

**ExxonMobil
Refining & Supply Company**

2300 Clayton Road, Suite 1250
P.O. Box 4032
Concord, CA 94524-4032
(925) 246-8747 Telephone
(925) 246-8798 Facsimile
gene.n.ortega@exxonmobil.com

Gene N. Ortega
Territory Manager
Global Remediation - U.S. Retail

ExxonMobil
Refining & Supply

October 31, 2001

Wait for SCM (coming soon), then
evaluate for closure if no potential
sensitive receptors.

NOV 02 2001

Ms. Eva Chu
Alameda County Health Agency
Division of Environmental Protection
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502

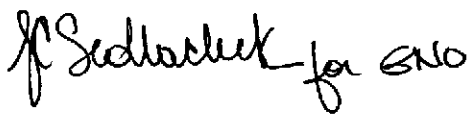
Subject: Former Exxon RAS #7-0210, 7840 Amador Valley Boulevard, Dublin, California

Dear Ms. Chu:

Attached for your review and comment is a copy of the *Report of Groundwater Monitoring, Third Quarter 2001* for the above-referenced site. The report, prepared by ETIC Engineering, Inc. of Pleasant Hill, California, details the results of the September 2001 sampling event.

If you have any questions or comments, please contact me at (925) 246-8747.

Sincerely,



Gene N. Ortega
Territory Manager

Attachment: ETIC Groundwater Monitoring Report dated October 2001

- c: w/ attachment:
Mr. Winson B. Low - Valero Energy Corporation

- c: w/o attachment:
Ms. Christa Marting - ETIC Engineering, Inc.



NOV 02 2001

Report of Groundwater Monitoring Third Quarter 2001

Former Exxon Retail Site 7-0210 7840 Amador Valley Boulevard Dublin, California

Prepared for

ExxonMobil Refining and Supply Company
P.O. Box 4032
2300 Clayton Road, Suite 1250
Concord, California 94524-4032

Prepared by

ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, California 94523
(925) 602-4710

Ted Moise

10/26/01

Ted Moise
Project Manager

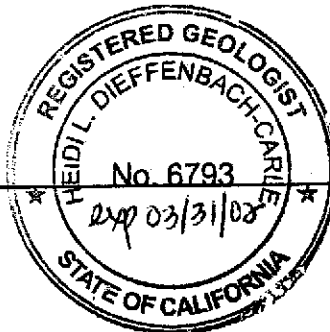
Date

Heidi Dieffenbach-Carle

October 29, 2001

Heidi Dieffenbach-Carle, R.G. #6793
Senior Geologist

Date



October 2001

SITE CONTACTS

Station Number: Former Exxon Retail Site 7-0210

Station Address: 7840 Amador Valley Boulevard
Dublin, California

ExxonMobil Project Manager: Gene N. Ortega
ExxonMobil Refining and Supply Company
P.O. Box 4032
2300 Clayton Road, Suite 1250
Concord, California 94524-4032
(925) 246-8747

Consultant to ExxonMobil: ETIC Engineering, Inc.
2285 Morello Avenue
Pleasant Hill, California 94523
(925) 602-4710

ETIC Project Manager: Ted Moise

Regulatory Oversight: Eva Chu
Alameda County Health Agency
Division of Environmental Protection
Department of Environmental Health
1131 Harbor Bay Parkway, 2nd Floor
Alameda, California 94502
(510) 567-6700

1. INTRODUCTION

Former Exxon Retail Site (RS) 7-0210 is an active Valero service station located at 7840 Amador Valley Boulevard in Dublin, California. Land use in the area is a mixture of residential and commercial. The immediate vicinity of the site is commercial, consisting of shopping malls and parking lots. A Unocal service station with underground storage tanks (USTs) is located on the southwestern corner of the intersection. The site is located on essentially flat terrain with topography in the area sloping gently to the southeast.

Former Exxon RS 7-0210 was owned and operated by Texaco until 1988, when it was purchased by Exxon. In February 1990, Exxon replaced product dispensers and installed a vapor recovery system. In October 1991, Exxon replaced three 8,000-gallon single-walled steel USTs with the existing three 12,000-gallon double-walled fiberglass-reinforced plastic tanks. The product piping was also upgraded to double-walled fiberglass-reinforced plastic. The locations of the present and former tanks are indicated in Figure 1.

Groundwater monitoring wells MW1-MW4 were installed in May 1992 and monitored for petroleum hydrocarbons and benzene, toluene, ethylbenzene, and total xylenes (BTEX) until June 1995. These monitoring wells were destroyed in April 1996 as authorized by the Alameda County Health Agency Department of Environmental Health and the Regional Water Quality Control Board in a March 1996 site closure letter to Exxon. The locations of these former wells are presented in Figure 1. Three onsite groundwater monitoring wells (MW5-MW7, Figure 1) were installed on 14 and 15 November 2000 based on the results of a baseline investigation conducted in 1999, prior to the property transfer from ExxonMobil to Valero in June 2000.

2. GROUNDWATER MONITORING

On 12 September 2001, groundwater in wells MW5-MW7 (Figure 1) was gauged. Groundwater samples were collected from the wells and the samples were analyzed for Total Petroleum Hydrocarbons as gasoline (TPH-g), BTEX, and methyl t-butyl ether (MTBE).

Current groundwater monitoring data and calculated groundwater elevations are presented in boldface type in Table 1, along with previous data. Current groundwater elevations are also shown in Figure 1. The groundwater flow direction on 12 September was to the southeast, with a gradient of approximately 0.004. Liquid-phase hydrocarbons were not observed in any of the wells.

After the depths to water were measured, the wells were purged. Field parameters of pH, temperature, and electrical conductance of the purged water were measured for approximately every well casing volume removed during purging. Copies of the field documents are included as Appendix A. When the field parameters were stable (less than a 10 percent change from the previous reading for temperature and electrical conductance and not more than 0.1 pH units) and approximately 3 casing volumes were removed from each well, purging was stopped and samples were collected using factory-cleaned disposable bailers. The samples were poured into 40-ml glass VOA vials and stored in an ice-filled cooler. All samples were handled and transported under chain of custody.

The samples were submitted to SPL, Inc. in Houston, Texas, and analyzed for TPH-g by Cal EPA-modified EPA Method 8015 and for BTEX and MTBE by EPA Method 8021B. Samples in which MTBE was detected were also analyzed for MTBE by EPA Method 8260B for confirmation. The results for these analyses are presented in boldface type, along with previous analytical data, in Table 1, and are shown in Figure 1. The laboratory analytical report and chain-of-custody documentation are included in Appendix B.

3. WORK PROPOSED FOR NEXT QUARTER

Groundwater in wells MW5-MW7 will be gauged and sampled in November 2001. The groundwater samples will be analyzed for TPH-g, BTEX, and MTBE.



**Groundwater
Flow Direction**
Gradient = 0.004

| | |
|--------------|------|
| Benzene | <0.5 |
| Toluene | <0.5 |
| Ethylbenzene | <0.5 |
| Xylenes | <0.5 |
| TPH-g | 100 |
| MTBE(8021) | 760 |
| MTBE(8260) | 800 |

| | |
|--------------|------|
| Benzene | <0.5 |
| Toluene | <0.5 |
| Ethylbenzene | <0.5 |
| Xylenes | <0.5 |
| TPH-g | <50 |
| MTBE(8021) | <0.5 |

| | |
|--------------|------|
| Benzene | <0.5 |
| Toluene | <0.5 |
| Ethylbenzene | <0.5 |
| Xylenes | <0.5 |
| TPH-g | <50 |
| MTBE(8021) | 680 |
| MTBE(8260) | 740 |

LEGEND

- GROUNDWATER MONITORING WELL LOCATION
- SOIL BORING / GROUNDWATER SAMPLING LOCATION
- CONFIRMATION SOIL SAMPLE
- DESTROYED GROUNDWATER MONITORING WELL

- (339.09) GROUNDWATER ELEVATION (FEET MSL)
- TPH-g TOTAL PETROLEUM HYDROCARBONS AS GASOLINE
- MTBE METHYL T-BUTYL ETHER
- CONCENTRATIONS IN MICROGRAMS PER LITER (ug/L).



MAP ADAPTED FROM EA ENGINEERING, SCIENCE, AND TECHNOLOGY DRAWING,
AND SITE SURVEY PERFORMED BY MILANI & ASSOCIATES, DECEMBER 2000.

ETIC
Engineering, Inc.

**SITE PLAN SHOWING GROUNDWATER ELEVATIONS
AND ANALYTICAL RESULTS**
FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BLVD., DUBLIN, CA.
12 SEPTEMBER 2001

FIGURE:

1

TABLE 1 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CA

| Well No. | Date | Casing Elevation (feet msl) | Depth to Water (feet) | Groundwater Elevation (feet msl) | LPH Thickness (feet) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH-g (µg/L) | MTBE (µg/L) | Other Oxygenates and Additives (µg/L) |
|----------|----------|-----------------------------|----------------------------|----------------------------------|----------------------|-------------------|----------------|----------------------|----------------------|--------------|-------------|---------------------------------------|
| MW1 | 05/21/92 | 96.32 | 14.45 | 81.87 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW1 | 02/10/93 | 96.32 | 12.22 | 84.10 | 0.00 | 3.1 | <0.5 | 1.8 | 0.6 | 2,600 | NA | |
| MW1 | 05/20/93 | 96.32 | 10.74 | 85.58 | 0.00 | 1.9 | <0.5 | 1.8 | <1.0 | 1,000 | NA | |
| MW1 | 06/23/93 | 96.32 | 11.74 | 84.58 | 0.00 | 1.0 | <0.5 | 1.2 | <0.5 | 1,300 | NA | |
| MW1 | 08/23/93 | 96.32 | 12.72 | 83.60 | 0.00 | <0.5 | <0.5 | <0.5 | 0.8 | 80 | NA | |
| MW1 | 10/25/93 | 96.32 | 13.99 | 82.33 | 0.00 | <0.5 | <0.5 | 0.8 | 1.3 | 140 | NA | |
| MW1 | 02/16/94 | 96.32 | 14.90 | 81.42 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW1 | 04/16/94 | 96.32 | 14.49 | 81.83 | 0.00 | <0.5 ^b | <0.5 | <0.5 | <0.5 | 190 | NA | |
| MW1 | 07/26/94 | 96.32 | 15.11 | 81.21 | 0.00 | <0.5 ^b | <0.5 | <0.5 | <0.5 | 130 | NA | |
| MW1 | 10/05/94 | 96.32 | 15.69 | 80.63 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW1 | 01/04/95 | 96.32 | 14.66 | 81.66 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW1 | 06/12/95 | 96.32 | 10.08 | 86.24 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 230 | |
| MW1 | | | Well destroyed April 1996. | | | | | | | | | |
| MW2 | 05/21/92 | 95.91 | 14.30 | 81.61 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW2 | 02/10/93 | 95.91 | 12.34 | 83.57 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW2 | 05/20/93 | 95.91 | 10.73 | 85.18 | 0.00 | <0.5 | <0.5 | <0.5 | <1.0 | 320 | NA | |
| MW2 | 06/23/93 | 95.91 | 11.74 | 84.17 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | 130 | NA | |
| MW2 | 08/23/93 | 95.91 | 12.60 | 83.31 | 0.00 | <0.5 | <0.5 | <0.5 | 1.1 | 140 | NA | |
| MW2 | 10/25/93 | 95.91 | 13.86 | 82.05 | 0.00 | <0.5 | <0.5 | 0.5 | 2.4 | 75 | NA | |
| MW2 | 02/16/94 | 95.91 | 14.73 | 81.18 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW2 | 04/16/94 | 95.91 | 14.33 | 81.58 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW2 | 07/26/94 | 95.91 | 14.96 | 80.95 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW2 | 10/05/94 | 95.91 | 15.49 | 80.42 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |

TABLE 1 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CA

| Well No. | Date | Casing Elevation (feet msl) | Depth to Water (feet) | Groundwater Elevation (feet msl) | LPH Thickness (feet) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH-g (µg/L) | MTBE (µg/L) | Other Oxygenates and Additives (µg/L) |
|----------|----------|-----------------------------|----------------------------|----------------------------------|----------------------|----------------|----------------|----------------------|----------------------|--------------|-------------|---------------------------------------|
| MW2 | 01/04/95 | 95.91 | 14.44 | 81.47 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW2 | 06/12/95 | 95.91 | 10.10 | 85.81 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 59 | |
| MW2 | | | Well destroyed April 1996. | | | | | | | | | |
| MW3 | 05/21/92 | 97.95 | 16.05 | 81.90 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW3 | 02/10/93 | 97.95 | 13.77 | 84.18 | 0.00 | <0.5 | <0.5 | <0.5 | 0.7 | <50 | NA | |
| MW3 | 05/20/93 | 97.95 | 12.32 | 85.63 | 0.00 | <0.5 | <0.5 | <0.5 | <1.0 | <50 | NA | |
| MW3 | 06/23/93 | 97.95 | 13.34 | 84.61 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW3 | 08/23/93 | 97.95 | 14.30 | 83.65 | 0.00 | 2.3 | 1.2 | 1.4 | 4.1 | <50 | NA | |
| MW3 | 10/25/93 | 97.95 | 15.62 | 82.33 | 0.00 | NS | NS | NS | NS | NS | NS | |
| MW3 | 02/16/94 | 97.95 | 16.48 | 81.47 | 0.00 | NS | NS | NS | NS | NS | NS | |
| MW3 | 04/16/94 | 97.95 | 16.61 | 81.34 | 0.00 | NS | NS | NS | NS | NS | NS | |
| MW3 | 07/26/94 | 97.95 | 16.72 | 81.23 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW3 | 10/05/94 | 97.95 | 17.33 | 80.62 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW3 | 01/04/95 | 97.95 | 16.29 | 81.66 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW3 | 06/12/95 | 97.95 | 11.67 | 86.28 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <2.5 | |
| MW3 | | | Well destroyed April 1996. | | | | | | | | | |
| MW4 | 05/21/92 | 96.69 | 14.59 | 82.10 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW4 | 02/10/93 | 96.69 | 12.30 | 84.39 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW4 | 05/20/93 | 96.69 | 10.75 | 85.94 | 0.00 | 1.4 | 1.0 | <0.5 | 1.8 | <50 | NA | |
| MW4 | 06/23/93 | 96.69 | 11.78 | 84.91 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW4 | 08/23/93 | 96.69 | 12.82 | 83.87 | 0.00 | <0.5 | <0.5 | <0.5 | 0.8 | <50 | NA | |
| MW4 | 10/25/93 | 96.69 | 14.10 | 82.59 | 0.00 | NS | NS | NS | NS | NS | NS | |

TABLE 1 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CA

| Well No. | Date | Casing Elevation (feet msl) | Depth to Water (feet) | Groundwater Elevation (feet msl) | LPH Thickness (feet) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH-g (µg/L) | MTBE (µg/L) | Other Oxygenates and Additives (µg/L) |
|------------|-----------------|-----------------------------|-----------------------|----------------------------------|----------------------|----------------|----------------|----------------------|----------------------|---------------|------------------------|---------------------------------------|
| MW4 | 02/16/94 | 96.69 | 15.02 | 81.67 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW4 | 04/16/94 | 96.69 | 14.61 | 82.08 | 0.00 | NS | NS | NS | NS | NS | NS | |
| MW4 | 07/26/94 | 96.69 | 15.23 | 81.46 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW4 | 10/05/94 | 96.69 | 15.85 | 80.84 | 0.00 | <0.5 | 12 | <0.5 | <0.5 | <50 | NA | |
| MW4 | 01/04/95 | 96.69 | 14.84 | 81.85 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | NA | |
| MW4 | 06/12/95 | 96.69 | 10.07 | 86.62 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <2.5 | |
| MW4 | | Well destroyed April 1996. | | | | | | | | | | |
| MW5 | 11/17/00 | 352.93 | 13.51 | 339.42 | 0.00 | <0.5 | <0.5 | <0.5 | 2.46 | 240 | 1,500 | |
| MW5 | 11/17/00 | 352.93 | | | | | | | | | 1,600 ^a | |
| MW5 | 02/02/01 | 352.93 | 13.81 | 339.12 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | 110 | 1,400 | |
| MW5 | 02/02/01 | 352.93 | | | | | | | | | 1,200 ^a | |
| MW5 | 05/09/01 | 352.93 | 12.20 | 340.73 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 770 ^a | ND ^c |
| MW5 | 09/12/01 | 352.93 | 13.84 | 339.09 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | 100 | 760 | NA |
| MW5 | 09/12/01 | 352.93 | | | | | | | | | 800^a | |
| MW6 | 11/17/00 | 352.66 | 13.47 | 339.19 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 270 | |
| MW6 | 11/17/00 | 352.66 | | | | | | | | | 260 ^a | |
| MW6 | 02/02/01 | 352.66 | 13.79 | 338.87 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 160 | |
| MW6 | 02/02/01 | 352.66 | | | | | | | | | 130 ^a | |
| MW6 | 05/09/01 | 352.66 | 12.25 | 340.41 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 760 ^a | ND ^c |
| MW6 | 09/12/01 | 352.66 | 13.83 | 338.83 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | 680 | NA |
| MW6 | 09/12/01 | 352.66 | | | | | | | | | 740^a | |

TABLE 1 GROUNDWATER MONITORING DATA, FORMER EXXON RS 7-0210, 7840 AMADOR VALLEY BOULEVARD, DUBLIN, CA

| Well No. | Date | Casing Elevation (feet msl) | Depth to Water (feet) | Groundwater Elevation (feet msl) | LPH Thickness (feet) | Benzene (µg/L) | Toluene (µg/L) | Ethyl-benzene (µg/L) | Total Xylenes (µg/L) | TPH-g (µg/L) | MTBE (µg/L) | Other Oxygenates and Additives (µg/L) |
|------------|-----------------|-----------------------------|-----------------------|----------------------------------|----------------------|----------------|----------------|----------------------|----------------------|---------------|-----------------|---------------------------------------|
| MW7 | 11/17/00 | 351.86 | 12.44 | 339.42 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | |
| MW7 | 02/02/01 | 351.86 | 12.74 | 339.12 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | |
| MW7 | 05/09/01 | 351.86 | 11.15 | 340.71 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <5 ^a | ND ^c |
| MW7 | 09/12/01 | 351.86 | 12.74 | 339.12 | 0.00 | <0.5 | <0.5 | <0.5 | <0.5 | <50 | <0.5 | NA |

a Analysis by EPA Method 8260.

b A peak eluting earlier than benzene, suspected to be MTBE.

c Other oxygenates and additives include diisopropyl ether, t-butyl alcohol, tert-amyl methyl ether, tert-butyl ethyl ether, 1,2-dibromoethane, and 1,2-dichloroethane.

LPH Liquid-phase hydrocarbons.

TPH-g Total Petroleum Hydrocarbons as gasoline.

MTBE Methyl tertiary butyl ether.

NA Not analyzed.

ND Not detected.

NS Not sampled.

feet msl Feet relative to mean sea level.

µg/L Micrograms per liter.

Appendix A
Field Documents

GROUNDWATER PURGE AND SAMPLE

Project Name: *Exxon 7-0210* Well No: *MW5* Date: *9/12/2001*
 Project No: *UP0210.1* Personnel: *JAKE H.*

GAUGING DATA

Water Level Measuring Method: *WLM* Measuring Point Description: *TOC*

| WELL PURGE VOLUME CALCULATION | Total Depth (feet) | Depth to Water (feet) | Water Column (feet) | Multiplier for Casing Diameter | | | | Casing Volume (gal) | Total Purge Volume (gal) | | | |
|-------------------------------|--------------------|-----------------------|---------------------|--------------------------------|--------------|----------|----------|---------------------|--------------------------|----------|-------------|----------|
| | <i>24.35</i> | <i>-</i> | <i>13.84</i> | <i>=</i> | <i>10.51</i> | <i>X</i> | <i>1</i> | <i>2</i> | <i>4</i> | <i>6</i> | <i>1.68</i> | <i>=</i> |
| | | | | | | 0.04 | 0.16 | 0.64 | 1.44 | | | |

PURGING DATA

Purge Method: *Submersible Pump* Purge Depth: *Screen* Purge Rate: *(gpm)*

| Time | 1340 | 1343 | 1347 | | | |
|---------------------|---------------------|---------------------|---------------------|---------------------|--|--|
| Volume Purge (gal) | <i>2</i> | <i>4</i> | <i>6</i> | | | |
| Temperature (C) | <i>23.7</i> | <i>23.4</i> | <i>22.6</i> | | | |
| pH | <i>8.61</i> | <i>8.58</i> | <i>8.61</i> | | | |
| Spec. Cond. (umhos) | <i>.368</i> | <i>.433</i> | <i>.434</i> | | | |
| Turbidity/Color | <i>Y</i> <i>brn</i> | <i>Y</i> <i>brn</i> | <i>Y</i> <i>brn</i> | <i>Y</i> <i>brn</i> | | |
| Odor (Y/N) | <i>N</i> | <i>N</i> | <i>N</i> | | | |
| Casing Volumes | <i>Silty</i> | <i>Silty</i> | <i>Silty</i> | | | |
| Dewatered (Y/N) | <i>N</i> | <i>N</i> | <i>N</i> | | | |

Comments/Observations:

SAMPLING DATA

Time Sampled: *1400* Approximate Depth to Water During Sampling: *(feet)*

Comments:

| Sample Number | Number of Containers | Container Type | Perservative | Volume Filled (mL or L) | Turbidity/ Color | Analysis Method |
|---------------|----------------------|----------------|--------------|-------------------------|------------------|--------------------------|
| <i>MW5</i> | <i>6</i> | <i>Voa</i> | <i>HCL</i> | <i>40 ml</i> | | <i>TPH-g, BTEX, MTBE</i> |
| | | | | | | |
| | | | | | | |

Total Purge Volume: *6.0* (gallons) Disposal: *ROMIC*

Weather Conditions: *Summer*

Condition of Well Box and Casing at Time of Sampling: *Good*

Well Head Conditions Requiring Correction: *None*

Problems Encountered During Purging and Sampling: *None*

Comments:

GROUNDWATER PURGE AND SAMPLE

Project Name: *Exxon 7-0210* Well No: *MW6* Date: *9/18/2001*
 Project No: *UP0210.1* Personnel: *JAKE H.*

GAUGING DATA

Water Level Measuring Method: *WLM* Measuring Point Description: *TOC*

| WELL PURGE VOLUME CALCULATION | Total Depth (feet) | Depth to Water (feet) | Water Column (feet) | Multiplier for Casing Diameter | | | | Casing Volume (gal) | Total Purge Volume (gal) |
|-------------------------------|--------------------|-----------------------|---------------------|--------------------------------|----------|----------|----------|---------------------|--------------------------|
| | <i>24.72</i> | <i>13.83</i> | <i>10.88</i> | <i>1</i> | <i>2</i> | <i>4</i> | <i>6</i> | <i>1.74</i> | <i>5.22</i> |
| | | | | 0.04 | 0.16 | 0.64 | 1.44 | | |

PURGING DATA

Purge Method: *Submersible Pump* Purge Depth: *Screen* Purge Rate: *(gpm)*

| Time | 1228 | 1234 | 1238 | | | |
|---------------------|--------------|--------------|--------------|--|--|--|
| Volume Purge (gal) | <i>2</i> | <i>4</i> | <i>6</i> | | | |
| Temperature (C) | <i>21.5</i> | <i>21.2</i> | <i>21.1</i> | | | |
| pH | <i>8.53</i> | <i>8.58</i> | <i>8.29</i> | | | |
| Spec. Cond. (umhos) | <i>427</i> | <i>415</i> | <i>405</i> | | | |
| Turbidity/Color | <i>Y brn</i> | <i>Y brn</i> | <i>Y brn</i> | | | |
| Odor (Y/N) | <i>N</i> | <i>N</i> | <i>N</i> | | | |
| Casing Volumes | <i>silty</i> | <i>silty</i> | <i>silty</i> | | | |
| Dewatered (Y/N) | <i>N</i> | <i>N</i> | <i>N</i> | | | |

Comments/Observations:

SAMPLING DATA

Time Sampled: *1245* Approximate Depth to Water During Sampling: *(feet)*

Comments:

| Sample Number | Number of Containers | Container Type | Perservative | Volume Filled (mL or L) | Turbidity/ Color | Analysis Method |
|---------------|----------------------|----------------|--------------|-------------------------|------------------|--------------------------|
| <i>MW6</i> | <i>6</i> | <i>Voac</i> | <i>HCL</i> | <i>40 ml</i> | | <i>TPH-g, BTEX, MTBE</i> |
| | | | | | | |
| | | | | | | |

Total Purge Volume: *6.0* (gallons) Disposal: *ROMIC*

Weather Conditions: *Cloudy*
 Condition of Well Box and Casing at Time of Sampling: *Good - part of flange on well cap broken*
 Well Head Conditions Requiring Correction: *See Above*

Problems Encountered During Purging and Sampling:

Comments:

GROUNDWATER PURGE AND SAMPLE

Project Name: *Exxon 7-0210* Well No: *MW7* Date: *9/12/2001*
 Project No: *UP0210.1* Personnel: *JAKE H.*

GAUGING DATA

Water Level Measuring Method: *WLM* Measuring Point Description: *TOC*

| WELL PURGE VOLUME CALCULATION | Total Depth (feet) | Depth to Water (feet) | Water Column (feet) | Multiplier for Casing Diameter | | | | Casing Volume (gal) | Total Purge Volume (gal) |
|-------------------------------|--------------------|-----------------------|---------------------|--------------------------------|----------|----------|----------|---------------------|--------------------------|
| | <i>23.78</i> | <i>12.74</i> | <i>11.04</i> | <i>X</i> | <i>1</i> | <i>2</i> | <i>4</i> | <i>6</i> | <i>1.76</i> |
| | | | | 0.04 | 0.16 | 0.64 | 1.44 | | |

PURGING DATA

Purge Method: *Submersible Pump* Purge Depth: *Screen* Purge Rate: *(gpm)*

| Time | 1309 | 1309 | 1311 | | | |
|---------------------|--------------|--------------|--------------|--|--|--|
| Volume Purge (gal) | <i>2</i> | <i>4</i> | <i>6</i> | | | |
| Temperature (C) | <i>22.0</i> | <i>22.3</i> | <i>22.1</i> | | | |
| pH | <i>8.70</i> | <i>8.63</i> | <i>8.57</i> | | | |
| Spec. Cond. (umhos) | <i>.371</i> | <i>.421</i> | <i>.367</i> | | | |
| Turbidity/Color | <i>Y brn</i> | <i>Y brn</i> | <i>Y brn</i> | | | |
| Odor (Y/N) | <i>N</i> | <i>N</i> | <i>N</i> | | | |
| Casing Volumes | <i>Silty</i> | <i>Silty</i> | <i>Silty</i> | | | |
| Dewatered (Y/N) | <i>N</i> | <i>N</i> | <i>N</i> | | | |

Comments/Observations:

SAMPLING DATA

Time Sampled: *1326* Approximate Depth to Water During Sampling: *(feet)*

Comments:

| Sample Number | Number of Containers | Container Type | Perservative | Volume Filled (mL or L) | Turbidity/ Color | Analysis Method |
|---------------|----------------------|----------------|--------------|-------------------------|------------------|--------------------------|
| <i>MW7</i> | <i>6</i> | <i>Voa</i> | <i>HCL</i> | <i>40 ml</i> | | <i>TPH-g, BTEX, MTBE</i> |
| | | | | | | |
| | | | | | | |

Total Purge Volume: *6.0* (gallons) Disposal: *ROMIC*

Weather Conditions: *Cloudy*
 Condition of Well Box and Casing at Time of Sampling: *Good*
 Well Head Conditions Requiring Correction: *None*
 Problems Encountered During Purging and Sampling: *None*
 Comments:

Appendix B

Laboratory Analytical Reports



HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TEXAS 77054
(713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:
01090501

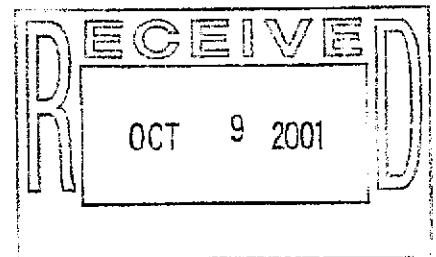
| | |
|---|---|
| Report To: ETIC Engineering, Inc. John Ortega 2285 Morello Avenue Pleasant Hill California 94523- ph: (925) 602-4710 fax: (925) 602-4720 | Project Name: TM0210.1 Site: 7-0210 Site Address: 7840 Amador Valley Blvd. Dublin CA PO Number: EWR#21012153 State: California State Cert. No.: 1903 Date Reported: 9/28/01 |
|---|---|

This Report Contains A Total Of 15 Pages

Excluding This Page

And

Chain Of Custody



9/28/01

Date



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Case Narrative for:
EXXON Company U.S.A.

Certificate of Analysis Number:
01090501

| | |
|--|--|
| <p>Report To:</p> <p>ETIC Engineering, Inc. John Ortega 2285 Morello Avenue</p> <p>Pleasant Hill California 94523- ph: (925) 602-4710 fax: (925) 602-4720</p> | <p>Project Name: TM0210.1</p> <p>Site: 7-0210</p> <p>Site Address: 7840 Amador Valley Blvd. Dublin CA</p> <p>PO Number: EWR#21012153</p> <p>State: California</p> <p>State Cert. No.: 1903</p> <p>Date Reported: 9/28/01</p> |
|--|--|

Matrix spike (MS) and matrix spike duplicate (MSD) samples are chosen and tested at random from an analytical batch of "like " matrix to check for possible matrix effect. The MS and MSD will provide site specific matrix data only for those samples which are spiked by the laboratory. Since the MS and MSD are chosen at random from an analytical batch, the sample chosen for spike purposes may or may not have been a sample submitted in this sample delivery group. The validity of the analytical procedures for which data is reported in this analytical report is determined by the Laboratory Control Sample (LCS) and the Method Blank (MB). The Laboratory Control Sample (LCS) and the Method Blank (MB) are processed with the samples and the MS/MSD to ensure method criteria are achieved throughout the entire analytical process.

Any other exceptions associated with this report will be footnoted in the analytical result page(s) or the quality control summary page(s).

Please do not hesitate to contact us if you have any questions or comments pertaining to this data report. Please reference the above Certificate of Analysis Number.

This report shall not be reproduced except in full, without the written approval of the laboratory. The reported results are only representative of the samples submitted for testing.

SPL, Inc. is pleased to be of service to you. We anticipate working with you in fulfilling all your current and future analytical needs.

Sonia West
 Sonia West
 Senior Project Manager



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

EXXON Company U.S.A.

Certificate of Analysis Number:

01090501

Report To: ETIC Engineering, Inc.
 John Ortega
 2285 Morello Avenue

Pleasant Hill
 California
 94523-

ph: (925) 602-4710 fax: (925) 602-4720

Fax To: ETIC Engineering, Inc.
 John Ortega fax : (925) 602-4720

Project Name: TM0210.1

Site: 7-0210

Site Address: 7840 Amador Valley Blvd.

Dublin CA

PO Number: EWR#21012153

State: California

State Cert. No.: 1903

Date Reported: 9/28/01

| Client Sample ID | Lab Sample ID | Matrix | Date Collected | Date Received | COC ID | HOLD |
|------------------|---------------|--------|---------------------|--------------------|--------|-------------------------------------|
| MW5 | 01090501-01 | Water | 9/12/01 2:00:00 PM | 9/18/01 9:45:00 AM | | <input type="checkbox"/> |
| MW6 | 01090501-02 | Water | 9/12/01 12:45:00 PM | 9/18/01 9:45:00 AM | | <input type="checkbox"/> |
| MW7 | 01090501-03 | Water | 9/12/01 1:20:00 PM | 9/18/01 9:45:00 AM | | <input type="checkbox"/> |
| MW7 | 01090501-03 | Water | 9/12/01 1:20:00 PM | 9/18/01 9:45:00 AM | | <input checked="" type="checkbox"/> |

Sonia West
 Sonia West
 Senior Project Manager

9/28/01

Date

Joel Grice
 Laboratory Director

Ted Yen
 Quality Assurance Officer



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Client Sample ID MW5

Collected: 9/12/01 2:00:00 SPL Sample ID: 01090501-01

Site: 7-0210

| Analyses/Method | Result | Rep.Limit | Dil. Factor | QUAL | Date Analyzed | Analyst | Seq. # |
|--|--------|-----------|-------------|----------------|--------------------|---------|--------|
| GASOLINE RANGE ORGANICS | | | | | | | |
| | | | MCL | CA_GRO | Units: ug/L | | |
| Gasoline Range Organics | 100 | 50 | 1 | | 09/19/01 1:46 | D_R | 834541 |
| Surr: 1,4-Difluorobenzene | 98.3 | % 62-144 | 1 | | 09/19/01 1:46 | D_R | 834541 |
| Surr: 4-Bromofluorobenzene | 105 | % 44-153 | 1 | | 09/19/01 1:46 | D_R | 834541 |
| PURGEABLE AROMATICS | | | | | | | |
| | | | MCL | SW8021B | Units: ug/L | | |
| Benzene | ND | 0.5 | 1 | | 09/19/01 1:46 | D_R | 834388 |
| Ethylbenzene | ND | 0.5 | 1 | | 09/19/01 1:46 | D_R | 834388 |
| Methyl tert-butyl ether | 760 | 2.5 | 5 | | 09/21/01 1:09 | D_R | 836932 |
| Toluene | ND | 0.5 | 1 | | 09/19/01 1:46 | D_R | 834388 |
| m,p-Xylene | ND | 0.5 | 1 | | 09/19/01 1:46 | D_R | 834388 |
| o-Xylene | ND | 0.5 | 1 | | 09/19/01 1:46 | D_R | 834388 |
| Xylenes,Total | ND | 0.5 | 1 | | 09/19/01 1:46 | D_R | 834388 |
| Surr: 1,4-Difluorobenzene | 98.5 | % 72-137 | 1 | | 09/19/01 1:46 | D_R | 834388 |
| Surr: 1,4-Difluorobenzene | 99.5 | % 72-137 | 5 | | 09/21/01 1:09 | D_R | 836932 |
| Surr: 4-Bromofluorobenzene | 97.6 | % 48-156 | 1 | | 09/19/01 1:46 | D_R | 834388 |
| Surr: 4-Bromofluorobenzene | 102 | % 48-156 | 5 | | 09/21/01 1:09 | D_R | 836932 |
| VOLATILE ORGANICS BY METHOD 8260B | | | | | | | |
| | | | MCL | SW8260B | Units: ug/L | | |
| Methyl tert-butyl ether | 800 | 50 | 10 | | 09/25/01 13:41 | JC | 841921 |
| Surr: 1,2-Dichloroethane-d4 | 100 | % 62-130 | 10 | | 09/25/01 13:41 | JC | 841921 |
| Surr: 4-Bromofluorobenzene | 106 | % 70-130 | 10 | | 09/25/01 13:41 | JC | 841921 |
| Surr: Toluene-d8 | 102 | % 74-122 | 10 | | 09/25/01 13:41 | JC | 841921 |

Qualifiers: ND/U - Not Detected at the Reporting Limit
 B - Analyte detected in the associated Method Blank
 * - Surrogate Recovery Outside Advisable QC Limits
 J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Client Sample ID MW6

Collected: 9/12/01 12:45:00 SPL Sample ID: 01090501-02

Site: 7-0210

| Analyses/Method | Result | Rep.Limit | Dil. Factor | QUAL | Date Analyzed | Analyst | Seq. # |
|--|--------|-----------|-------------|----------------|--------------------|---------|--------|
| GASOLINE RANGE ORGANICS | | | MCL | CA_GRO | Units: ug/L | | |
| Gasoline Range Organics | ND | 50 | 1 | | 09/19/01 2:12 | D_R | 834542 |
| Surr: 1,4-Difluorobenzene | 102 | % 62-144 | 1 | | 09/19/01 2:12 | D_R | 834542 |
| Surr: 4-Bromofluorobenzene | 98.7 | % 44-153 | 1 | | 09/19/01 2:12 | D_R | 834542 |
| PURGEABLE AROMATICS | | | MCL | SW8021B | Units: ug/L | | |
| Benzene | ND | 0.5 | 1 | | 09/19/01 2:12 | D_R | 834389 |
| Ethylbenzene | ND | 0.5 | 1 | | 09/19/01 2:12 | D_R | 834389 |
| Methyl tert-butyl ether | 680 | 2.5 | 5 | | 09/21/01 1:36 | D_R | 836933 |
| Toluene | ND | 0.5 | 1 | | 09/19/01 2:12 | D_R | 834389 |
| m,p-Xylene | ND | 0.5 | 1 | | 09/19/01 2:12 | D_R | 834389 |
| o-Xylene | ND | 0.5 | 1 | | 09/19/01 2:12 | D_R | 834389 |
| Xylenes, Total | ND | 0.5 | 1 | | 09/19/01 2:12 | D_R | 834389 |
| Surr: 1,4-Difluorobenzene | 96.1 | % 72-137 | 1 | | 09/19/01 2:12 | D_R | 834389 |
| Surr: 1,4-Difluorobenzene | 99.9 | % 72-137 | 5 | | 09/21/01 1:36 | D_R | 836933 |
| Surr: 4-Bromofluorobenzene | 103 | % 48-156 | 5 | | 09/21/01 1:36 | D_R | 836933 |
| Surr: 4-Bromofluorobenzene | 98.4 | % 48-156 | 1 | | 09/19/01 2:12 | D_R | 834389 |
| VOLATILE ORGANICS BY METHOD 8260B | | | MCL | SW8260B | Units: ug/L | | |
| Methyl tert-butyl ether | 740 | 50 | 10 | | 09/25/01 14:07 | JC | 841922 |
| Surr: 1,2-Dichloroethane-d4 | 100 | % 62-130 | 10 | | 09/25/01 14:07 | JC | 841922 |
| Surr: 4-Bromofluorobenzene | 104 | % 70-130 | 10 | | 09/25/01 14:07 | JC | 841922 |
| Surr: Toluene-d8 | 100 | % 74-122 | 10 | | 09/25/01 14:07 | JC | 841922 |

Qualifiers: ND/U - Not Detected at the Reporting Limit
 B - Analyte detected in the associated Method Blank
 * - Surrogate Recovery Outside Advisable QC Limits
 J - Estimated Value between MDL and PQL

>MCL - Result Over Maximum Contamination Limit(MCL)
 D - Surrogate Recovery Unreportable due to Dilution
 MI - Matrix Interference



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Client Sample ID MW7 Collected: 9/12/01 1:20:00 SPL Sample ID: 01090501-03

Site: 7-0210

| Analyses/Method | Result | Rep.Limit | Dil. Factor | QUAL | Date Analyzed | Analyst | Seq. # |
|--------------------------------|--------|-----------|-------------|----------------|--------------------|---------|--------|
| GASOLINE RANGE ORGANICS | | | MCL | CA_GRO | Units: ug/L | | |
| Gasoline Range Organics | ND | 50 | 1 | | 09/19/01 2:38 | D_R | 834543 |
| Surr: 1,4-Difluorobenzene | 107 | % 62-144 | 1 | | 09/19/01 2:38 | D_R | 834543 |
| Surr: 4-Bromofluorobenzene | 97.0 | % 44-153 | 1 | | 09/19/01 2:38 | D_R | 834543 |
| PURGEABLE AROMATICS | | | MCL | SW8021B | Units: ug/L | | |
| Benzene | ND | 0.5 | 1 | | 09/19/01 2:38 | D_R | 834390 |
| Ethylbenzene | ND | 0.5 | 1 | | 09/19/01 2:38 | D_R | 834390 |
| Methyl tert-butyl ether | ND | 0.5 | 1 | | 09/19/01 2:38 | D_R | 834390 |
| Toluene | ND | 0.5 | 1 | | 09/19/01 2:38 | D_R | 834390 |
| m,p-Xylene | ND | 0.5 | 1 | | 09/19/01 2:38 | D_R | 834390 |
| o-Xylene | ND | 0.5 | 1 | | 09/19/01 2:38 | D_R | 834390 |
| Xylenes, Total | ND | 0.5 | 1 | | 09/19/01 2:38 | D_R | 834390 |
| Surr: 1,4-Difluorobenzene | 95.1 | % 72-137 | 1 | | 09/19/01 2:38 | D_R | 834390 |
| Surr: 4-Bromofluorobenzene | 99.2 | % 48-156 | 1 | | 09/19/01 2:38 | D_R | 834390 |

Qualifiers: ND/U - Not Detected at the Reporting Limit >MCL - Result Over Maximum Contamination Limit(MCL)
 B - Analyte detected in the associated Method Blank D - Surrogate Recovery Unreportable due to Dilution
 * - Surrogate Recovery Outside Advisable QC Limits MI - Matrix Interference
 J - Estimated Value between MDL and PQL

Quality Control Documentation



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

EXXON Company U.S.A.
TM0210.1

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01090501
Lab Batch ID: R43730

Method Blank

Samples in Analytical Batch:

RunID: HP_R_010918C-834380 Units: ug/L
Analysis Date: 09/19/2001 0:02 Analyst: D_R

Lab Sample ID Client Sample ID
01090501-01A MW5
01090501-02A MW6
01090501-03A MW7

Table with 3 columns: Analyte, Result, Rep Limit. Rows include Benzene, Ethylbenzene, Methyl tert-butyl ether, Toluene, m,p-Xylene, o-Xylene, Xylenes, Total, and two surrogate compounds.

Laboratory Control Sample (LCS)

RunID: HP_R_010918C-834379 Units: ug/L
Analysis Date: 09/18/2001 23:10 Analyst: D_R

Table with 6 columns: Analyte, Spike Added, Result, Percent Recovery, Lower Limit, Upper Limit. Rows include Benzene, Ethylbenzene, Methyl tert-butyl ether, Toluene, m,p-Xylene, o-Xylene, and Xylenes, Total.

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01090501-02
RunID: HP_R_010918C-834391 Units: ug/L
Analysis Date: 09/19/2001 3:30 Analyst: D_R

Table with 12 columns: Analyte, Sample Result, MS Spike Added, MS Result, MS % Recovery, MSD Spike Added, MSD Result, MSD % Recovery, RPD, RPD Limit, Low Limit, High Limit. Rows include Benzene, Ethylbenzene, and Methyl tert-butyl ether.

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

EXXON Company U.S.A.

TM0210.1

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01090501
Lab Batch ID: R43730

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01090501-02
RunID: HP_R_010918C-834391 Units: ug/L
Analysis Date: 09/19/2001 3:30 Analyst: D_R

| Analyte | Sample Result | MS Spike Added | MS Result | MS % Recovery | MSD Spike Added | MSD Result | MSD % Recovery | RPD | RPD Limit | Low Limit | High Limit |
|----------------|---------------|----------------|-----------|---------------|-----------------|------------|----------------|-------|-----------|-----------|------------|
| Toluene | ND | 20 | 23 | 113 | 20 | 22 | 112 | 0.491 | 20 | 38 | 159 |
| m,p-Xylene | ND | 40 | 41 | 102 | 40 | 39 | 98.2 | 3.56 | 17 | 53 | 144 |
| o-Xylene | ND | 20 | 22 | 110 | 20 | 21 | 107 | 2.85 | 18 | 53 | 143 |
| Xylenes, Total | ND | 60 | 63 | 105 | 60 | 60 | 100 | 4.88 | 18 | 53 | 144 |

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
 J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

EXXON Company U.S.A.

TM0210.1

Analysis: Gasoline Range Organics
Method: CA_GRO

WorkOrder: 01090501
Lab Batch ID: R43733

Method Blank

Samples in Analytical Batch:

RunID: HP_R_010918E-834538 Units: mg/L
Analysis Date: 09/19/2001 0:02 Analyst: D_R

Lab Sample ID Client Sample ID
01090501-01A MW5
01090501-02A MW6
01090501-03A MW7

Table with 3 columns: Analyte, Result, Rep Limit. Rows include Gasoline Range Organics, Surr: 1,4-Difluorobenzene, and Surr: 4-Bromofluorobenzene.

Laboratory Control Sample (LCS)

RunID: HP_R_010918E-834537 Units: mg/L
Analysis Date: 09/18/2001 23:36 Analyst: D_R

Table with 6 columns: Analyte, Spike Added, Result, Percent Recovery, Lower Limit, Upper Limit. Row for Gasoline Range Organics.

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01090501-01
RunID: HP_R_010918E-834544 Units: mg/L
Analysis Date: 09/19/2001 4:22 Analyst: D_R

Table with 12 columns: Analyte, Sample Result, MS Spike Added, MS Result, MS % Recovery, MSD Spike Added, MSD Result, MSD % Recovery, RPD, RPD Limit, Low Limit, High Limit. Row for Gasoline Range Organics.

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

EXXON Company U.S.A.

TM0210.1

Analysis: Purgeable Aromatics
Method: SW8021B

WorkOrder: 01090501
Lab Batch ID: R43855

Method Blank

Samples in Analytical Batch:

RunID: HP_S_010920A-836836 Units: ug/L
Analysis Date: 09/20/2001 18:35 Analyst: D_R

Lab Sample ID Client Sample ID
01090501-01A MW5
01090501-02A MW6

| Analyte | Result | Rep Limit |
|----------------------------|--------|-----------|
| Methyl tert-butyl ether | ND | 0.50 |
| Surr: 1,4-Difluorobenzene | 100.2 | 72-137 |
| Surr: 4-Bromofluorobenzene | 100.3 | 48-156 |

Laboratory Control Sample (LCS)

RunID: HP_S_010920A-836835 Units: ug/L
Analysis Date: 09/20/2001 17:14 Analyst: D_R

| Analyte | Spike Added | Result | Percent Recovery | Lower Limit | Upper Limit |
|-------------------------|-------------|--------|------------------|-------------|-------------|
| Methyl tert-butyl ether | 50 | 50 | 100 | 70 | 130 |

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01090548-02
RunID: HP_S_010920A-836837 Units: ug/L
Analysis Date: 09/20/2001 19:22 Analyst: D_R

| Analyte | Sample Result | MS Spike Added | MS Result | MS % Recovery | MSD Spike Added | MSD Result | MSD % Recovery | RPD | RPD Limit | Low Limit | High Limit |
|-------------------------|---------------|----------------|-----------|---------------|-----------------|------------|----------------|--------|-----------|-----------|------------|
| Methyl tert-butyl ether | ND | 20 | 19 | 95.9 | 20 | 26 | 130 | 30.1 * | 20 | 39 | 150 |

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

EXXON Company U.S.A.

TM0210.1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 01090501
Lab Batch ID: R44144

Method Blank

Samples in Analytical Batch:

RunID: M_010925A-841916 Units: ug/L
Analysis Date: 09/25/2001 11:28 Analyst: JC

Lab Sample ID Client Sample ID
01090501-01B MW5
01090501-02B MW6

Table with 3 columns: Analyte, Result, Rep Limit. Lists various chemical compounds and their detection results (ND) and reporting limits (e.g., 5.0, 10, 20, 100).

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

EXXON Company U.S.A.

TM0210.1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 01090501
Lab Batch ID: R44144

Method Blank

RunID: M_010925A-841916 Units: ug/L
Analysis Date: 09/25/2001 11:28 Analyst: JC

Table with 3 columns: Analyte, Result, Rep Limit. Lists various compounds like n-Propylbenzene, Naphthalene, etc., with results mostly as ND and limits as 5.0.

Laboratory Control Sample (LCS)

RunID: M_010925A-841915 Units: ug/L
Analysis Date: 09/25/2001 11:02 Analyst: JC

Table with 6 columns: Analyte, Spike Added, Result, Percent Recovery, Lower Limit, Upper Limit. Shows recovery data for 1,1-Dichloroethene, Benzene, Chlorobenzene, Toluene, and Trichloroethene.

Matrix Spike (MS) / Matrix Spike Duplicate (MSD)

Sample Spiked: 01090501-02
RunID: M_010925A-841923 Units: ug/L
Analysis Date: 09/25/2001 14:34 Analyst: JC

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.



Quality Control Report

HOUSTON LABORATORY
8880 INTERCHANGE DRIVE
HOUSTON, TX 77054
(713) 660-0901

EXXON Company U.S.A.

TM0210.1

Analysis: Volatile Organics by Method 8260B
Method: SW8260B

WorkOrder: 01090501
Lab Batch ID: R44144

| Analyte | Sample Result | MS Spike Added | MS Result | MS % Recovery | MSD Spike Added | MSD Result | MSD % Recovery | RPD | RPD Limit | Low Limit | High Limit |
|--------------------|---------------|----------------|-----------|---------------|-----------------|------------|----------------|-----|-----------|-----------|------------|
| 1,1-Dichloroethene | ND | 500 | 500 | 100 | 500 | 460 | 92.0 | 8 | 14 | 38 | 172 |
| Benzene | ND | 500 | 530 | 106 | 500 | 510 | 102 | 4 | 11 | 66 | 134 |
| Chlorobenzene | ND | 500 | 520 | 104 | 500 | 500 | 100 | 4 | 13 | 67 | 115 |
| Toluene | ND | 500 | 520 | 104 | 500 | 490 | 98.0 | 6 | 13 | 59 | 125 |
| Trichloroethene | ND | 500 | 500 | 100 | 500 | 480 | 96.0 | 4 | 14 | 61 | 134 |

Qualifiers: ND/U - Not Detected at the Reporting Limit MI - Matrix Interference
 B - Analyte detected in the associated Method Blank D - Recovery Unreportable due to Dilution
 J - Estimated value between MDL and PQL * - Recovery Outside Advisable QC Limits

The percent recoveries for QC samples are correct as reported. Due to significant figures and rounding, the reported RPD may differ from the displayed RPD values but is correct as reported.

*Sample Receipt Checklist
And
Chain of Custody*



HOUSTON LABORATORY
 8880 INTERCHANGE DRIVE
 HOUSTON, TX 77054
 (713) 660-0901

Sample Receipt Checklist

| | | | |
|-------------------------|--------------------|---------------|-----------|
| Workorder: | 01090501 | Received By: | DS |
| Date and Time Received: | 9/18/01 9:45:00 AM | Carrier name: | FedEx |
| Temperature: | 4 | Chilled by: | Water Ice |

1. Shipping container/cooler in good condition? Yes No Not Present
2. Custody seals intact on shipping container/cooler? Yes No Not Present
3. Custody seals intact on sample bottles? Yes No Not Present
4. Chain of custody present? Yes No
5. Chain of custody signed when relinquished and received? Yes No
6. Chain of custody agrees with sample labels? Yes No
7. Samples in proper container/bottle? Yes No
8. Sample containers intact? Yes No
9. Sufficient sample volume for indicated test? Yes No
10. All samples received within holding time? Yes No
11. Container/Temp Blank temperature in compliance? Yes No
12. Water - VOA vials have zero headspace? Yes No Not Applicable
13. Water - pH acceptable upon receipt? Yes No Not Applicable

SPL Representative: Contact Date & Time:

Client Name Contacted:

Non Conformance Issues:

Client Instructions:

EXXON COMPANY, USA.

(West Coast)

CHAIN OF CUSTODY RECORD NO. _____

Page 1 of 1

Exxon Engineer: Gene Ortega Phone: (925) 846-8747
 Consultant Co. Name ETIC Engineering Contact: John Ortega
 Address: 2285 Morello Ave Fax: (925) 6024720
Pleasant Hill, CA 94523
 RAS #: 7-0210 Facility/State ID # (TN Only): _____
 AFE # (Terminal Only): _____ Consultant Project #: TM0210.1
 Location: 7840 Arador Valley Rd (City) Dublin (State) CA
 EE C&M SDT
 Consultant Work Release #: 21012153
 Sampled By: Jack H.

ANALYSIS REQUEST: (CHECK APPROPRIATE BOX)

OTHER

| | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------------|-----------------------------------|--|-----------------------------------|------------------------------------|------------------------------|------------------------------------|-------------------------------|--|---------------------------------------|--------------------------------------|------------------------------------|------------------------------|--|------------------------------|---------------------------------------|-------------------------------|-------------------------------|--|-----------------------------------|--|----------------------------------|-------------------------------|-------------------------------|--|---------------------------------------|--|-------------------------------|-------------------------------------|--|-------------------------------------|-------------------------------------|------------------------------------|--------------------------------------|---|------------------------------|---------------------------------------|----------------------------------|
| NO. OF CONTAINERS | CONTAINER SIZE <u>40 ml vials</u> | TPH/GC 8015 GRG <input type="checkbox"/> | 8015 DRO <input type="checkbox"/> | BTEX 8020 <input type="checkbox"/> | 602 <input type="checkbox"/> | MTBE 8020 <input type="checkbox"/> | 8260 <input type="checkbox"/> | OXYGENATES (7) 8260 <input type="checkbox"/> | O&G IR 413.1 <input type="checkbox"/> | GRAV. 413.2 <input type="checkbox"/> | VOL. 8260 <input type="checkbox"/> | 624 <input type="checkbox"/> | SEMI-VOL 8270 <input type="checkbox"/> | 625 <input type="checkbox"/> | PNA/PAH 8100 <input type="checkbox"/> | 8510 <input type="checkbox"/> | 8270 <input type="checkbox"/> | PCB/PEST 80818082 <input type="checkbox"/> | PCB ONLY <input type="checkbox"/> | TCLP FULL VOL <input type="checkbox"/> | SEMIVOL <input type="checkbox"/> | PEST <input type="checkbox"/> | HERB <input type="checkbox"/> | METALS, TOTAL <input type="checkbox"/> | METALS, TCLP <input type="checkbox"/> | LEAD, TOTAL 238.1 <input type="checkbox"/> | 7421 <input type="checkbox"/> | LEAD, TCLP <input type="checkbox"/> | LEAD, DISSOLVED <input type="checkbox"/> | LEAD TOTAL <input type="checkbox"/> | REACTIVITY <input type="checkbox"/> | CORROSION <input type="checkbox"/> | FLASH POINT <input type="checkbox"/> | PURGEABLE HYDROCARBON 8010 <input type="checkbox"/> | 801 <input type="checkbox"/> | TPH/IR 418.1 <input type="checkbox"/> | TOX/FOH <input type="checkbox"/> |
| | * Confirm by 8260 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |

| SAMPLE I.D. | DATE | TIME | COMP. | GRAB | MATRIX | | | OTHER | PRESERVATIVE | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
|-------------|---------|------|-------|------|------------------|------|-----|-------|--------------|---|---|---|---|---|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|--|
| | | | | | H ₂ O | SOIL | AIR | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| MW5 | 9/12/01 | 1400 | | | X | | | | HCL | 6 | X | X | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| MW6 | 9/12/01 | 1245 | | | X | | | | HCL | 6 | X | X | X | X | | | | | | | | | | | | | | | | | | | | | | | | |
| MW7 | 9/12/01 | 1320 | | | X | | | | HCL | 6 | X | X | X | X | | | | | | | | | | | | | | | | | | | | | | | | |

RUSH

TAT
 24 HR. _____ * 72 HR. _____ *
 48 HR. 96 HR. _____ *
 8 Business _____ *Contact US Prior to Sending Sample
 Other _____

**EXXON UST
CONTRACT NO.
C41483**

SPECIAL DETECTION LIMITS (Specify)

SPECIAL REPORTING REQUIREMENTS (Specify)

PDF EDD
 FAX FAX C-O-C W/REPORT

REMARKS:
 * Confirm MTBE hits by 8260
 4

LAB USE ONLY Lot # _____ Storage Location _____
 WORK ORDER # 01090501 LAB WORK RELEASE # 21012153

CUSTODY RECORD

| | | | |
|--------------------------|---------|------|--|
| Relinquished By Sampler: | Date | Time | Received By: |
| <i>[Signature]</i> | 9/12/01 | | |
| Relinquished: | Date | Time | Received By: |
| | | | |
| Relinquished: | Date | Time | Received By: |
| | | | |
| | | | Way Bill # <u>Danna Stealy</u> Cooler Temp: <u>9/12/01 945</u> |