ExxonMobil
Refining and Supply Company
Downstream - Safety, Health & Environment
Environmental Remediation

Darin L. Rouse Senior Engineer Environmental Remediation

2300 Clayton Road, Suife 1250 P.O. Box 4032 Concord, CA 94524-4032 (925) 246-8768 Telephone (925) 246-8798 Facsimile darin.l.rouse@exxon.com

ExonMobil
Refining & Supply

July 19, 2000

Mr. Scott Seery Alameda County Health Care Services Agency Environmental Health Services Division 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

RE: Former Exxon RAS #7-3567/3192 Santa Rita Road, Pleasanton, California.

Dear Mr. Seery:

Attached for your review and comment is a letter report entitled *Quarterly Groundwater Monitoring Report, Second Quarter 2000*, dated July 6, 2000, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and presents the results of quarterly groundwater monitoring and sampling activities at the subject site.

If you have any questions or comments, please contact me at (925) 246-8768.

- LIV

Sincerely

Darin L. Rouse Senior Engineer

Attachment: ERI's Quarterly Groundwater Monitoring Report, Second Quarter 2000, dated July 6, 2000.

cc: W

w/ attachment

Mr. Eddy So - California Regional Water Quality Control Board-San Francisco Bay Region

w/o attachment

Mr. James F. Chappell - Environmental Resolutions, Inc.



ENVIRONMENTAL RESOLUTIONS, INC.

July 6, 2000 ERI 243113.R06

Mr. Darin L. Rouse ExxonMobil Refining and Supply P.O. Box 4032 Concord, California 94524-4032

Subject:

Quarterly Groundwater Monitoring Report, Second Quarter 2000, Former Exxon

Service Station 7-3567, 3192 Santa Rita Road, Pleasanton, California.

Mr. Rouse:

At the request of ExxonMobil Refining and Supply (formerly known as Exxon Company, U.S.A.) (ExxonMobil), Environmental Resolutions, Inc. (ERI) is reporting the groundwater monitoring and sampling results for the second quarter 2000 event at the subject site. The location of the site is shown on the Site Vicinity Map (Plate 1). The purpose of quarterly monitoring is to evaluate hydrocarbon concentrations in groundwater and groundwater flow direction and gradient. Blaine Tech Services, Inc. (Blaine Tech) performed the site field activities at the request of ExxonMobil.

GROUNDWATER MONITORING AND SAMPLING

On June 6, 2000, Blaine Tech measured depth to water (DTW) and collected groundwater samples from selected monitoring wells for laboratory analysis. Groundwater monitoring and sampling were performed in accordance with Blaine Tech's groundwater sampling protocol (Attachment A).

Historical and recent monitoring data are summarized in Table 1.

Laboratory Analyses And Results

Groundwater samples were submitted to Southern Petroleum Laboratories, Inc. (SPL), a California state-certified laboratory, under Chain of Custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), total extractable petroleum hydrocarbons as diesel (TEPHd), and total purgeable petroleum hydrocarbons as gasoline (TPPHg) using the methods listed in the notes in Table 1. The laboratory analysis report and Chain of Custody record are attached (Attachment B). Cumulative results of laboratory analyses of groundwater samples are summarized in Table 1. Analytical results of recent groundwater samples are presented on Plate 2.

LIMITATIONS

This report was prepared in accordance with generally accepted standards of environmental practice in California at the time this investigation was performed. This report has been prepared for ExxonMobil, and any reliance on this report by third parties shall be at such party's sole risk.

ERI recommends forwarding signed copies of this report to:

Mr. Scott Seery Alameda County Health Care Services Agency Department of Environmental Health 1131 Harbor Bay Parkway, Suite 250 Alameda, California 94502-6577

Mr. Eddy So California Regional Water Quality Control Board San Francisco Bay Region 1515 Clay Street, Suite 1400 Oakland, California 94612

Please call Mr. James F. Chappell (415) 382-4323 with any questions regarding this project.

Sincerely,

Environmental Resolutions, Inc.

Tames F. Chappell Senior Staff Scientist

Mark S. Dockum

R.G. 4412 C.E.G. 1675

Attachments: Table 1: Cumulative Groundwater Monitoring and Sampling Data

Plate 1: Site Vicinity Map
Plate 2: Generalized Site Plan

Attachment A: Groundwater Sampling Protocol

Attachment B: Laboratory Analysis Report and Chain of Custody Record

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

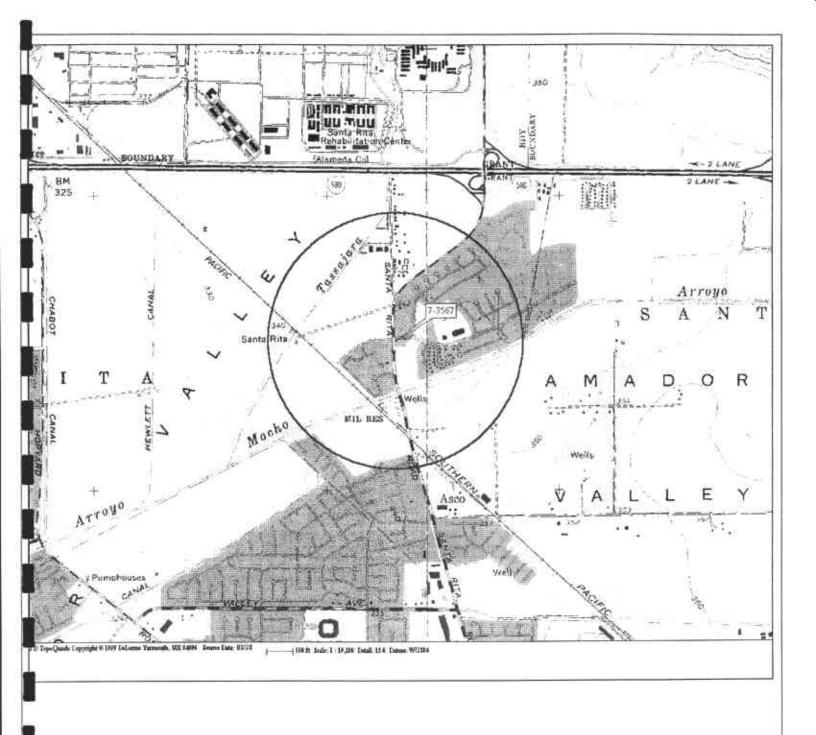
Former Exxon Service Station 7-3567 3192 Santa Rita Road Pleasanton, California (Page 1 of 2)

Well ID#	Sampling	SUBJ	DTW	Elev.	TEPHd	TPPHg	MTBE	В	T	Е	X
(TOC)	Date	<	feet	>	<			ug/L	************		>
MW1	11/17/98	NLPH	21.90	318.96	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
(340.86)	03/15/99	NLPH	21.15	319.71	< 50	< 50	< 2.5	< 0.5	< 0.5	< 0.5	< 0.5
	06/25/99	NLPH	20.34	320.52	18	< 50	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5
	09/24/99	NLPH	20.42	320.44	< 50	< 50	24.6	< 0.5	< 0.5	< 0.5	< 0.5
	12/22/99	NLPH	21.11	319.75	< 61	< 50	< 2	< 0.5	< 0.5	< 0.5	< 0.5
	03/07/00	NLPH	14.12	326,74	57	< 50	220	< 0.5	< 0.5	< 0.5	< 0.5
	06/06/00	NLPH	17.79	323.07	< 50	< 50	5.4	< 0.5	< 0.5	< 0.5	< 0.5
MW2	11/17/98	NLPH	20.42	320.19	91	< 50	17/23*	1.5	< 0.5	0.98	2.6
(340.61)	03/15/99	NLPH	28.35	312.26	90	< 50	12/12.5*	0.73	1.1	2.4	2.2
	06/25/99	NLPH	25.20	315.41	a	< 50	< 2.0	< 0.5	< 0.5	< 0.5	< 0.5
	09/24/99	NLPH	23.93	316.68	< 50	< 50	3.06	< 0.5	< 0.5	< 0.5	< 0.5
	12/22/99	NLPH	23,39	317.22	< 56	< 50	< 2	< 0.5	< 0.5	< 0.5	< 0.5
	03/07/00	NLPH	17.08	323.53	52	< 50	< 2	< 0.5	0.80	< 0.5	< 0.3
	06/06/00	NLPH	21.01	319.60	< 50	< 50	< 2	< 0.5	< 0.5	< 0.5	< 0.5
MW3	11/17/98	NLPH	36.58	306.37	120	< 50	180/220*	< 0.5	< 0.5	< 0.5	< 0.5
(342.95)	03/15/99	NLPH	40.01	302.94	180	< 50	290/314*	< 0.5	< 0.5	< 0.5	< 0.5
	06/25/99	NLPH	46.83	296.12	a	< 50	107/113*	< 0.5	< 0.5	< 0.5	< 0.:
	9/24/99 ^b	NLPH	47.71	295.24	*						
	12/22/99	NLPH	43 82	299.13	140	< 50	65	< 0.5	< 0.5	< 0.5	<0.
	03/07/00	NLPH	32.75	310.20	< 50	< 50	82	< 0.5	0.88	< 0.5	<0.3
	06/06/00	NLPH	36.05	306.90	< 50	< 50	140	< 0.5	< 0.5	0.82	< 0.9
MW4	11/17/98	NLPH	50.20	292.76	72	< 50	4.1/3.5*	< 0.5	< 0.5	< 0.5	<0.:
(342.96)	03/15/99	NLPH	47.93	295.03	91	< 50	280/260*	< 0.5	< 0.5	< 0.5	<0.
	6/25/99 ^b	NLPH	48.15	294.81							
	9/24/99 ^b	NLPH	49.29	293.67							
	12/22/99	NLPH	49.33	293.63	ь						
	03/07/00	NLPH	49.05	293.91	190	< 50	710	< 0.5	0.84	< 0.5	< 0
	06/06/00	NLPH	49.02	293.94	110	< 50	460	< 0.5	< 0.5	< 0.5	< 0.:

TABLE 1 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Former Exxon Service Station 7-3567 3192 Santa Rita Road Pleasanton, California (Page 2 of 2)

Notes:		
TOC	=	Elevation of top of well casing; in feet above mean sea level.
SUBJ	=	Results of subjective evaluation, liquid-phase hydrocarbon thickness (HT) in feet.
DTW	=	Depth to water.
Elev.	=	Elevation of groundwater in feet above mean sea level.
NLPH	=	No liquid-phase hydrocarbons present in well.
TEPHd	=	Total extractable petroleum hydrocarbons as diesel analyzed using modified EPA method 8015.
TPPHg	=	Total purgeable petroleum hydrocarbons as gasoline analyzed using modified EPA method 5030/8015 (modified).
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA method 8021B.
MTBE	=	Methyl tertiary butyl ether analyzed using EPA method 8021B.
+	=	MTBE confirmed using EPA method 8260.
a	=	No result because of sample loss during laboratory fire.
ь	=	Well contained an insufficient amount of water to collect a sample.
<		Less than the indicated detection limit indicated.

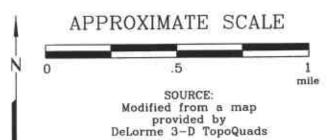


FN 2431Topo

EXPLANATION



1/2-mile radius circle

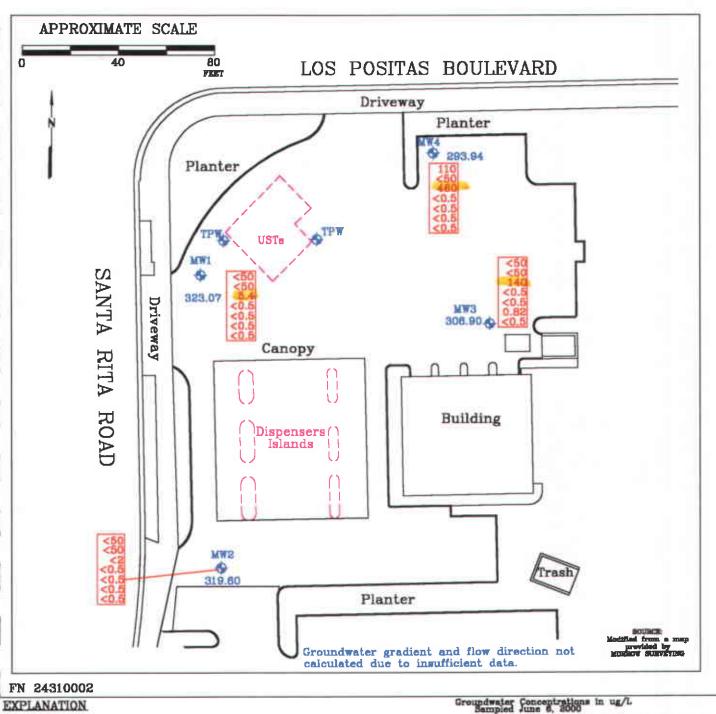




SITE VICINITY MAP

For ~ / EXXON SERVICE STATION 7-3567 3192 Santa Rita Road Pleasanton, California PROJECT NO. 2431

PLATE 1



MW4

Groundwater Monitoring Well Groundwater elevation in feet above mean sea level

93.94

Tank Pit Well

< 50 Total Extractable Petroleum Hydrocarbons as Diesel Total Purgeable Petroleum Hydrocarbons as Gasolina

Mothyl Tertiary Butyl Ether

<0.5 Benzene

<0.5 Toluane 0.82 Ethylbensene

Total Kylenes Less Than the Stated Laboratory Detection Limit

us/L Micrograms per Liter

GENERALIZED SITE PLAN

FORMER EXXON SERVICE STATION 7-3567 3192 Santa Rita Road Pleasanton, California

PROJECT NO.

2431

PLATE

2 June 19, 2000



ATTACHMENT A GROUNDWATER SAMPLING PROTOCOL

BLAINE TECH SERVICES, INC. METHODS AND PROCEDURES FOR THE ROUTINE MONITORING OF GROUNDWATER WELLS AT EXXON STATIONS

Blaine Tech Services, Inc. performs environmental sampling and documentation as an independent third party. We specialize in groundwater monitoring assignments and intentionally limit the scope of our services to those centered on the generation of objective information.

To avoid conflicts of interest, Blaine Tech Services, Inc. personnel do not evaluate or interpret the information we collect. As a state licensed contractor (C-57 well drilling –water – 746684) performing strictly technical services, we do not make any professional recommendations and perform no consulting of any kind.

SAMPLING PROCEDURES OVERVIEW

SAFETY

All groundwater monitoring assignments performed for Exxon comply with Exxon's safety guidelines, 29 CFR 1910.120 and SB-198 Injury and Illness Prevention Program (IIPP). All Field Technicians receive the full 40 hour 29CFR 1910.120 OSHA SARA HAZWOPER course, medical clearance and on-the-job training prior to commencing any work on any Exxon site.

INSPECTION AND GAUGING

Wells are inspected prior to evacuation and sampling. The condition of the wellhead is checked and noted according to a wellhead inspection checklist. Each wellcap is removed prior to gauging to allow the water level to equilibrate for at least 15 minutes.

Standard measurements include the depth to water (DTW) and the total well depth (TD) obtained with industry standard electronic sounders which are graduated in increments of hundredths of a foot.

The water in each well is inspected for the presence of Immiscibles or sheen and when free product is suspected, it is confirmed using an electronic interface probe (e.g. MMC). If sheen or product is found in a well, the Project Coordinator notifies the appropriate party (e.g. Exxon employee or consultant).

No samples are collected from a well containing sheen or product.

EVACUATION

Depth to water measurements are collected by our personnel prior to purging and minimum purge volumes are calculated anew for each well based on the height of the water column and the diameter of the well. Expected purge volumes are never less than three case volumes and are set at no less than four case volumes in some jurisdictions.

Well purging devices are selected on the basis of the well diameter and the total volume to be evacuated. In most cases the well will be purged using an electric submersible pump (i.e. Grundfos) suspended near (but not touching) the bottom of the well. Small volumes of purgewater are often removed by hand bailing with a disposable bailer.

PARAMETER STABILIZATION

Well purging completion standards include minimum purge volumes, but additionally require stabilization of specific groundwater parameters prior to sample collection. Typical groundwater parameters used to measure stability are electrical conductivity, pH, and temperature. Instrument readings are obtained at regular intervals during the evacuation process (no less than once per case volume).

Stabilization standards for routine quarterly monitoring of fuel sites include the following: Temperature is considered to have stabilized when successive readings do not fluctuate more than +/- 1 degree Celsius. Electrical conductivity is considered stable when successive readings are within 10%. pH is considered to be stable when successive readings remain constant or vary no more than 0.2 of a pH unit.

DEWATERED WELLS

Normal evacuation removes no less than three case volumes of water from the well. However, less water may be removed in cases where the well dewaters and does not recharge.

Wells known to dewater are evacuated as early as possible during each site visit in order to allow for the greatest amount of recovering. Any well that does not recharge to 80% of its original volume will be sampled prior to the departure of our personnel from the site in order to eliminate the need of a return visit.

In jurisdictions where a certain percentage of recovery is included in the local completion standard, our personnel follow the regulatory expectation.

PURGEWATER CONTAINMENT

All non-hazardous purgewater evacuated from each groundwater monitoring well is captured and contained in on-board storage tanks on the Sampling Vehicle and/or special water hauling trailers. Effluent from the decontamination of reusable apparatus (sounders, electric pumps and hoses etc.), consisting of groundwater combined with deionized water and non-phosphate soap, is also captured and pumped into effluent tanks.

Non hazardous purgewater is transported under standard Bill of Lading documentation to a

Blaine Tech Services, Inc. facility before being transported to an Exxon approved disposal facility (e.g. Romic Environmental Technologies Corporation in East Palo Alto, California).

SAMPLE COLLECTION DEVICES

All samples are collected using a disposable bailer.

SAMPLE CONTAINERS

Sample material is decanted directly from the sampling bailer into sample containers provided by the laboratory which will analyze the samples. The transfer of sample material from the bailer to the sample container conforms to specifications contained in the USEPA T.E.G.D. The type of sample container, material of construction, method of closure and filling requirements are specific to the intended analysis. Chemicals needed to preserve the sample material are commonly placed inside the sample containers by the laboratory or glassware vendor prior to delivery of the bottle to our personnel. The laboratory sets the number of replicate containers.

TRIP BLANKS

A Trip Blank is carried to each site and is kept inside the cooler for the duration of the sampling event. It is turned over to the laboratory for analysis with the samples from that site.

SAMPLE STORAGE

All sample containers are promptly placed in food grade ice chests for storage in the field and transport (direct or via our facility) to the analytical laboratory that will perform the intended analytical procedures. These ice chests contain quantities of restaurant grade ice as a refrigerant material. The samples are maintained in either an ice chest or a refrigerator until relinquished into the custody of the laboratory or laboratory courier.

DOCUMENTATION CONVENTIONS

Each and every sample container has a label affixed to it. In most cases these labels are generated by our office personnel and are partially preprinted. Labels can also be hand written by our field personnel. The site is identified with the store number and site address, as is the particular groundwater well from which the sample is drawn (e.g. MW-1, MW-2, S-1 etc.). The time at which the sample was collected and the initials of the person collecting the sample are handwritten onto the label.

Chain of Custody records are created using client specific preprinted forms following USEPA specifications.

Bill of Lading records are contemporaneous records created in the field at the site where the non-hazardous purgewater is generated. Field Technicians use preprinted Bill of Lading forms.

DECONTAMINATION

All equipment is brought to the site in clean and serviceable condition and is cleaned after use in each well and before subsequent use in any other well. Equipment is decontaminated before leaving the site.

The primary decontamination device is a commercial steam cleaner. The steam cleaner is detuned to function as a hot pressure washer which is then operated with high quality deionized water which is produced at our facility and stored onboard our sampling vehicle. Cleaning is facilitated by the use of proprietary fixtures and devices included in the patented workstation (U.S. Patent 5,535,775) that is incorporated in each sampling vehicle. The steam cleaner is used to decon reels, pumps and bailers.

Any sensitive equipment or parts (i.e. Dissolved Oxygen sensor membrane, sounder etc.) that cannot be washed using the hot high pressure water, will be sprayed with a non-phosphate soap and deionized water solution and rinsed with deionized water.

EXAMPLE: The sounder is cleaned between wells using the non-phosphate soap and deionized water solution followed by deionized water rinses. The sounder is then washed with the steam cleaner between sites or as necessitated by use in a particularly contaminated well.

DISSOLVED OXYGEN READINGS

All Dissolved Oxygen readings are taken using YSI meters (e.g. YSI Model 58 or equivalent YSI meter). These meters are equipped with a YSI stirring device that enables them to collect accurate in-situ readings. The probe/stirring devices are modified to allow downhole measurements to be taken from wells as small as two-inch diameter.

The probe and reel is decontaminated between wells as described above. The meter is calibrated between wells as per the instructions in the operating manual. The probe and stirrer is lowered into the water column allowed to stabilize before use.

OXYIDATON REDUCTION POTENTIAL READINGS

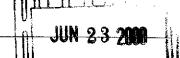
All readings are obtained with either Corning or Myron-L meters (e.g. Corning ORP-65 or a Myron-L Ultrameter GP). The meter is cleaned between wells as described above. The meter is calibrated at the start of each day according to the instruction manual. In use the probe is placed in a cup of freshly obtained monitoring well water and allowed to stabilize.

ATTACHMENT B LABORATORY ANALYSIS REPORT AND CHAIN OF CUSTODY RECORD



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

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



Certificate of Analysis Number:

00060200

Report To:

Environmental Resolution, Inc.

Jim Chappell

73 Digital Drive Suite 100

Novato

California 94949-

ph: (415) 382-9105

fax: (415) 382-1856

Project Name:

Site:

7-3567,19908560

Site Address:

3192 Santa Rita Rd.

Pleasanton

CA

PO Number:

State:

California

2431

State Cert. No.:

Date Reported:

6/16/00

Upon receipt of your samples it was found that sample ID "TB" was not received. A message was left on June 8, 2000. The laboratory proceeded with the analyses.

Any data flags or quality control 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.

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

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.

Soma West

Senior Project Manager

6/19/00

Date





EXXON Company U.S.A.

Certificate of Analysis Number:

00060200

eport To: Environmental Resolution, Inc.

Jim Chappell

73 Digital Drive Suite 100

Novato

California

94949-

ph: (415) 382-9105

fax: (415) 382-1856

ax To:

Environmental Resolution, Inc.

Jim Chappell

fax: (415) 382-1856

Project Name:

2431

Site:

7-3567,19908560

Site Address:

3192 Santa Rita Rd.

Pleasanton

CA

PO Number:

State:

California

State Cert. No.: Date Reported:

		***/			,,	
Client Sample ID	Lab Sample ID	Matrix	Date Collected	Date Received	COCID I	HOLD
Client Sample in	Lab Sample ID	Mann	Date dellected	Dato Hoodivou	000.0	

W-1	00060200-01	Water	6/6/00 3:12:00 PM	6/8/00 10:00:00 AM	
W-2	00060200-02	Water	6/6/00 3:32:00 PM	6/8/00 10:00:00 AM	
VIW-3	00060200-03	Water	6/6/00 3:50:00 AM	6/8/00 10:00:00 AM	
<u>M</u> W-4	00060200-04	Water	6/6/00 4:02:00 PM	6/8/00 10:00:00 AM	

Sonia West

6/16/00

Date

lest, Sonia

enior Project Manager

Joel Grice Laboratory Director

Ted Yen
Quality Assurance Officer





SPL Sample ID: 00060200-01 Collected: 6/6/00 3:12:00 P Client Sample ID MW-1 7-3567,19908560 Site: Dil. Factor QUAL Date Analyzed Analyst Rep.Limit Seq.# Analyses/Method Result MCL CA DRO Units: ug/L DIESEL RANGE ORGANICS 06/12/00 23:13 AM 308750 50 1 Diesel Range Organics ND 06/12/00 23:13 AM 20-150 1 308750 61.2 % Surr: n-Pentacosane Run ID/Seq #: HP_V_000612B-308750 Prep Date Prep Initials Prep Method 06/09/2000 13:18 KL SW3510B CA_GRO Units: ug/L **GASOLINE RANGE ORGANICS** MCL 06/12/00 16:36 306395 DL ND 50 Gasoline Range Organics 06/12/00 16:36 306395 DL 108 % 62-144 1 Surr: 1,4-Difluorobenzene 06/12/00 16:36 DL 306395 1 92.3 % 44-153 Surr: 4-Bromofluorobenzene SW8021B Units: ug/L MCL **PURGEABLE AROMATICS** 06/12/00 16:36 DL 306371 ND 0.5 Benzene 306371 06/12/00 16:36 DL 1 ND 0.5 Ethylbenzene 306371 06/12/00 16:36 DL 2 1 5.4 Methyl tert-butyl ether 306371 06/12/00 16:36 DĻ 0.5 1 Toluene ND 1 06/12/00 16:36 DL 306371 ND 0.5 m,p-Xylene 06/12/00 16:36 DL 306371 0.5 1 ND o-Xylene 06/12/00 16:36 DL 306371 1 0.5 Xylenes, Total ND 306371 06/12/00 16:36 DL 72-137 1 Surr: 1,4-Difluorobenzene 103 % 06/12/00 16:36 DL 306371 1 48-156 Surr: 4-Bromofluorobenzene 101 %

Soma West

West, Sonia Project Manager

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





Client Sample ID MW-2 Collected: 6/6/00 3:32:00 P SPL Sample ID: 00060200-02 Site: 7-3567,19908560 Dil. Factor QUAL Date Analyzed Analyst Seq. # Rep.Limit Analyses/Method Result MCL CA_DRO Units: ug/L **DIESEL RANGE ORGANICS** 06/13/00 1:10 AM 308754 ND 50 1 Diesel Range Organics 06/13/00 1:10 AM 308754 20-150 1 Surr: n-Pentacosane 57.4 % Run ID/Seg #: HP V 000612B-308754 Prep Initials Prep Method Prep Date SW3510B 06/09/2000 13:18 KL. CA_GRO MCL Units: ug/L **GASOLINE RANGE ORGANICS** ND 50 06/12/00 17:01 DL 306396 Gasoline Range Organics 06/12/00 17:01 DL 306396 107 % 62-144 1 Surr: 1,4-Difluorobenzene DL 306396 1 06/12/00 17:01 Surr: 4-Bromofluorobenzene 92.3 % 44-153 SW8021B Units: ug/L MCL **PURGEABLE AROMATICS** 06/12/00 17:01 DL 306373 0.5 Benzene ND 1 306373 06/12/00 17:01 DL Ethylbenzene ND 0.5 1 06/12/00 17:01 306373 1 DL Methyl tert-butyl ether ND 2 06/12/00 17:01 DL 306373 ND 0.5 1 Toluene 06/12/00 17:01 DL 306373 ND 0.5 1 m,p-Xylene 06/12/00 17:01 DL 306373 0.5 1 ND o-Xylene DL 306373 06/12/00 17:01 ND 0.5 1 Xylenes, Total 06/12/00 17:01 306373 72-137 DL 1 Surr: 1,4-Difluorobenzene 102 1 06/12/00 17:01 DL 306373 Surr: 4-Bromofluorobenzene 101 % 48-156

Sonia West

West, Sonia Project Manager

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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





SPL Sample ID: 00060200-03 Collected: 6/6/00 3:50:00 A Client Sample ID MW-3 7-3567,19908560 Site: Date Analyzed Analyst Dil. Factor QUAL Seq. # Rep.Limit Result Analyses/Method CA_DRO MCL Units: ug/L DIESEL RANGE ORGANICS 06/13/00 1:49 AM Diesel Range Organics ND 50 1 308755 06/13/00 1:49 AM 20-150 1 308755 58.6 % Surr: n-Pentacosane Run ID/Seq #: HP_V_000612B-308755 Prep Initials Prep Method Prep Date SW3510B 06/09/2000 13:18 KL CA_GRO Units: ug/L GASOLINE RANGE ORGANICS MCL 06/12/00 17:27 DL 306397 ND 50 1 Gasoline Range Organics 06/12/00 17:27 DL 306397 1 Surr: 1,4-Difluorobenzene 110 % 62-144 306397 1 06/12/00 17:27 DL 94.7 44-153 % Surr: 4-Bromofluorobenzene SW8021B Units: ug/L MCL PURGEABLE AROMATICS 306374 06/12/00 17:27 DL ND 0.5 Benzene 0.82 0.5 1 06/12/00 17:27 DL 306374 Ethylbenzene 1 06/12/00 17:27 DL 306374 140 2 Methyl tert-butyl ether 306374 06/12/00 17:27 DL ND 0.5 1 Toluene DL 306374 06/12/00 17:27 1 ND 0.5 m,p-Xylene 06/12/00 17:27 DL 306374 0.5 1 o-Xylene ND 306374 0.5 1 06/12/00 17:27 DL ND Xylenes, Total 1 06/12/00 17:27 DL 306374 105 72-137 Surr: 1,4-Difluorobenzene 06/12/00 17:27 DL 306374 48-156 1 102 % Surr: 4-Bromofluorobenzene

Sonia West

West, Sonia Project Manager

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>MCL - Result Over Maximum Contamination Limit(MCL)

D - Surrogate Recovery Unreportable due to Dilution





Collected: 6/6/00 4:02:00 P SPL Sample ID: 00060200-04 Client Sample ID MW-4 Site: 7-3567,19908560 Result Rep.Limit Dil. Factor QUAL Date Analyzed Analyst Seq. # Analyses/Method Units: ug/L MCL CA_DRO **DIESEL RANGE ORGANICS** 06/13/00 2:28 AM 308756 110 50 1 Diesel Range Organics 06/13/00 2:28 AM 308756 20-150 Surr: n-Pentacosane 60.2 % Run ID/Seq #: HP_V_000612B-308756 Prep Initials Prep Date Prep Method SW3510B 06/09/2000 13:18 KL CA_GRO MCL. Units: ug/L **GASOLINE RANGE ORGANICS** 50 06/12/00 17:52 DL 306400 ND Gasoline Range Organics 06/12/00 17:52 DL 306400 1 Surr: 1,4-Difluorobenzene 108 % 62-144 1 06/12/00 17:52 DL 306400 92.0 % 44-153 Surr: 4-Bromofluorobenzene SW8021B Units: ug/L MCL **PURGEABLE AROMATICS** 06/12/00 17:52 306376 DL Benzene ND 0.5 1 306376 06/12/00 17:52 DL ND 0.5 1 Ethylbenzene 06/12/00 17:52 306376 1 DL Methyl tert-butyl ether 460 2 06/12/00 17:52 DL 306376 ND 0.5 1 Toluene 306376 06/12/00 17:52 DL m,p-Xylene ND 0.5 1 06/12/00 17:52 DL 306376 0.5 1 ND o-Xylene 306376 06/12/00 17:52 DL ND 0.5 1 Xylenes, Total 06/12/00 17:52 DL 306376 72-137 1 106 Surr: 1,4-Difluorobenzene % 06/12/00 17:52 DL. 306376 Surr: 4-Bromofluorobenzene 48-156 1 100 %

Sonia West

West, Sonia Project Manager

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





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

Quality Control Report

EXXON Company U.S.A.

2431

nalysis:

Diesel Range Organics

Method:

CA_DRO

WorkOrder:

00060200

Lab Batch ID:

5347

Method Blank

Units:

Lab Sample ID

Samples in Analytical Batch:

RunID:

HP_V_000612B-308748

mg/L

00060200-01B

Client Sample ID

nalysis Date:

06/12/2000 21:55

Analyst: AM

MW-1

reparation Date:

06/09/2000 13:18

00060200-02B

MW-2

Prep By: KL

Method SW3510B

00060200-03B

MW-3

00060200-04B

MW-4

Analyte	Result	Rep Limit
Diesel Range Organics	ND	0.050
Surr: n-Pentacosane	92.4	20-150

Laboratory Control Sample (LCS)

RunID:

HP_V_000612B-308749

Units:

mg/L

Analysis Date:

Preparation Date:

06/12/2000 22:34 06/09/2000 13:18 Analyst: AM

Prep By:

Method SW3510B

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Diesel Range Organics	2.5	2.2	89	21	175

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

Sample Spiked:

00060200-01

RunID:

HP_V_000612B-308752

Units:

Analysis Date:

06/12/2000 23:52

mg/L Analyst: AM

Preparation Date:

06/09/2000 13:18

Prep By:

Method

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
esel Range Organics	ND	2.5	1.4	54.1	2.5	1.8	69.2	24.5*	20	21	175

Qualifiers:

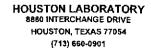
ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

* - Recovery Outside Advisable QC Limits

D - Recovery Unreportable due to Dilution





Quality Control Report

EXXON Company U.S.A.

2431

Analysis: thod:

RunID:

alysis Date:

Purgeable Aromatics

SW8021B

WorkOrder:

00060200

Lab Batch ID:

R15553

Method Blank

HP_W_000612A-306366

06/12/2000 12:28

Units: Analyst:

ug/L DL

Lab Sample ID

Samples in Analytical Batch:

Client Sample ID

00060200-01A 00060200-02A MW-1

00060200-03A

MW-2 MW-3

00060200-04A

MW-4

Analyte	Result	Rep Limit
Benzene	ND	0.50
Ethylbenzene	ND	0.50
Methyl tert-butyl ether	ND	2.0
Toluene	ND	0.50
m,p-Xylene	ND	0.50
o-Xylene	ND	0.50
Xylenes, Total	ND	0.50
Surr. 1,4-Difluorobenzene	103.0	72-137
Surr. 4-Bromofluorobenzene	103.9	48-156

Laboratory Control Sample (LCS)

RunID:

HP_W_000612A-306364

Units:

ug/L

Analysis Date:

06/12/2000 11:37

DL Analyst:

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Benzene	50	54	107	70	130
Ethylbenzene	50	52	105	70	130
Methyl tert-butyl ether	50	53	105	70	130
Toluene	50	53	106	70	130
m,p-Xylene	100	100	103	70	130
o-Xylene	50	52	104	70	130
Xylenes, Total	150	152	101	72	117

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

Sample Spiked:

00060200-01

HP_W_000612A-306368

Units:

ug/L

Analysis Date:

RunID:

06/12/2000 14:34

Analyst:

DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result !	MSD % Recovery	RPD	RPD		High Limit
One Tono	ND	20	20	98.5	20	21	105	6.71	21	32	i
Benzene Ethylbenzene	ND		20	102	20	21	103	1.41	19	52	4
ethyl tert-butyl ether	5.4		20	73.4	20	22	82.0	11.1	20	39	150

Qualifiers:

ND/U - Not Detected at the Reporting Limit

* - Recovery Outside Advisable QC Limits

B - Analyte detected in the associated Method Blank

D - Recovery Unreportable due to Dilution

- J Estimated value between MDL and PQL
- MI Matrix Interference



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

Quality Control Report

EXXON Company U.S.A.

2431

Analysis: Method: **Purgeable Aromatics**

SW8021B

WorkOrder:

00060200

Lab Batch ID:

R15553

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

Sample Spiked:

00060200-01

RunID:

HP_W_000612A-306368

Units:

ug/L

Analysis Date:

06/12/2000 14:34

Analyst:

DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit		High Limit
foluene	ND	20	20	102	20	21	104	1.78	20	38	159
n,p-Xylene	ND	40	40	99.4	40	40	101	1.31	17	53	144
o-Xylene	ND	20	20	101	20	20	102	0.780	18	53	143
Kylenes,Total	ND	60	60	100	60	60	100	0	18	53	144

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

* - Recovery Outside Advisable QC Limits

D - Recovery Unreportable due to Dilution



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

Quality Control Report

EXXON Company U.S.A.

2431

Analysis:

Gasoline Range Organics

Method:

ิงนกID:

Analysis Date:

CA_GRO

06/12/2000 12:28

v

Samples in Analytical Batch:

00060200

WorkOrder: Lab Batch ID:

R15555

Method Blank

HP_W_000612B-306392 Units:

Analyst:

Lab Sample ID

Client Sample ID

mg/L

DL

00060200-01A

MW-1

00060200-02A

MW-2

00060200-03A

MW-3

00060200-04A

MW-4

Analyte	Result	Rep Limit
Gasoline Range Organics	ND	0.050
Surr: 1,4-Diffuorobenzene	106.7	62-144
Surr: 4-Bromofluorobenzene	93.3	44-153

Laboratory Control Sample (LCS)

RunID:

HP_W_000612B-306391

Units:

mg/L

Analysis Date:

06/12/2000 11:11

Analyst:

DL

Analyte	Spike Added	Result	Percent Recovery	Lower Limit	Upper Limit
Gasoline Range Organics	1	0.91	91	75	125

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

Sample Spiked:

00060200-02

RuniD:

HP_W_000612B-306393

Units:

mg/L

Analysis Date:

06/12/2000 15:20

Analyst: DL

Analyte	Sample Result	MS Spike Added	MS Result	MS % Recovery	MSD Spike Added	MSD Result	MSD % Recovery	RPD	RPD Limit	Low Limit	High Limit
asoline Range Organics	. ND	0.9	1	112	0.9	0.98	109	2.85	36	36	160

Qualifiers:

ND/U - Not Detected at the Reporting Limit

B - Analyte detected in the associated Method Blank

J - Estimated value between MDL and PQL

* - Recovery Outside Advisable QC Limits

D - Recovery Unreportable due to Dilution

Chain of Custody And Sample Receipt Checklist

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Sample Receipt Checklist

Workorder:	00060200		Received by:		Stelfy, D'Anna
Date and Time Received:	6/8/00 10:00:00 AM		Carrier name:		FedEx
Temperature:	4				
Shipping container/cooler in	good condition?	Yes 🗹	No 🗌	Not Present	
Custody seals intact on ship	pping container/cooler?	Yes 🗌	No 🗌	Not Present	∀
Custody seals intact on sam	ple bottles?	Yes 🗌	No 🗌	Not Present	V
Chain of custody present?		Yes 🛂	No 🗔		
Chain of custody signed whe	en relinquished and received?	Yes 🗹	No 🗀		
Chain of custody agrees with	n sample labels?	Yes 🗹	No 🗌		
Samples in proper container	/bottle?	Yes 🗹	No 🗌		
Sample containers intact?		Yes 🗸	No 🗌		
Sufficient sample volume for	indicated test?	Yes 🔽	No 🗌		
All samples received within h	olding time?	Yes 🔽	No 🗀		
Container/Temp Blank tempe	erature in compliance?	Yes 🗸	No 🗔		
Water - VOA vials have zero	headspace?	Yes 🔽	No 🗔	Not Present	
Water - pH acceptable upon	receipt?	Yes 🔽	No 🗀		
<u> </u>					