

EXXON COMPANY, U.S.A.

ENVIRONMENTAL PROTECTION
93 SEP 15 PM 3:41

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

DARIN L. ROUSE
SENIOR ENGINEER

(925) 246-8768
(925) 246-8798 FAX

September 9, 1999

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

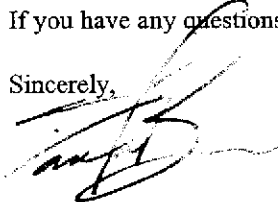
RE: Exxon RAS #7-0238/2200 East 12th Street, Oakland, California.

Dear Mr. Chan:

Attached for your review and comment is a letter report entitled **Quarterly Groundwater Monitoring Report, Third Quarter 1999**, dated August 27, 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) 246-8768.

Sincerely,


Darin L. Rouse
Senior Engineer

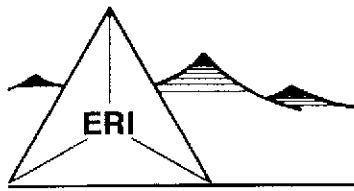
Attachment ERI's Quarterly Groundwater Monitoring Report, Third Quarter 1999, dated August 27, 1999.

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

 w/o attachment
 Mr. John C. Skance - Environmental Resolutions, Inc.
 Ms. Kathy Simonelli - Geologic Services Corporation

245
• NTBS still with
• decrease in NTBS - 9/9/99
• note to drop in data
• units? groundwater from
anti wells





ENVIRONMENTAL RESOLUTIONS, INC.

ENVIRONMENTAL
PROTECTION

99 SEP 16 PM 3:47

August 27, 1999
ERI 229313.R06

Mr. Darin L. Rouse
Exxon Company, U.S.A.
P.O. Box 4032
Concord, California 94524-4032

Subject: Quarterly Groundwater Monitoring Report, Third Quarter 1999, Exxon Service Station
7-0238, 2200 East 12th Street, Oakland, California.

Mr. Rouse:

At the request of Exxon Company, U.S.A. (Exxon), Environmental Resolutions, Inc. (ERI), is reporting the results of the third 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 and sampling 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 August 3, 1999, Blaine Tech measured depth to water (DTW) and collected groundwater samples from select monitoring wells for laboratory analysis. Groundwater monitoring and sampling were performed in accordance with Blaine Tech's groundwater sampling protocol (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., 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), 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. The results of analyses of groundwater samples collected during the recent sampling event are shown 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 Exxon Company, U.S.A., and any reliance on this report by third parties shall be at such party's sole risk.

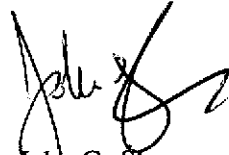
ERI recommends forwarding copies of this report to:

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

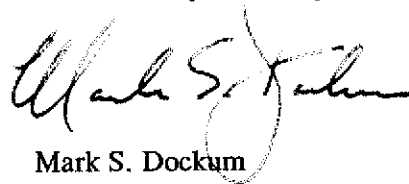
Mr. Stephen Hill
California Regional Water Quality Control Board
San Francisco Bay Region
1515 Clay Street, Suite 1400
Oakland, California 94612

If you have any questions or comments regarding this report, please call Mr. John C. Skance at (415) 382-5996.

Sincerely,
Environmental Resolutions, Inc.



John C. Skance
Assistant Project 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 7-0238
 2200 East 12th Street
 Oakland, California
 (Page 1 of 3)

Well ID # (TOC)	Sampling Date	SUBJ <.....>	DTW feet	Elev.	TPPHg <.....>	MTBE <.....>	B ug/L	T <.....>	E <.....>	X <.....>
MW9A (11.46)	11/2/95	NLPH	7.16	4.30	<50	<10	<0.5	<0.5	<0.5	<0.5
	4/26/96	NLPH	6.33	5.13	---	---	---	---	---	---
	8/22/96	NLPH	7.02	4.44	---	---	---	---	---	---
	2/24/97	---	---	---	---	---	---	---	---	---
	3/16/98	NLPH	6.14	5.32	<200	40,000	7.9	<2.0	<2.0	<2.0
	4/21/98	NLPH	6.29	5.17	<50	53,000	3.8	<0.5	<0.5	<0.5
	(14.53) 7/22/98	NLPH	6.58	7.95	<250	18,000	<2.5	<2.5	<2.5	<2.5
	12/22/98	NLPH	6.47	8.06	<50	5,200	<0.5	<0.5	<0.5	<0.5
	2/26/99	NLPH	6.38	8.15	<100	10,000	<1.0	<1.0	<1.0	<1.0
	5/27/99**	NLPH	6.56	7.97	<5,000	15,300	<50	<50	<50	<50
8/3/99	NLPH	9.39	5.14	<50	<2.5	<0.5	<0.5	<0.5	<0.5	
MW9B (9.80)	11/2/95	NLPH	6.14	3.66	130	<10	3.3	<0.5	<0.5	<0.5
	4/26/96	NLPH	5.66	4.14	270	70	130	2.8	6.7	<3
	8/22/96	NLPH	6.16	3.64	210	31	5.7	6.8	1.1	9.2
	2/24/97	NLPH	5.58	4.22	1,400	1,300	76	1.4	4.1	1.2
	3/16/98	NLPH	5.32	4.48	860	1,500	140	2.0	11	<2.0
	4/21/98	NLPH	5.49	4.31	1,800	18,000	300	<5.0	7.9	<5.0
	(12.83) 7/22/98	NLPH	5.79	7.04	<500	26,000	13	<5.0	<5.0	<5.0
	12/22/98	NLPH	5.69	7.14	700	21,000	110	3.1	9.1	14
	2/26/99	NLPH	5.10	7.73	8,800	8,000	2,000	<25	52	38
	5/18/99	NLPH	5.65	7.18	<10,000	42,100	158	<100	<100	<100
8/3/99	NLPH	6.24	6.59	960	24,900	<5.0	<5.0	<5.0	<5.0	
MW9C (11.14)	11/2/95	---	---	---	---	---	---	---	---	---
	4/26/96	---	---	---	---	---	---	---	---	---
	8/22/96	---	---	---	---	---	---	---	---	---
	2/24/97	---	---	---	---	---	---	---	---	---
	3/16/98	NLPH	5.51	5.63	<500	150,000	24	<5.0	<5.0	<5.0
	4/21/98	NLPH	5.83	5.31	150	130,000/150,000*	<0.5	<0.5	<0.5	<0.5
	(14.19) 7/22/98	NLPH	6.43	7.76	<500	95,000	<5.0	<5.0	<5.0	<5.0
	12/22/98	NLPH	6.16	8.03	<500	84,000	<5.0	<5.0	<5.0	<5.0
	2/26/99	NLPH	5.46	8.73	<250	55,000	<2.5	<2.5	<2.5	<2.5
	5/18/99	NLPH	6.27	7.92	<25,000	68,900	<250	<250	<250	<250
8/3/99	NLPH	7.13	7.06	210	69,200	<1.0	1.3	<1.0	<1.0	

TABLE 1
 CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA
 Exxon Service Station 7-0238
 2200 East 12th Street
 Oakland, California
 (Page 2 of 3)

Well ID # (TOC)	Sampling Date	SUBI <.....>	DTW feet.....>	Elev.	TPPHg <.....>	MTBE	B ug/L.....>	T	E	X
MW9D (12.90)	11/2/95	---	---	---	---	---	---	---	---	---
	4/26/96	---	---	---	---	---	---	---	---	---
	8/22/96	---	---	---	---	---	---	---	---	---
	2/24/97	---	---	---	---	---	---	---	---	---
	3/16/98	NLPH	6.94	5.96	<50	10	<0.5	<0.5	<0.5	<0.5
	4/21/98	NLPH	7.22	5.68	<50	12	<0.5	<0.5	<0.5	<0.5
	(15.98) 7/22/98	NLPH	7.85	8.13	<50	13	<0.5	<0.5	<0.5	<0.5
	12/22/98	NLPH	7.58	8.40	<50	12	<0.5	<0.5	<0.5	<0.5
	2/26/99	NLPH	6.42	9.56	<50	310	<0.5	<0.5	<0.5	<0.5
	5/18/99	NLPH	6.55	9.43	<2,500	13,500	<25	<25	<25	<25
8/3/99	NLPH	8.34	7.64	<50	<2.5	<0.5	<0.5	<0.5	<0.5	
MW9F (8.37)	11/2/95	---	---	---	---	---	---	---	---	---
	4/26/96	NLPH	---	---	<50	57	<0.5	<0.5	<0.5	<0.5
	8/22/96	NLPH	---	---	<50	5.8	<0.5	<0.5	<0.5	<0.5
	2/24/97	NLPH	---	---	<50	<30	<0.5	<0.5	<0.5	<0.5
	3/16/98	NLPH	---	---	---	---	---	---	---	---
	4/21/98	---	---	---	---	---	---	---	---	---
	(11.38) 7/22/98	---	---	---	---	---	---	---	---	---
	12/22/98	NLPH	5.47	5.91	<50	81	<0.5	<0.5	<0.5	<0.5
	2/26/99	NLPH	5.35	6.03	<50	<2.5	<0.5	<0.5	<0.5	<0.5
	5/18/99	NLPH	5.62	5.76	<50	61.6	<0.5	<0.5	<0.5	<0.5
8/3/99	NLPH	6.32	5.06	<50	3.10	<0.5	<0.5	<0.5	<0.5	
MW9G (9.95)	11/2/95	NLPH	5.92	4.03	<50	<10	<0.5	<0.5	<0.5	<0.5
	4/26/96	NLPH	5.28	4.67	<50	18	<0.5	<0.5	<0.5	<0.5
	8/22/96	NLPH	5.57	4.38	<50	18	<0.5	<0.5	<0.5	<0.5
	2/24/97	NLPH	5.30	4.65	<50	240	<0.5	0.57	<0.5	0.62
	3/16/98	---	---	---	---	---	---	---	---	---
	4/21/98	---	---	---	---	---	---	---	---	---
	(12.99) 7/22/98	---	---	---	---	---	---	---	---	---
	12/22/98	NLPH	5.28	7.71	<50	1,100	<0.5	<0.5	<0.5	<0.5
	2/26/99	NLPH	5.31	7.68	<50	50	<0.5	<0.5	<0.5	<0.5
	5/18/99	NLPH	5.18	7.81	<1,000	3,990	<10	<10	<10	<10
8/3/99	NLPH	6.00	6.99	<50	1,340	<0.5	<0.5	<0.5	<0.5	

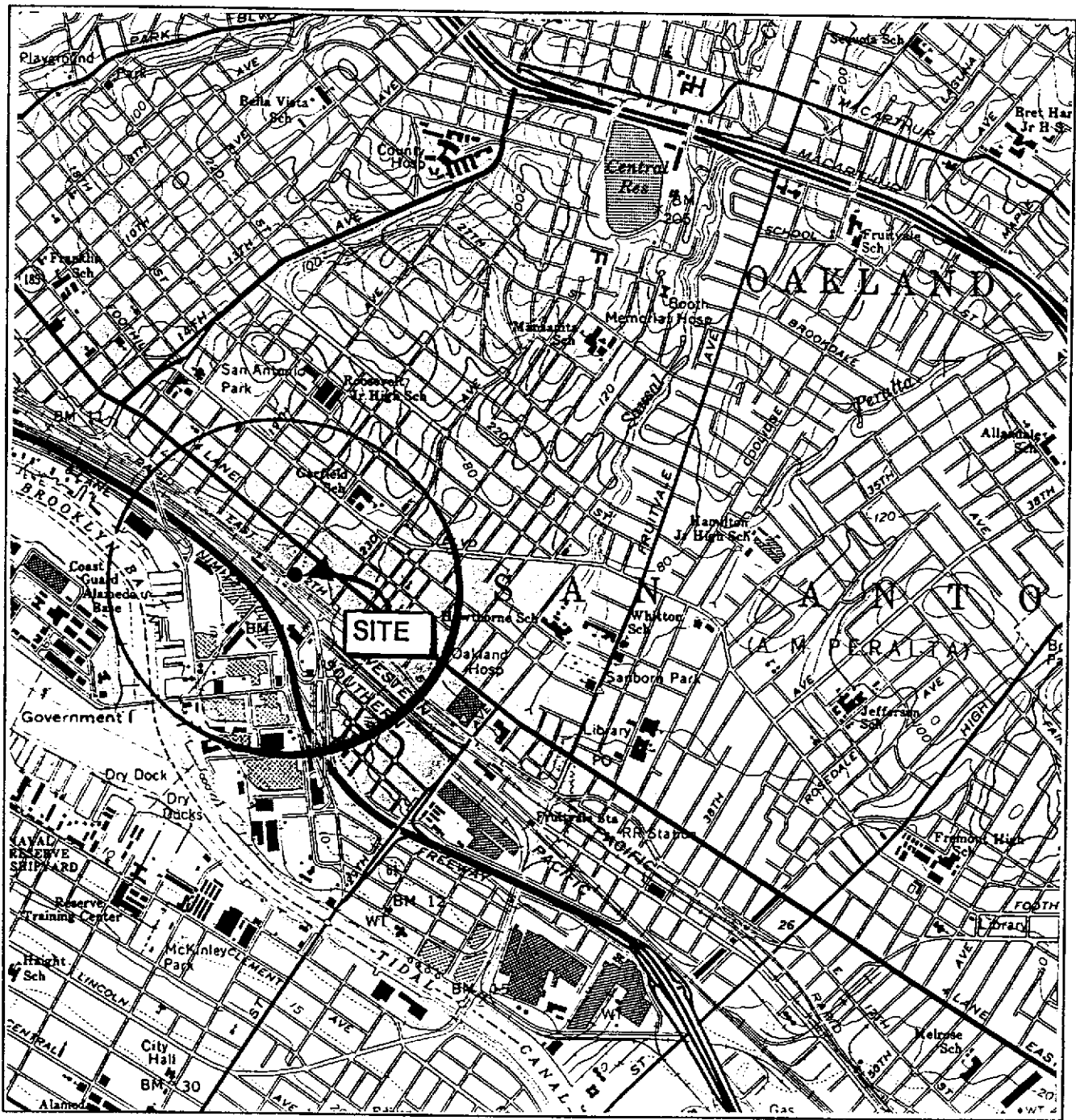
TABLE 1
CUMULATIVE GROUNDWATER MONITORING AND SAMPLING DATA

Exxon Service Station 7-0238
2200 East 12th Street
Oakland, California
(Page 3 of 3)

Well ID # (TOC)	Sampling Date	SUBJ <.....>	DTW feet	Elev.	TPPHg <.....>	MTBE <.....>	B ug/L	T <.....>	E <.....>	X <.....>	
MW9H (8.58)	11/2/95	NLPH	8.40	0.18	<50	<10	<0.5	<0.5	<0.5	<0.5	
	4/26/96	NLPH	8.05	0.53	---	---	---	---	---	---	
	8/22/96	NLPH	8.17	0.41	---	---	---	---	---	---	
	2/24/97	---	---	---	---	---	---	---	---	---	
	3/16/98	---	---	---	---	---	---	---	---	---	
	4/21/98	---	---	---	---	---	---	---	---	---	
	(11.61)	7/22/98	---	---	---	---	---	---	---	---	
	12/22/98	NLPH	7.81	3.80	<50	<2.5	<0.5	<0.5	<0.5	<0.5	
	2/26/99	NLPH	7.61	4.00	<50	<2.5	<0.5	<0.5	<0.5	<0.5	
	5/18/99	NLPH	8.00	3.61	<50	3.98	<0.5	<0.5	<0.5	<0.5	
	8/3/99	NLPH	6.05	5.56	<50	<2.5	<0.5	<0.5	<0.5	<0.5	
MW9I (10.11)	11/2/95	NLPH	6.04	4.07	<50	<10	<0.5	<0.5	<0.5	<0.5	
	4/26/96	NLPH	5.27	4.84	<50	99	<0.5	<0.5	<0.5	<0.5	
	8/22/96	NLPH	5.66	4.45	<50	170	<0.5	<0.5	<0.5	<0.5	
	2/24/97	NLPH	5.24	4.87	120	9,100	<0.5	<0.5	<0.5	<0.5	
	3/16/98	NLPH	4.91	5.20	<200	59,000	13	<2.0	<2.0	<2.0	
	4/21/98	NLPH	5.08	5.03	<500	59,000	<5.0	<5.0	<5.0	<5.0	
	(13.14)	7/22/98	NLPH	5.44	7.70	<500	62,000	<5.0	<5.0	<5.0	<5.0
	12/22/98	NLPH	5.32	7.82	200	51,000	1.7	<0.5	<0.5	<0.5	
	2/26/99	NLPH	4.71	8.43	<500	9,700	<5.0	<5.0	<5.0	<5.0	
	5/18/99	NLPH	5.30	7.84	<1,000	3,730	<10	<10	<10	<10	
	8/3/99	NLPH	5.98	7.16	<50	21,900	<0.5	0.650	<0.5	<0.5	

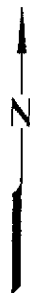
Notes:

- 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.
- * = MTBE confirmed using EPA method 8260.
- ** = Miscalculation in field. Field technician may have inadvertently monitored and sampled the wrong well. Resampled 5/27/99.

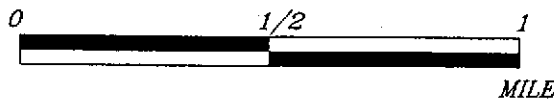


FN: 22930001

EXPLANATION



APPROXIMATE SCALE



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



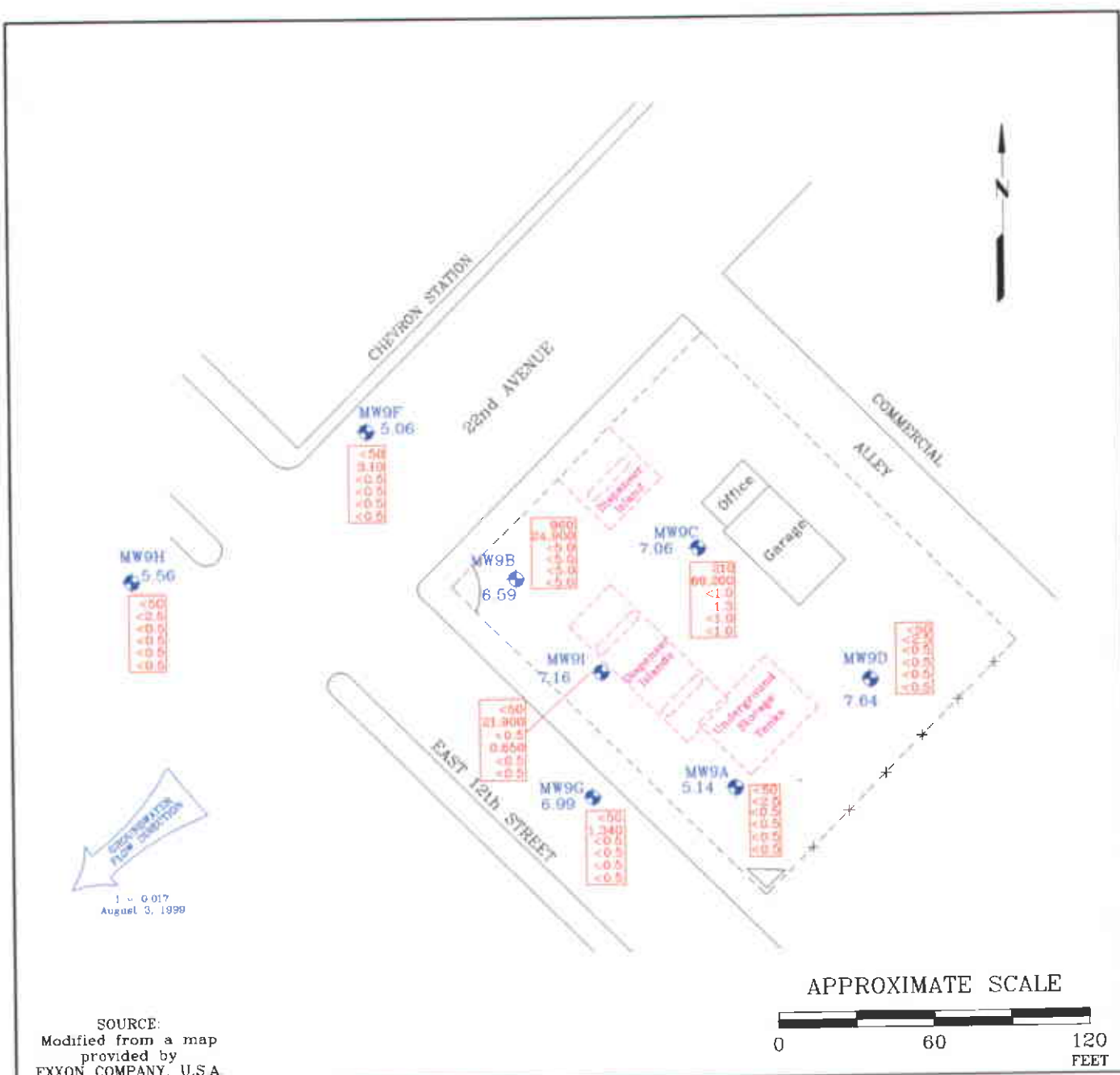
PROJECT ERI 2293

SITE VICINITY MAP

EXXON SERVICE STATION 7-0238
2200 East 12th Street
Oakland, California

PLATE

1



SOURCE:
 Modified from a map
 provided by
 EXXON COMPANY, U.S.A.

FN 22930002

EXPLANATION

- MW91 Groundwater Monitoring Well
- 7.16 Groundwater elevation in feet above mean sea level
- i = Interpreted Groundwater Gradient



GENERALIZED SITE PLAN

EXXON SERVICE STATION 7-0238
 2200 East 12th Street
 Oakland, California

PROJECT NO.

2293

PLATE

2

August 25, 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 dewateres 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. Romac 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.

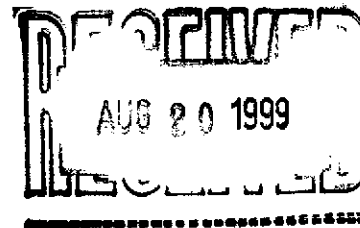
ATTACHMENT B

**LABORATORY ANALYSIS REPORT
AND CHAIN OF CUSTODY RECORD**



Sequoia Analytical

885 Jarvis Drive
Morgan Hill, CA 95037
(408) 776-9600
FAX (408) 782-6308



August 16, 1999

Scott Graham
Environmental Resolutions (Exxon)
73 Digital Drive, Suite 100
Novato, CA 94949

RE: Exxon 7-0238/9080173

Dear Scott Graham

Enclosed are the results of analyses for sample(s) received by the laboratory on August 4, 1999. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Ron Chew
Project Manager

CA ELAP Certificate Number 1210





Environmental Resolutions (Exxon) 75 Digital Drive, Suite 100 Novato, CA 94949	Project: Exxon Project Number: 7-0238 Project Manager: Scott Graham	Sampled: 8/3/99 Received: 8/4/99 Reported: 8/16/99
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ANALYTICAL REPORT FOR 9080173

Sample Description	Laboratory Sample Number	Sample Matrix	Date Sampled
MW9 A	9080173-01	Water	8/3/99
MW9 B	9080173-02	Water	8/3/99
MW9 C	9080173-03	Water	8/3/99
MW9 D	9080173-04	Water	8/3/99
MW9 F	9080173-05	Water	8/3/99
MW9 G	9080173-06	Water	8/3/99
MW9 H	9080173-07	Water	8/3/99
MW9 I	9080173-08	Water	8/3/99
	9080173-09	Water	8/3/99





Environmental Resolutions (Exxon) 73 Digital Drive, Suite 100 Novato, CA 94949	Project: Exxon Project Number: 7-0238 Project Manager: Scott Graham	Sampled: 8/3/99 Received: 8/4/99 Reported: 8/16/99
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
W9 A								
				9080173-01			Water	
Purgeable Hydrocarbons	9080433	8/12/99	8/11/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	8/12/99		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		105000 105	%	
W9 B								
				9080173-02			Water	
Purgeable Hydrocarbons	9080434	8/12/99	8/11/99		500	960	ug/l	1
Benzene	"	"	"		5.00	ND	"	
Toluene	"	"	"		5.00	ND	"	
Ethylbenzene	"	"	"		5.00	ND	"	
Xylenes (total)	"	"	"		5.00	ND	"	
Methyl tert-butyl ether	"	"	8/12/99		2500	24900	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		108	%	
W9 C								
				9080173-03			Water	
Purgeable Hydrocarbons	9080434	8/12/99	8/11/99		100	210	ug/l	
Benzene	"	"	"		1.00	ND	"	
Toluene	"	"	"		1.00	1.30	"	
Ethylbenzene	"	"	"		1.00	ND	"	
Xylenes (total)	"	"	"		1.00	ND	"	
Methyl tert-butyl ether	"	"	8/12/99		2500	69200	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		125	%	
W9 D								
				9080173-04			Water	
Purgeable Hydrocarbons	9080386	8/11/99	8/11/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		94.0	%	
W9 F								
				9080173-05			Water	
Purgeable Hydrocarbons	9080434	8/12/99	8/12/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	





Environmental Resolutions (Exxon) 73 Digital Drive, Suite 100 Novato, CA 94949	Project: Exxon Project Number: 7-0238 Project Manager: Scott Graham	Sampled: 8/3/99 Received: 8/4/99 Reported: 8/16/99
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**Total Purgeable Hydrocarbons (C6-C12), BTEX and MTBE by DHS LUFT
Sequoia Analytical - Morgan Hill**

Analyte	Batch Number	Date Prepared	Date Analyzed	Surrogate Limits	Reporting Limit	Result	Units	Notes*
W9 F (continued)								
Methyl tert-butyl ether	9080434	8/12/99	8/12/99		2.50	3.10	ug/l	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		98.0	%	
W9 G								
Purgeable Hydrocarbons	9080434	8/12/99	8/11/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	8/12/99		250	1340	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	8/11/99	70.0-130		120	%	
MW9 H								
Purgeable Hydrocarbons	9080386	8/11/99	8/11/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		102	%	
W9 I								
Purgeable Hydrocarbons	9080434	8/12/99	8/11/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	0.650	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	8/12/99		2500	21900	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	8/11/99	70.0-130		126	%	
TB								
Purgeable Hydrocarbons	9080386	8/11/99	8/11/99		50.0	ND	ug/l	
Benzene	"	"	"		0.500	ND	"	
Toluene	"	"	"		0.500	ND	"	
Ethylbenzene	"	"	"		0.500	ND	"	
Xylenes (total)	"	"	"		0.500	ND	"	
Methyl tert-butyl ether	"	"	"		2.50	ND	"	
Surrogate: a,a,a-Trifluorotoluene	"	"	"	70.0-130		104	%	





Sequoia Analytical

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Environmental Resolutions (Exxon) 73 Digital Drive, Suite 100 Novato, CA 94949	Project: Exxon Project Number: 7-0238 Project Manager: Scott Graham	Sampled: 8/3/99 Received: 8/4/99 Reported: 8/16/99
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Total Purgeable Hydrocarbons (C6-C10), Benzene, Toluene, Ethylbenzene, Xylenes, and Methyl tert-Butyl Ether (MTBE) by DHS, DDT, DDE, DDD, and Dieldrin
Sequoia Analytical - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
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Batch: 9080386	Date Prepared: 8/11/99	Extraction Method: EPA 5030B (P/T)								
Blank	9080386-BLK1									
Purgeable Hydrocarbons	8/11/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	2.50				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.80	"	70.0-130	88.0			

LCS	9080386-BS1									
Benzene	8/11/99	10.0		8.70	ug/l	70.0-130	87.0			
Toluene	"	10.0		8.70	"	70.0-130	87.0			
Ethylbenzene	"	10.0		8.70	"	70.0-130	87.0			
Xylenes (total)	"	30.0		26.0	"	70.0-130	86.7			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.50	"	70.0-130	85.0			

Matrix Spike	9080386-MS1	9080034-02								
Benzene	8/11/99	10.0	ND	9.10	ug/l	60.0-140	91.0			
Toluene	"	10.0	ND	8.90	"	60.0-140	89.0			
Ethylbenzene	"	10.0	ND	9.00	"	60.0-140	90.0			
Xylenes (total)	"	30.0	ND	27.0	"	60.0-140	90.0			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.80	"	70.0-130	88.0			

Matrix Spike Dup	9080386-MSD1	9080034-02								
Benzene	8/11/99	10.0	ND	9.00	ug/l	60.0-140	90.0	25.0	1.10	
Toluene	"	10.0	ND	8.70	"	60.0-140	87.0	25.0	2.27	
Ethylbenzene	"	10.0	ND	8.90	"	60.0-140	89.0	25.0	1.12	
Xylenes (total)	"	30.0	ND	27.0	"	60.0-140	90.0	25.0	0	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		8.00	"	70.0-130	80.0			

Batch: 9080433	Date Prepared: 8/12/99	Extraction Method: EPA 5030B (P/T)								
Blank	9080433-BLK1									
Purgeable Hydrocarbons	8/12/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Xylenes (total)	"			ND	"	0.500				
Methyl tert-butyl ether	"			ND	"	2.50				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.50	"	70.0-130	95.0			





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Environmental Resolutions (Exxon) 73 Digital Drive, Suite 100 Novato, CA 94949	Project: Exxon Project Number: 7-0238 Project Manager: Scott Graham	Sampled: 8/3/99 Received: 8/4/99 Reported: 8/16/99
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Environmental Resolutions (Exxon) - Groundwater Monitoring and Remediation - Phase 1 - Control
Site: 9080433 - Morgan Hill

Analyte	Date Analyzed	Spike Level	Sample Result	QC Result	Units	Reporting Limit Recov. Limits	Recov. %	RPD Limit	RPD %	Notes*
BS										
Purgeable Hydrocarbons	8/12/99	250		254	ug/l	70.0-130	102			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		12.4	"	70.0-130	124			
Matrix Spike										
Purgeable Hydrocarbons	8/12/99	250	ND	236	ug/l	60.0-140	94.4			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.0	"	70.0-130	100			
Matrix Spike Dup										
Purgeable Hydrocarbons	8/12/99	250	ND	220	ug/l	60.0-140	88.0	25.0	7.02	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.80	"	70.0-130	98.0			
Batch: 9080434										
			Date Prepared: 8/12/99			Extraction Method: EPA 5030B [P/T]				
Blank										
Purgeable Hydrocarbons	8/12/99			ND	ug/l	50.0				
Benzene	"			ND	"	0.500				
Toluene	"			ND	"	0.500				
Ethylbenzene	"			ND	"	0.500				
Alkenes (total)	"			ND	"	0.500				
Diethyl tert-butyl ether	"			ND	"	2.50				
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.90	"	70.0-130	99.0			
BS										
Purgeable Hydrocarbons	8/12/99	250		270	ug/l	70.0-130	108			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.60	"	70.0-130	96.0			
BS Dup										
Purgeable Hydrocarbons	8/12/99	250		272	ug/l	70.0-130	109	25.0	0.922	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.1	"	70.0-130	101			
Matrix Spike										
Purgeable Hydrocarbons	8/12/99	250	ND	270	ug/l	60.0-140	108			
Surrogate: a,a,a-Trifluorotoluene	"	10.0		10.0	"	70.0-130	100			
Matrix Spike Dup										
Purgeable Hydrocarbons	8/12/99	250	ND	267	ug/l	60.0-140	107	25.0	0.930	
Surrogate: a,a,a-Trifluorotoluene	"	10.0		9.90	"	70.0-130	99.0			





Environmental Resolutions (Exxon) 73 Digital Drive, Suite 100 Novato, CA 94949	Project: Exxon Project Number: 7-0238 Project Manager: Scott Graham	Sampled: 8/3/99 Received: 8/4/99 Reported: 8/16/99
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Notes and Definitions

Note

1 Chromatogram Pattern: Unidentified Hydrocarbons C6-C12

DET Analyte DETECTED

ND Analyte NOT DETECTED at or above the reporting limit

NR Not Reported

DR Sample results reported on a dry weight basis

Recov. Recovery

RD Relative Percent Difference





Sequoia Analytical
 680 Chesapeake Dr.
 Redwood City, CA 94063
 (650) 364-9600 • FAX (650) 364-9233

EXXON COMPANY, U.S.A.

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

CHAIN OF CUSTODY

Consultant's Name: ERI / Blaine Tech Services, Inc. Page 1 of 1

Address: 73 Digital Dr, Suite 100, Novato, CA 94949 Site Location: 2200 E. 12th St, Oakland

Project #: 990803-S2 Consultant Project #: _____ Consultant Work Release #: 19900938

Project Contact: Scott Graham Phone #: (415) 382-5989 Laboratory Work Release #: _____

EXXON Contact: Marla Guensler Phone #: (925) 246-8776 EXXON RAS #: 7-0238

Sampled by (print): RPS Sampler's Signature: [Signature]

Shipment Method: _____ Air Bill #: _____

TAT: 24 hr 48 hr 72 hr 96 hr Standard (10 day) 9080173 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: _____
11 MW9 A	8/3/99	14:12	water	HW	3	01	X			7	
MW9 B		15:00				02					
MW9 C		14:30				03					
MW9 D		13:40				04					
MW9 E		13:05				05					
MW9 G		13:20				06					
MW9 H		12:45				07					
MW9 I		14:43				08					
TB		—			2	09					

RELINQUISHED BY / AFFILIATION	Date	Time	ACCEPTED / AFFILIATION	Date	Time	Additional Comments
<u>[Signature]</u> BTS	8/4/99	8:58	<u>[Signature]</u>	8/4/99	8:58	
<u>[Signature]</u>	8/3/99		TJT (MH) / SA	8.4.99	11:56	

Pink - Client
Yellow - Sequoia
White - Sequoia