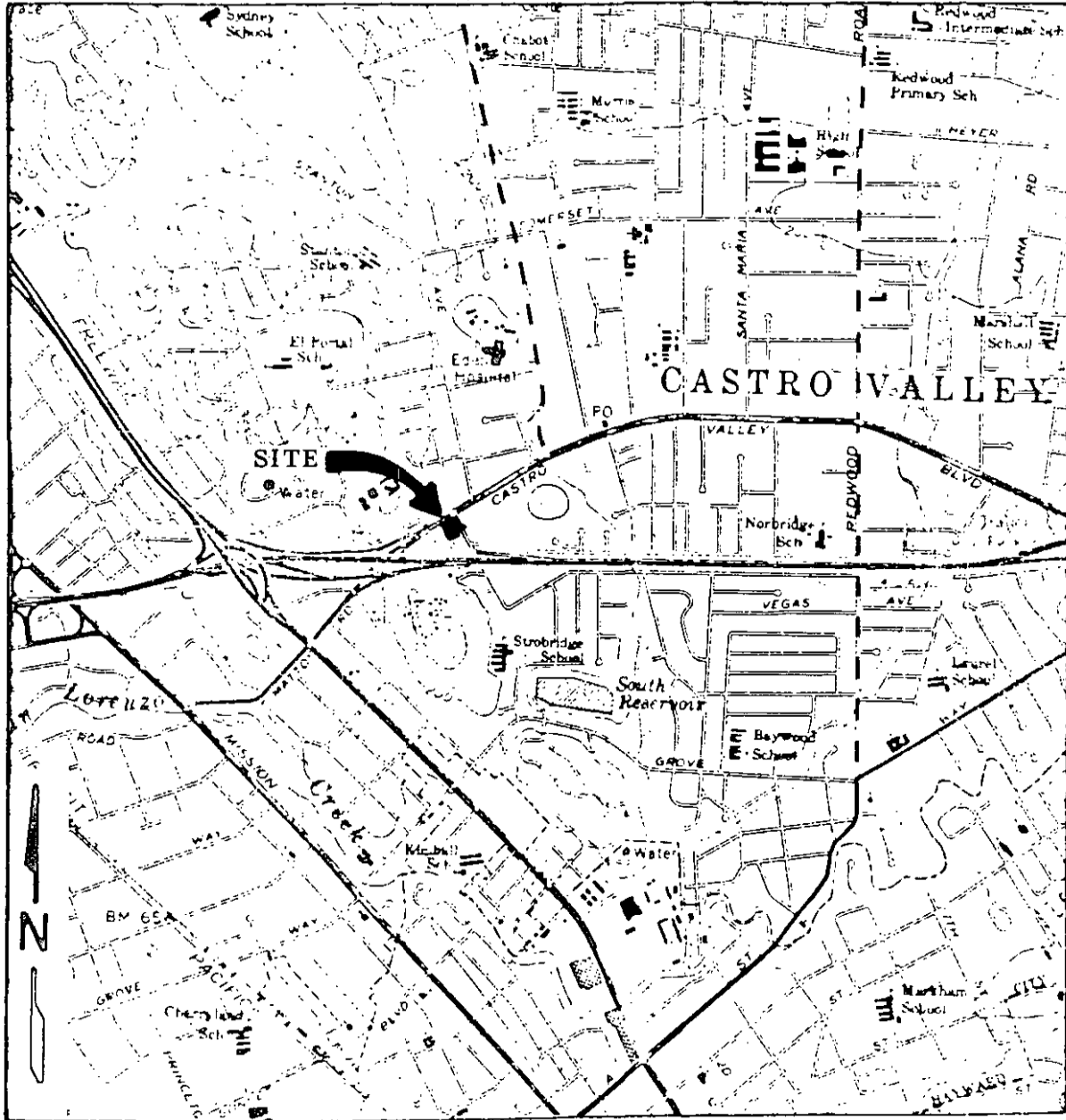
Results in parts per billion (ppb), unless otherwise indicated.

NOTE: Water samples from EB6 were collected during drilling. The results of the analyses may not be representative of formation water, they should be used for information only.



**KAPREALIAN ENGINEERING, INC.**  
*Consulting Engineers*

PO. BOX 996 • BENICIA, CA 94510  
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



LOCATION MAP

Unocal S/S #3072  
2445 Castro Valley Boulevard  
Castro Valley, CA

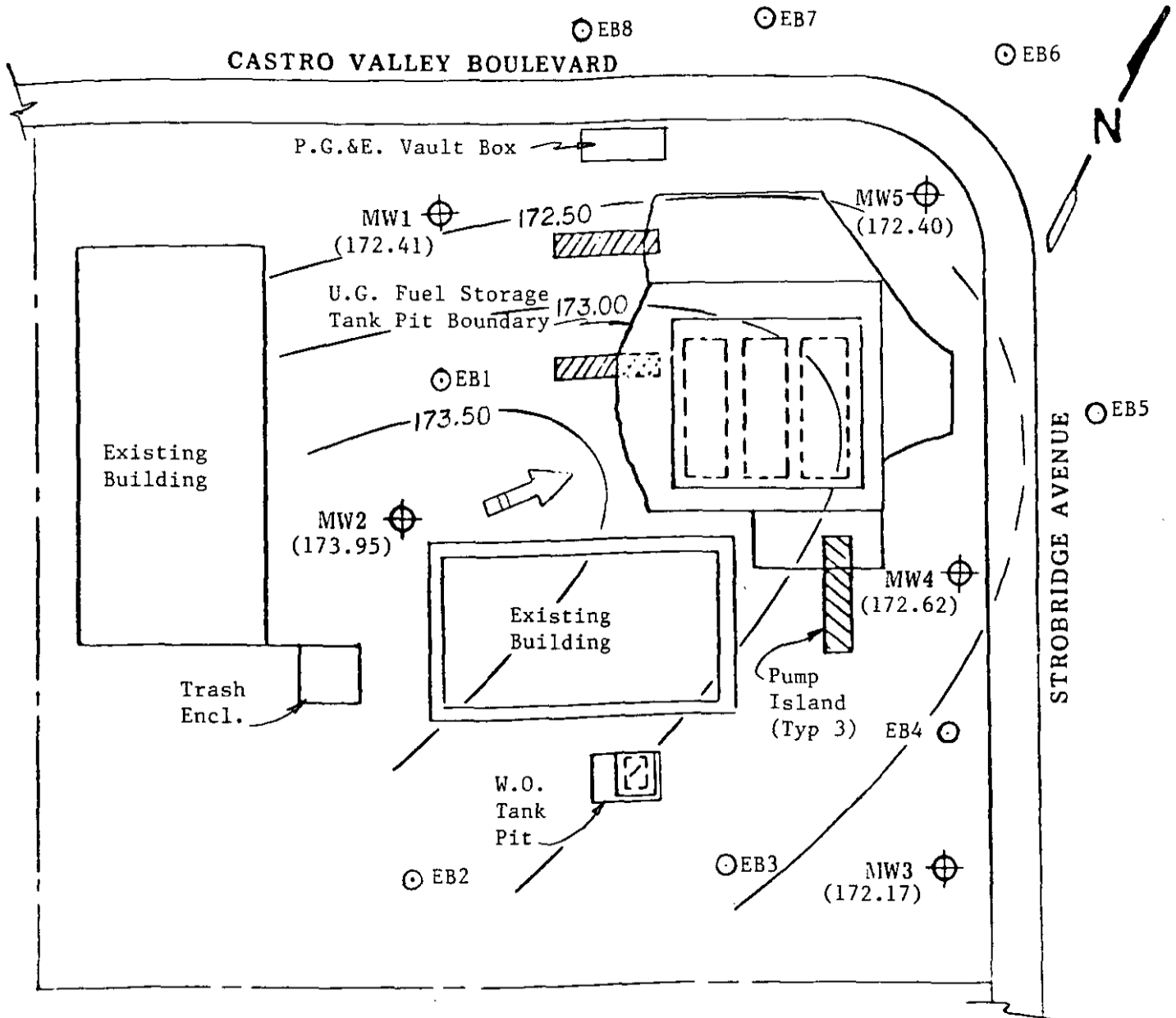


# KAPREALIAN ENGINEERING, INC.

Consulting Engineers



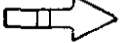
P.O. BOX 996 • BENICIA, CA 94510

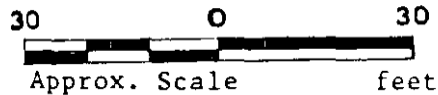
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



SITE PLAN  
Figure 1

### LEGEND

-  Monitoring Well
-  Exploratory Boring
-  Ground Water Flow Direction
- ( ) Ground Water Elevation in feet (MSL) on 6/12/91
- Contours of ground water elevation

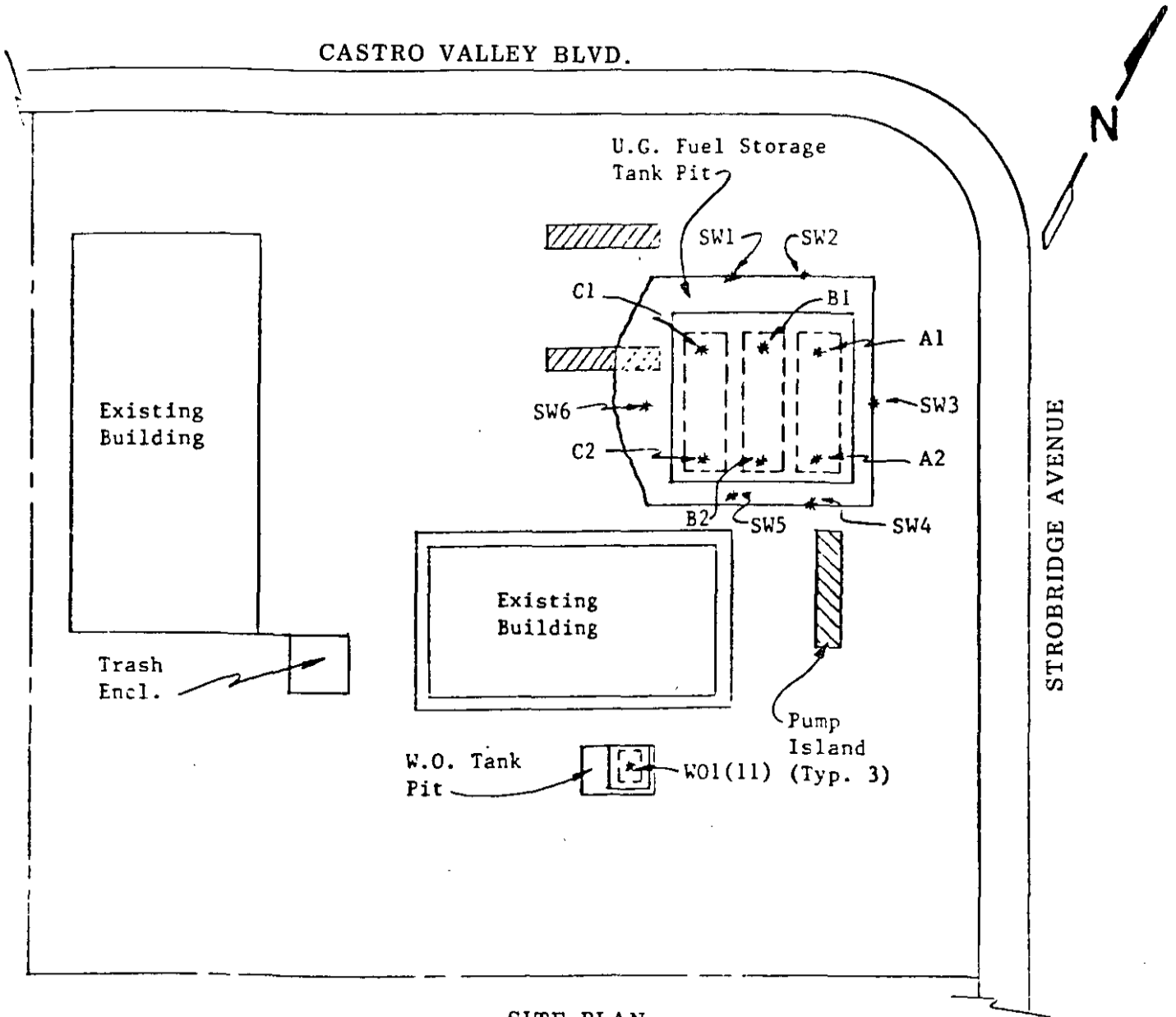


Unocal Service Station #3072  
2445 Castro Valley Blvd.  
Castro Valley, California

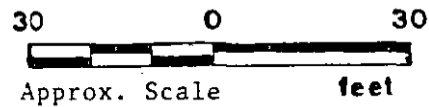


**KAPREALIAN ENGINEERING, INC.**  
*Consulting Engineers*

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



SITE PLAN  
Figure 2



LEGEND

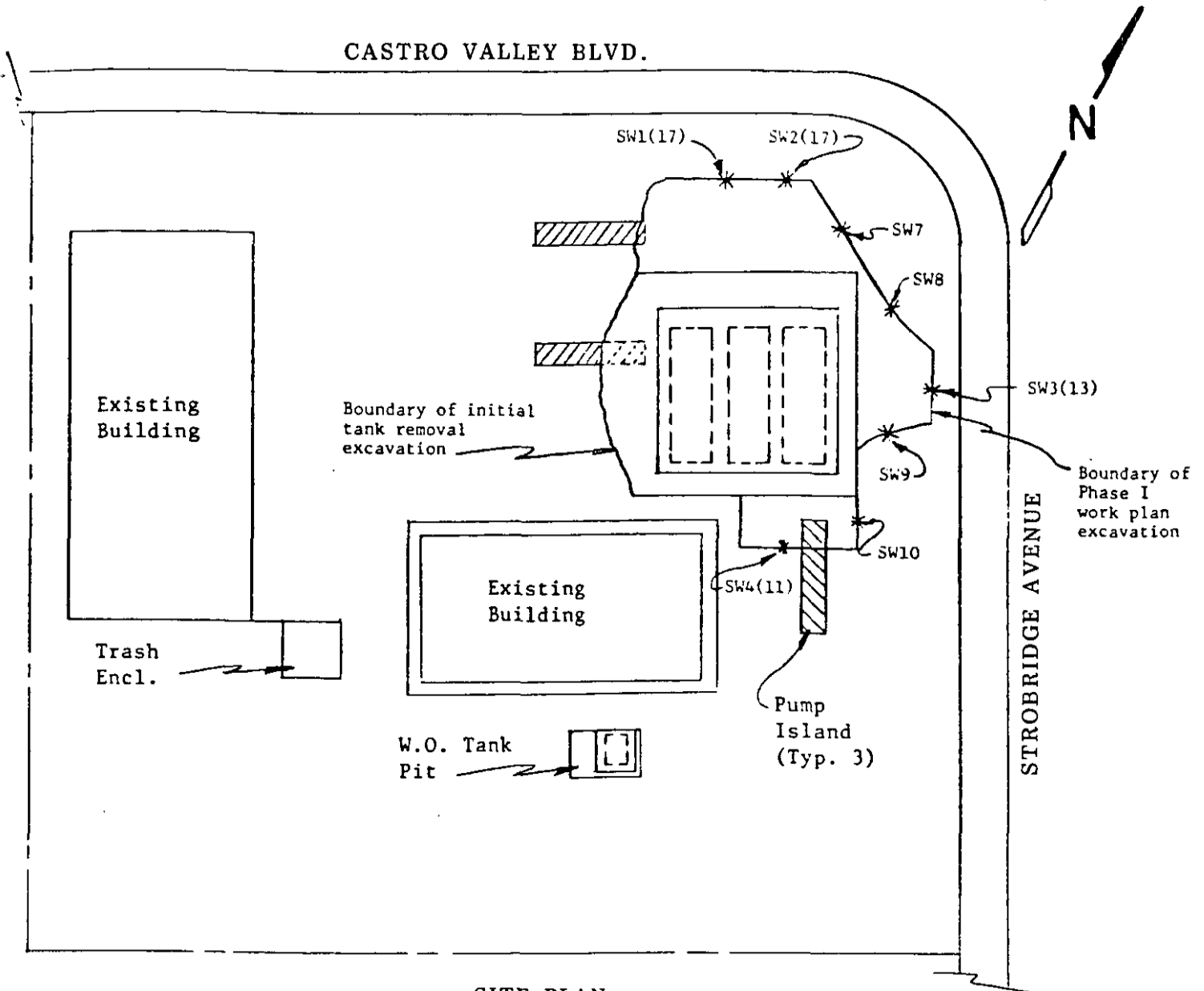
\* Sample Point Location

Unocal S/S #3072  
2445 Castro Valley Blvd.  
Castro Valley, CA

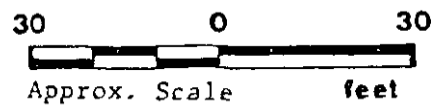


**KAPREALIAN ENGINEERING, INC.**  
Consulting Engineers

PO. BOX 996 • BENICIA, CA 94510  
(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581



SITE PLAN  
Figure 3



LEGEND

\* Sample Point Location

Unocal S/S #3072  
2445 Castro Valley Blvd.  
Castro Valley, CA

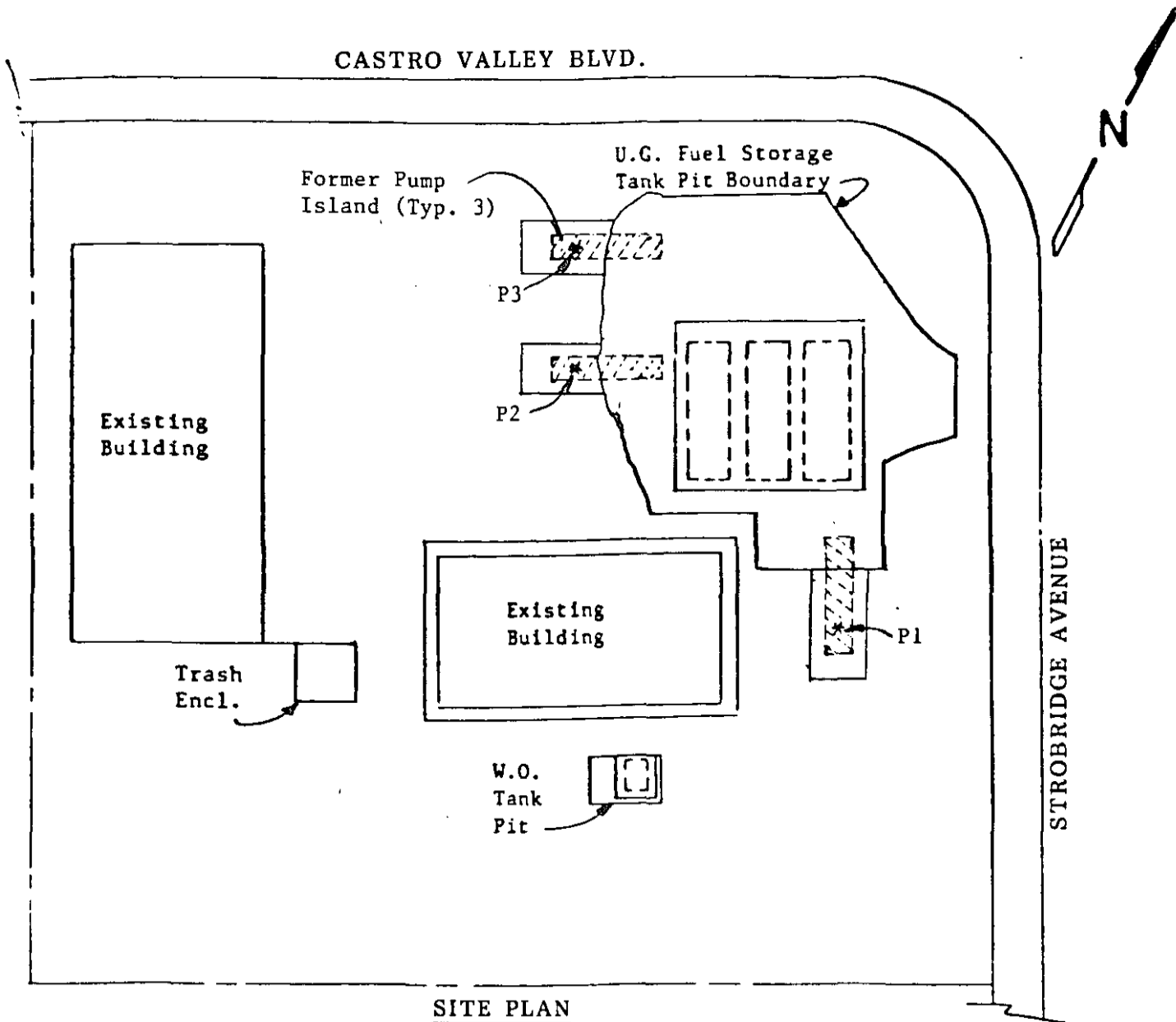


# KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P.O. BOX 996 • BENICIA, CA 94510

(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581

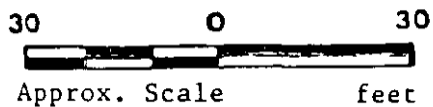


**SITE PLAN**

Figure 4

**LEGEND**

\* Sample Point Location



Unocal S/S #3072  
2445 Castro Valley Blvd.  
Castro Valley, CA



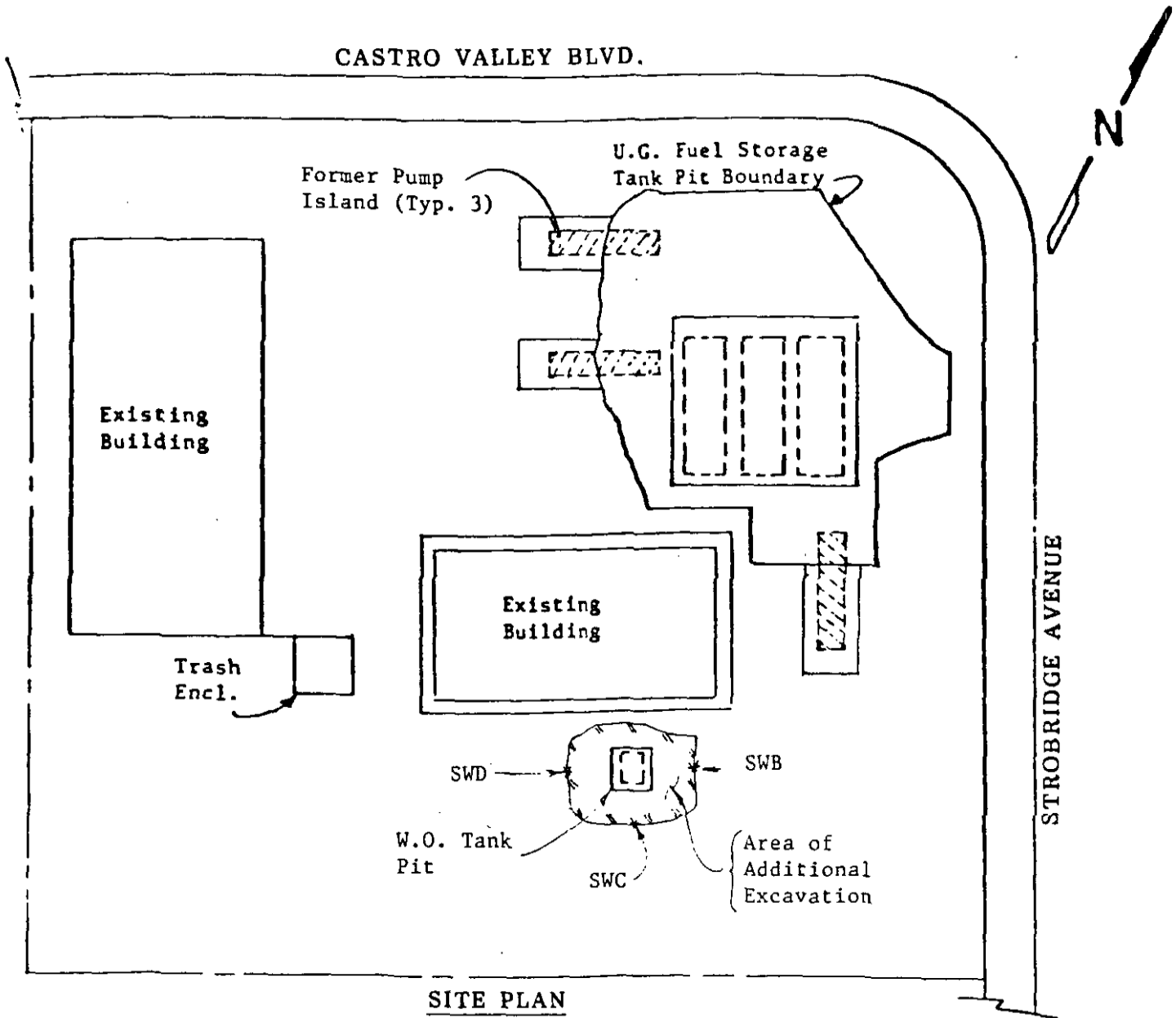


# KAPREALIAN ENGINEERING, INC.

Consulting Engineers

P.O. BOX 996 • BENICIA, CA 94510

(707) 746-6915 • (707) 746-6916 • FAX: (707) 746-5581

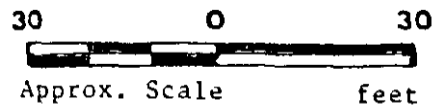


**SITE PLAN**

Figure 5

### LEGEND

\* Sample Point Location



Unocal S/S #3072  
2445 Castro Valley Blvd.  
Castro Valley, 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, 2445 Castro Valley, Castro Valley	Sampled: Jun 12, 1991
P.O. Box 996	Matrix Descript: Water	Received: Jun 12, 1991
Benicia, CA 94510	Analysis Method: EPA 5030/8015/8020	Analyzed: Jun 22, 1991
Attention: Mardo Kaprealian, P.E.	First Sample #: 106-0275 AB	Reported: Jun 26, 1991

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

Sample Number	Sample Description	Low/Medium B.P.	Benzene	Toluene	Ethyl Benzene	Xylenes
		Hydrocarbons				
		$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)	$\mu\text{g/L}$ (ppb)
106-0275 AB	MW-1	N.D.	0.66	N.D.	N.D.	N.D.
106-0276 AB	MW-2	N.D.	N.D.	0.46	N.D.	0.44
106-0277 AB	MW-3	N.D.	N.D.	N.D.	N.D.	N.D.
106-0278 AB	MW-4	N.D.	N.D.	N.D.	N.D.	0.48
106-0279 AB	MW-5	N.D.	N.D.	N.D.	N.D.	0.32

<b>Detection Limits:</b>	<b>30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>	<b>0.30</b>
--------------------------	-----------	-------------	-------------	-------------	-------------

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

  
Julia R. Malerstein  
Project Manager



# 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

Client Project ID: Unocal, 2445 Castro Valley, Castro Valley

Attention: Mardo Kaprealian, P.E. QC Sample Group: 1060275-79

Reported: Jun 26, 1991

## QUALITY CONTROL DATA REPORT

ANALYTE	Benzene	Toluene	Ethyl Benzene	Xylenes
---------	---------	---------	---------------	---------

Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	R.H.	R.H.	R.H.	R.H.
Reporting Units:	ppb	ppb	ppb	ppb
Date Analyzed:	Jun 22, 1991	Jun 22, 1991	Jun 22, 1991	Jun 22, 1991
QC Sample #:	BLK062291	BLK062291	BLK062291	BLK062291

Sample Conc.:	N.D.	N.D.	N.D.	N.D.
Spike Conc. Added:	20	20	20	60
Conc. Matrix Spike:	27	27	28	83
Matrix Spike % Recovery:	140	140	140	140
Conc. Matrix Spike Dup.:	22	22	23	70
Matrix Spike Duplicate % Recovery:	110	110	120	120
Relative % Difference:	20	20	20	17

SEQUOIA ANALYTICAL

*J. Malerstein*  
Julia R. Malerstein  
Project Manager

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



# 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, 2445 Castro Valley, Castro Valley Sample Descript.: Matrix Blank Analysis Method: EPA 5030/8015/8020 Q.C. Sample Group 1060275-79	Analyzed: Jun 22, 1991 Reported: Jun 26, 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

  
Julia R. Malerstein  
Project Manager



# 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

Client Project ID: Unocal, 2445 Castro Valley, Castro Valley

Attention: Mardo Kaprealian, P.E. QC Sample Group: 1060275-79

Reported: Jun 26, 1991

## QUALITY CONTROL DATA REPORT

### SURROGATE

Method:	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020	EPA8015/8020
Analyst:	R.H.	R.H.	R.H.	R.H.	R.H.	R.H.
Reporting Units:	ppb	ppb	ppb	ppb	ppb	ppb
Date Analyzed:	Jun 22, 1991	Jun 22, 1991	Jun 22, 1991	Jun 22, 1991	Jun 22, 1991	Jun 22, 1991
Sample #:	106-0275	106-0276	106-0277	106-0278	106-0279	Blank

Surrogate						
% Recovery:	120	120	120	120	120	100

SEQUOIA ANALYTICAL

*J. Malerstein*  
Julia R. Malerstein  
Project Manager

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



# KAPREALIAN ENGINEERING, INC.

## CHAIN OF CUSTODY

SAMPLER		SITE NAME & ADDRESS							ANALYSES REQUESTED		TURN AROUND TIME:
WITNESSING AGENCY		UNOCAL CASTRO VALLEY 2445 CASTRO VALLEY							TPH & BTEX		REGULAR
SAMPLE ID NO.	DATE	TIME	SOIL	WATER	GRAB	COMP	NO. OF CONT.	SAMPLING LOCATION	REMARKS		
MW1	6-12			X	X		2	VO	X	X	1060275 AB
MW2	"			X	X		4		X	X	276
MW3	"			X	X		4		X	X	277
MW4	"			X	X		4		X	X	278
MW5	"			X	X		4		X	X	279 ↓

Relinquished by: (Signature) 1) Kay (KET)	Date/Time 6-12-91	Received by: (Signature) 1) [Signature]
Relinquished by: (Signature) 2) [Signature]	Date/Time 6/13 1400	Received by: (Signature) 2) [Signature]
Relinquished by: (Signature) 3) [Signature]	Date/Time 6/13/91 1200	Received by: (Signature) 3) [Signature]
Relinquished by: (Signature) 4) [Signature]	Date/Time 6/12/91 1600	Received by: (Signature) 4) [Signature]

- The following MUST BE completed by the laboratory accepting samples for analysis:
- Have all samples received for analysis been stored in ice? yes
  - Will samples remain refrigerated until analyzed? yes
  - Did any samples received for analysis have head space? no
  - Were samples in appropriate containers and properly packaged? yes
- Signature: BS Title: login Date: 6/12/91



March 8, 2005

TRC Project No. 420187-01

ConocoPhillips  
P.O. Box 2197  
Houston, TX 77079-1175

ATTN: WILLIAM E. RODGERS, JR.  
  
SITE: 76 SERVICE STATION No. 3072  
2445 CASTRO VALLEY BLVD  
CASTRO VALLEY, CALIFORNIA  
  
RE: BASELINE SITE ASSESSMENT REPORT

Dear Mr. Rodgers:

On behalf of ConocoPhillips Company, TRC submits this Baseline Site Assessment Report summarizing sampling activities at the site referenced above. The contents of this report include:

- Section 1 Summary Data
- Section 2 Figures
- Section 3 Tables
- Section 4 General Field Procedures and Boring Logs
- Section 5 Official Laboratory Reports

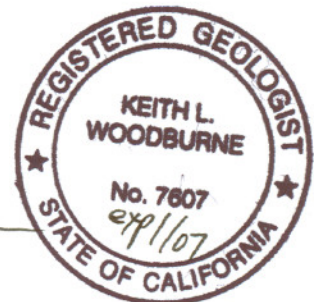
If you have any questions regarding this report, please call Keith Woodburne with TRC at (925) 688-2488.

Sincerely,

TRC

Rachelle Dunn  
Staff Geologist

Keith Woodburne, R.G.  
Senior Project Geologist



cc: Thomas Kosel (electronic copy)  
Bob Turrietta (3 copies)

## SECTION 1



## SUMMARY DATA

<b>SITE INFORMATION</b>	
<b>76 Service Station No. 3072</b> <b>2445 Castro Valley Blvd.</b> <b>Castro Valley, California</b>	TRC Project Number: 42018701
<b>SCOPE OF WORK</b>	
Advance 6 direct-push borings to assess the presence of hydrocarbon-affected soil and groundwater beneath the site. Collect grab groundwater samples from all soil borings.	Environmental Consultant: TRC Drilling Contractor and Rig: Woodward Drilling / Power Probe
<b>SITE OVERVIEW</b>	
Active service station with two 10,000-gallon gasoline USTs, one 10,000-gallon diesel UST, and one 550-gallon waste-oil UST, and three dispenser islands.	Groundwater was encountered at depths ranging from 15.0 to 49 fbg in 5 borings on January 24, 25, and 31, 2005.
<b>FIELD ACTIVITIES</b>	
USA Notification: January 18, 2005 Borings Drilled on: January 24, 25, and 31, 2005	Total Soil Samples Analyzed: 10 Grab Groundwater Samples Analyzed: 4
Boring Depths and Identifications: 25.5 fbg: Direct Push Boring SB-1 24.0 fbg: Direct Push Boring SB-2 18.0 fbg: Direct Push Boring SB-3 50.0 fbg: Direct Push Boring SB-4 23.0 fbg: Direct Push Boring SB-5 50.0 fbg: Direct Push Boring SB-6	Soil and groundwater sampling activities were conducted in accordance with the field procedures detailed in Section 4. All field activities performed under the purview of a registered professional.  The dates of sample collection are documented on the Chain of Custody records included in Section 5.
<b>LABORATORY ANALYSIS</b>	
Soil and groundwater samples were submitted to a state-certified laboratory for the analyses listed below.	
<u>Gasoline USTs and Dispensers:</u>	
<ul style="list-style-type: none"> <li>• TPPH using EPA Method 8260B.</li> <li>• BTEX, Oxygenates, and ethanol using EPA Method 8260B.</li> </ul>	
<u>Diesel UST and Diesel Dispenser:</u>	
<ul style="list-style-type: none"> <li>• TPH-D using EPA Method 8015.</li> </ul>	
<u>Waste Oil UST:</u>	
<ul style="list-style-type: none"> <li>• Oil and Grease (O&amp;G) using EPA Method 1664.</li> <li>• Total lead using EPA Method 6010.</li> </ul>	
<b>FINDINGS</b>	
<u>Lithology and Depth to Groundwater</u>	
Lithologies encountered beneath the site consist of mostly hard dry fine-grained sand and a minimal amount of silt and clay to the maximum depth investigated of 50.0 fbg. Groundwater was encountered at depths ranging from 15.0 to 49 fbg in 6 borings on January 24, 25, and 31, 2005.	
<u>Soil Results</u>	
The laboratory results for TPH-D, TPPH, BTEX, oxygenates, fuel additives, ethanol, total lead and O&G are listed in Section 3. Benzene, toluene, DIPE, ETBE, TAME, 1,2-DCA, EDB and ethanol were not detected in the eight soil samples analyzed from five borings adjacent to the gasoline USTs and dispensers. TPPH was detected in two soil samples at a maximum concentration of 480 mg/kg (SB-1 @ 8'). Ethylbenzene was detected in two soil samples at a maximum concentration of 1.1 mg/kg (SB-1 @ 8'). Total xylenes was detected in three soil samples at a maximum concentration of 1.1 mg/kg (SB-1 @ 8'). TBA was detected in two soil samples at a maximum concentration of 0.014 mg/kg (SB-2 @ 12'). MTBE was detected in two soil samples at a maximum concentration of 0.11 mg/kg (SB-3 @ 18'). O&G were detected in one of the two soil samples analyzed at a maximum concentration of 670 mg/kg (SB-6 @ 10'). Total lead was detected in both soil samples at a maximum concentration of 4.7 mg/kg (SB-6 @ 50').	

## SUMMARY DATA

### FINDINGS (CONT'D.)

TPH-D was detected in two of the three soil samples analyzed from three borings at a maximum of 25 mg/kg (SB-4 @ 8').

#### Groundwater Results

TPPH, benzene, toluene, TBA, DIPE, ETBE, TAME, 1,2-DCA, EDB and ethanol were not detected in the four grab groundwater samples. Ethylbenzene was detected in one of the four grab groundwater samples at a concentration of 0.77 µg/L (SB-1). Total xylenes was detected in one of the four grab groundwater samples at a concentration of 1.2 µg/L (SB-2). MTBE was detected in three of the four grab groundwater samples at a maximum concentration of 87 µg/L (SB-1).

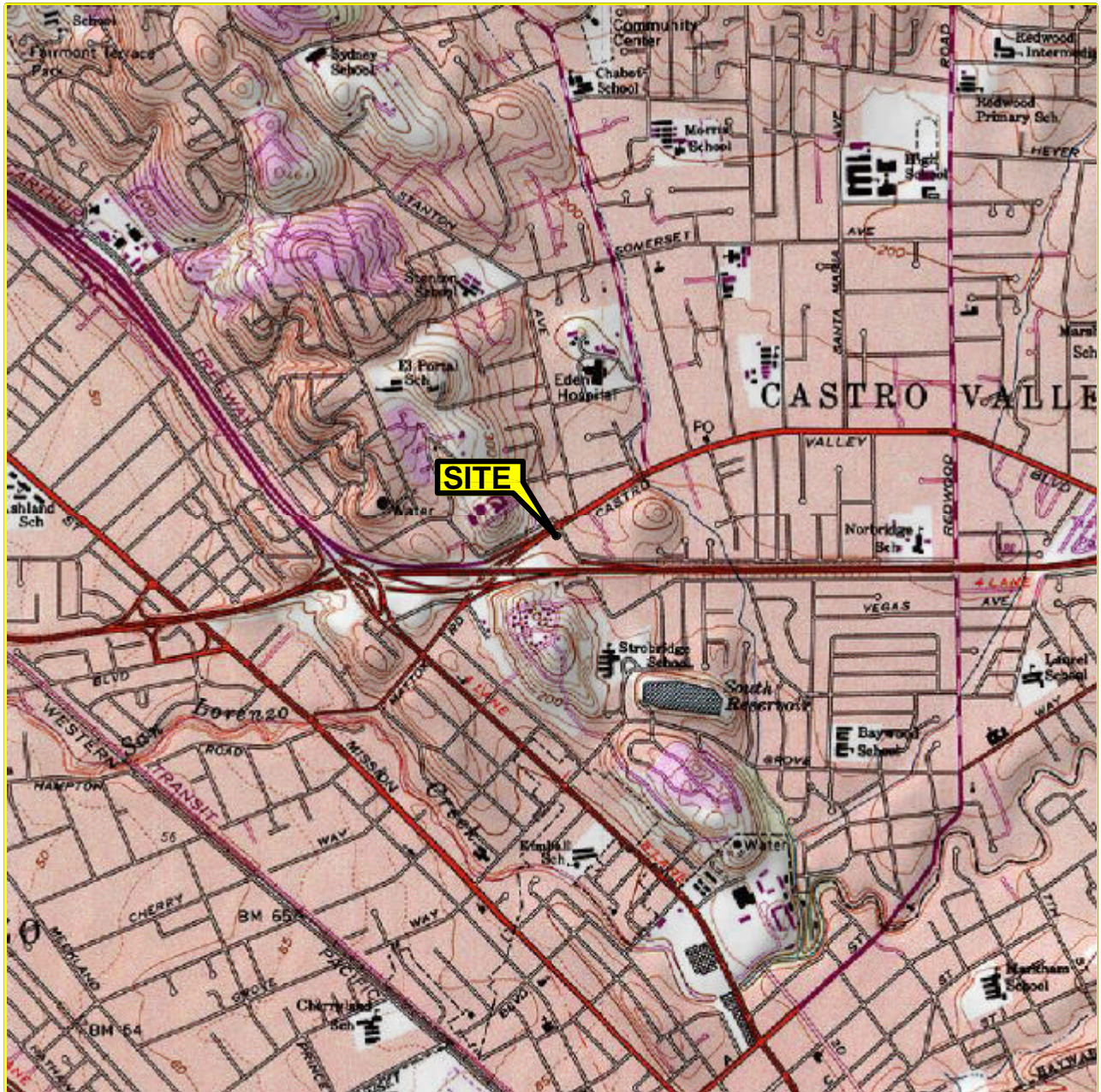
### LIST OF ABBREVIATIONS

BAAQMD = Bay Area Air Quality Management District	MTBE = methyl tertiary butyl ether
BTEX = benzene, toluene, ethyl benzene and total xylenes	TAME = tertiary amyl methyl ether
TPPH = total purgeable petroleum hydrocarbons	TPH-D = total petroleum hydrocarbons as diesel
O&G = oil and grease (petroleum)	NA = not applicable
VOC = volatile organic compound	ND = not detected at laboratory detection limits indicated in official laboratory report
PCB = polychlorinated biphenyl	fbg = feet below grade
HSA = Hollow stem auger	gw = groundwater
TBA = tertiary butyl alcohol	gal = gallon
1,2-DCA = 1,2-dichloroethane	max = maximum
DIPE = di-isopropyl ether	mg/kg = milligrams per kilogram
EDB = ethylene dibromide	UST = Underground storage tank
ETBE = ethyl tertiary butyl ether	

### STATEMENT OF LIMITATIONS

The activities summarized in this report have been conducted in accordance with current practice and the standard of care exercised by geologists and engineers performing similar tasks in this area. No warranty, express or implied, is made regarding the conclusions and professional opinions presented in this report. The findings and conclusions are based solely upon an analysis of observed conditions. If actual conditions differ from those described in this report, our office should be notified.

## SECTION 2



1 MILE 3/4 1/2 1/4 0 1 MILE



SCALE 1 : 24,000



**SOURCE:**

United States Geological Survey  
7.5 Minute Topographic Maps:  
Hayward Quadrangle  
California



**VICINITY MAP**

76 Service Station #3072  
2445 Castro Valley Boulevard  
Castro Valley, California

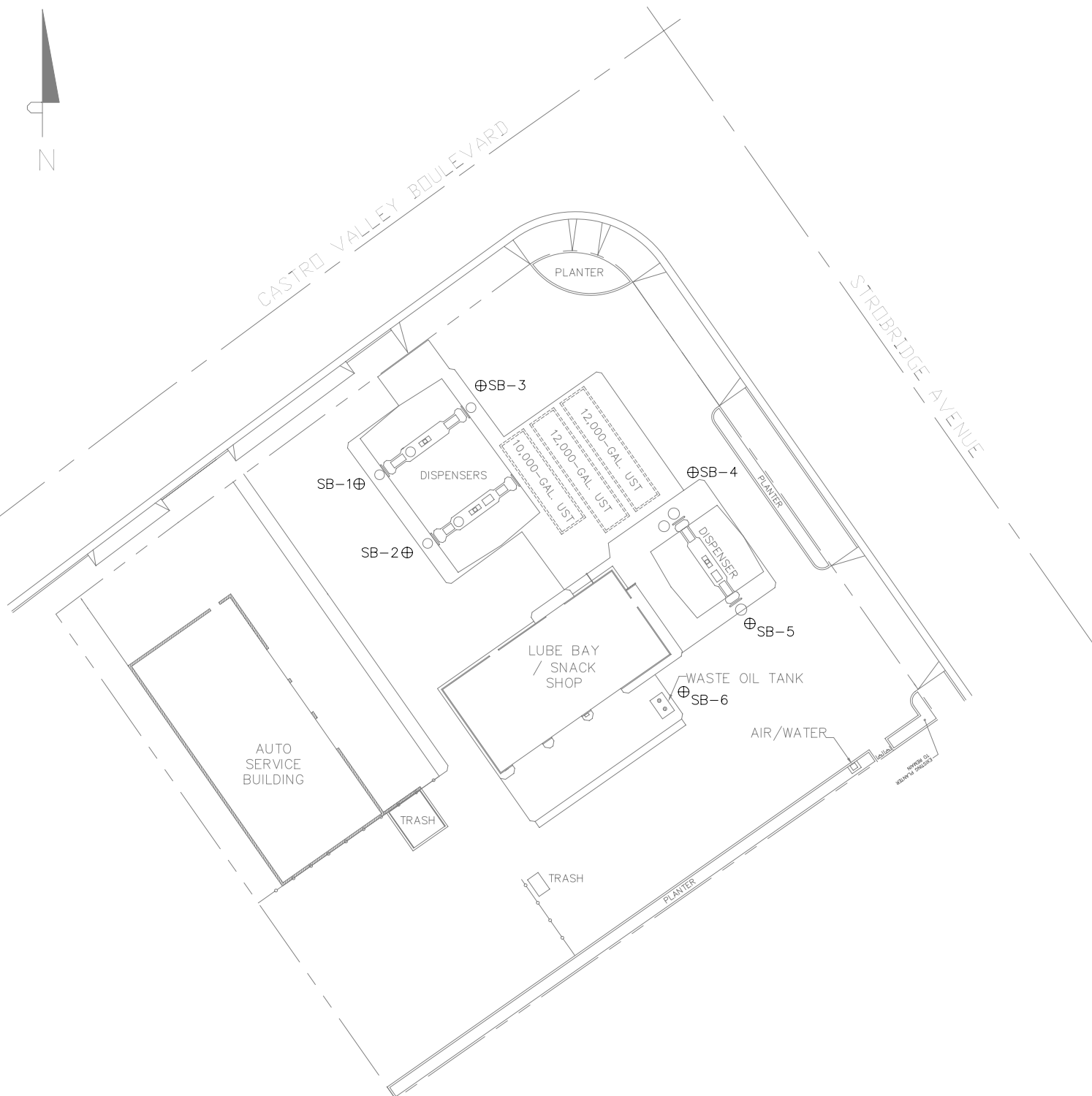


**FIGURE 1**



CASTRO VALLEY BOULEVARD

STROBRIDGE AVENUE



APPROXIMATE SCALE (FEET)



LEGEND

- Property Boundary
- o-o-o-o-o- Fence
- ⊕ SB-4 Soil Boring

**SITE PLAN**

76 Service Station #3072  
2445 Castro Valley Boulevard  
Castro Valley, California

SOURCE: Client-provided site plan prepared by A&S Engineering, October 1997.



**FIGURE 2**

## SECTION 3

Table 1

**RESULTS OF LABORATORY ANALYSIS OF SOIL SAMPLES**  
**76 Station # 3072**  
**2445 Castro Valley Blvd, Castro Valley, California**

Sample Number	Sample Date	Depth (fbg)	TPH-D	TPPH	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TBA	MTBE	DIPE	ETBE	TAME	1, 2-DCA	EDB	Ethanol	Total Lead	Oil & Grease
			(mg/kg) EPA 8015	(mg/kg) EPA 8260B	(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)
SB-1 @ 8'	1/24/2005	8.0	--	<b>480</b>	<0.50	<0.50	<b>1.1</b>	<b>1.1</b>	<2.5	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<25	--	--
SB-1 @ 25.5'	1/24/2005	25.5	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<b>0.013</b>	<b>0.074</b>	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	--	--
SB-2 @ 12'	1/24/2005	12.0	--	<1.0	<0.0050	<0.0050	<b>0.043</b>	<b>0.021</b>	<b>0.014</b>	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	--	--
SB-2 @ 24'	1/24/2005	24.0	--	<1.0	<0.0050	<0.0050	<0.0050	<b>0.011</b>	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	--	--
SB-3 @ 18'	1/25/2005	18.0	<1.0	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<b>0.11</b>	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	--	--
SB-4 @ 8'	1/25/2005	8.0	<b>25</b>	<b>470</b>	<0.50	<0.50	<0.50	<0.50	<2.5	<0.50	<1.0	<0.50	<0.50	<0.50	<0.50	<25	--	--
SB-4 @ 50'	1/25/2005	50.0	--	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	--	--
SB-5 @ 23'	1/31/2005	23.0	<b>2.1</b>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	--	--
SB-6 @ 10'	1/31/2005	10.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>3.4</b>	<b>670</b>
SB-6 @ 50'	1/31/2005	50.0	--	--	--	--	--	--	--	--	--	--	--	--	--	--	<b>4.7</b>	<50
Composite	1/25/2005	na	<b>5.0</b>	<1.0	<0.0050	<0.0050	<0.0050	<0.0050	<0.010	<0.0050	<0.010	<0.0050	<0.0050	<0.0050	<0.0050	<0.1	<b>7.5</b>	

Notes:

TPH-D	= total petroleum hydrocarbon as diesel	1,2 DCA	= 1,2-dichloroethane
TPPH	= total purgeable petroleum hydrocarbons	EDB	= ethylene dibromide
TBA	= tertiary butyl alcohol	fbg	= feet below grade
MTBE	= methyl tertiary butyl ether	mg/kg	= milligrams per kilogram
DIPE	= di-isopropyl ether	--	= not analyzed, measured, or collected
ETBE	= ethyl tertiary butyl ether	na	= not applicable
TAME	= tertiary amyl methyl ether		

Table 2

RESULTS OF LABORATORY ANALYSIS OF GROUNDWATER SAMPLES  
 76 Station # 3072  
 2445 Castro Valley Blvd, Castro Valley, California

Sample Number	Sample Date	Depth (fbg)	TPH-D	TPPH	Benzene	Toluene	Ethyl-	Total	TBA	MTBE	DIPE	ETBE	TAME	1, 2-DCA	EDB	Ethanol	
			(µg/L) EPA 8015	(µg/L) EPA 8260B			benzene	Xylenes		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)
EPA Method 8260B																	
SB-1	1/24/2005	na	--	<50	<0.50	<0.50	<b>0.77</b>	<1.0	<5.0	<b>87</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<50	
SB-2	1/24/2005	na	--	<50	<0.50	<0.50	<0.50	<b>1.2</b>	<5.0	<b>0.68</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<50	
SB-3	1/25/2005	na	<50	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<b>5.1</b>	<0.50	<0.50	<0.50	<0.50	<0.50	<50	
SB-4	1/25/2005	na	--	<50	<0.50	<0.50	<0.50	<1.0	<5.0	<0.50	<0.50	<0.50	<0.50	<0.50	<0.50	<50	
Notes:	TPH-D	=	total petroleum hydrocarbon as diesel					1,2 DCA	=	1,2-dichloroethane							
	TPPH	=	total purgeable petroleum hydrocarbons					EDB	=	ethylene dibromide							
	TBA	=	tertiary butyl alcohol					fbg	=	feet below grade							
	MTBE	=	methyl tertiary butyl ether					µg/L	=	micrograms per liter							
	DIPE	=	di-isopropyl ether					--	=	not analyzed, measured, or collected							
	ETBE	=	ethyl tertiary butyl ether					na	=	not applicable							
	TAME	=	tertiary amyl methyl ether														



## SECTION 4

## **GENERAL FIELD PROCEDURES**

The following is a description of general field procedures used during drilling, groundwater and soil sampling activities.

### **GEOPROBE SOIL SAMPLING**

Soil sampling points are driven into the soil using hydraulically actuated "direct-push" and percussion equipment. The soil sampling points consist of 1.5-inch-diameter hollow steel rods fitted with a reverse-threaded or sliding hardened drive point. Borings will be grouted to ground surface with a cement/bentonite slurry

Soil samples are obtained for soil description, field hydrocarbon vapor screening, and possible laboratory analysis. Soil samples are retrieved from the borings using a 3-foot-long, 2-inch diameter continuous-core split-barrel sampler lined with six 1.5-inch-diameter stainless steel/brass sample tubes or a 4-foot-long acetate liner.

During drilling activities, soil adjacent to the laboratory sample is screened for combustible vapors using a combustible gas indicator (CGI) or equivalent field instrument. For each hydrocarbon vapor screening event, a stainless steel tube is filled approximately 1/3 full with the soil sample, capped at both ends, and shaken. The probe is then inserted through a small opening in the cap, and a reading is taken after approximately 15 seconds and recorded on the boring log. The remaining soil recovered is removed from the sample insert or sampler, and described in accordance with the Unified Soil Classification System. For each sampling interval, field estimates of soil type, density/consistency, moisture, color, and grading are recorded on the boring logs.

### **SOIL SAMPLE HANDLING**

Upon retrieval, soil samples are immediately removed from the sampler, sealed with Teflon sheeting and polyurethane caps, and wrapped with tape. Each sample is labeled with the project number, boring/well number, sample depth, geologist's initials, and date of collection. After the samples have been labeled and documented in the chain of custody record, they are placed in a cooler with ice at approximately 4 degrees Celsius (°C) prior to and during transport to a state-certified laboratory for analysis. Samples not selected for immediate analysis may be transported in a cooler with ice and archived in a frostless refrigerator at approximately 4°C for possible future testing.

### **HYDROPUNCH SAMPLING**

A grab groundwater sample is collected using a Hydropunch® sampling device. The Hydropunch® consists of a stainless steel probe, which is advanced into the water-yielding zone then withdrawn to expose an internal screen. A decontaminated stainless steel bailer is inserted

down the center of the well screen to obtain a "grab-type" groundwater sample for analysis. The boring is grouted to ground surface with cement/bentonite slurry.

#### CHAIN OF CUSTODY PROTOCOL

Chain of custody protocol is followed for all soil selected for laboratory analysis. The chain of custody forms(s) accompanies the samples from the sampling locality to the laboratory, providing a continuous record of possession prior to analysis.

#### DECONTAMINATION

Drilling equipment is decontaminated by steam cleaning before being brought onsite. The augers are also steam cleaned before each new boring is commenced. Prior to use, the sampler and sampling tubes are brush-scrubbed in a Liqui-nox and potable water solution and rinsed twice in clean potable water. Sampling equipment and tubes are also decontaminated before each sample is collected to avoid cross-contamination between borings.

#### GROUNDWATER MONITORING AND SAMPLING ASSIGNMENTS

For each site, TRC technicians are provided with a Technical Service Request (TSR) that specifies activities required to complete the groundwater monitoring and sampling assignment for the site. TSRs are based on client directives, instructions from the primary environmental consultant for the site, regulatory requirements, and TRC's previous experience with the site.

##### Fluid Level Measurements

Initial site activities include determination of well locations based on a site map provided with the TSR. Well boxes are opened and caps are removed. Indications of well or well box damage or of pressure buildup in the well are noted.

Fluid levels in each well are measured using a coated cloth tape equipped with an electronic interface probe, which distinguishes between liquid phase hydrocarbon (LPH) and water. The depths to LPH (if it is present), to water, and to the bottom of the well are measured from the top of the well casing (surveyors mark or notch if present) to the nearest 0.01 foot. Unless otherwise instructed, a well with less than 0.67 foot between the measured top of water and the measured bottom of the well casing is considered dry, and is not sampled. If the well contains 0.67 foot or more of water, an attempt is made to bail and/or sample as specified on the TSR.

Wells that are found to contain LPH are not purged or sampled. Instead, one casing volume of fluid is bailed from the well and the well is re-sealed. Bailed fluids are placed in a container separate from normal purge water, and properly disposed.

##### Purging and Groundwater Parameter Measurement

TSR instructions may specify that a well not be purged (no-purge sampling), be purged using low-flow methods, or be purged using conventional pump and/or bail methods. Conventional purging generally consists of pumping or bailing until a minimum of three casing volumes of water have been removed or until the well has been pumped dry. Pumping is generally accomplished using submersible electric or pneumatic diaphragm pumps.

During conventional purging, three groundwater parameters (temperature, pH, and conductivity) are measured after removal of each casing volume. Stabilization of these parameters, to within 10 percent, confirm that sufficient purging has been completed. In some cases, the TSR indicates that other parameters are also to be measured during purging. TRC commonly measures dissolved oxygen (DO), oxidation-reduction potential (ORP), and/or turbidity. Instruments used for groundwater parameter measurement are calibrated daily according to manufacturer's instructions.

Low-flow purging utilizes a bladder or peristaltic pump to remove water from the well at a low rate. Groundwater parameters specified by the TSR are measured continuously until they become stable in general accordance with EPA guidelines.

Purge water is generally collected in labeled drums for disposal. Drums may be left on site for disposal by others, or transported to a collection location for eventual transfer to a licensed treatment or recycling facility. In some cases, purge water may be collected directly from the site by a licensed vacuum truck company, or may be treated on site by an active remediation system, if so directed.

#### Groundwater Sample Collection

After wells are purged, or not purged, according to TSR instructions, samples are collected for laboratory analysis. For wells that have been purged using conventional pump or bail methods, sampling is conducted after the well has recovered to 80 percent of its original volume or after two hours if the well does not recover to at least 80 percent. If there is insufficient recharge of water in the well after two hours, the well is not sampled.

Samples are collected by lowering a new, disposable, ½-inch to 4-inch polyethylene bottom-fill bailer to just below the water level in the well. The bailer is retrieved and the water sample is carefully transferred to containers specified for the laboratory analytical methods indicated by the TSR. Particular care is given to containers for volatile organic analysis (VOAs) which require filling to zero headspace and fitting with Teflon-sealed caps.

After filling, all containers are labeled with project number (or site number), well designation, sample date, and the samplers initials, and placed in an insulated chest with ice. Samples remain chilled prior to and during transport to a state-certified laboratory for analysis. Sample container descriptions and requested analyses are entered onto a chain-of-custody form in order to provide instructions to the laboratory. The chain-of-custody form accompanies the samples during transportation to provide a continuous record of possession from the field to the laboratory. If a freight or overnight carrier transports the samples, the carrier is noted on the form.

For wells that have been purged using low-flow methods, sample containers are filled from the effluent stream of the bladder or peristaltic pump. In some cases, if so specified by the TSR, samples are taken from the sample ports of actively pumping remediation wells.

#### Sequence of Gauging, Purging, and Sampling

The sequence in which monitoring activities are conducted are specified on the TSR. In general, wells are gauged beginning with the least-affected well and ending with the well that has highest concentration based on previous analytic results. After all gauging for the site is completed, wells are purged and/or sampled from the least-affected well to the most-affected well.

### Decontamination

In order to reduce the possibility of cross-contamination between wells, strict isolation and decontamination procedures are observed. Portable pumps are not used in wells with LPH. Technicians wear nitrile gloves during all gauging, purging and sampling activities. Gloves are changed between wells and more often if warranted. Any equipment that could come in contact with fluids are either dedicated to a particular well, decontaminated prior to each use, or discarded after a single use. Decontamination consists of washing in a solution of Liqui-nox and water and rinsing twice. The final rinse is in deionized water.

### Exceptions

Additional tasks or non-standard procedures, if any, that may be requested or required for a particular site, and noted on the site TSR, are documented in field notes on the following pages.

1/5/04 version

PROJECT NO.: 42-0187-01	DATE DRILLED: 1/24/05	NORTHING: NOT SURVEYED
LOCATION: 76 Station #3072	LOGGED BY: R. Dunn	EASTING: NOT SURVEYED
2445 Castro Valley Blvd.	APPROVED BY: K. Woodburne, RG	GROUND SURFACE ELEVATION: NOT SURVEYED
Castro Valley, California	DRILLING CO.: Woodward Drilling	

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DRILLING METHOD: 2-inch Diameter Direct-Push SAMPLER TYPE: 4-foot Continuous-Core Barrel TOTAL DEPTH: 25.5 feet DEPTH TO WATER: 23.5 feet	USCS	LITHOLOGY	BORING BACKFILL DETAIL
					DESCRIPTION			
				0	Vacuum clearance to 5'.			
34.0	3.0/ 3.0			5	SAND (SP): Gray (10YR 6/1), 10% fines, 90% fine- to medium-grained sand, dense, dry, hydrocarbon odor.  - @ 8': color change to grayish brown (10YR 5/2), slight odor.  - @ 12': color change to brown (10YR 4/3), no odor.	SP		0 5 10 15 20 25 30 35 40
5.0	4.0/ 4.0			10				
1.0	3.0/ 3.0			15	No recovery.			
1.2	2.0/ 2.0			20				
1.5	3.0/ 3.0			25	SAND (SP): same as above.  - @ 21.5': color change to dark gray (10YR 4/1).  - @ 24': color change to grayish brown (10YR 5/2), wet.	SP		
1.4	2.5/ 2.5			30				
				35				
				40				



**LOG OF EXPLORATORY BORING**

PROJECT NO.: 42-0187-01	DATE DRILLED: 1/24/05	NORTHING: NOT SURVEYED
LOCATION: 76 Station #3072	LOGGED BY: R. Dunn	EASTING: NOT SURVEYED
2445 Castro Valley Blvd.	APPROVED BY: K. Woodburne, RG	GROUND SURFACE ELEVATION: NOT SURVEYED
Castro Valley, California	DRILLING CO.: Woodward Drilling	

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DRILLING METHOD: 2-inch Diameter Direct-Push SAMPLER TYPE: 4-foot Continuous-Core Barrel TOTAL DEPTH: 24.0 feet DEPTH TO WATER: 23.0 feet	USCS	LITHOLOGY	BORING BACKFILL DETAIL
					DESCRIPTION			
				0	Vacuum clearance to 5'.			0
0.6	3.0/3.0			5	SAND (SP): Brown (10YR 4/3), 10% fines, 90% fine-grained sand, loose, dry.			5
7.1	4.0/4.0			10				10
2.8	3.0/3.0			15	- @ 15': fine- to medium-grained sand.			15
2.1	1.0/1.0			17.5	- @ 17.5': color change to dark grayish brown (10YR 4/2), dense.			17.5
2.0	1.5/1.5			20				20
1.9	2.0/2.0			23				23
2.1	1.5/1.5			24	SILTY CLAY (CL): Gray (10YR 5/1), 95% fines, 5% fine-grained sand, medium plasticity, soft, wet.	CL		24
1.6	3.0/3.0			25				25
				30				30
				35				35
				40				40



**LOG OF EXPLORATORY BORING**

PROJECT NO.: 42-0187-01  
 LOCATION: 76 Station #3072  
 2445 Castro Valley Blvd.  
 Castro Valley, California

DATE DRILLED: 1/25/05  
 LOGGED BY: R. Dunn  
 APPROVED BY: K. Woodburne, RG  
 DRILLING CO.: Woodward Drilling

NORTHING: NOT SURVEYED  
 EASTING: NOT SURVEYED  
 GROUND SURFACE ELEVATION: NOT SURVEYED



PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DRILLING METHOD: 2-inch Diameter Direct-Push SAMPLER TYPE: 4-foot Continuous-Core Barrel TOTAL DEPTH: 18.0 feet DEPTH TO WATER: 15.0 feet		USCS	LITHOLOGY	BORING BACKFILL DETAIL
					DESCRIPTION				
1.4	0.0/ 3.0	0.0/ 4.0	1.0/ 3.5	0	Vacuum clearance to 5'.				0
				5	No recovery.				
	2.5/ 2.5			15	PEA GRAVEL: wet. SAND (GW): Brown (10YR 4/3), 5% fines, 95% fine- to medium-grained sand, loose, wet.		GW		15
				20					20
				25					25
				30					30
				35					35
				40					40



**LOG OF EXPLORATORY BORING**



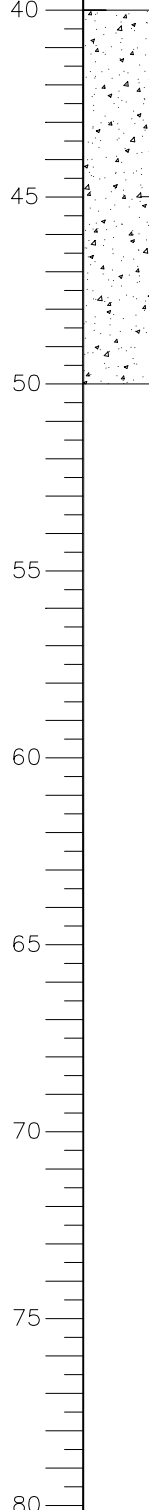
PROJECT NO.: 42-0187-01	DATE DRILLED: 1/25/05	NORTHING: NOT SURVEYED
LOCATION: 76 Station #3072	LOGGED BY: R. Dunn	EASTING: NOT SURVEYED
2445 Castro Valley Blvd.	APPROVED BY: K. Woodburne, RG	GROUND SURFACE ELEVATION: NOT SURVEYED
Castro Valley, California	DRILLING CO.: Woodward Drilling	

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DRILLING METHOD: 2-inch Diameter Direct-Push SAMPLER TYPE: 4-foot Continuous-Core Barrel TOTAL DEPTH: 50.0 feet DEPTH TO WATER: 49.0 feet	USCS	LITHOLOGY	BORING BACKFILL DETAIL
					DESCRIPTION			
				0	Vacuum clearance to 5'.			
44.0		3.0/ 3.0		5	SILTY CLAY (CL): Greenish gray (GLEYS 1 5/10Y), 90% fines, 10% fine-grained sand, medium plastic, soft, moist, hydrocarbon odor.	CL		0 5 10 15 20 25 30 35 40
1.3		4.0/ 4.0		8.5	- @ 8.5': stiff.			Grout to Surface
1.7		2.0/ 4.0		13	SAND (SP): Grayish brown (10YR 5/2), 10% fines, 90% fine-grained sand, dense, no odor.	SP		
2.0		3.0/ 3.0		13.5	- @ 13': color change to brown (10YR 5/3).			
0.9		1.0/ 1.0		18	- @ 13.5': color change to very dark gray (10YR 3/1).			
1.5		3.0/ 3.0		20	- @ 18': color change to dark grayish brown (10YR 4/2).			
2.0		1.0/ 1.0		25	Difficult drilling conditions; augers used; no samples collected.			



**LOG OF EXPLORATORY BORING**

PROJECT NO.: 42-0187-01	DATE DRILLED: 1/25/05	NORTHING: NOT SURVEYED
LOCATION: 76 Station #3072	LOGGED BY: R. Dunn	EASTING: NOT SURVEYED
2445 Castro Valley Blvd.	APPROVED BY: K. Woodburne, RG	GROUND SURFACE ELEVATION: NOT SURVEYED
Castro Valley, California	DRILLING CO.: Woodward Drilling	

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DRILLING METHOD: 2-inch Diameter Direct-Push SAMPLER TYPE: 4-foot Continuous-Core Barrel TOTAL DEPTH: 50.0 feet DEPTH TO WATER: 49.0 feet	USCS	LITHOLOGY	BORING BACKFILL DETAIL
					DESCRIPTION			
1.2			1.0/ 1.0	40	Difficult drilling conditions.			 <p>Grout to Surface</p>
				50				
				55				
				60				
				65				
				70				
				75				
				80				



**LOG OF EXPLORATORY BORING**

PROJECT NO.: 42-0187-01	DATE DRILLED: 1/31/05	NORTHING: NOT SURVEYED
LOCATION: 76 Station #3072	LOGGED BY: R. Dunn	EASTING: NOT SURVEYED
2445 Castro Valley Blvd.	APPROVED BY: K. Woodburne, RG	GROUND SURFACE ELEVATION: NOT SURVEYED
Castro Valley, California	DRILLING CO.: Woodward Drilling	

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DRILLING METHOD: 2-inch Diameter Direct-Push SAMPLER TYPE: 4-foot Continuous-Core Barrel TOTAL DEPTH: 23.0 feet DEPTH TO WATER: Not Encountered	USCS	LITHOLOGY	BORING BACKFILL DETAIL
					DESCRIPTION			
				0	Vacuum clearance to 5'.			
0.2	3.0/3.0			5	SILT (ML): Light yellowish brown (10YR 6/4), 90% fines, 10% fine-grained sand, nonplastic, stiff, dry.	ML		
0.4	4.0/4.0			10	SAND (SP): Brown (10YR 5/3), 10% fines, 90% fine- to medium-grained sand, dense, dry.			
1.2	4.0/4.0			15				
1.2	2.0/2.0			17.5	- @ 17.5': color change to gray (10YR 5/11), fine-grained sand, loose.	SP		
1.8	2.0/2.0			20				
2.5	2.0/2.0			25				
2.0	1.0/1.0			30				
				35				
				40				



**LOG OF EXPLORATORY BORING**

PROJECT NO.: 42-0187-01	DATE DRILLED: 1/31/05	NORTHING: NOT SURVEYED
LOCATION: 76 Station #3072	LOGGED BY: R. Dunn	EASTING: NOT SURVEYED
2445 Castro Valley Blvd.	APPROVED BY: K. Woodburne, RG	GROUND SURFACE ELEVATION: NOT SURVEYED
Castro Valley, California	DRILLING CO.: Woodward Drilling	

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DRILLING METHOD: 2-inch Diameter Direct-Push SAMPLER TYPE: 4-foot Continuous-Core Barrel TOTAL DEPTH: 50.0 feet DEPTH TO WATER: 47.0 feet	USCS	LITHOLOGY	BORING BACKFILL DETAIL
					DESCRIPTION			
				0	Vacuum clearance to 5'.			0
24.6	3.0/3.0			5	SILT (ML): Greenish gray (GLE Y1 5/10Y), 90% fines, 10% fine- to medium-grained sand, low plasticity, soft, moist.	ML		5
190.1	2.0/2.0			10	SAND (SP): Pale brown (10YR 6/3), 15% fines, 85% fine-grained sand, dry.			10
60.1	2.0/2.0			12.5	- @ 12.5': color change to yellowish brown (10YR 5/4).			12.5
2.2	1.0/1.0			15	- @ 15.5': medium-grained sand, slight hydrocarbon odor.	SP		15
6.7	3.0/3.0			20	- @ 20': no odor.			20
7.1	3.0/3.0			25				25
6.8	2.0/2.0			30				30
				35				35
				40	Difficult drilling conditions; augers used; no samples collected.			40



**LOG OF EXPLORATORY BORING**

PROJECT NO.: 42-0187-01	DATE DRILLED: 1/31/05	NORTHING: NOT SURVEYED
LOCATION: 76 Station #3072	LOGGED BY: R. Dunn	EASTING: NOT SURVEYED
2445 Castro Valley Blvd.	APPROVED BY: K. Woodburne, RG	GROUND SURFACE ELEVATION: NOT SURVEYED
Castro Valley, California	DRILLING CO.: Woodward Drilling	

PID/FID (ppm)	BLOWS PER 6 INCHES	RECOVERY	SAMPLE	DEPTH (feet below grade)	DRILLING METHOD: 2-inch Diameter Direct-Push SAMPLER TYPE: 4-foot Continuous-Core Barrel TOTAL DEPTH: 50.0 feet DEPTH TO WATER: 47.0 feet	USCS	LITHOLOGY	BORING BACKFILL DETAIL
					DESCRIPTION			
				40	Difficult drilling conditions.			40
				45				45
		3.0/ 3.0		50	SANDY SILT (ML): Gray (10YR 5/1), 90% fines, 10% fine-grained sand, low plasticity, soft, wet. SAND (SP): Gray (10YR 6/1), 10% fines, 90% fine-grained sand, dense, dry.	ML SP		50
				55				55
				60				60
				65				65
				70				70
				75				75
				80				80



**LOG OF EXPLORATORY BORING**

## SECTION 5

**TRC/Alton Geoscience-Concord**

February 10, 2005

1590 Solano Way, Suite A  
Concord, CA 94520

Attn.: Keith Woodburne

Project#: 42018701

Project: Conoco Phillips # 3072

Site: 2445 Castro Valley Blvd., Castro Valley

Attached is our report for your samples received on 01/26/2005 15:00

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 03/12/2005 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: [dsharma@stl-inc.com](mailto:dsharma@stl-inc.com)

Sincerely,



Dimple Sharma  
Project Manager

**Total Lead**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
COMPOSITE	01/25/2005 19:30	Soil	12



**Total Lead**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 3050B	Test(s): 6010B
Sample ID: <b>COMPOSITE</b>	Lab ID: 2005-01-0746 - 12
Sampled: 01/25/2005 19:30	Extracted: 1/28/2005 11:52
Matrix: Soil	QC Batch#: 2005/01/28-05.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	7.5	1.0	mg/Kg	1.00	01/31/2005 11:19	

**Total Lead**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 3050B

**Method Blank**

MB: 2005/01/28-05.15-025

**Soil**

Test(s): 6010B

**QC Batch # 2005/01/28-05.15**

Date Extracted: 01/28/2005 11:52

Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	1.0	mg/Kg	01/31/2005 10:19	

**Total Lead**

TRC/Alton Geoscience-Concord  
Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Batch QC Report										
Prep(s): 3050B						Test(s): 6010B				
<b>Laboratory Control Spike</b>			<b>Soil</b>			<b>QC Batch # 2005/01/28-05.15</b>				
LCS	2005/01/28-05.15-026		Extracted: 01/28/2005			Analyzed: 01/31/2005 10:24				
LCSD	2005/01/28-05.15-027		Extracted: 01/28/2005			Analyzed: 01/31/2005 10:28				
Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Lead	104	105	100.0	104.0	105.0	1.0	80-120	20		

**Diesel (C9-C24)**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SB-3	01/25/2005 11:10	Water	8

**Diesel (C9-C24)**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 3511	Test(s): 8015M
Sample ID: <b>SB-3</b>	Lab ID: 2005-01-0746 - 8
Sampled: 01/25/2005 11:10	Extracted: 2/2/2005 12:38
Matrix: Water	QC Batch#: 2005/02/02-09.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	50	ug/L	1.00	02/03/2005 23:08	
<b>Surrogate(s)</b> o-Terphenyl	98.5	78-177	%	1.00	02/03/2005 23:08	

**Diesel (C9-C24)**

TRC/Alton Geoscience-Concord  
Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Batch QC Report					
Prep(s): 3511		Test(s): 8015M			
<b>Method Blank</b>		<b>Water</b>		<b>QC Batch # 2005/02/02-09.10</b>	
MB: 2005/02/02-09.10-001		Date Extracted: 02/02/2005 12:38			
Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	50	ug/L	02/03/2005 23:38	
<b>Surrogates(s)</b> o-Terphenyl	100.0	78-177	%	02/03/2005 23:38	

**Diesel (C9-C24)**

TRC/Alton Geoscience-Concord  
Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Batch QC Report										
Prep(s): 3511						Test(s): 8015M				
<b>Laboratory Control Spike</b>			<b>Water</b>			<b>QC Batch # 2005/02/02-09.10</b>				
LCS	2005/02/02-09.10-002		Extracted: 02/02/2005			Analyzed: 02/04/2005 00:07				
LCSD	2005/02/02-09.10-003		Extracted: 02/02/2005			Analyzed: 02/04/2005 00:36				
Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Diesel	473	523	680	69.6	76.9	10.0	60-150	25		
<b>Surrogates(s)</b> o-Terphenyl	1.09	1.22	1.25	87.4	97.4		78-177	0		

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SB-3 @ 18	01/25/2005 09:10	Soil	7
SB-4 @ 8	01/25/2005 12:55	Soil	9
COMPOSITE	01/25/2005 19:30	Soil	12



**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 3550/8015M	Test(s): 8015M
Sample ID: <b>SB-3 @ 18</b>	Lab ID: 2005-01-0746 - 7
Sampled: 01/25/2005 09:10	Extracted: 2/2/2005 11:06
Matrix: Soil	QC Batch#: 2005/02/02-6B.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	ND	1.0	mg/Kg	1.00	02/03/2005 08:32	
<b>Surrogate(s)</b> o-Terphenyl	72.0	60-130	%	1.00	02/03/2005 08:32	

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 3550/8015M	Test(s): 8015M
Sample ID: <b>SB-4 @ 8</b>	Lab ID: 2005-01-0746 - 9
Sampled: 01/25/2005 12:55	Extracted: 2/2/2005 11:06
Matrix: Soil	QC Batch#: 2005/02/02-6B.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	25	1.0	mg/Kg	1.00	02/03/2005 21:19	Q2
<b>Surrogate(s)</b> o-Terphenyl	85.2	60-130	%	1.00	02/03/2005 21:19	

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 3550/8015M	Test(s): 8015M
Sample ID: <b>COMPOSITE</b>	Lab ID: 2005-01-0746 - 12
Sampled: 01/25/2005 19:30	Extracted: 2/2/2005 11:06
Matrix: Soil	QC Batch#: 2005/02/02-6B.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	5.0	1.0	mg/Kg	1.00	02/03/2005 23:31	Q2
<b>Surrogate(s)</b> o-Terphenyl	85.5	60-130	%	1.00	02/03/2005 23:31	

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 3550/8015M

**Method Blank**

MB: 2005/02/02-6B.10-001

**Soil**

Test(s): 8015M

**QC Batch # 2005/02/02-6B.10**

Date Extracted: 02/02/2005 11:06

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	1	mg/Kg	02/02/2005 16:49	
<b>Surrogates(s)</b> o-Terphenyl	68.2	60-130	%	02/02/2005 16:49	

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Batch QC Report										
Prep(s): 3550/8015M						Test(s): 8015M				
<b>Laboratory Control Spike</b>			<b>Soil</b>			<b>QC Batch # 2005/02/02-6B.10</b>				
LCS	2005/02/02-6B.10-002		Extracted: 02/02/2005			Analyzed: 02/02/2005 17:15				
LCSD	2005/02/02-6B.10-003		Extracted: 02/02/2005			Analyzed: 02/02/2005 17:41				
Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Diesel	30.5	32.9	41.5	73.5	78.9	7.1	60-130	25		
<b>Surrogates(s)</b> o-Terphenyl	17.2	18.0	20.0	86.1	90.0		60-130			

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Legend and Notes**

**Result Flag**

Q2

Quantit. of unknown hydrocarbon(s) in sample based on diesel.

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SB-1	01/24/2005 09:00	Water	3
SB-2	01/24/2005 12:30	Water	6
SB-3	01/25/2005 11:10	Water	8
SB-4	01/25/2005 18:50	Water	11

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-1</b>	Lab ID: 2005-01-0746 - 3
Sampled: 01/24/2005 09:00	Extracted: 2/7/2005 12:09
Matrix: Water	QC Batch#: 2005/02/07-2A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	1.00	02/07/2005 12:09	
Benzene	ND	0.50	ug/L	1.00	02/07/2005 12:09	
Toluene	ND	0.50	ug/L	1.00	02/07/2005 12:09	
Ethylbenzene	0.77	0.50	ug/L	1.00	02/07/2005 12:09	
Total xylenes	ND	1.0	ug/L	1.00	02/07/2005 12:09	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	02/07/2005 12:09	
Methyl tert-butyl ether (MTBE)	87	0.50	ug/L	1.00	02/07/2005 12:09	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	02/07/2005 12:09	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	02/07/2005 12:09	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	02/07/2005 12:09	
1,2-DCA	ND	0.50	ug/L	1.00	02/07/2005 12:09	
EDB	ND	0.50	ug/L	1.00	02/07/2005 12:09	
Ethanol	ND	50	ug/L	1.00	02/07/2005 12:09	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	99.6	73-130	%	1.00	02/07/2005 12:09	
Toluene-d8	98.7	81-114	%	1.00	02/07/2005 12:09	



**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-2</b>	Lab ID: 2005-01-0746 - 6
Sampled: 01/24/2005 12:30	Extracted: 2/7/2005 13:17
Matrix: Water	QC Batch#: 2005/02/07-2A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	1.00	02/07/2005 13:17	
Benzene	ND	0.50	ug/L	1.00	02/07/2005 13:17	
Toluene	ND	0.50	ug/L	1.00	02/07/2005 13:17	
Ethylbenzene	ND	0.50	ug/L	1.00	02/07/2005 13:17	
Total xylenes	1.2	1.0	ug/L	1.00	02/07/2005 13:17	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	02/07/2005 13:17	
Methyl tert-butyl ether (MTBE)	0.68	0.50	ug/L	1.00	02/07/2005 13:17	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	02/07/2005 13:17	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	02/07/2005 13:17	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	02/07/2005 13:17	
1,2-DCA	ND	0.50	ug/L	1.00	02/07/2005 13:17	
EDB	ND	0.50	ug/L	1.00	02/07/2005 13:17	
Ethanol	ND	50	ug/L	1.00	02/07/2005 13:17	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	98.4	73-130	%	1.00	02/07/2005 13:17	
Toluene-d8	97.2	81-114	%	1.00	02/07/2005 13:17	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s):	5030B	Test(s):	8260B
Sample ID:	<b>SB-3</b>	Lab ID:	2005-01-0746 - 8
Sampled:	01/25/2005 11:10	Extracted:	2/7/2005 13:39
Matrix:	Water	QC Batch#:	2005/02/07-2A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	1.00	02/07/2005 13:39	
Benzene	ND	0.50	ug/L	1.00	02/07/2005 13:39	
Toluene	ND	0.50	ug/L	1.00	02/07/2005 13:39	
Ethylbenzene	ND	0.50	ug/L	1.00	02/07/2005 13:39	
Total xylenes	ND	1.0	ug/L	1.00	02/07/2005 13:39	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	02/07/2005 13:39	
Methyl tert-butyl ether (MTBE)	5.1	0.50	ug/L	1.00	02/07/2005 13:39	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	02/07/2005 13:39	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	02/07/2005 13:39	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	02/07/2005 13:39	
1,2-DCA	ND	0.50	ug/L	1.00	02/07/2005 13:39	
EDB	ND	0.50	ug/L	1.00	02/07/2005 13:39	
Ethanol	ND	50	ug/L	1.00	02/07/2005 13:39	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	99.7	73-130	%	1.00	02/07/2005 13:39	
Toluene-d8	100.8	81-114	%	1.00	02/07/2005 13:39	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-4</b>	Lab ID: 2005-01-0746 - 11
Sampled: 01/25/2005 18:50	Extracted: 2/7/2005 14:02
Matrix: Water	QC Batch#: 2005/02/07-2A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	1.00	02/07/2005 14:02	
Benzene	ND	0.50	ug/L	1.00	02/07/2005 14:02	
Toluene	ND	0.50	ug/L	1.00	02/07/2005 14:02	
Ethylbenzene	ND	0.50	ug/L	1.00	02/07/2005 14:02	
Total xylenes	ND	1.0	ug/L	1.00	02/07/2005 14:02	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	1.00	02/07/2005 14:02	
Methyl tert-butyl ether (MTBE)	ND	0.50	ug/L	1.00	02/07/2005 14:02	
Di-isopropyl Ether (DIPE)	ND	0.50	ug/L	1.00	02/07/2005 14:02	
Ethyl tert-butyl ether (ETBE)	ND	0.50	ug/L	1.00	02/07/2005 14:02	
tert-Amyl methyl ether (TAME)	ND	0.50	ug/L	1.00	02/07/2005 14:02	
1,2-DCA	ND	0.50	ug/L	1.00	02/07/2005 14:02	
EDB	ND	0.50	ug/L	1.00	02/07/2005 14:02	
Ethanol	ND	50	ug/L	1.00	02/07/2005 14:02	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	100.4	73-130	%	1.00	02/07/2005 14:02	
Toluene-d8	97.4	81-114	%	1.00	02/07/2005 14:02	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Method Blank**

**Water**

**QC Batch # 2005/02/07-2A.66**

MB: 2005/02/07-2A.66-013

Date Extracted: 02/07/2005 09:13

Compound	Conc.	RL	Unit	Analyzed	Flag
GRO (C6-C12)	ND	50	ug/L	02/07/2005 09:13	
Benzene	ND	0.5	ug/L	02/07/2005 09:13	
Toluene	ND	0.5	ug/L	02/07/2005 09:13	
Ethylbenzene	ND	0.5	ug/L	02/07/2005 09:13	
Total xylenes	ND	1.0	ug/L	02/07/2005 09:13	
tert-Butyl alcohol (TBA)	ND	5.0	ug/L	02/07/2005 09:13	
Methyl tert-butyl ether (MTBE)	ND	0.5	ug/L	02/07/2005 09:13	
Di-isopropyl Ether (DIPE)	ND	0.5	ug/L	02/07/2005 09:13	
Ethyl tert-butyl ether (ETBE)	ND	0.5	ug/L	02/07/2005 09:13	
tert-Amyl methyl ether (TAME)	ND	0.5	ug/L	02/07/2005 09:13	
1,2-DCA	ND	0.5	ug/L	02/07/2005 09:13	
EDB	ND	0.5	ug/L	02/07/2005 09:13	
Ethanol	ND	50	ug/L	02/07/2005 09:13	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	99.6	73-130	%	02/07/2005 09:13	
Toluene-d8	96.8	81-114	%	02/07/2005 09:13	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Water**

**QC Batch # 2005/02/07-2A.66**

LCS 2005/02/07-2A.66-050

Extracted: 02/07/2005

Analyzed: 02/07/2005 08:50

LCSD

Compound	Conc. ug/L		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	21.4		25	85.6			65-165	20		
Benzene	22.8		25	91.2			69-129	20		
Toluene	27.3		25	109.2			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	481		500	96.2			73-130			
Toluene-d8	488		500	97.6			81-114			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Water**

**QC Batch # 2005/02/07-2A.66**

SB-1 >> MS

Lab ID: 2005-01-0746 - 003

MS: 2005/02/07-2A.66-032

Extracted: 02/07/2005

Analyzed: 02/07/2005 12:32

Dilution: 1.00

MSD: 2005/02/07-2A.66-054

Extracted: 02/07/2005

Analyzed: 02/07/2005 12:54

Dilution: 1.00

Compound	Conc. ug/L			Spk.Level ug/L	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	112	115	86.7	25	101.2	113.2	11.2	65-165	20		
Benzene	24.9	26.3	ND	25	99.6	105.2	5.5	69-129	20		
Toluene	30.6	31.7	ND	25	122.4	126.8	3.5	70-130	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	450	489		500	90.0	97.8		73-130			
Toluene-d8	490	509		500	98.0	101.8		81-114			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SB-1 @ 25.5	01/24/2005 17:50	Soil	2
SB-2 @ 12	01/24/2005 08:40	Soil	4
SB-2 @ 24	01/24/2005 12:15	Soil	5
SB-3 @ 18	01/25/2005 09:10	Soil	7
SB-4 @ 50	01/25/2005 19:20	Soil	10
COMPOSITE	01/25/2005 19:30	Soil	12

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-1 @ 25.5</b>	Lab ID: 2005-01-0746 - 2
Sampled: 01/24/2005 17:50	Extracted: 2/7/2005 11:24
Matrix: Soil	QC Batch#: 2005/02/07-1A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	1.0	mg/Kg	1.00	02/07/2005 11:24	
Benzene	ND	0.0050	mg/Kg	1.00	02/07/2005 11:24	
Toluene	ND	0.0050	mg/Kg	1.00	02/07/2005 11:24	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	02/07/2005 11:24	
Total xylenes	ND	0.0050	mg/Kg	1.00	02/07/2005 11:24	
tert-Butyl alcohol (TBA)	0.013	0.010	mg/Kg	1.00	02/07/2005 11:24	
Methyl tert-butyl ether (MTBE)	0.074	0.0050	mg/Kg	1.00	02/07/2005 11:24	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	02/07/2005 11:24	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	02/07/2005 11:24	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	02/07/2005 11:24	
1,2-DCA	ND	0.0050	mg/Kg	1.00	02/07/2005 11:24	
EDB	ND	0.0050	mg/Kg	1.00	02/07/2005 11:24	
Ethanol	ND	0.1	mg/Kg	1.00	02/07/2005 11:24	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	104.2	72-124	%	1.00	02/07/2005 11:24	
Toluene-d8	92.6	75-116	%	1.00	02/07/2005 11:24	



**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s):	5030B	Test(s):	8260B
Sample ID:	<b>SB-2 @ 12</b>	Lab ID:	2005-01-0746 - 4
Sampled:	01/24/2005 08:40	Extracted:	2/5/2005 13:34
Matrix:	Soil	QC Batch#:	2005/02/05-1A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	1.0	mg/Kg	1.00	02/05/2005 13:34	
Benzene	ND	0.0050	mg/Kg	1.00	02/05/2005 13:34	
Toluene	ND	0.0050	mg/Kg	1.00	02/05/2005 13:34	
Ethyl benzene	0.043	0.0050	mg/Kg	1.00	02/05/2005 13:34	
Total xylenes	0.021	0.0050	mg/Kg	1.00	02/05/2005 13:34	
tert-Butyl alcohol (TBA)	0.014	0.010	mg/Kg	1.00	02/05/2005 13:34	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	02/05/2005 13:34	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	02/05/2005 13:34	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	02/05/2005 13:34	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	02/05/2005 13:34	
1,2-DCA	ND	0.0050	mg/Kg	1.00	02/05/2005 13:34	
EDB	ND	0.0050	mg/Kg	1.00	02/05/2005 13:34	
Ethanol	ND	0.1	mg/Kg	1.00	02/05/2005 13:34	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	103.9	72-124	%	1.00	02/05/2005 13:34	
Toluene-d8	94.4	75-116	%	1.00	02/05/2005 13:34	

### Gas/BTEX Fuel Oxygenates by 8260B

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
 Concord, CA 94520  
 Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
 Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-2 @ 24</b>	Lab ID: 2005-01-0746 - 5
Sampled: 01/24/2005 12:15	Extracted: 2/7/2005 11:47
Matrix: Soil	QC Batch#: 2005/02/07-1A.66
Analysis Flag: N1 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	1.0	mg/Kg	1.00	02/07/2005 11:47	
Benzene	ND	0.0050	mg/Kg	1.00	02/07/2005 11:47	
Toluene	ND	0.0050	mg/Kg	1.00	02/07/2005 11:47	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	02/07/2005 11:47	
Total xylenes	0.011	0.0050	mg/Kg	1.00	02/07/2005 11:47	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	1.00	02/07/2005 11:47	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	02/07/2005 11:47	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	02/07/2005 11:47	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	02/07/2005 11:47	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	02/07/2005 11:47	
1,2-DCA	ND	0.0050	mg/Kg	1.00	02/07/2005 11:47	
EDB	ND	0.0050	mg/Kg	1.00	02/07/2005 11:47	
Ethanol	ND	0.1	mg/Kg	1.00	02/07/2005 11:47	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	106.2	72-124	%	1.00	02/07/2005 11:47	
Toluene-d8	94.1	75-116	%	1.00	02/07/2005 11:47	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-3 @ 18</b>	Lab ID: 2005-01-0746 - 7
Sampled: 01/25/2005 09:10	Extracted: 2/7/2005 23:03
Matrix: Soil	QC Batch#: 2005/02/07-3A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	1.0	mg/Kg	1.00	02/07/2005 23:03	
Benzene	ND	0.0050	mg/Kg	1.00	02/07/2005 23:03	
Toluene	ND	0.0050	mg/Kg	1.00	02/07/2005 23:03	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	02/07/2005 23:03	
Total xylenes	ND	0.0050	mg/Kg	1.00	02/07/2005 23:03	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	1.00	02/07/2005 23:03	
Methyl tert-butyl ether (MTBE)	0.11	0.0050	mg/Kg	1.00	02/07/2005 23:03	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	02/07/2005 23:03	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	02/07/2005 23:03	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	02/07/2005 23:03	
1,2-DCA	ND	0.0050	mg/Kg	1.00	02/07/2005 23:03	
EDB	ND	0.0050	mg/Kg	1.00	02/07/2005 23:03	
Ethanol	ND	0.1	mg/Kg	1.00	02/07/2005 23:03	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	114.7	72-124	%	1.00	02/07/2005 23:03	
Toluene-d8	93.7	75-116	%	1.00	02/07/2005 23:03	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-4 @ 50</b>	Lab ID: 2005-01-0746 - 10
Sampled: 01/25/2005 19:20	Extracted: 2/8/2005 13:49
Matrix: Soil	QC Batch#: 2005/02/08-1A.66
Analysis Flag: N1 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	1.0	mg/Kg	1.00	02/08/2005 13:49	
Benzene	ND	0.0050	mg/Kg	1.00	02/08/2005 13:49	
Toluene	ND	0.0050	mg/Kg	1.00	02/08/2005 13:49	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	02/08/2005 13:49	
Total xylenes	ND	0.0050	mg/Kg	1.00	02/08/2005 13:49	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	1.00	02/08/2005 13:49	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	02/08/2005 13:49	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	02/08/2005 13:49	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	02/08/2005 13:49	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	02/08/2005 13:49	
1,2-DCA	ND	0.0050	mg/Kg	1.00	02/08/2005 13:49	
EDB	ND	0.0050	mg/Kg	1.00	02/08/2005 13:49	
Ethanol	ND	0.1	mg/Kg	1.00	02/08/2005 13:49	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	116.9	72-124	%	1.00	02/08/2005 13:49	
Toluene-d8	82.6	75-116	%	1.00	02/08/2005 13:49	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>COMPOSITE</b>	Lab ID: 2005-01-0746 - 12
Sampled: 01/25/2005 19:30	Extracted: 2/8/2005 14:11
Matrix: Soil	QC Batch#: 2005/02/08-1A.66

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	1.0	mg/Kg	1.00	02/08/2005 14:11	
Benzene	ND	0.0050	mg/Kg	1.00	02/08/2005 14:11	
Toluene	ND	0.0050	mg/Kg	1.00	02/08/2005 14:11	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	02/08/2005 14:11	
Total xylenes	ND	0.0050	mg/Kg	1.00	02/08/2005 14:11	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	1.00	02/08/2005 14:11	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	02/08/2005 14:11	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	02/08/2005 14:11	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	02/08/2005 14:11	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	02/08/2005 14:11	
1,2-DCA	ND	0.0050	mg/Kg	1.00	02/08/2005 14:11	
EDB	ND	0.0050	mg/Kg	1.00	02/08/2005 14:11	
Ethanol	ND	0.1	mg/Kg	1.00	02/08/2005 14:11	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	110.6	72-124	%	1.00	02/08/2005 14:11	
Toluene-d8	96.0	75-116	%	1.00	02/08/2005 14:11	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Method Blank**

**Soil**

**QC Batch # 2005/02/05-1A.66**

MB: 2005/02/05-1A.66-055

Date Extracted: 02/05/2005 11:55

Compound	Conc.	RL	Unit	Analyzed	Flag
GRO (C6-C12)	ND	1	mg/Kg	02/05/2005 11:55	
Benzene	ND	0.005	mg/Kg	02/05/2005 11:55	
Toluene	ND	0.005	mg/Kg	02/05/2005 11:55	
Ethyl benzene	ND	0.005	mg/Kg	02/05/2005 11:55	
Total xylenes	ND	0.005	mg/Kg	02/05/2005 11:55	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	02/05/2005 11:55	
Methyl tert-butyl ether (MTBE)	ND	0.005	mg/Kg	02/05/2005 11:55	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	02/05/2005 11:55	
Ethyl tert-butyl ether (ETBE)	ND	0.005	mg/Kg	02/05/2005 11:55	
tert-Amyl methyl ether (TAME)	ND	0.005	mg/Kg	02/05/2005 11:55	
1,2-DCA	ND	0.005	mg/Kg	02/05/2005 11:55	
EDB	ND	0.005	mg/Kg	02/05/2005 11:55	
Ethanol	ND	0.100	mg/Kg	02/05/2005 11:55	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	107.2	72-124	%	02/05/2005 11:55	
Toluene-d8	110.8	75-116	%	02/05/2005 11:55	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Method Blank**

**Soil**

**QC Batch # 2005/02/07-1A.66**

MB: 2005/02/07-1A.66-027

Date Extracted: 02/07/2005 08:27

Compound	Conc.	RL	Unit	Analyzed	Flag
GRO (C6-C12)	ND	1	mg/Kg	02/07/2005 08:27	
Benzene	ND	0.005	mg/Kg	02/07/2005 08:27	
Toluene	ND	0.005	mg/Kg	02/07/2005 08:27	
Ethyl benzene	ND	0.005	mg/Kg	02/07/2005 08:27	
Total xylenes	ND	0.005	mg/Kg	02/07/2005 08:27	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	02/07/2005 08:27	
Methyl tert-butyl ether (MTBE)	ND	0.005	mg/Kg	02/07/2005 08:27	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	02/07/2005 08:27	
Ethyl tert-butyl ether (ETBE)	ND	0.005	mg/Kg	02/07/2005 08:27	
tert-Amyl methyl ether (TAME)	ND	0.005	mg/Kg	02/07/2005 08:27	
1,2-DCA	ND	0.005	mg/Kg	02/07/2005 08:27	
EDB	ND	0.005	mg/Kg	02/07/2005 08:27	
Ethanol	ND	0.100	mg/Kg	02/07/2005 08:27	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	100.4	72-124	%	02/07/2005 08:27	
Toluene-d8	96.8	75-116	%	02/07/2005 08:27	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Method Blank**

**Soil**

**QC Batch # 2005/02/07-3A.66**

MB: 2005/02/07-3A.66-005

Date Extracted: 02/07/2005 18:05

Compound	Conc.	RL	Unit	Analyzed	Flag
GRO (C6-C12)	ND	1	mg/Kg	02/07/2005 18:05	
Benzene	ND	0.005	mg/Kg	02/07/2005 18:05	
Toluene	ND	0.005	mg/Kg	02/07/2005 18:05	
Ethyl benzene	ND	0.005	mg/Kg	02/07/2005 18:05	
Total xylenes	ND	0.005	mg/Kg	02/07/2005 18:05	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	02/07/2005 18:05	
Methyl tert-butyl ether (MTBE)	ND	0.005	mg/Kg	02/07/2005 18:05	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	02/07/2005 18:05	
Ethyl tert-butyl ether (ETBE)	ND	0.005	mg/Kg	02/07/2005 18:05	
tert-Amyl methyl ether (TAME)	ND	0.005	mg/Kg	02/07/2005 18:05	
1,2-DCA	ND	0.005	mg/Kg	02/07/2005 18:05	
EDB	ND	0.005	mg/Kg	02/07/2005 18:05	
Ethanol	ND	0.100	mg/Kg	02/07/2005 18:05	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	98.6	72-124	%	02/07/2005 18:05	
Toluene-d8	96.4	75-116	%	02/07/2005 18:05	



**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Method Blank**

**Soil**

**QC Batch # 2005/02/08-1A.66**

MB: 2005/02/08-1A.66-027

Date Extracted: 02/08/2005 07:27

Compound	Conc.	RL	Unit	Analyzed	Flag
GRO (C6-C12)	ND	1	mg/Kg	02/08/2005 07:27	
Benzene	ND	0.005	mg/Kg	02/08/2005 07:27	
Toluene	ND	0.005	mg/Kg	02/08/2005 07:27	
Ethyl benzene	ND	0.005	mg/Kg	02/08/2005 07:27	
Total xylenes	ND	0.005	mg/Kg	02/08/2005 07:27	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	02/08/2005 07:27	
Methyl tert-butyl ether (MTBE)	ND	0.005	mg/Kg	02/08/2005 07:27	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	02/08/2005 07:27	
Ethyl tert-butyl ether (ETBE)	ND	0.005	mg/Kg	02/08/2005 07:27	
tert-Amyl methyl ether (TAME)	ND	0.005	mg/Kg	02/08/2005 07:27	
1,2-DCA	ND	0.005	mg/Kg	02/08/2005 07:27	
EDB	ND	0.005	mg/Kg	02/08/2005 07:27	
Ethanol	ND	0.100	mg/Kg	02/08/2005 07:27	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	103.0	72-124	%	02/08/2005 07:27	
Toluene-d8	96.4	75-116	%	02/08/2005 07:27	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2005/02/05-1A.66**

LCS 2005/02/05-1A.66-033

Extracted: 02/05/2005

Analyzed: 02/05/2005 11:33

LCSD

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	0.0478		0.05	95.6			65-165	20		
Benzene	0.0404		0.05	80.8			69-129	20		
Toluene	0.0505		0.05	101.0			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	527		500	105.4			72-124			
Toluene-d8	544		500	108.8			75-116			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2005/02/07-1A.66**

LCS 2005/02/07-1A.66-049

Extracted: 02/07/2005

Analyzed: 02/07/2005 09:49

LCSD

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	0.0370		0.05	74.0			65-165	20		
Benzene	0.0371		0.05	74.2			69-129	20		
Toluene	0.0469		0.05	93.8			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	496		500	99.2			72-124			
Toluene-d8	514		500	102.8			75-116			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord  
Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Batch QC Report										
Prep(s): 5030B							Test(s): 8260B			
<b>Laboratory Control Spike</b>				<b>Soil</b>			<b>QC Batch # 2005/02/07-3A.66</b>			
LCS	2005/02/07-3A.66-043			Extracted: 02/07/2005			Analyzed: 02/07/2005 17:43			
LCSD										

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	0.0452		0.05	90.4			65-165	20		
Benzene	0.0413		0.05	82.6			69-129	20		
Toluene	0.0532		0.05	106.4			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	486		500	97.2			72-124			
Toluene-d8	500		500	100.0			75-116			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2005/02/08-1A.66**

LCS 2005/02/08-1A.66-003

Extracted: 02/08/2005

Analyzed: 02/08/2005 07:04

LCSD

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	0.0450		0.05	90.0			65-165	20		
Benzene	0.0454		0.05	90.8			69-129	20		
Toluene	0.0563		0.05	112.6			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	478		500	95.6			72-124			
Toluene-d8	490		500	98.0			75-116			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Soil**

**QC Batch # 2005/02/05-1A.66**

MS/MSD

Lab ID: 2005-02-0085 - 001

MS: 2005/02/05-1A.66-004

Extracted: 02/05/2005

Analyzed: 02/05/2005 15:04

Dilution: 1.00

MSD: 2005/02/05-1A.66-026

Extracted: 02/05/2005

Analyzed: 02/05/2005 15:26

Dilution: 1.00

Compound	Conc. mg/Kg			Spk.Level mg/Kg	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	0.0385	0.0409	ND	0.047348	81.3	84.1	3.4	65-165	20		
Benzene	0.0391	0.0380	ND	0.047348	82.6	78.1	5.6	69-129	20		
Toluene	0.132	0.0948	0.134	0.047348	-4.2	-80.6	-180	70-130	20	M5	M5,R1
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	510	479		500	102.0	95.8		72-124			
Toluene-d8	535	505		500	107.0	101.0		75-116			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B	Test(s): 8260B
<b>Matrix Spike ( MS / MSD )</b>	<b>Soil</b>
	<b>QC Batch # 2005/02/07-1A.66</b>
MS/MSD	Lab ID: 2005-01-0653 - 003
MS: 2005/02/07-1A.66-040	Extracted: 02/07/2005
	Analyzed: 02/07/2005 10:40
	Dilution: 1.00
MSD: 2005/02/07-1A.66-002	Extracted: 02/07/2005
	Analyzed: 02/07/2005 11:02
	Dilution: 1.00

Compound	Conc. mg/Kg			Spk.Level mg/Kg	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	0.0627	0.0541	ND	0.049603	126.4	112.1	12.0	65-165	20		
Benzene	0.0617	0.0560	ND	0.049603	124.4	116.0	7.0	69-129	20		
Toluene	0.0561	0.0531	ND	0.049603	113.1	110.0	2.8	70-130	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	694	638		500	138.8	127.6		72-124		S7	S7
Toluene-d8	517	514		500	103.4	102.8		75-116			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Soil**

**QC Batch # 2005/02/07-3A.66**

MS/MSD

Lab ID: 2005-01-0756 - 011

MS: 2005/02/07-3A.66-040

Extracted: 02/07/2005

Analyzed: 02/07/2005 19:40

Dilution: 200.00

MSD: 2005/02/07-3A.66-003

Extracted: 02/07/2005

Analyzed: 02/07/2005 20:03

Dilution: 200.00

Compound	Conc. mg/Kg			Spk.Level mg/Kg	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	0.0754	0.0825	0.0382	0.049115	75.7	89.1	16.3	65-165	20		
Benzene	0.0436	0.0446	ND	0.049115	88.8	89.7	1.0	69-129	20		
Toluene	0.0515	0.0494	ND	0.049115	104.9	99.4	5.4	70-130	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	480	470		500	96.0	94.0		72-124			
Toluene-d8	503	488		500	100.6	97.6		75-116			



**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Soil**

**QC Batch # 2005/02/08-1A.66**

MS/MSD

Lab ID: 2005-02-0085 - 007

MS: 2005/02/08-1A.66-004

Extracted: 02/08/2005

Analyzed: 02/08/2005 13:04

Dilution: 200.00

MSD: 2005/02/08-1A.66-026

Extracted: 02/08/2005

Analyzed: 02/08/2005 13:26

Dilution: 200.00

Compound	Conc. mg/Kg			Spk.Level mg/Kg	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	0.0361	0.0410	ND	0.049505	72.9	83.3	13.3	65-165	20		
Benzene	0.0373	0.0425	ND	0.049505	75.3	86.4	13.7	69-129	20		
Toluene	0.0961	0.0762	0.0397	0.049505	113.9	74.2	42.2	70-130	20		R1
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	489	498		500	97.8	99.6		72-124			
Toluene-d8	493	493		500	98.6	98.6		75-116			

## Gas/BTEX Fuel Oxygenates by 8260B

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

### Legend and Notes

#### Analysis Flag

N1

Internal standard out of range.

#### Result Flag

M5

MS/MSD spike recoveries were below acceptance limits.  
See blank spike (LCS).

R1

Analyte RPD was out of QC limits.

S7

Surrogate recoveries higher than acceptance limits.

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SB-1 @ 8	01/24/2005 14:15	Soil	1
SB-4 @ 8	01/25/2005 12:55	Soil	9

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-1 @ 8</b>	Lab ID: 2005-01-0746 - 1
Sampled: 01/24/2005 14:15	Extracted: 2/7/2005 16:16
Matrix: Soil	QC Batch#: 2005/02/04-3A.66
Analysis Flag: L2 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	480	50	mg/Kg	1.00	02/07/2005 16:16	
Benzene	ND	0.50	mg/Kg	1.00	02/07/2005 16:16	
Toluene	ND	0.50	mg/Kg	1.00	02/07/2005 16:16	
Ethyl benzene	1.1	0.50	mg/Kg	1.00	02/07/2005 16:16	
Total xylenes	1.1	0.50	mg/Kg	1.00	02/07/2005 16:16	
tert-Butyl alcohol (TBA)	ND	2.5	mg/Kg	1.00	02/07/2005 16:16	
Methyl tert-butyl ether (MTBE)	ND	0.50	mg/Kg	1.00	02/07/2005 16:16	
Di-isopropyl Ether (DIPE)	ND	1.0	mg/Kg	1.00	02/07/2005 16:16	
Ethyl tert-butyl ether (ETBE)	ND	0.50	mg/Kg	1.00	02/07/2005 16:16	
tert-Amyl methyl ether (TAME)	ND	0.50	mg/Kg	1.00	02/07/2005 16:16	
1,2-DCA	ND	0.50	mg/Kg	1.00	02/07/2005 16:16	
EDB	ND	0.50	mg/Kg	1.00	02/07/2005 16:16	
Ethanol	ND	25	mg/Kg	1.00	02/07/2005 16:16	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	102.2	53-129	%	1.00	02/07/2005 16:16	
Toluene-d8	111.8	47-136	%	1.00	02/07/2005 16:16	

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-4 @ 8</b>	Lab ID: 2005-01-0746 - 9
Sampled: 01/25/2005 12:55	Extracted: 2/5/2005 21:25
Matrix: Soil	QC Batch#: 2005/02/04-3A.66
Analysis Flag: L2 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	470	50	mg/Kg	1.00	02/05/2005 21:25	
Benzene	ND	0.50	mg/Kg	1.00	02/05/2005 21:25	
Toluene	ND	0.50	mg/Kg	1.00	02/05/2005 21:25	
Ethyl benzene	ND	0.50	mg/Kg	1.00	02/05/2005 21:25	
Total xylenes	ND	0.50	mg/Kg	1.00	02/05/2005 21:25	
tert-Butyl alcohol (TBA)	ND	2.5	mg/Kg	1.00	02/05/2005 21:25	
Methyl tert-butyl ether (MTBE)	ND	0.50	mg/Kg	1.00	02/05/2005 21:25	
Di-isopropyl Ether (DIPE)	ND	1.0	mg/Kg	1.00	02/05/2005 21:25	
Ethyl tert-butyl ether (ETBE)	ND	0.50	mg/Kg	1.00	02/05/2005 21:25	
tert-Amyl methyl ether (TAME)	ND	0.50	mg/Kg	1.00	02/05/2005 21:25	
1,2-DCA	ND	0.50	mg/Kg	1.00	02/05/2005 21:25	
EDB	ND	0.50	mg/Kg	1.00	02/05/2005 21:25	
Ethanol	ND	25	mg/Kg	1.00	02/05/2005 21:25	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	113.4	53-129	%	1.00	02/05/2005 21:25	
Toluene-d8	104.3	47-136	%	1.00	02/05/2005 21:25	

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701  
Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Method Blank**

**Soil**

**QC Batch # 2005/02/04-3A.66**

MB: 2005/02/04-3A.66-015

Date Extracted: 02/05/2005 01:15

Compound	Conc.	RL	Unit	Analyzed	Flag
GRO (C6-C12)	ND	50	mg/Kg	02/05/2005 01:15	
Benzene	ND	0.5	mg/Kg	02/05/2005 01:15	
Toluene	ND	0.50	mg/Kg	02/05/2005 01:15	
Ethyl benzene	ND	0.50	mg/Kg	02/05/2005 01:15	
Total xylenes	ND	0.50	mg/Kg	02/05/2005 01:15	
tert-Butyl alcohol (TBA)	ND	2.5	mg/Kg	02/05/2005 01:15	
Methyl tert-butyl ether (MTBE)	ND	0.50	mg/Kg	02/05/2005 01:15	
Di-isopropyl Ether (DIPE)	ND	1.0	mg/Kg	02/05/2005 01:15	
Ethyl tert-butyl ether (ETBE)	ND	0.50	mg/Kg	02/05/2005 01:15	
tert-Amyl methyl ether (TAME)	ND	0.50	mg/Kg	02/05/2005 01:15	
1,2-DCA	ND	0.50	mg/Kg	02/05/2005 01:15	
EDB	ND	0.50	mg/Kg	02/05/2005 01:15	
Ethanol	ND	25	mg/Kg	02/05/2005 01:15	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	122.8	53-129	%	02/05/2005 01:15	
Toluene-d8	107.6	47-136	%	02/05/2005 01:15	

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2005/02/04-3A.66**

LCS 2005/02/04-3A.66-030

Extracted: 02/05/2005

Analyzed: 02/05/2005 00:30

LCSD 2005/02/04-3A.66-052

Extracted: 02/05/2005

Analyzed: 02/05/2005 00:52

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Benzene	9.70	10.3	10	97.0	103.0	6.0	69-129	20		
Toluene	10.9	11.7	10	109.0	117.0	7.1	70-130	20		
Methyl tert-butyl ether (MTBE)	8.13	9.09	10	81.3	90.9	11.1	65-165	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	299	293	250	119.6	117.2		53-129			
Toluene-d8	293	290	250	117.2	116.0		47-136			

**Gas/BTEXFuel Oxygenates by 8260B (High Level)**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 42018701

Conoco Phillips # 3072

Received: 01/26/2005 15:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Legend and Notes**

**Analysis Flag**

L2

Reporting limits were raised due to high level of analyte present in the sample.







**TRC/Alton Geoscience-Concord**

February 15, 2005

1590 Solano Way, Suite A  
Concord, CA 94520

Attn.: Keith Woodburne

Project#: 41050001FA20

Project: Conoco Phillips #3072

Site: 2445 Castro Valley Blvd., Castro Valley

Attached is our report for your samples received on 02/01/2005 16:00

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 03/18/2005 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: [dsharma@stl-inc.com](mailto:dsharma@stl-inc.com)

Sincerely,



Dimple Sharma  
Project Manager

**Total Lead**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SB-6@10	01/31/2005 11:25	Soil	2
SB-6@50	01/31/2005 17:30	Soil	3

**Total Lead**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 3050B	Test(s): 6010B
Sample ID: <b>SB-6@10</b>	Lab ID: 2005-02-0090 - 2
Sampled: 01/31/2005 11:25	Extracted: 2/4/2005 11:31
Matrix: Soil	QC Batch#: 2005/02/04-03.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	3.4	1.0	mg/Kg	1.00	02/07/2005 10:15	

**Total Lead**

TRC/Alton Geoscience-Concord  
Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20  
Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 3050B	Test(s): 6010B
Sample ID: <b>SB-6@50</b>	Lab ID: 2005-02-0090 - 3
Sampled: 01/31/2005 17:30	Extracted: 2/4/2005 11:31
Matrix: Soil	QC Batch#: 2005/02/04-03.15

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Lead	4.7	1.0	mg/Kg	1.00	02/07/2005 13:30	

**Total Lead**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 3050B

**Method Blank**

MB: 2005/02/04-03.15-011

**Soil**

Test(s): 6010B

**QC Batch # 2005/02/04-03.15**

Date Extracted: 02/04/2005 11:31

Compound	Conc.	RL	Unit	Analyzed	Flag
Lead	ND	1.0	mg/Kg	02/07/2005 08:42	

**Total Lead**

TRC/Alton Geoscience-Concord  
Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20  
Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

Batch QC Report										
Prep(s): 3050B						Test(s): 6010B				
<b>Laboratory Control Spike</b>			<b>Soil</b>			<b>QC Batch # 2005/02/04-03.15</b>				
LCS	2005/02/04-03.15-012		Extracted: 02/04/2005			Analyzed: 02/07/2005 08:45				
LCSD	2005/02/04-03.15-013		Extracted: 02/04/2005			Analyzed: 02/07/2005 08:48				
Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Lead	94.1	88.0	100.0	94.1	88.0	6.7	80-120	20		



**Oil & Grease (Total) by EPA 1664A**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SB-6@10	01/31/2005 11:25	Soil	2
SB-6@50	01/31/2005 17:30	Soil	3

**Oil & Grease (Total) by EPA 1664A**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 1664A	Test(s): 1664A
Sample ID: <b>SB-6@10</b>	Lab ID: 2005-02-0090 - 2
Sampled: 01/31/2005 11:25	Extracted: 2/9/2005 00:00
Matrix: Soil	QC Batch#: 2005/02/09-01.23

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Oil & Grease (total)	670	50	mg/Kg	1.00	02/09/2005	

**Oil & Grease (Total) by EPA 1664A**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 1664A	Test(s): 1664A
Sample ID: <b>SB-6@50</b>	Lab ID: 2005-02-0090 - 3
Sampled: 01/31/2005 17:30	Extracted: 2/9/2005 00:00
Matrix: Soil	QC Batch#: 2005/02/09-01.23

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Oil & Grease (total)	ND	50	mg/Kg	1.00	02/09/2005	

**Oil & Grease (Total) by EPA 1664A**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 1664A

**Method Blank**

MB: 2005/02/09-01.23-001

**Soil**

Test(s): 1664A

**QC Batch # 2005/02/09-01.23**

Date Extracted: 02/09/2005

Compound	Conc.	RL	Unit	Analyzed	Flag
Oil & Grease (total)	ND	50	mg/Kg	02/09/2005	

**Oil & Grease (Total) by EPA 1664A**

TRC/Alton Geoscience-Concord  
Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20  
Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

Batch QC Report										
Prep(s): 1664A						Test(s): 1664A				
<b>Laboratory Control Spike</b>			<b>Soil</b>			<b>QC Batch # 2005/02/09-01.23</b>				
LCS	2005/02/09-01.23-002		Extracted: 02/09/2005			Analyzed: 02/09/2005				
LCSD	2005/02/09-01.23-003		Extracted: 02/09/2005			Analyzed: 02/09/2005				
Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Oil & Grease (total)	752	746	800	94.2	93.3	1.0	79-114	20		

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SB-5@23	01/31/2005 09:04	Soil	1

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s):	3550/8015M	Test(s):	8015M
Sample ID:	<b>SB-5@23</b>	Lab ID:	2005-02-0090 - 1
Sampled:	01/31/2005 09:04	Extracted:	2/11/2005 07:29
Matrix:	Soil	QC Batch#:	2005/02/11-2A.10

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
Diesel	2.1	1.0	mg/Kg	1.00	02/11/2005 17:23	Q2
<b>Surrogate(s)</b> o-Terphenyl	78.2	60-130	%	1.00	02/11/2005 17:23	

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20  
Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 3550/8015M	Test(s): 8015M
<b>Method Blank</b>	<b>Soil</b>
MB: 2005/02/11-2A.10-001	<b>QC Batch # 2005/02/11-2A.10</b>
	Date Extracted: 02/11/2005 07:29

Compound	Conc.	RL	Unit	Analyzed	Flag
Diesel	ND	1	mg/Kg	02/11/2005 14:38	
<b>Surrogates(s)</b> o-Terphenyl	76.4	60-130	%	02/11/2005 14:38	



**Diesel**

TRC/Alton Geoscience-Concord  
Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20  
Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

Batch QC Report										
Prep(s): 3550/8015M						Test(s): 8015M				
<b>Laboratory Control Spike</b>			<b>Soil</b>			<b>QC Batch # 2005/02/11-2A.10</b>				
LCS	2005/02/11-2A.10-002		Extracted: 02/11/2005			Analyzed: 02/11/2005 16:40				
LCSD	2005/02/11-2A.10-003		Extracted: 02/11/2005			Analyzed: 02/11/2005 17:06				
Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Diesel	33.9	33.5	41.2	82.3	81.1	1.5	60-130	25		
<b>Surrogates(s)</b> o-Terphenyl	19.0	19.0	20.0	95.1	95.2		60-130			

**Diesel**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Legend and Notes**

**Result Flag**

Q2

Quantit. of unknown hydrocarbon(s) in sample based on diesel.

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Samples Reported**

Sample Name	Date Sampled	Matrix	Lab #
SB-5@23	01/31/2005 09:04	Soil	1

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20  
Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

Prep(s): 5030B	Test(s): 8260B
Sample ID: <b>SB-5@23</b>	Lab ID: 2005-02-0090 - 1
Sampled: 01/31/2005 09:04	Extracted: 2/11/2005 13:06
Matrix: Soil	QC Batch#: 2005/02/11-1A.66
Analysis Flag: N1 ( See Legend and Note Section )	

Compound	Conc.	RL	Unit	Dilution	Analyzed	Flag
GRO (C6-C12)	ND	1.0	mg/Kg	1.00	02/11/2005 13:06	
Benzene	ND	0.0050	mg/Kg	1.00	02/11/2005 13:06	
Toluene	ND	0.0050	mg/Kg	1.00	02/11/2005 13:06	
Ethyl benzene	ND	0.0050	mg/Kg	1.00	02/11/2005 13:06	
Total xylenes	ND	0.0050	mg/Kg	1.00	02/11/2005 13:06	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	1.00	02/11/2005 13:06	
Methyl tert-butyl ether (MTBE)	ND	0.0050	mg/Kg	1.00	02/11/2005 13:06	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	1.00	02/11/2005 13:06	
Ethyl tert-butyl ether (ETBE)	ND	0.0050	mg/Kg	1.00	02/11/2005 13:06	
tert-Amyl methyl ether (TAME)	ND	0.0050	mg/Kg	1.00	02/11/2005 13:06	
1,2-DCA	ND	0.0050	mg/Kg	1.00	02/11/2005 13:06	
EDB	ND	0.0050	mg/Kg	1.00	02/11/2005 13:06	
Ethanol	ND	0.1	mg/Kg	1.00	02/11/2005 13:06	
<b>Surrogate(s)</b>						
1,2-Dichloroethane-d4	132.5	72-124	%	1.00	02/11/2005 13:06	S7
Toluene-d8	89.7	75-116	%	1.00	02/11/2005 13:06	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A  
Concord, CA 94520  
Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20  
Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Method Blank**

**Soil**

**QC Batch # 2005/02/11-1A.66**

MB: 2005/02/11-1A.66-024

Date Extracted: 02/11/2005 08:24

Compound	Conc.	RL	Unit	Analyzed	Flag
GRO (C6-C12)	ND	1	mg/Kg	02/11/2005 08:24	
Benzene	ND	0.005	mg/Kg	02/11/2005 08:24	
Toluene	ND	0.005	mg/Kg	02/11/2005 08:24	
Ethyl benzene	ND	0.005	mg/Kg	02/11/2005 08:24	
Total xylenes	ND	0.005	mg/Kg	02/11/2005 08:24	
tert-Butyl alcohol (TBA)	ND	0.010	mg/Kg	02/11/2005 08:24	
Methyl tert-butyl ether (MTBE)	ND	0.005	mg/Kg	02/11/2005 08:24	
Di-isopropyl Ether (DIPE)	ND	0.010	mg/Kg	02/11/2005 08:24	
Ethyl tert-butyl ether (ETBE)	ND	0.005	mg/Kg	02/11/2005 08:24	
tert-Amyl methyl ether (TAME)	ND	0.005	mg/Kg	02/11/2005 08:24	
1,2-DCA	ND	0.005	mg/Kg	02/11/2005 08:24	
EDB	ND	0.005	mg/Kg	02/11/2005 08:24	
Ethanol	ND	0.100	mg/Kg	02/11/2005 08:24	
<b>Surrogates(s)</b>					
1,2-Dichloroethane-d4	109.0	72-124	%	02/11/2005 08:24	
Toluene-d8	104.6	75-116	%	02/11/2005 08:24	

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Laboratory Control Spike**

**Soil**

**QC Batch # 2005/02/11-1A.66**

LCS 2005/02/11-1A.66-001

Extracted: 02/11/2005

Analyzed: 02/11/2005 08:01

LCSD

Compound	Conc. mg/Kg		Exp.Conc.	Recovery %		RPD	Ctrl.Limits %		Flags	
	LCS	LCSD		LCS	LCSD		%	Rec.	RPD	LCS
Methyl tert-butyl ether (MTBE)	0.0467		0.05	93.4			65-165	20		
Benzene	0.0470		0.05	94.0			69-129	20		
Toluene	0.0574		0.05	114.8			70-130	20		
<b>Surrogates(s)</b>										
1,2-Dichloroethane-d4	517		500	103.4			72-124			
Toluene-d8	501		500	100.2			75-116			

**Gas/BTEX Fuel Oxygenates by 8260B**

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

**Batch QC Report**

Prep(s): 5030B

Test(s): 8260B

**Matrix Spike ( MS / MSD )**

**Soil**

**QC Batch # 2005/02/11-1A.66**

SB-5@23 >> MS

Lab ID: 2005-02-0090 - 001

MS: 2005/02/11-1A.66-028

Extracted: 02/11/2005

Analyzed: 02/11/2005 13:28

Dilution: 1.00

MSD: 2005/02/11-1A.66-051

Extracted: 02/11/2005

Analyzed: 02/11/2005 13:51

Dilution: 1.00

Compound	Conc. mg/Kg			Spk.Level mg/Kg	Recovery %			Limits %		Flags	
	MS	MSD	Sample		MS	MSD	RPD	Rec.	RPD	MS	MSD
Methyl tert-butyl ether	0.0585	0.0588	ND	0.05	117.0	117.6	0.5	65-165	20		
Benzene	0.0569	0.0552	ND	0.05	113.8	110.4	3.0	69-129	20		
Toluene	0.0611	0.0573	ND	0.05	122.2	114.6	6.4	70-130	20		
<b>Surrogate(s)</b>											
1,2-Dichloroethane-d4	567	589		500	113.4	117.8		72-124			
Toluene-d8	485	499		500	97.0	99.8		75-116			

## Gas/BTEX Fuel Oxygenates by 8260B

TRC/Alton Geoscience-Concord

Attn.: Keith Woodburne

1590 Solano Way, Suite A

Concord, CA 94520

Phone: (925) 688-1200 Fax: (925) 688-0388

Project: 41050001FA20

Conoco Phillips #3072

Received: 02/01/2005 16:00

Site: 2445 Castro Valley Blvd., Castro Valley

### Legend and Notes

#### Analysis Flag

N1

Internal standard out of range.

#### Result Flag

S7

Surrogate recoveries higher than acceptance limits.



