EXXON COMPANY, U.S.A.

P.O. BOX 4032 • CONCORD, CA 94524-4032
MARKETING DEPARTMENT • ENVIRONMENTAL ENGINEERING

MARLA D. GUENSLER
SENIOR ENGINEER
(925) 246-8776
(925) 246-8798 FAX

JUN 1 5 1999

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

RE: Exxon RAS #7-0235/2225 Telegraph Avenue, Oakland, California.

Dear Mr. Seery:

Attached for your review and comment is a letter report entitled ***Quarterly Groundwater Monitoring Report, Second Quarter 1999,*** dated May 14, 1999, for the above referenced site. The report was prepared by Environmental Resolutions, Inc. (ERI) of Novato, California, and details the results of the quarterly groundwater monitoring and sampling activities at the subject site.

If you have any questions or comments, please contact me at (925) 246-8776.

Sincerely,

FOR

Marla D. Guensler
Senior Engineer

MDG/tjm

Attachment ERI's Quarterly Groundwater Monitoring Report, Second Quarter 1999, dated May 14, 1999.

cc: w/ attachment
Mr. Stephen Hill - California Regional Water Quality Control Board-San Francisco Bay Region

w/o attachment
Ms. Tracy A. Faulkner - Environmental Resolutions, Inc.

99 JUN 17 PM 2:26

ENVIRONMENTAL PROTECTION

STID 1039

ERI

ENVIRONMENTAL RESOLUTIONS, INC.

May 14, 1999
ERI 222913.R06

Ms. Marla D. Guensler
Exxon Company, U.S.A.
P.O. Box 4032
Concord, California 94524-4032

Subject: Quarterly Groundwater Monitoring Report, Second Quarter 1999, Exxon Service Station 7-0235, 2225 Telegraph Avenue, Oakland, California.

Ms. Guensler:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI), is reporting the results of the second quarter 1999 groundwater monitoring and sampling event. The location of the site is shown on the Site Vicinity Map (Plate 1). The purpose of quarterly monitoring is to evaluate concentrations of dissolved hydrocarbons in groundwater and groundwater flow direction and gradient. Blaine Tech Services, Inc. (Blaine Tech) performed the site field activities at the request of Exxon.

GROUNDWATER MONITORING AND SAMPLING

On April 8, 1999, Blaine Tech measured depth to water (DTW) and collected groundwater samples from selected wells for laboratory analyses. Work was performed in accordance with Blaine Tech's groundwater sampling protocol provided in Attachment A.

Calculated groundwater gradient and flow direction are presented on Plate 2. Historical and recent monitoring data are summarized in Table 1.

LABORATORY ANALYSES AND RESULTS

Groundwater samples were submitted to Sequoia Analytical Laboratories, Inc. (California State Certification Number 1210) in Redwood City, California, under Chain of Custody protocol. The samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX), methyl tertiary butyl ether (MTBE), 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 provided in Attachment B. Historical and recent results of laboratory analyses of groundwater samples are summarized in Table 1. The results of analyses of groundwater samples collected during the recent sampling event are shown on Plate 2.

ERI recommends forwarding copies of this report to:

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

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

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 Exxon Company, U.S.A. and any reliance on this report by third parties shall be at such party's sole risk.

If you have any questions or comments regarding this report, please call Ms. Tracy A. Faulkner at (415) 382-5985.

Sincerely,
Environmental Resolutions, Inc.

Tracy A. Faulkner
Program Manager

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
Exxon Service Station 7-0235
2225 Telegraph Avenue
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW-6B	11/26/96	NLPH	12.26	5.22	<50	<30	<0.5	<0.5	<0.5	<0.5
(17.48)	2/27/97	NLPH	11.73	5.75	<50	<30	<0.5	<0.5	<0.5	0.80
	5/21/97	NLPH	12.70	4.78	<50	<30	<0.5	<0.5	<0.5	<0.5
	8/18/97	NLPH	12.89	4.59	380	<30	4.3	<0.5	1.2	1.5
	3/13/98	NLPH	11.15	6.33	360	<6.2	93	4.9	4.1	12
	4/20/98	NLPH	11.49	5.99	110	5.5	19	1.3	1.5	3.9
(21.37)	7/21/98	NLPH	12.18	9.19	<50	8.7	0.84	0.59	<0.5	<0.5
	10/6/98	NLPH	12.70	8.67	190	6.0	2.4	0.56	0.51	1.2
	1/11/99	NLPH	12.48	8.89	50	3.9	1.2	<0.5	<0.5	0.95
	4/8/99	**NLPH**	**11.52**	**9.85**	**85**	**14.0**	**4.4**	**<0.5**	**<0.5**	**<0.5**
MW-6E	11/26/96	NLPH	12.94	4.69	<50	<30	1.1	<0.5	<0.5	<0.5
(17.63)	2/27/97	NLPH	12.28	5.35	<50	<30	<0.5	<0.5	<0.5	<0.5
	5/21/97	NLPH	13.60	4.03	160	<5	10	1.4	5.5	4.8
	8/18/97	NLPH	13.75	3.88	66	<30	<0.5	<0.5	<0.5	<0.5
	3/13/98	NLPH	11.36	6.27	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	4/20/98	NLPH	11.88	5.75	<50	<2.5	<0.5	<0.5	<0.5	<0.5
(21.58)	7/21/98	NLPH	13.10	8.48	1,200	<10	81	3.1	28	77
	10/6/98	NLPH	13.55	8.03	<50	6.6	1.4	0.51	<0.5	0.97
	1/11/99	NLPH	13.40	8.18	<50	5.1	<0.5	<0.5	<0.5	<0.5
	4/8/99	**NLPH**	**12.04**	**9.54**	**<50**	**4.7**	**<0.5**	**<0.5**	**<0.5**	**<0.5**
MW-6F	11/26/96	NLPH	13.29	5.29	<50	<30	<0.5	<0.5	<0.5	<0.5
(18.58)	2/27/97	---	---	---	---	---	---	---	---	---
	5/21/97	NLPH	14.18	4.40	---	---	---	---	---	---
	8/18/97	NLPH	14.69	3.89	---	---	---	---	---	---
	3/13/98	NLPH	10.93	7.65	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	4/20/98	NLPH	11.77	6.81	---	---	---	---	---	---
(22.51)	7/21/98	NLPH	13.62	8.89	---	---	---	---	---	---
	10/6/98	NLPH	13.52	8.99	---	---	---	---	---	---
	1/11/99	NLPH	14.06	8.45	---	---	---	---	---	---
	4/8/99	**NLPH**	**11.86**	**10.65**	**---**	**---**	**---**	**---**	**---**	**---**

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Exxon Service Station 7-0235
2225 Telegraph Avenue
Oakland, California

Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPPHg	MTBE	B	T	E	X
		<	feet	>	<		ug/L			>
MW-6G	11/26/96	NLPH	11.12	5.70	<50	<30	<0.5	<0.5	<0.5	<0.5
(16.82)	2/27/97	—	---	---	---	---	---	---	---	---
	5/21/97	NLPH	11.76	5.06	---	---	---	---	---	---
	8/18/97	NLPH	12.23	4.59	---	---	---	---	---	---
	3/13/98	NLPH	9.13	7.69	<50	4.4	<0.5	<0.5	<0.5	<0.5
	4/20/98	NLPH	9.73	7.09	---	---	---	---	---	---
(20.72)	7/21/98	NLPH	11.15	9.57	---	---	---	---	---	---
	10/6/98	NLPH	11.91	8.81	---	---	---	---	---	---
	1/11/99	NLPH	12.00	8.72	---	---	---	---	---	---
	4/8/99	**NLPH**	**10.04**	**10.68**	**---**	---	**---**	**---**	**---**	**---**
MW-6H	11/26/96	NLPH	11.87	4.71	1,200	<30	320	110	22	85
(16.58)	2/27/97	NLPH	11.58	5.00	1,800	<200	760	31	8.4	44
	5/21/97	NLPH	12.23	4.35	1,100	81	640	18	5.4	45
	8/18/97	NLPH	12.29	4.29	870	26	200	3.6	2.4	7.4
	3/13/98	NLPH	11.44	5.14	5,300	<125	1,900	720	100	470
	4/20/98	NLPH	11.58	5.00	6,000	2,700	1,500	600	91	440
(20.47)	7/21/98	NLPH	11.97	8.5	2,200	1,600	740	44	15	63
	10/6/98	NLPH	12.23	8.24	5,400	3,000	1,900	<25	<25	76
	1/11/99	NLPH	12.17	8.30	2,600	4,300	1,200	<12	<12	20
	4/8/99	**NLPH**	**11.56**	**8.91**	**13,000**	**13,000**	**3,400**	**1,300**	**260**	**1,200**
MW-6I	11/26/96	NLPH	12.45	3.81	<50	<30	<0.5	<0.5	<0.5	<0.5
(16.26)	2/27/97	NLPH	12.24	4.02	<50	<30	<0.5	<0.5	<0.5	<0.5
	5/21/97	NLPH	12.82	3.44	<50	<30	<0.5	<0.5	<0.5	<0.5
	8/18/97	NLPH	12.81	3.45	<50	<30	<0.5	<0.5	<0.5	<0.5
	3/13/98	—	—	---	---	---	---	---	---	---
	4/20/98	NLPH	12.14	4.12	<50	<2.5	<0.5	<0.5	<0.5	<0.5
(20.24)	7/21/98	NLPH	12.59	7.65	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	10/6/98	NLPH	12.81	7.43	---	---	---	---	---	---
	1/11/99	NLPH	12.74	7.50	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	4/8/99	**NLPH**	**11.93**	**8.31**	**—**	—	**---**	**---**	**---**	**---**

TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
Exxon Service Station 7-0235
2225 Telegraph Avenue
Oakland, California

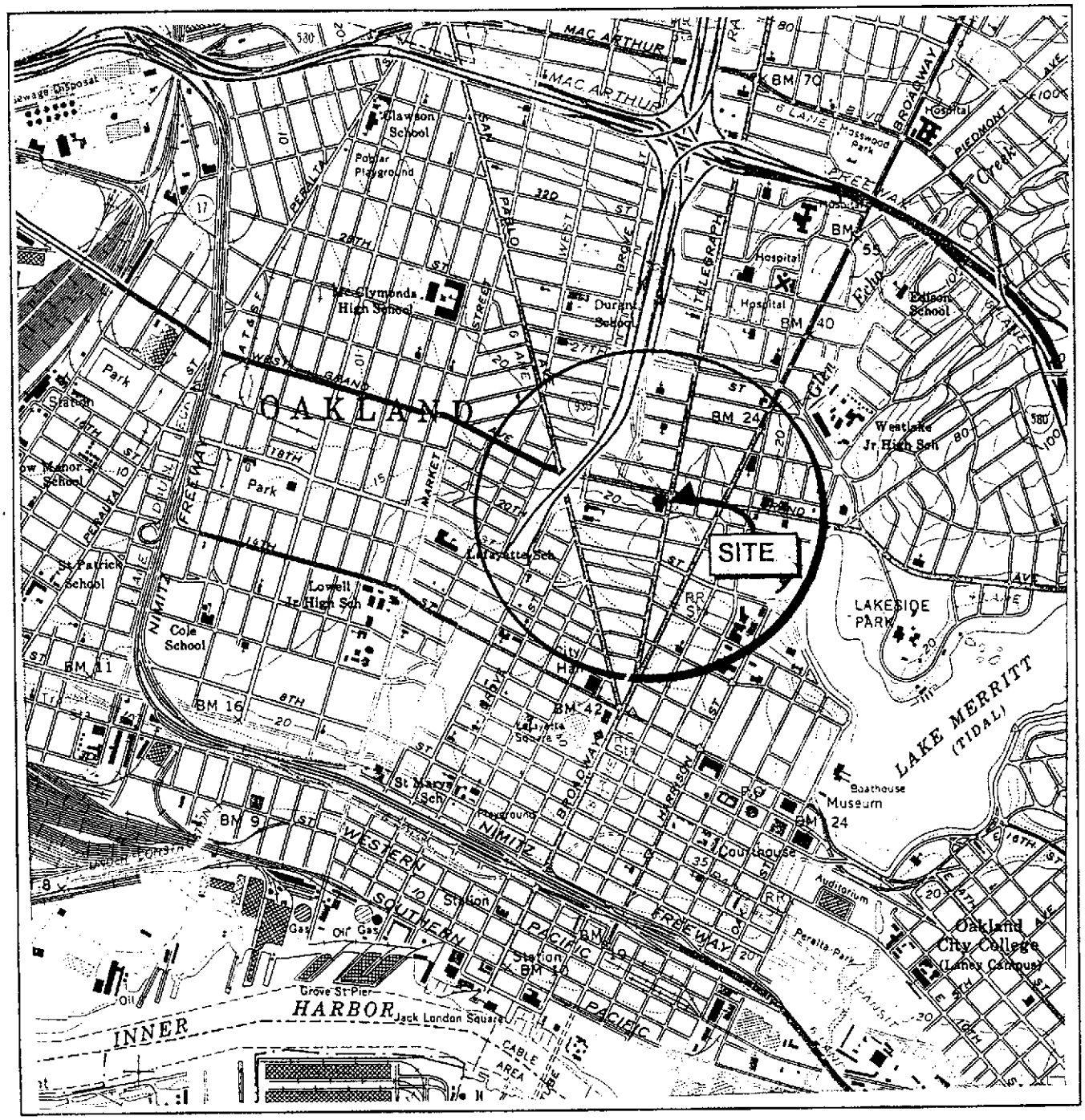
Well ID # (TOC)	Sampling Date	SUBJ	DTW	Elev.	TPPHg	MTBE	B	T	E	X
		<.....feet.....>			<.....ug/L.....>					
RW-1	Not Monitored 6/16/92 through 10/6/98.									
(20.24)	1/11/99	NLPH	12.37	7.87	---	---	---	---	---	---
	4/8/99	**NLPH**	**10.41**	**9.83**	---	---	---	---	---	---
RW-2	Not Monitored 6/16/92 through 4/20/98.									
(20.44)	7/21/98	NLPH	12.65	7.79	3,500	170	240	100	41	96
	10/6/98	NLPH	13.06	7.38	3,200	200	120	48	56	120
	1/11/99	NLPH	12.88	7.56	3,300	350	150	17	35	40
	4/8/99	**NLPH**	**11.76**	**8.68**	---	---	---	---	---	---
RW-3A	Not Monitored 6/16/92 through 4/20/98.									
(21.75)	7/21/98	NLPH	13.08	8.67	280	16	97	<1.2	<1.2	<1.2
	10/6/98	NLPH	13.72	8.03	78	26	26	0.89	<0.5	<0.5
	1/11/99	NLPH	12.00	9.75	1,000	230	490	5.0	<5.0	7.4
	4/8/99	**NLPH**	**11.90**	**9.85**	**130**	**11**	**70**	**<1.0**	**<1.0**	**<1.0**

7/6/99 " "
Actually HC "sheen" was noted in well!!

Notes:

SUBJ	=	Results of subjective evaluation.
NLPH	=	No liquid-phase hydrocarbons present in well.
TOC	=	Elevation of top of well casing; relative to mean sea level.
DTW	=	Depth to water.
Elev.	=	Elevation of groundwater surface; relative to mean sea level.
TPPHg	=	Total purgeable petroleum hydrocarbons as gasoline analyzed using EPA method 5030/8015 (modified).
MTBE	=	Methyl tertiary butyl ether analyzed using EPA method 5030/8020.
BTEX	=	Benzene, toluene, ethylbenzene, and total xylenes analyzed using EPA method 5030/8020.
<	=	Less than the indicated detection limit shown by the laboratory.
---	=	Not measured or sampled.
*	=	DTW taken after purging of other nearby wells; measurement suspect.
ug/L	=	Micrograms per liter.

Sampling discontinued for wells MW6F, MW6G, and RW1 per Alameda County Health Services Agency letter dated June 1, 1998.



FN: 22290001

N

APPROXIMATE SCALE

0 1/2 1

MILE

Source: U.S.G.S. 7.5 minute topographic quadrangle map Oakland West, California (Photorevised 1980)

ERI ENVIRONMENTAL RESOLUTIONS, INC.

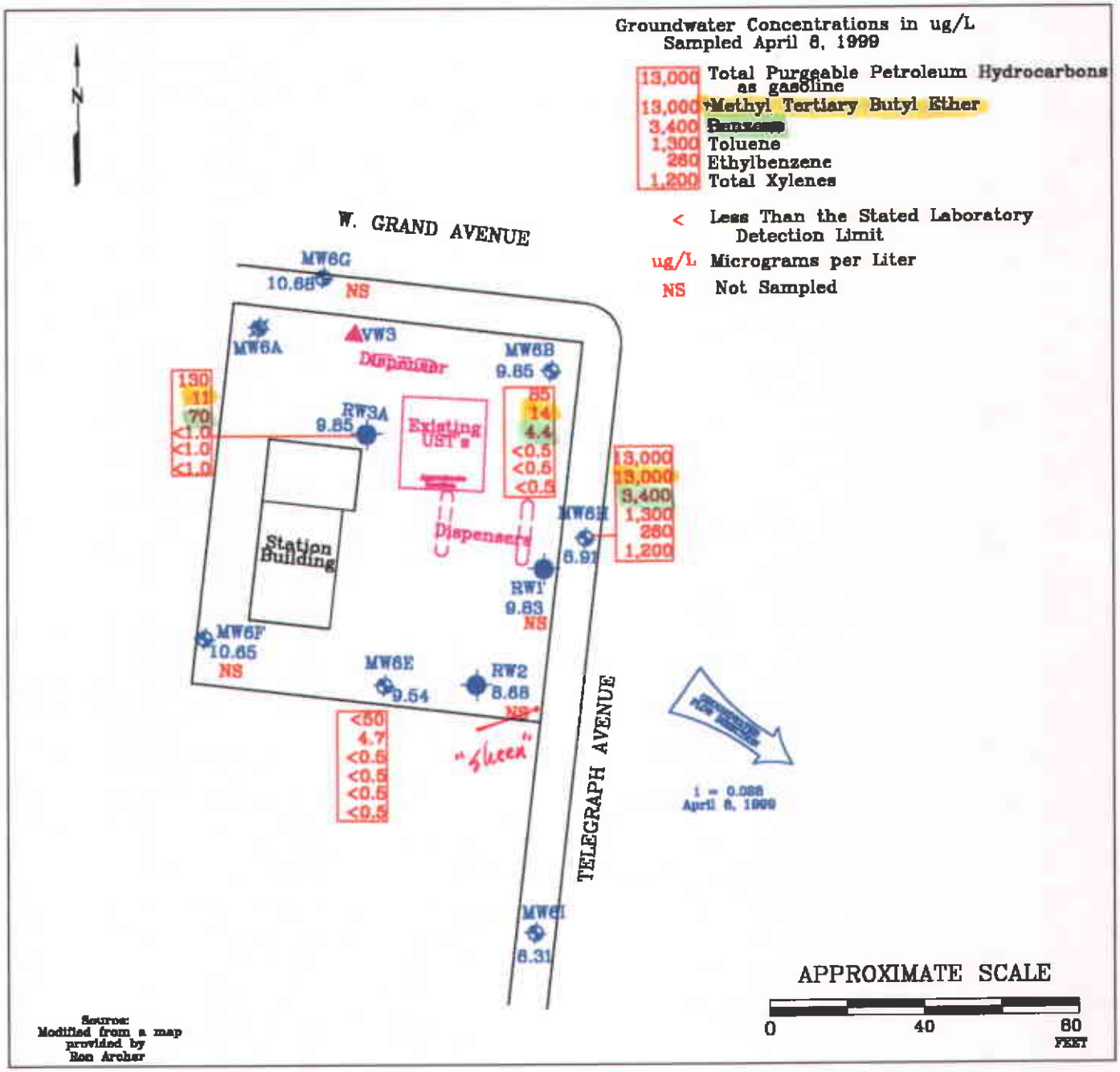
PROJECT ERI 2229

SITE VICINITY MAP

EXXON SERVICE STATION 7-0235
2225 Telegraph Avenue
Oakland, California

PLATE

1



FN 22290002

EXPLANATION

MW6H — Groundwater Monitoring Well

6.91 — Groundwater elevation in feet above mean sea level

i = Interpreted Groundwater Gradient

RW3A — Recovery Well

VW3 — Vapor/Vadose Well

ENVIRONMENTAL RESOLUTIONS, INC.

GENERALIZED SITE PLAN

EXXON SERVICE STATION 7-0235
2225 Telegraph Avenue
Oakland, California

PROJECT NO. 2229

PLATE 2

May 7, 1999

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.

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 station 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 de-tuned 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

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

Environmental Resolutions
73 Digital Drive, Suite 100
Novato, CA 94949
Attention: Mark Dockum

Client Proj. ID: Exxon 7-0235, 2229

Lab Proj. ID: 9904471

Received: 04/09/99

Reported: 04/22/99

LABORATORY NARRATIVE

In order to properly interpret this report, it must be reproduced in its entirety. This report contains a total of 10 pages including the laboratory narrative, sample results, quality control, and related documents as required (cover page, COC, raw data, etc.).

SEQUOIA ANALYTICAL

Jackie Tague Clark
Project Manager

Sequoia Analytical

680 Chesapeake Drive, Redwood City, CA 94063, (650) 364-9600, FAX (650) 364-9233
404 N. Wiget Lane, Walnut Creek, CA 94598, (925) 988-9600, FAX (925) 988-9673
819 Striker Avenue, Suite 8, Sacramento, CA 95834, (916) 921-9600, FAX (916) 921-0100
1455 McDowell Blvd. North, Ste. D, Petaluma, CA 94954, (707) 792-1865, FAX (707) 792-0342
1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

Environmental Resolutions
73 Digital Drive, Suite 100
Novato, CA 94949

Attention: Mark Dockum

Client Proj. ID: Exxon 7-0235, 2229
Sample Descript: MW-6B
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9904471-01

Sampled: 04/08/99
Received: 04/09/99

Analyzed: 04/16/99
Reported: 04/22/99

QC Batch Number: GC041699BTEX31A
Instrument ID: GCHP31

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	**50**	**85**
Methyl t-Butyl Ether	**2.5**	**14**
Benzene	**0.50**	**4.4**
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		
Unidentified HC		**C6-C12**

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	107

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

Sequoia Analytical

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1551 Industrial Road, San Carlos, CA 94070-4111, (650) 232-9600, FAX (650) 232-9612

Environmental Resolutions
73 Digital Drive, Suite 100
Novato, CA 94949

Attention: Mark Dockum

Client Proj. ID: Exxon 7-0235, 2229
Sample Descript: MW-6E
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9904471-02

Sampled: 04/08/99
Received: 04/09/99

Analyzed: 04/20/99
Reported: 04/22/99

QC Batch Number: GC042099BTEX30A
Instrument ID: GCHP30

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	50	N.D.
Methyl t-Butyl Ether	**2.5**	**4.7**
Benzene	0.50	N.D.
Toluene	0.50	N.D.
Ethyl Benzene	0.50	N.D.
Xylenes (Total)	0.50	N.D.
Chromatogram Pattern:		

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	122

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

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Environmental Resolutions
73 Digital Drive, Suite 100
Novato, CA 94949

Attention: Mark Dockum

Client Proj. ID: Exxon 7-0235, 2229
Sample Descript: MW-6H
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9904471-03

Sampled: 04/08/99
Received: 04/09/99

Analyzed: 04/20/99
Reported: 04/22/99

QC Batch Number: GC042099BTEX30A
Instrument ID: GCHP30

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	5000	13000
Methyl t-Butyl Ether	250	13000
Benzene	50	3400
Toluene	50	1300
Ethyl Benzene	50	260
Xylenes (Total)	50	1200
Chromatogram Pattern:		GAS

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	119

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

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Environmental Resolutions
73 Digital Drive, Suite 100
Novato, CA 94949

Attention: Mark Dockum

Client Proj. ID: Exxon 7-0235, 2229
Sample Descript: RW-3A
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9904471-04

Sampled: 04/08/99
Received: 04/09/99

Analyzed: 04/21/99
Reported: 04/22/99

QC Batch Number: GC042199BTEX03A
Instrument ID: GCHP03

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

Analyte	Detection Limit ug/L	Sample Results ug/L
TPPH as Gas	100	130
Methyl t-Butyl Ether	5.0	11
Benzene	1.0	70
Toluene	1.0	N.D.
Ethyl Benzene	1.0	N.D.
Xylenes (Total)	1.0	N.D.
Chromatogram Pattern:		
Discrete Peaks		C6-C8

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	81

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

Sequoia Analytical

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Environmental Resolutions
73 Digital Drive, Suite 100
Novato, CA 94949

Attention: Mark Dockum

Client Proj. ID: Exxon 7-0235, 2229
Sample Descript: TB
Matrix: LIQUID
Analysis Method: 8015Mod/8020
Lab Number: 9904471-05

Sampled: 04/08/99
Received: 04/09/99

Analyzed: 04/16/99
Reported: 04/22/99

QC Batch Number: GC041699BTEX31A
Instrument ID: GCHP31

Total Purgeable Petroleum Hydrocarbons (TPPH) with BTEX and MTBE

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

Surrogates	Control Limits %		% Recovery
Trifluorotoluene	70	130	99

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

SEQUOIA ANALYTICAL - ELAP #1210

Vickie Tague Clark
Project Manager

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Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949
Attention: Mark Dockum

Client Project ID: Exxon 7-0235

QC Sample Group: 9904471

Reported: Apr 22, 1999

QUALITY CONTROL DATA REPORT

Matrix:	Liquid
Method:	EPA 8015
Analyst:	JF
ANALYTE	Gasoline

QC Batch #: GC041699BTEX31A

Sample No.:	GW9904471-1
Date Prepared:	4/16/99
Date Analyzed:	4/16/99
Instrument I.D.#:	GCHP31
Sample Conc., ug/L:	85
Conc. Spiked, ug/L:	250
Matrix Spike, ug/L:	370
% Recovery:	114
Matrix pike Duplicate, ug/L:	260
% Recovery:	70
elative % Difference:	48
RPD Control Limits:	0-25

LCS Batch#: GC041699BTEX31A

Date Prepared:	4/16/99
Date Analyzed:	4/16/99
Instrument I.D.#:	GCHP31
Conc. Spiked, ug/L:	250
LCS Recovery, ug/L:	240
LCS % Recovery:	96

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	70-130

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

SEQUOIA ANALYTICAL

Ronald M. Chew
Project Manager

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

Sequoia Analytical

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Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949
Attention: Mark Dockum

Client Project ID: Exxon 7-0235

QC Sample Group: 9904471

Reported: Apr 22, 1999

QUALITY CONTROL DATA REPORT

Matrix:	Liquid
Method:	EPA 8015
Analyst:	JAB
ANALYTE	Gasoline

QC Batch #: GC042099BTEX30A

Sample No.:	GW9904751-2
Date Prepared:	4/20/99
Date Analyzed:	4/20/99
Instrument I.D.#:	GCHP30
Sample Conc., ug/L:	N.D.
Conc. Spiked, ug/L:	250
Matrix Spike, ug/L:	270
% Recovery:	108
Matrix pike Duplicate, ug/L:	260
% Recovery:	104
elative % Difference:	3.8
RPD Control Limits:	0-25

LCS Batch#: GC042099BTEX30A

Date Prepared:	4/20/99
Date Analyzed:	4/20/99
Instrument I.D.#:	GCHP30
Conc. Spiked, ug/L:	250
LCS Recovery, ug/L:	250
LCS % Recovery:	100.0

Percent Recovery Control Limits:

MS/MSD	60-140
LCS	70-130

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

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

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Project Manager

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Environmental Resolutions
74 Digital Drive, Suite 6
Novato, CA 94949
Attention: Mark Dockum

Client Project ID: Exxon 7-0235

QC Sample Group: 9904471

Reported: Apr 22, 1999

QUALITY CONTROL DATA REPORT

Matrix:	Liquid			
Method:	EPA 8020			
Analyst:	JAB			
ANALYTE	Benzene	Toluene	Ethylbenzene	Xylenes
QC Batch #:	GC042199BTEX03A			
Sample No.:	GW9904614-2			
Date Prepared:	4/21/99	4/21/99	4/21/99	4/21/99
Date Analyzed:	4/21/99	4/21/99	4/21/99	4/21/99
Instrument I.D.#:	GCHP03	GCHP03	GCHP03	GCHP03
Sample Conc., ug/L:	N.D.	N.D.	N.D.	N.D.
Conc. Spiked, ug/L:	10	10	10	30
Matrix Spike, ug/L:	11	10.0	10.0	32
% Recovery:	110	100.0	100.0	107
Matrix pike Duplicate, ug/L:	10.0	10.0	10.0	30
% Recovery:	100.0	100.0	100.0	100.0
elative % Difference:	9.5	0.0	0.0	6.8
RPD Control Limits:	0-25	0-25	0-25	0-25

LCS Batch#:	GC042199BTEX03A			
Date Prepared:	4/21/99	4/21/99	4/21/99	4/21/99
Date Analyzed:	4/21/99	4/21/99	4/21/99	4/21/99
Instrument I.D.#:	GCHP03	GCHP03	GCHP03	GCHP03
Conc. Spiked, ug/L:	10	10	10	30
LCS Recovery, ug/L:	10.0	10.0	10.0	31
LCS % Recovery:	100.0	100.0	100.0	103

Percent Recovery Control Limits:

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

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

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

SEQUOIA ANALYTICAL

Ronald M. Chew
Project Manager

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EXXON COMPANY, U.S.A.

P.O. Box 2180, Houston, TX 77002-7426

CHAIN OF CUSTODY

Consultant's Name: ERI / EXXON		Page 1 of 1 Oakland	
Address: 74 Digital Dr. Suite 6, Novato, CA 94949		**Site Location:** 2225 Telegraph Ave	
Project #: 990408-K1	**Consultant Project #:** 2229	**Consultant Work Release #:** 19900939	
Project Contact: Mark Dockum	**Phone #:** (415) 382-5991	**Laboratory Work Release #:**	
EXXON Contact: Marla Guensler	**Phone #:** (925) 246-8796	**EXXON RAS #:** 7-0235	
Sampled by (print): Mark Spandler	**Sampler's Signature:**		
Shipment Method:	**Air Bill #:**		

TAT: ☐ 24 hr ☐ 48 hr ☐ 72 hr ☐ 96 hr ☐ Standard (10 day) 990447 1

ANALYSIS REQUIRED

Sample Description	Collection Date	Collection Time	Matrix Soil/Water/Air	Prsv	# of Cont.	Sequoia's Sample #	TPH/Gas BTEX/ 8015/ 8020	TPH/ Diesel EPA 8015	TRPH S.M. 5520	MTBE (8020)		Temperature: Inbound Seal: Yes No Outbound Seal: Yes No
MW-6B	4/8/99	950	W		3	01	X			X		
MW-6E		1020			3	02	X			X		9 12 2
MW-6H		1050			3	03	X			X		
RW-9A		1005			3	04	X			X		
TB		—			2	05	X			X		

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
Conference for Mark Spandler	4/9	955		4/9/99	955	
	4/9/99					
				4/9/99	1221	

Pink - Client
Yellow - Sequoia
White - Sequoia