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**LETTER REPORT**  
**QUARTERLY GROUNDWATER MONITORING**  
Fourth Quarter 1993  
at  
Exxon Station 7-7003  
349 Main Street  
Pleasanton, California

130015.01

12-27-93

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December 27, 1993  
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130015.01

Ms. Marla D. Guensler  
Exxon Company U.S.A.  
2300 Clayton Road, Suite 1250  
P.O. Box 4032  
Concord, California 94520

Subject: Letter Report, Quarterly Groundwater Monitoring, Fourth Quarter 1993 at  
Exxon Station 7-7003, 349 Main Street, Pleasanton, California

Ms. Guensler:

As requested by Exxon Company U.S.A. (Exxon), this letter report summarizes the methods and results of the fourth quarter 1993 groundwater monitoring performed by RESNA Industries Inc. (RESNA) at the above-referenced subject site. The Exxon site is located at 349 Main Street on the southwestern corner of the intersection of Angela and Main Streets in Pleasanton, California, as shown on Plate 1, Site Vicinity Map.

The objectives of this quarterly monitoring are to evaluate the groundwater flow direction and gradient, and trends in concentrations of gasoline hydrocarbons in the local groundwater associated with former and existing used-oil, and three former and existing gasoline, underground storage tanks (USTs) at the site.

Prior to the present monitoring, RESNA, formerly Applied GeoSystems (AGS), performed an environmental investigation related to the removal and replacement of three gasoline USTs and one used-oil UST in August 1989 (AGS, October 1, 1989). Additionally, RESNA performed an environmental investigation between January and June 1990 that included drilling 13 boreholes around the former gasoline UST location and adjacent to the former used-oil UST, installing groundwater monitoring wells MW-1 through MW-5 in five of the boreholes, and analyzing soil and groundwater samples (AGS, August 1, 1990). AGS drilled five boreholes north and northwest of the former gasoline USTs and installed groundwater monitoring wells MW-6 and MW-7, and vapor extraction well VE-1 between February and March 1991 (AGS, October 24, 1991). Quarterly monitoring at the site began in the first quarter 1990 (AGS, August 1, 1990). RESNA is currently conducting an interim remedial investigation which included the installation of one groundwater monitoring well (MW-8)

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

and two vapor extraction wells (VE-2 and VE-3), a vapor extraction test, and a pumping test. The report will be sent under separate cover. The results of previous environmental investigations performed at the site are presented in the reports listed in the references section. The locations of the groundwater monitoring wells and pertinent site features are shown on the Generalized Site Plan (Plate 2).

Groundwater Sampling and Gradient Evaluation *not sampled*

For the latest quarterly groundwater monitoring, RESNA personnel collected groundwater monitoring data from groundwater monitoring wells MW-1 through MW-8, and vapor extraction wells VE-1 through VE-3 on November 17 and 18, 1993. During field work at the site, RESNA personnel measured depth to water (DTW) levels in the groundwater monitoring wells and vapor extraction wells, subjectively analyzed water from the wells for the presence of free-phase hydrocarbons, and purged and sampled groundwater from the eight groundwater monitoring wells and three vapor extraction wells. Field methods used by RESNA personnel are described RESNA's Groundwater Sampling Protocol (RESNA, August 2, 1993). Vapor well VW-3 did not recover to 80% of the initial DTW after purging and was not sampled.

RESNA calculated groundwater elevations for each well by subtracting the measured DTW from the elevation of the wellhead. The measured DTW levels, wellhead elevations, and groundwater elevations for this and previous quarterly monitoring at the site are summarized in Table 1, Cumulative Groundwater Monitoring Data. Based on the November 17, 1993, groundwater elevation data, the interpreted local groundwater gradient and flow direction is approximately 0.08 toward the northwest. The Groundwater Gradient Map (Plate 3) shows the interpreted local groundwater gradient for this quarter, which is generally consistent with those previously interpreted.

No evidence of free-phase hydrocarbons or hydrocarbon odor was observed in the water samples collected for subjective analysis from the eight groundwater monitoring wells and three vapor extraction wells. Results of the subjective analyses are summarized in Table 1.

The eight groundwater monitoring wells and three vapor extraction wells were purged and sampled in accordance with RESNA's Groundwater Sampling Protocol (RESNA, August 2, 1993). Well purge data sheets reporting the monitored parameters, temperature, pH, conductivity, and turbidity, for groundwater monitoring wells MW-1 through MW-8 and vapor extraction wells VE-1 through VE-3 are included on the Well Purge Data Sheets in Appendix A.

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

**Results of Laboratory Analysis**

Groundwater samples from the eight groundwater monitoring wells and two vapor extraction wells were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and the gasoline constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX) using modified Environmental Protection Agency (EPA) Methods 5030/8015/8020. In addition, groundwater from wells MW-1 and MW-4 were analyzed for volatile organic compounds (VOCs) using EPA Method 8010. The samples were analyzed by Pace Incorporated laboratories (California State Certification Number 1282) in Novato, California. The chain of custody record and laboratory analysis sheets for the monitoring wells included in Appendix B.

The chemical analytical results of this and previous, quarterly monitoring events are summarized in Table 2, Cumulative Results of Laboratory Analyses of Groundwater Samples. Graphic representations of TPHg and benzene concentrations in the local groundwater for this quarter are shown on Plate 4, Hydrocarbons and Volatile Organic Compounds in Groundwater.

Results of this quarter's laboratory analyses of groundwater samples from groundwater monitoring wells MW-1 through MW-8, and vapor extraction wells VE-1 and VE-2 indicate:

- TPHg was not detected at the method detection limit (MDL) of 50 parts per billion (ppb) in wells MW-3 through MW-7;
- TPHg was detected from monitoring wells MW-1, MW-2, MW-8, and vapor extraction wells VE-1 and VE-2 at concentrations ranging from 78 ppb (MW-8) to 5,900 (MW-1);
- benzene was not detected at the MDL of 0.5 ppb from wells MW-3, MW-4, MW-5, MW-7, and MW-8;
- benzene was detected from monitoring wells MW-1, MW-2, and MW-6, and vapor extraction wells VE-1 and VE-2 at concentrations ranging from 0.6 ppb (MW-6) to 24 ppb (MW-1). The detected concentrations of benzene in wells MW-1 and MW-2, and vapor extraction wells VE-2 and VE-3 are greater than the State of California Department of Health Services (DHS) Maximum Contaminant Level (MCL) of 1.0 ppb benzene for drinking water;
- toluene, ethylbenzene, and total xylenes from groundwater monitoring wells MW-1 through MW-8 and vapor extraction wells VE-1 and VE-2 were either

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

not detected at the MDL of 0.5 ppb or less than the DHS Drinking Water Action Level (DWAL) of 100 ppb toluene, and MCLs of 680 ppb ethylbenzene and 1,750 ppb total xylenes in drinking:

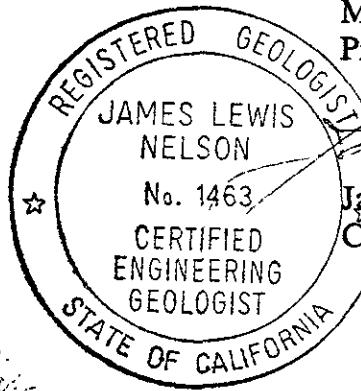
- VOCs were not detected at their MDLs in wells MW-1 and MW-4.

If you have any questions or comments, please call (408) 264-7723.

Sincerely,  
RESNA Industries Inc.

*Marc A Briggs*

Marc A Briggs  
Project Manager



*James L. Nelson*  
James L. Nelson  
C.E.G. No. 1463

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

Enclosures: References

- Plate 1: Site Vicinity Map  
Plate 2: Generalized Site Plan  
Plate 3: Groundwater Gradient Map (November 17, 1993)  
Plate 4: Hydrocarbons and Volatile Organic Compounds in  
Groundwater
- Table 1: Cumulative Groundwater Monitoring Data  
Table 2: Cumulative Results of Laboratory Analyses of Groundwater  
Samples

Appendix A, Well Purge Data Sheets

Appendix B, Laboratory Analysis Reports and Chain of Custody Records

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

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Alameda County Flood Control and Water Conservation District - Zone 7, January 16, 1991. Fall 1990 Groundwater Level Report.

Applied GeoSystems. July 20, 1989. Report on Soil Vapor Survey at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025-1V.

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Applied GeoSystems. February 26, 1991. Letter Report Fourth Quarter 1990 Groundwater Monitoring at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025-3.

Applied GeoSystems. October 24, 1991. Report on Supplemental Subsurface Environmental Investigation and Quarterly Monitoring at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025-3.

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Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

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California Department of Water Resources. 1974. Evaluation of Groundwater Resources, Livermore and Sunol Valleys. Bulletin No. 118-2, page 153.

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RESNA Industries Inc. May 28, 1992. Letter Report First Quarter 1992 Groundwater Monitoring at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025.05.

RESNA Industries Inc. September 10, 1992. Letter Report Second Quarter 1992 Groundwater Monitoring at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025.05.

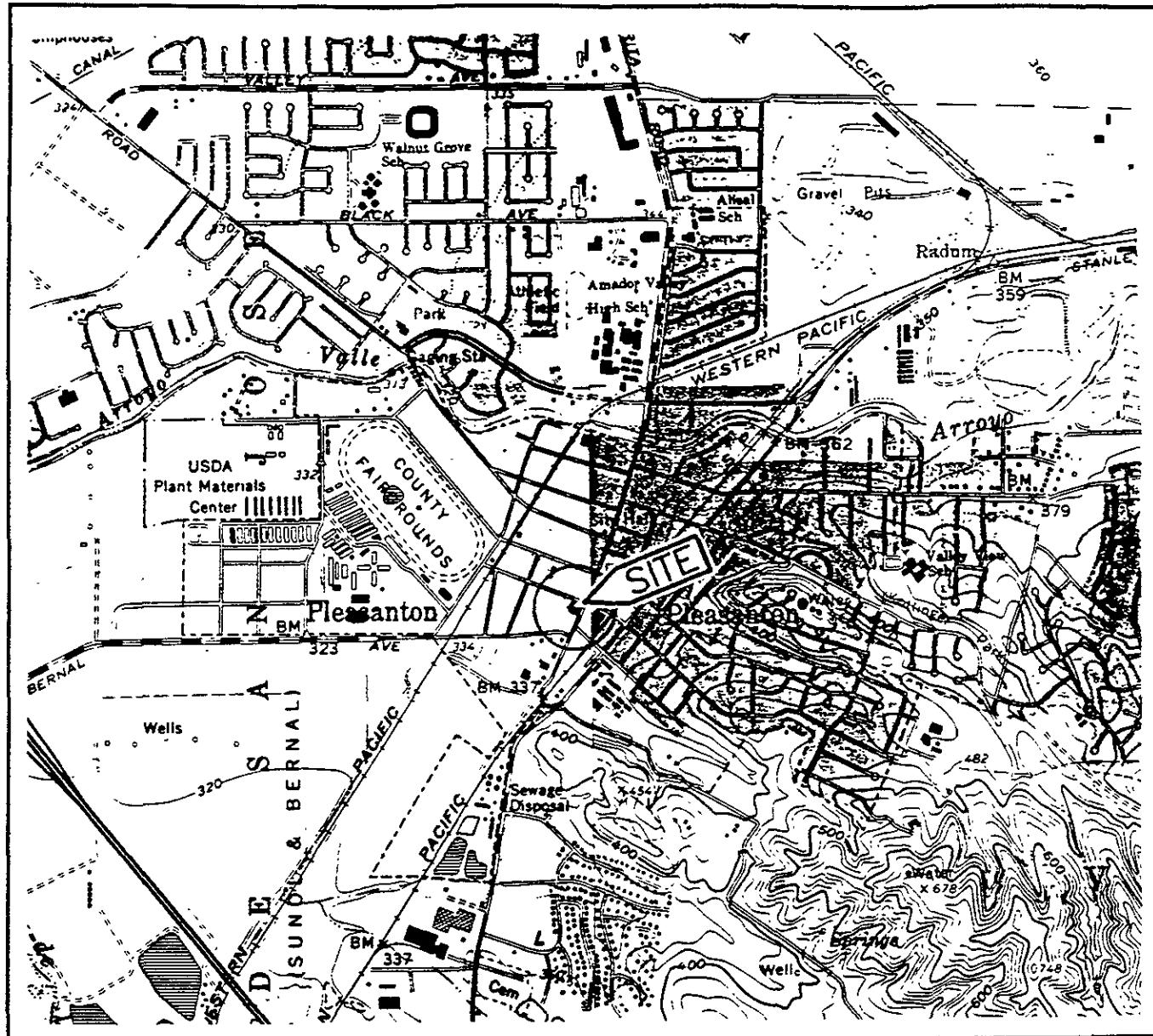
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RESNA Industries Inc. August 2, 1993. Letter Report, Quarterly Groundwater Monitoring, Second Quarter 1993 at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 130015.01.

RESNA Industries Inc. October 22, 1993. Letter Report, Quarterly Groundwater Monitoring, Third Quarter 1993 at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 130015.01.



Base: U.S. Geological Survey  
7.5-Minute Quadrangles  
Dublin/Livermore, California.  
Photorevised 1980

#### LEGEND

● = Site Location

#### Approximate Scale



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Working to Restore Nature

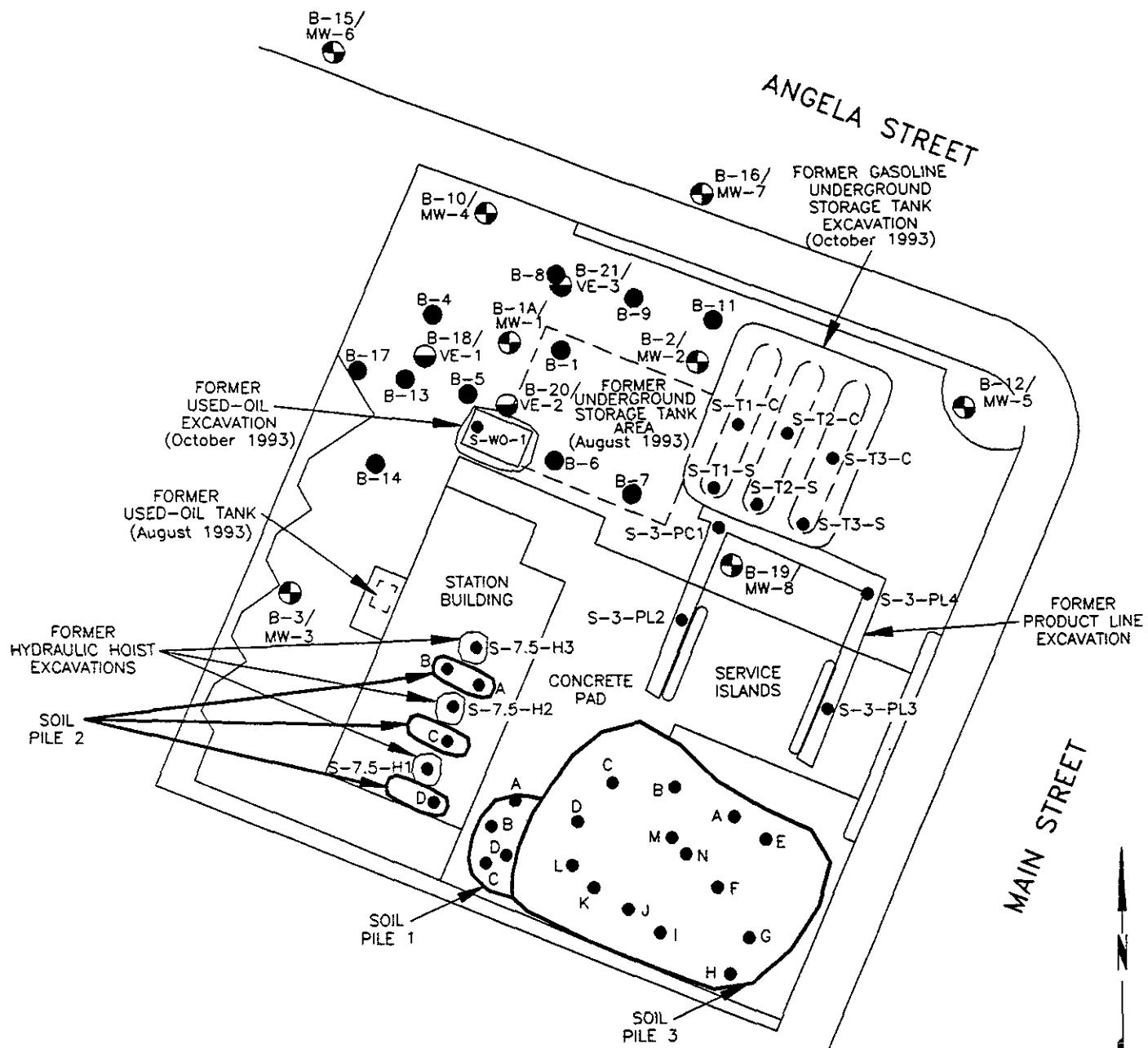
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SITE VICINITY MAP  
Exxon Station 7-7003  
349 Main Street  
Pleasanton, California

PLATE

1



EXPLANATION

B-17 ● = Soil boring

B-19/  
MW-8 ○ = Monitoring well

B-21/  
VE-3 ○ = Vapor extraction well

□ = Excavated areas

○ = Soilpiles

● = Sample locations

Approximate Scale



Source: Surveyed by Ron Archer Civil Engineer, Inc., June 1990, April 1991 and May 1993.

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**GENERALIZED SITE PLAN**

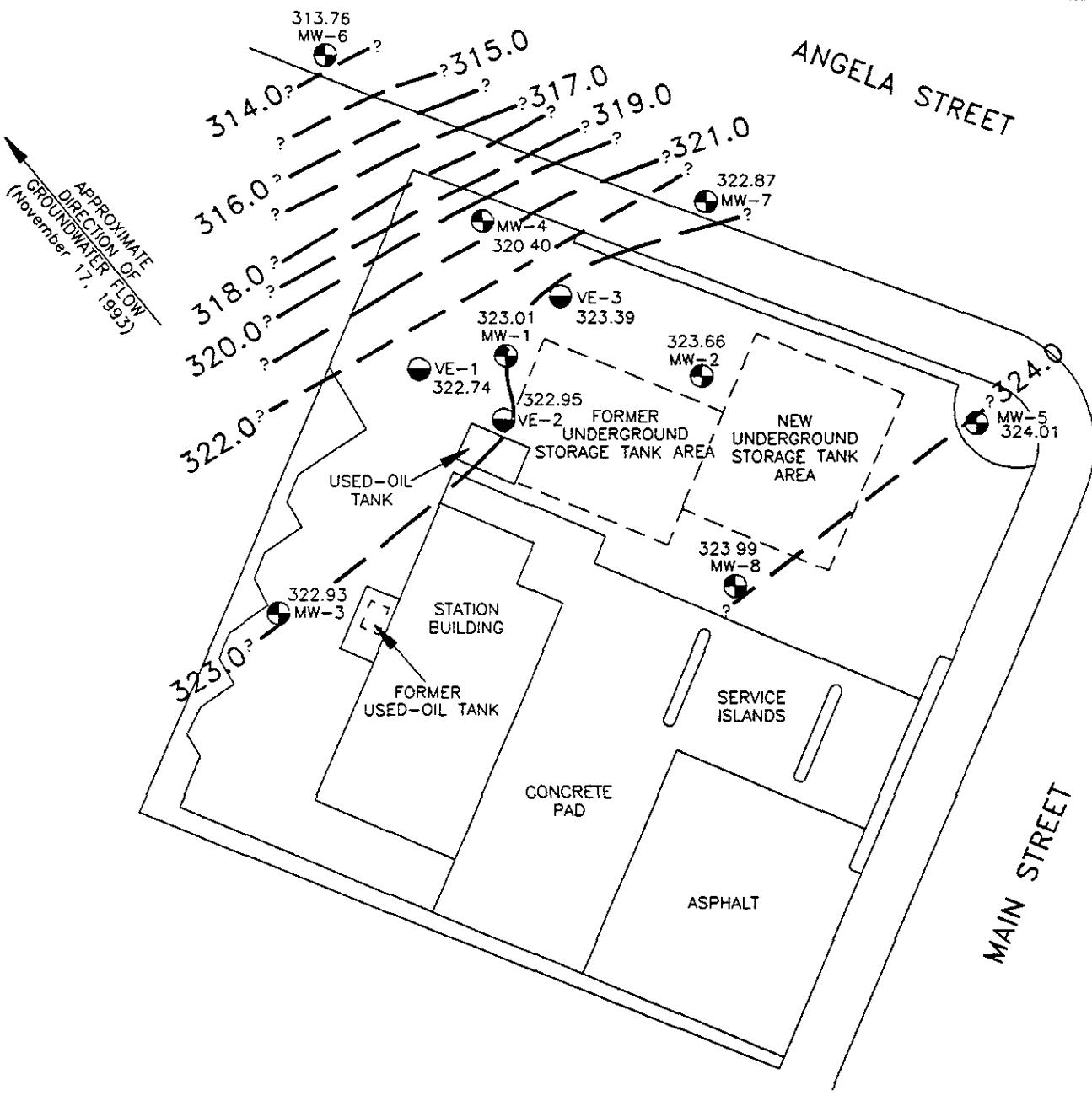
Exxon Station 7-7003  
349 Main Street  
Pleasanton, California

**PLATE**

**2**

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130015.01



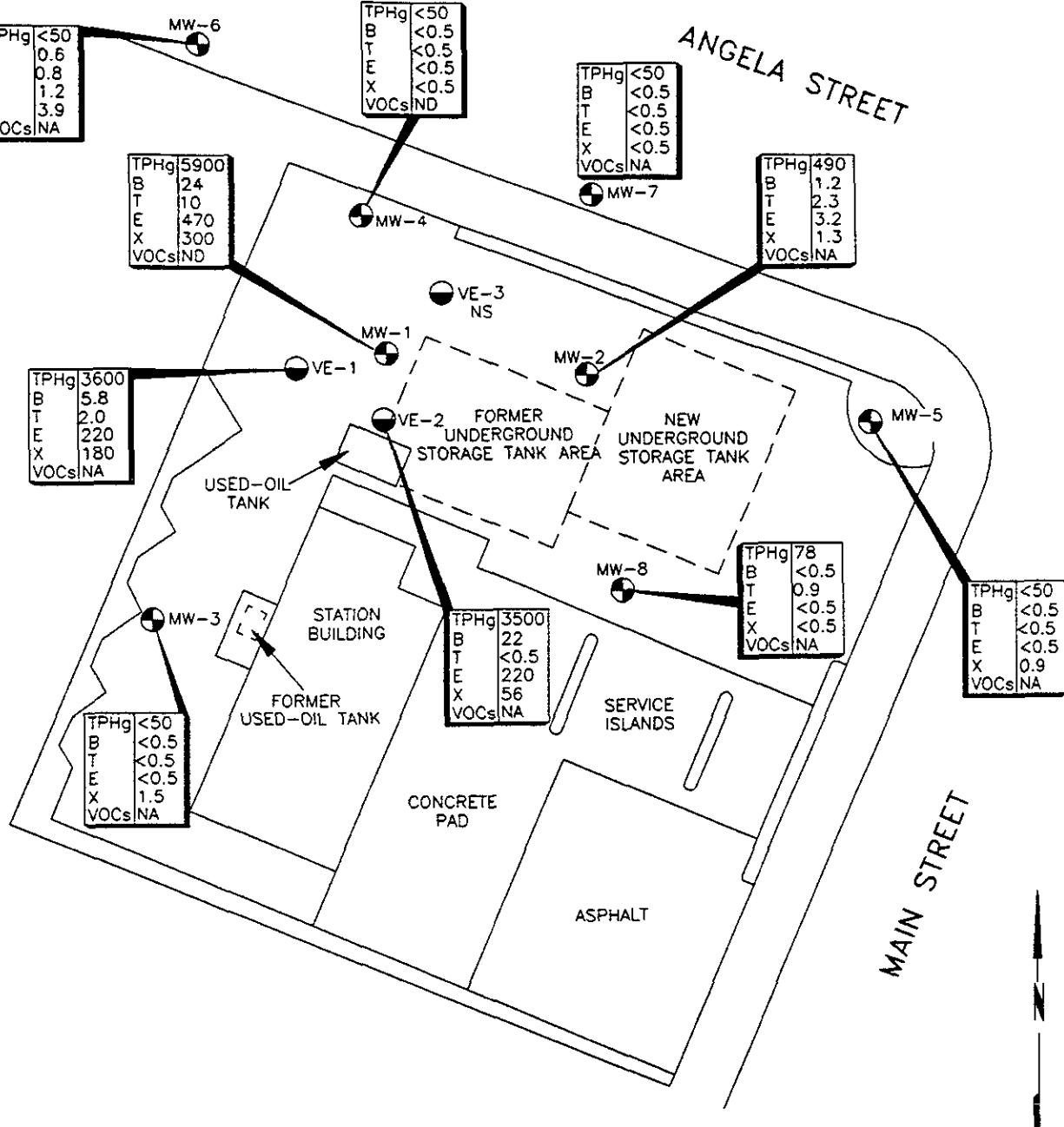
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GROUNDWATER GRADIENT MAP  
Exxon Station 7-7003  
349 Main Street  
Pleasanton, California

PLATE 3

Source: Surveyed by Ron Archer Civil Engineer, Inc., June 1990, April 1991 and May 1993.



#### EXPLANATION

MW-8 = Monitoring well

VE-3 = Vapor extraction well

TPHg 5,900	B 24	T 10	E 470	X 300	ND
------------	------	------	-------	-------	----

= Concentrations of Hydrocarbons and Volatile Organic Compounds in groundwater in parts per billion, November 18, 1993

ND = Not detected

NA = Not analyzed

NS = Not sampled

Approximate Scale



Source: Surveyed by Ron Archer Civil Engineer, Inc., June 1990, April 1991 and May 1993.

Quarterly Groundwater Monitoring  
 Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
 130015.01

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING DATA**  
 Exxon Station 7-7003  
 Pleasanton, California  
 Page 1 of 6  
 (See notes on page 6)

WELL	DATE	WELL ELEVATION	DEPTH TO WATER	GROUNDWATER ELEVATION	FLOATING PRODUCT
MW-1	02/23/90	343.83	26.08	317.75	None
	06/15/90		26.49	317.34	None
	08/90		26.47	317.36	None
	12/18/90		28.00	315.83	None
	03/19/91		23.63	320.20	None
	06/27/91		22.11	321.72	None
	09/26/91		27.75	316.08	None
	01/10/92		25.61	318.22	None
	03/12/92		22.52	321.31	None
	06/09/92		21.53	322.30	None
	09/28/92		29.84	313.99	None
	12/12/92		23.86	319.97	None
	02/02/93		19.00	324.83	None
	06/08/93		16.62	327.21	None
	09/22/93		19.63	324.20	None
	11/17/93		20.82	323.01	None
MW-2	02/23/90	344.22	26.31	317.91	None
	06/15/90		26.25	317.97	None
	08/90		26.15	318.07	None
	12/18/90		27.94	316.28	None
	03/19/91		23.41	320.81	None
	06/27/91		21.63	322.59	None

Quarterly Groundwater Monitoring  
 Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
 130015.01

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING DATA**  
 Exxon Station 7-7003  
 Pleasanton, California  
 Page 2 of 6  
 (See notes on page 6)

WELL	DATE	WELL ELEVATION	DEPTH TO WATER	GROUNDWATER ELEVATION	FLOATING PRODUCT
MW-2	09/26/91		27.19	317.03	None
	01/10/92		25.67	318.55	None
	03/12/92		22.28	321.94	None
	06/09/92		21.17	323.05	None
	09/28/92		29.58	314.64	None
	12/12/92		Not Measured		
	02/02/93		18.69	325.53	None
	06/08/93		16.32	327.90	None
	09/22/93		19.43	324.79	None
	11/17/93		20.56	323.66	None
MW-3		342.90			
	02/23/90		24.78	318.12	None
	06/15/90		25.29	317.61	None
	08/90		25.40	317.50	None
	12/18/90		26.84	316.06	None
	03/19/91		22.13	320.77	None
	06/27/91		21.04	321.86	None
	09/26/91		26.63	316.27	None
	01/10/92		24.26	318.64	None
	03/12/92		21.60	321.30	None
	06/09/92		20.88	322.02	None
	09/28/92		28.67	314.23	None
	12/12/92		20.73	322.17	None
	02/02/93		19.30	323.60	None

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

TABLE 1  
CUMULATIVE GROUNDWATER MONITORING DATA  
Exxon Station 7-7003  
Pleasanton, California  
Page 3 of 6  
(See notes on page 6)

WELL	DATE	WELL ELEVATION	DEPTH TO WATER	GROUNDWATER ELEVATION	FLOATING PRODUCT
MW-3	06/08/93		15.89	327.01	None
	09/22/93		18.63		None
	11/17/93		19.97		None
MW-4	06/15/90	343.38	30.94	312.44	None
	08/90		31.21		None
	12/18/90		32.86		None
	03/19/91		26.76		None
	06/27/91		25.91		None
	09/26/91		32.29		None
	01/10/92		29.06		None
	03/12/92		24.25		None
	06/09/92		25.00		None
	09/28/92		34.41		None
	12/12/92		30.77		None
	02/02/93		21.03		None
	06/08/93		18.35		None
	09/22/93		21.86		None
	11/17/93		22.98		None
MW-5	06/15/90	345.20	26.94	318.26	None
	08/90		26.90		None
	12/18/90		28.31		None
	03/19/91		23.98		None

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

TABLE 1  
CUMULATIVE GROUNDWATER MONITORING DATA  
Exxon Station 7-7003  
Pleasanton, California  
Page 4 of 6  
(See notes on page 6)

WELL	DATE	WELL ELEVATION	DEPTH TO WATER	GROUNDWATER ELEVATION	FLOATING PRODUCT
MW-5	06/27/91	--	22.41	322.79	None
	09/26/91		27.77	317.43	None
	01/10/92		26.38	318.82	None
	03/12/92		22.08	323.12	None
	06/09/92		31.98	313.22	None
	09/28/92		30.26	314.94	None
	12/12/92		27.20	318.00	None
	02/02/93		20.01	325.19	None
	06/08/93		16.80	328.40	None
	09/22/93		20.28	324.92	None
	11/17/93		21.19	324.01	None
MW-6	03/19/91	342.25	34.42	307.83	None
	06/27/91		35.01	307.24	None
	09/26/91		40.34	301.91	None
	01/10/92		36.20	306.05	None
	03/12/92		31.95	310.30	None
	06/09/92		33.22	309.03	None
	09/28/92		40.96	301.29	None
	12/12/92		342.25	0.00	None
	02/02/93		26.51	315.74	None
	06/08/93		22.62	319.63	None
	09/22/93		26.74	315.51	None
	11/17/93		28.49	313.76	None

Quarterly Groundwater Monitoring  
 Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
 130015.01

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING DATA**  
 Exxon Station 7-7003  
 Pleasanton, California  
 Page 5 of 6  
 (See notes on page 6)

WELL	DATE	WELL ELEVATION	DEPTH TO WATER	GROUNDWATER ELEVATION	FLOATING PRODUCT
MW-7	03/19/91	343.62	24.68	318.94	None
	06/27/91		23.10	320.52	None
	09/26/91			Not Measured	
	01/10/92		26.98	316.64	None
	03/12/92		21.86	321.76	None
	06/09/92		22.32	321.30	None
	09/28/92		31.92	311.70	None
	12/12/92		28.80	314.82	None
	02/02/93		19.50	324.12	None
	06/08/93		16.72	326.90	None
	09/22/93		19.90	323.72	None
	11/17/93		20.75	322.87	None
MW-8	06/08/93	344.00	15.78	328.22	None
	09/22/93		18.86	325.14	None
	11/17/93		20.01	323.99	None
VE-1	09/28/92	343.38	31.92	311.46	None
	12/12/92			Not Measured	
	02/02/93			Not Measured	
	06/08/93		16.44	326.94	None
	09/22/93		19.47	323.91	None
	11/17/93		20.64	322.74	None

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

**TABLE 1**  
**CUMULATIVE GROUNDWATER MONITORING DATA**  
Exxon Station 7-7003  
Pleasanton, California  
Page 6 of 6  
(See notes on page 6)

WELL	DATE	WELL ELEVATION	DEPTH TO WATER	GROUNDWATER ELEVATION	FLOATING PRODUCT
VE-2	06/08/93	343.39	16.20	327.19	None
	09/22/93		19.23	324.16	None
	11/17/93		20.44	322.95	None
VE-3	06/08/93	343.39	16.48	326.91	None
	09/22/93		18.96	324.43	None
	11/17/93		20.00	323.39	None

Elevation relative to Mean Sea Level (MSL).

Measurements in feet.

Surveyed by Ron Archer Civil Engineer, Inc.

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES

Exxon Station 7-7003  
Pleasanton, California  
Page 1 of 10  
(See notes on page 10)

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	LEAD (ppm)	TOG (ppm)	VOC
MW-1	02/23/90	3300	21	9.2	59	19	0.1	NA	NA
	06/15/90	1300	7.9	5.9	32	58	<0.05	NA	NA
	08/90	2500	77	280	50	250	<0.05	NA	NA
	12/18/90	390	9	2	43	400	<0.1	NA	NA
	03/19/91	4500	45	12	240	300	<0.1	NA	12.0 <sup>1</sup>
	06/27/91	710	5.4	2.6	29	34	<0.1	NA	ND
	09/26/91	290	1.9	<0.5	0.6	0.6	<0.1	NA	ND
	01/10/92	5400	52	15	690	496	<0.1	NA	6.1 <sup>1</sup>
	03/13/92	1400	87	22	1200	1000	NA	NA	2.1 <sup>5</sup>
									14 <sup>1</sup>
									1.2 <sup>4</sup>
									0.5 <sup>6</sup>
									0.8 <sup>3</sup>
	06/09/92	4500	27	5.9	400	300	<0.1	<5.0	ND

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES  
Exxon Station 7-7003  
Pleasanton, California  
Page 2 of 10  
(See notes on page 10)

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	LEAD (ppm)	TOG (ppm)	VOC
MW-1 cont.	09/29/92	60	<0.5	0.9	<0.5	<0.5	NA	<5.0	ND
	12/12/92	1400	53	18	1100	570	NA	<5.0	49 <sup>1</sup>
	02/03/93	10,000	61	27	900	840	NA	<5.0	2.2 <sup>5</sup>
	02/03/93								19 <sup>1</sup>
	06/09/93	7500	42	32	970	720	NA	<5.0	1.1 <sup>6</sup>
	09/23/93	6600	36	34	820	540	NA	<5.0	2.4 <sup>3</sup>
	11/18/93	5900	24	10	470	300	NA	NA	0.8 <sup>3</sup>
MW-2	02/23/90	650	3	2	0.98	6.5	0.008	NA	0.6 <sup>3</sup>
	06/15/90	670	<0.5	2.6	<0.5	<0.5	<0.05	NA	NA
	08/90	1300	24	130	37	170	<0.05	NA	NA
	12/18/90	470	<0.3	0.5	1	3	<0.1	NA	NA

PCF

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES  
Exxon Station 7-7003  
Pleasanton, California  
Page 3 of 10  
(See notes on page 10)

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLEMES	LEAD (ppm)	TOG (ppm)	VOC
MW-2	03/19/91	700	10	3.4	6.1	3.8	<0.1	NA	ND
	cont.	06/27/91	1400	8.7	2.1	8.8	<0.1	NA	ND
	09/26/91	300	<0.5	0.6	0.6	3.9	<0.1	NA	ND
	01/10/92	800	9.3	1.0	2.4	3.2	<0.1	NA	ND
	03/13/92	350	<0.5	0.6	.63	1.0	NA	NA	ND
	06/09/92	150	1.9	2.5	2.51	5.1	<0.1	NA	ND
	09/29/92	71	<0.5	<0.5	<0.5	<0.5	NA	NA	ND
	12/12/92					Not Sampled			
	02/03/93	720	3.9	8.2	21	20	NA	NA	NA
	06/09/93	160	0.5	3.3	5.7	2.0	NA	NA	NA
	09/23/93	240	0.7	5.6	4.0	2.6	NA	NA	NA
	11/18/93	490	1.2	2.3	3.2	1.3	NA	NA	NA
MW-3	02/23/90	<20	<0.5	<0.5	<0.5	<0.5	0.01	NA	NA
	06/15/90	200	<0.5	<0.5	<0.5	<0.5	<0.05	NA	NA
	08/90	3200	54	380	23	400	<0.05	NA	NA

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES

Exxon Station 7-7003  
Pleasanton, California

Page 4 of 10  
(See notes on page 10)

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	LEAD (ppm)	TOG (ppm)	VOC
MW-3	12/18/90	200	8	12	6	24	<0.1	<5.0	4.1 <sup>3</sup>
	cont.	<50	<0.5	<0.5	<0.5	<0.5	<0.1	<5.0	ND
	06/27/91	<50	<0.5	<0.5	<0.5	<0.5	<0.1	<5.0	ND
	09/26/91	<50	<0.5	<0.5	<0.5	<0.5	<0.1	<5.0	ND
	01/10/92	<50	<0.5	<0.5	<0.5	<0.5	<0.1	5.1	ND
	03/13/92	<50	<0.5	<0.5	<0.5	<0.5	NA	5.0	ND
	06/09/92	<50	<0.5	<0.5	<0.5	<0.5	<0.1	<5.0	ND
	09/29/92	<50	<0.5	<0.5	<0.5	<0.5	NA	<5.0	ND
	12/12/92	<50	<0.5	<0.5	<0.5	1.3	NA	<5.0	NA
	02/03/93	<50	<0.5	<0.5	<0.5	<0.5	NA	<5.0	NA
	06/08/93	<50	0.6	0.9	3.4	2.8	NA	<5.0	NA
	09/22/93	<50	<0.5	1.0	1.6	4.4	NA	*	NA
	11/18/93	<50	<0.5	<0.5	<0.5	1.5	NA	NA	NA
MW-4	06/15/90	<20	<0.5	<0.5	<0.5	<0.5	<0.05	NA	NA
	08/90	120	5.2	5.4	5.4	9.9	<0.05	NA	NA

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES

Exxon Station 7-7003

Pleasanton, California

Page 5 of 10

(See notes on page 10)

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	LEAD (ppm)	TOG (ppm)	VOC
MW-4	12/18/90	50	7	1	<0.3	2	<0.1	NA	NA
	03/19/91	160	1.8	0.8	2.2	11	<0.1	NA	ND
	06/27/91	<50	<0.5	<0.5	<0.5	<0.5	<0.1	NA	ND
	09/26/91	<50	<0.5	<0.5	<0.5	<0.5	<0.1	NA	1.0 <sup>4</sup>
	01/10/92	98	0.9	<0.5	7.6	4.4	<0.1	NA	1.0 <sup>4</sup>
	03/13/92	82	1.2	<0.5	5.3	4.3	NA	NA	ND
	06/09/92	<50	0.6	1.0	<0.5	2.5	<0.1	NA	0.7 <sup>4</sup>
	09/29/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	ND
	12/12/92	99	1.0	0.9	7.0	11	NA	NA	ND
	02/03/93	170	2.3	2.2	6.2	8.4	NA	NA	ND
	06/09/93	<50	0.7	0.9	0.7	<0.5	NA	NA	0.6 <sup>4</sup>
	09/23/93	59	0.8	2.0	3.1	5.3	NA	NA	ND
	11/18/93	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	ND
MW-5	06/15/90	<20	<0.5	<0.5	<0.5	<0.5	0.06	NA	NA
	08/90	120	9.7	12	7.6	17	<0.05	NA	NA

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES

Exxon Station 7-7003

Pleasanton, California

Page 6 of 10

(See notes on page 10)

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	LEAD (ppm)	TOG (ppm)	VOC
MW-5	12/18/90	50	2	3.5	2	8	<0.1	NA	NA
	03/19/91	160	<0.5	<0.5	<0.5	<0.5	<0.1	NA	0.5 <sup>1</sup>
	06/27/91	<50	<0.5	<0.5	<0.5	<0.5	<0.1	NA	ND
	09/26/91	<50	<0.5	<0.5	<0.5	<0.5	<0.1	NA	ND
	01/10/92	98	<0.5	<0.5	<0.5	0.6	<0.1	NA	ND
	03/13/92	82	<0.5	<0.5	<0.5	<0.5		NA	ND
	06/09/92					Not Sampled			
	09/29/92	<50		<0.5	<0.5	<0.5	NA	NA	ND
	12/12/92	210	0.9	11	0.5	3.1	NA	NA	NA
	02/03/93	70	<0.5	2.7	<0.5	0.9	NA	NA	NA
MW-6	06/09/93	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	09/22/93	<50	1.0	<0.5	1.1	2.1	NA	NA	NA
	11/18/93	<50	<0.5	<0.5	<0.5	0.9	NA	NA	NA
	03/19/91	<50	<0.5	<0.5	<0.5	<0.5	<0.1	NA	ND
	06/27/91	<50	2.6	1.8	0.8	<0.30	<0.1	NA	ND

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES

Exxon Station 7-7003  
Pleasanton, California

Page 7 of 10  
(See notes on page 10)

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	LEAD (ppm)	TOG (ppm)	VOC
MW-6	09/26/91	<50	<0.5	<0.5	<0.5	<0.5	<0.1	NA	ND
	01/10/92	<50	<0.5	<0.5	<0.5	<0.5	<0.1	NA	ND
	03/13/92	<50	<0.5	<0.5	NS	NS	NA	ND	ND
	06/09/92	<50	<0.5	<0.5	<0.5	<0.5	<0.1	NA	ND
	09/29/92	<50	<0.5	<0.5	0.9	0.9	NA	NA	ND
	12/12/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	02/02/93	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
	06/08/93	<50	0.6	0.7	1.7	1.8	NA	NA	NA
	09/22/93	<50	<0.5	<0.5	0.7	1.1	NA	NA	NA
	11/18/93	<50	0.6	0.8	1.2	3.9	NA	NA	NA
MW-7	03/19/91	140	<0.5	<0.5	<0.5	<0.5	<0.1	NA	0.7 <sup>1</sup>
	06/27/91	100	5.2	5.6	3.9	16	<0.1	NA	0.8 <sup>2</sup>
	09/26/91				Not Sampled				
	01/10/92	<50	<0.5	<0.5	<0.5	<0.5	<0.1	NA	ND

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES

Exxon Station 7-7003  
Pleasanton, California

Page 8 of 10  
(See notes on page 10)

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	LEAD (ppm)	TOG (ppm)	VOC
MW-7 cont.	03/13/92	120	<0.5	<0.5	<0.5	<0.5		NA	ND
	06/09/92	81	<0.5	<0.5	<0.5	<0.5	<0.1	NA	ND
	09/29/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	ND
	12/12/92	200	5.1	6.9	3.3	19	NA	NA	NA
	02/03/93	170	<0.5	6.6	0.6	1.7	NA	NA	NA
	06/09/93	<50	<0.5	0.8	<0.5	<0.5	NA	NA	NA
	09/22/93	<50	0.6	0.9	0.7	1.1	NA	NA	NA
	11/18/93	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA
MW-8	06/09/93	65	<0.5	1.1	0.8	1.7	NA	NA	NA
	09/23/93	110	4.1	8.9	6.7	14	NA	NA	NA
	11/18/93	78	<0.5	0.9	<0.5	<0.5	NA	NA	NA
VE-1	06/08/93	5800	<5.0	15	830	500	NA	NA	NA
	09/23/93	3700	5.4	21	380	240	NA	NA	NA
	11/18/93	3600	5.8	2.0	220	180	NA	NA	NA

Quarterly Groundwater Monitoring  
Exxon Station 7-7003, Pleasanton, California

December 27, 1993  
130015.01

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES  
Exxon Station 7-7003  
Pleasanton, California  
Page 9 of 10  
(See notes on page 10)

WELL	DATE	TPHg	BENZENE	TOLUENE	ETHYL-BENZENE	TOTAL XYLENES	LEAD (ppm)	TOG (ppm)	VOC
VE-2	06/08/93	7000	10	18	900	340	NA	NA	NA
	09/23/93	2600	15	33	240	82	NA	NA	NA
	11/18/93	3500	22	<0.5	220	56	NA	NA	NA
VE-3	06/08/93	130	3.1	3.1	18	15	NA	NA	NA
	09/23/93	130	11	7.3	13	32	NA	NA	NA
	11/18/93				Not Sampled				
	MCLs	---	1.0	---	680	1,750	---	---	---
	DWAL	---	---	100	---	---	---	---	---

TABLE 2  
CUMULATIVE RESULTS OF LABORATORY ANALYSES  
OF GROUNDWATER SAMPLES

Exxon Station 7-7003  
Pleasanton, California  
Page 10 of 10

Results in parts per billion (ppb) except TOG and lead.

ppm	:	parts per million
<	:	Less than the laboratory detection limit.
NA	:	Not Analyzed
ND	:	Compounds not detected. See laboratory analysis reports for individual detection limits.
---	:	Not Applicable
TPHg	:	Total petroleum hydrocarbons as gasoline analyzed using modified EPA method 5030/8015.
BTEX	:	Analyzed using modified EPA method 5030/8020.
TOG	:	Total oil and grease analyzed using EPA Standard Method 5520.
VOC	:	Volatile Organic Compounds analyzed using EPA method 8010.
*	:	Analyzed for total petroleum hydrocarbons as diesel using EPA method 3510/8015.
1	:	Chloroform
2	:	Bromodichloromethane
3	:	Tetrachloroethene
4	:	1,2-Dichloroethane
5	:	Methylene Chloride
6	:	Trichloroethene
MCLs	:	Maximum Contaminant Levels, DHS (October 1990).
DWAL	:	Drinking Water Action Level, DHS (October 1990).



**APPENDIX A**  
**WELL PURGE DATA SHEETS**

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 130015.01

Date: November 18, 1993

Page 1 of 1

Well No. MW-1

Time Started 1027

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
1027	Start purging MW-1				
1027	0	61.8	6.43	8.68	3.7
1035	12	65.1	6.45	9.04	1.4
1045	24	63.5	6.60	8.93	4.7
1056	36	65.8	6.54	9.10	4.5
1112	50	66.4	6.56	9.21	4.0
	Stop purging MW-1				

Notes:

Well Diameter (inches) : 4  
 Depth to Bottom (feet) : 39.15  
 Depth to Water - initial (feet) (11/17/93) : 20.82  
 Depth to Water - final (feet) : 21.20  
 % recovery : 98  
 Time Sampled : 1243  
 Gallons per Well Casing Volume : 11.96  
 Gallons Purged : 50  
 Well Casing Volume Purged : 4.2  
 Approximate Pumping Rate (gpm) : 1.11

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 130015.01

Date: November 18, 1993

Page 1 of 1

Well No. MW-2

Time Started 930

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
930	Start purging MW-2				
930	0	63.6	6.57	7.15	13.7
938	12	64.9	6.53	7.16	5.4
947	24	66.8	6.52	7.92	12.2
956	36	97.0	6.50	8.23	5.0
1005	49	65.5	6.69	8.20	3.0
	Stop purging MW-2				

Notes:

Well Diameter (inches) : 4  
 Depth to Bottom (feet) : 39.25  
 Depth to Water - initial (feet) (11/17/93) : 20.56  
 Depth to Water - final (feet) : 20.77  
 % recovery : 99  
 Time Sampled : 1415  
 Gallons per Well Casing Volume : 12.2  
 Gallons Purged : 49  
 Well Casing Volume Purged : 4.02  
 Approximate Pumping Rate (gpm) : 1.4

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 130015.01

Date: November 18, 1993

Page 1 of 1

Well No. MW-3

Time Started 1446

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
1446	Start purging MW-3				
1446	0	62.0	6.37	8.78	32.2
1451	12.5	63.5	6.38	8.29	11.1
1506	25	64.6	6.40	8.68	9.0
1515	37.5	63.0	6.58	8.45	4.8
1531	50	62.4	6.42	8.28	9.4
	Stop purging MW-3				

Notes:

Well Diameter (inches) : 4  
 Depth to Bottom (feet) : 38.97  
 Depth to Water - initial (feet) (11/17/93) : 19.97  
 Depth to Water - final (feet) : 21.19  
 % recovery : 94  
 Time Sampled : 1315  
 Gallons per Well Casing Volume : 12.40  
 Gallons Purged : 50  
 Well Casing Volume Purged : 4.03  
 Approximate Pumping Rate (gpm) : 1.11

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 130015.01

Date: November 17, 1993

Page 1 of 1

Well No. MW-4

Time Started 1724

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
1724	Start purging MW-4				
1724	0	60.6	6.48	8.29	19.0
1732	16	63.2	6.50	8.44	5.0
1744	32	65.3	6.53	8.40	194.4
1746	34	DRY			
1626	48	59.1	6.56	7.94	14.8
1432	55	DRY			
	Stop purging MW-4				

Notes:

Well Diameter (inches) : 4  
 Depth to Bottom (feet) : 47.50  
 Depth to Water - initial (feet) : 22.98  
 Depth to Water - final (feet) (11/18/93) : 23.68  
 % recovery : 97  
 Time Sampled : 1345  
 Gallons per Well Casing Volume : 16.01  
 Gallons Purged : 55  
 Well Casing Volume Purged : 3.4  
 Approximate Pumping Rate (gpm) : 1.6

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 130015.01

Date: November 17, 1993

Page 1 of 1

Well No. MW-5

Time Started 1643

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)					
1643	Start purging MW-5									
1643	0	62.1	6.56	4.55	12.5					
1647	8	63.9	6.62	4.21	8.6					
1654	16	63.7	6.68	3.97	2.1					
1659	24	64.9	6.81	4.30	3.1					
1704	32	65.1	6.82	4.15	1.3					
	Stop purging MW-5									
<b>Notes:</b>										
Well Diameter (inches) : 4										
Depth to Bottom (feet) : 33.33										
Depth to Water - initial (feet) : 21.19										
Depth to Water - final (feet) (11/18/93) : 21.26										
% recovery : 99										
Time Sampled : 1330										
Gallons per Well Casing Volume : 7.92										
Gallons Purged : 32										
Well Casing Volume Purged : 4.01										
Approximate Pumping Rate (gpm) : 1.52										

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 130015.01

Date: November 17, 1993

Page 1 of 1

Well No. MW-6

Time Started 1335

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
1335	Start purging MW-6				
1335	0	65.2	6.55	6.45	40.4
1350	20	63.7	6.54	7.06	7.9
1402	40	63.5	6.53	7.36	4.1
1415	60	62.9	6.52	7.44	1.5
1427	80	64.1	6.59	7.55	1.1
	Stop purging MW-6				

Notes:

Well Diameter (inches) : 4

Depth to Bottom (feet) : 58.00

Depth to Water - initial (feet) : 28.49

Depth to Water - final (feet) (11/18/93) : 28.68

% recovery : 99

Time Sampled : 1245

Gallons per Well Casing Volume : 19.26

Gallons Purged : 80

Well Casing Volume Purged : 4.15

Approximate Pumping Rate (gpm) : 1.54

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 130015.01

Date: November 17, 1993

Page 1 of 1

Well No. MW-7

Time Started 1548

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
1548	Start purging MW-7				
1548	0	62.6	6.52	4.53	7.2
1558	16	63.2	6.54	4.56	5.3
1608	32	65.8	6.57	5.48	63.8
1416	48	65.0	6.57	5.43	38.2
1424	64	64.3	6.61	5.30	16.1
	Stop purging MW-7				

Notes:

Well Diameter (inches) : 4

Depth to Bottom (feet) : 44.88

Depth to Water - initial (feet) : 20.75

Depth to Water - final (feet) (11/18/93) : 20.97

% recovery : 99

Time Sampled : 1530

Gallons per Well Casing Volume : 15.75

Gallons Purged : 64

Well Casing Volume Purged : 4.06

Approximate Pumping Rate (gpm) : 1.77

**WELL PURGE DATA SHEET**

 Project Name: Exxon 7-7003

 Job No. 130015.01

 Date: November 18, 1993

 Page 1 of 1

 Well No. MW-8

 Time Started 1500

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
1500	Start purging MW-8				
1500	0	64.7	6.34	10.43	>200
1521	2	64.6	6.42	10.59	>200
1540	3	DRY			
1756	4	63.7	6.53	9.96	>200
	Stop purging MW-8				

**Notes:**

Well Diameter (inches) : 4  
 Depth to Bottom (feet) : 22.82  
 Depth to Water - initial (feet) (11/17/93) : 20.01  
 Depth to Water - final (feet) : 20.07  
 % recovery : 98  
 Time Sampled : 1400  
 Gallons per Well Casing Volume : 1.83  
 Gallons Purged : 4.0  
 Well Casing Volume Purged : 2.18  
 Approximate Pumping Rate (gpm) : 0.03

**WELL PURGE DATA SHEET**

 Project Name: Exxon 7-7003

 Job No. 130015.01

 Date: November 17, 1993

 Page 1 of 1

 Well No. VE-1

 Time Started 1502

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
1502	Start purging VE-1				
1502	0	64.3	6.34	9.68	29.6
1507	1	64.3	6.43	9.81	>200
1518	2	64.0	6.55	9.49	>200
1702	3	63.6	6.45	9.15	63.8
1737	4	63.2	6.54	9.35	>200
	Stop purging VE-1				

**Notes:**

Well Diameter (inches) : 2  
 Depth to Bottom (feet) : 26.79  
 Depth to Water - initial (feet) : 20.64  
 Depth to Water - final (feet) (11/18/93) : 20.92  
 % recovery : 95  
 Time Sampled : 1440  
 Gallons per Well Casing Volume : 1.00  
 Gallons Purged : 4  
 Well Casing Volume Purged : 4.0  
 Approximate Pumping Rate (gpm) : 0.02

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 130015.01

Date: November 18, 1993

Page 1 of 1

Well No. VE-2

Time Started 1309

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)					
1105	Start purging VE-2									
1105	0	66.0	6.47	9.07	40.0					
1109	2	65.9	6.53	9.65	84.9					
1118	4	65.6	6.58	9.71	>200					
1125	6	64.8	6.55	9.51	>200					
1133	8	64.0	6.59	9.45	>200					
	Stop purging VE-2									
Notes:										
Well Diameter (inches) : 4 Depth to Bottom (feet) : 23.61 Depth to Water - initial (feet) (11/17/93) : 20.44 Depth to Water - final (feet) : 20.68 % recovery : 92 Time Sampled : 1430 Gallons per Well Casing Volume : 2.07 Gallons Purged : 8 Well Casing Volume Purged : 3.87 Approximate Pumping Rate (gpm) : 0.3										

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 130015.01

Date: November 18, 1993

Page 1 of 1

Well No. VE-3

Time Started 945

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
945	Start purging VE-3				
945	0	65.9	6.58	11.76	70.2
953	2	65.5	6.70	12.21	>200
1001	4	65.6	6.80	12.88	>200
1015	4	DRY			
1050	4.5	DRY			
	Stop purging VE-3				

Notes:

Well Diameter (inches) : 4  
 Depth to Bottom (feet) : 22.99  
 Depth to Water - initial (feet) (11/17/93) : 20.00  
 Depth to Water - final (feet) :  
 % recovery :  
 Time Sampled :  
 Gallons per Well Casing Volume : 1.95  
 Gallons Purged : 4  
 Well Casing Volume Purged : 2.05  
 Approximate Pumping Rate (gpm) : 0.25



## **APPENDIX B**

### **LABORATORY ANALYSIS REPORTS AND CHAIN OF CUSTODY RECORD**



15C1

## REPORT OF LABORATORY ANALYSIS

December 01, 1993

RECEIVED

DEC -3 1993

Mr. Marc Briggs  
RESNA  
3315 Almaden Expressway Suite 34  
San Jose, CA 95118

RESNA  
COLL. 1993

RE: PACE Project No. 431119.507  
Client Reference: Exxon 7-7003 (EE)

Dear Mr. Briggs:

Enclosed is the report of laboratory analyses for samples received November 19, 1993.

Footnotes are given at the end of the report.

If you have any questions concerning this report, please feel free to contact us.

Sincerely,

A handwritten signature in cursive script that appears to read "Stephanie Matzo".

Stephanie Matzo  
Project Manager

Enclosures

RESNA  
3315 Almaden Expressway Suite 34  
San Jose, CA 95118

December 01, 1993  
PACE Project Number: 431119507

Attn: Mr. Marc Briggs

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:

70 0196817

Date Collected:

11/18/93

Date Received:

11/19/93

Client Sample ID:

Rinsate

Parameter

Units

MDL

DATE ANALYZED

ORGANIC ANALYSIS

PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):

Purgeable Fuels, as Gasoline (EPA 8015M) ug/L 50 - 11/27/93

PURGEABLE AROMATICS (BTXE BY EPA 8020M):

Benzene ug/L 0.5 ND 11/27/93

Toluene ug/L 0.5 ND 11/27/93

Ethylbenzene ug/L 0.5 0.8 11/27/93

Xylenes, Total ug/L 0.5 2.1 11/27/93

Mr. Marc Briggs  
Page 2December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0196825  
Date Collected: 11/18/93  
Date Received: 11/19/93  
Client Sample ID: MW6R

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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**ORGANIC ANALYSIS****PURGEABLE FUELS AND AROMATICS**

TOTAL FUEL HYDROCARBONS, (LIGHT):		-	11/27/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	ND	11/27/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):		-	11/27/93
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	0.6
Xylenes, Total	ug/L	0.5	1.5

Mr. Marc Briggs  
Page 3

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:	70 0196833
Date Collected:	11/18/93
Date Received:	11/19/93
Client Sample ID:	W-28-MW6

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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#### ORGANIC ANALYSIS

##### PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):		-	11/27/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M):		-	11/27/93
Benzene	ug/L	0.5	0.6
Toluene	ug/L	0.5	0.8
Ethylbenzene	ug/L	0.5	1.2
Xylenes, Total	ug/L	0.5	3.9

Mr. Marc Briggs  
 Page 4

December 01, 1993  
 PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:	70 0196850
Date Collected:	11/18/93
Date Received:	11/19/93
Client Sample ID:	W-21-MW3

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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#### ORGANIC ANALYSIS

##### PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):

Purgeable Fuels, as Gasoline (EPA 8015M) ug/L

50 ND 11/29/93

PURGEABLE AROMATICS (BTXE BY EPA 8020M):

Benzene ug/L 0.5 ND 11/29/93

Toluene ug/L 0.5 ND 11/29/93

Ethylbenzene ug/L 0.5 ND 11/29/93

Xylenes, Total ug/L 0.5 1.5 11/29/93

Mr. Marc Briggs  
Page 5

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0196876  
 Date Collected: 11/18/93  
 Date Received: 11/19/93  
 Client Sample ID: W-20-MW7

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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ORGANIC ANALYSIS

**PURGEABLE FUELS AND AROMATICS**

TOTAL FUEL HYDROCARBONS, (LIGHT):		-	11/29/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M):		-	11/29/93
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

Mr. Marc Briggs  
 Page 6

December 01, 1993  
 PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:	70 0196965
Date Collected:	11/18/93
Date Received:	11/19/93
Client Sample ID:	W-21-MW5

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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#### ORGANIC ANALYSIS

##### PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):		-	11/29/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M):		-	11/29/93
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	0.9

Mr. Marc Briggs  
 Page 7

December 01, 1993  
 PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0197015  
 Date Collected: 11/18/93  
 Date Received: 11/19/93  
 Client Sample ID: W-23-MW4

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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#### ORGANIC ANALYSIS

##### PURGEABLE FUELS AND AROMATICS

TOTAL FUEL HYDROCARBONS, (LIGHT):		-	11/27/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND 11/27/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):		-	11/27/93
Benzene	ug/L	0.5	ND 11/27/93
Toluene	ug/L	0.5	ND 11/27/93
Ethylbenzene	ug/L	0.5	ND 11/27/93
Xylenes, Total	ug/L	0.5	ND 11/27/93

##### HALOGENATED VOLATILE COMPOUNDS EPA 8010

Dichlorodifluoromethane	ug/L	2.0	ND 11/23/93
Chloromethane	ug/L	2.0	ND 11/23/93
Vinyl Chloride	ug/L	2.0	ND 11/23/93
Bromomethane	ug/L	2.0	ND 11/23/93
Chloroethane	ug/L	2.0	ND 11/23/93
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND 11/23/93
1,1-Dichloroethene	ug/L	0.5	ND 11/23/93
Methylene Chloride	ug/L	2.0	ND 11/23/93
trans-1,2-Dichloroethene	ug/L	0.5	ND 11/23/93
cis-1,2-Dichloroethene	ug/L	0.5	ND 11/23/93
1,1-Dichloroethane	ug/L	0.5	ND 11/23/93
Chloroform	ug/L	0.5	ND 11/23/93
1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND 11/23/93
Carbon Tetrachloride	ug/L	0.5	ND 11/23/93
1,2-Dichloroethane (EDC)	ug/L	0.5	ND 11/23/93
Trichloroethene (TCE)	ug/L	0.5	ND 11/23/93
1,2-Dichloropropane	ug/L	0.5	ND 11/23/93
Bromodichloromethane	ug/L	0.5	ND 11/23/93
2-Chloroethylvinyl ether	ug/L	0.5	ND 11/23/93
cis-1,3-Dichloropropene	ug/L	0.5	ND 11/23/93
trans-1,3-Dichloropropene	ug/L	0.5	ND 11/23/93
1,1,2-Trichloroethane	ug/L	0.5	ND 11/23/93
Tetrachloroethene	ug/L	0.5	ND 11/23/93

**REPORT OF LABORATORY ANALYSIS**

Mr. Marc Briggs  
Page 8

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:

70 0197015

Date Collected:

11/18/93

Date Received:

11/19/93

Client Sample ID:

W-23-MW4

Parameter

Units

MDL

DATE ANALYZED

**ORGANIC ANALYSIS**

**HALOGENATED VOLATILE COMPOUNDS EPA 8010**

Dibromochloromethane	ug/L	0.5	ND	11/23/93
Chlorobenzene	ug/L	0.5	ND	11/23/93
Bromoform	ug/L	0.5	ND	11/23/93
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	11/23/93
1,3-Dichlorobenzene	ug/L	0.5	ND	11/23/93
1,4-Dichlorobenzene	ug/L	0.5	ND	11/23/93
1,2-Dichlorobenzene	ug/L	0.5	ND	11/23/93
Bromochloromethane (Surrogate Recovery)	%		91	11/23/93
1,4-Dichlorobutane (Surrogate Recovery)	%		112	11/23/93

**REPORT OF LABORATORY ANALYSIS**

Mr. Marc Briggs  
 Page 9

December 01, 1993  
 PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:

70 0197031

Date Collected:

11/18/93

Date Received:

11/19/93

Client Sample ID:

W-20-MW8

Parameter

Units

MDL

DATE ANALYZED

**ORGANIC ANALYSIS**

**PURGEABLE FUELS AND AROMATICS**

**TOTAL FUEL HYDROCARBONS, (LIGHT):**

Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	78	-	11/27/93
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**PURGEABLE AROMATICS (BTXE BY EPA 8020M):**

Benzene	ug/L	0.5	ND	-	11/27/93
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Toluene	ug/L	0.5	0.9	-	11/27/93
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Ethylbenzene	ug/L	0.5	ND	-	11/27/93
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Xylenes, Total	ug/L	0.5	ND	-	11/27/93
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**REPORT OF LABORATORY ANALYSIS**

Mr. Marc Briggs  
 Page 10

December 01, 1993  
 PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:	70 0197058
Date Collected:	11/18/93
Date Received:	11/19/93
Client Sample ID:	W-20-MW2

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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**ORGANIC ANALYSIS**

**PURGEABLE FUELS AND AROMATICS**

TOTAL FUEL HYDROCARBONS, (LIGHT):	-	11/27/93	
Purgeable Fuels, as Gasoline (EPA 8015M) ug/L	50	490	11/27/93
PURGEABLE AROMATICS (BTXE BY EPA 8020M):	-	11/27/93	
Benzene ug/L	0.5	1.2	11/27/93
Toluene ug/L	0.5	2.3	11/27/93
Ethylbenzene ug/L	0.5	3.2	11/27/93
Xylenes, Total ug/L	0.5	1.3	11/27/93

Mr. Marc Briggs  
Page 11

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0197074  
Date Collected: 11/18/93  
Date Received: 11/19/93  
Client Sample ID: W-20-VE2

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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**ORGANIC ANALYSIS**

**PURGEABLE FUELS AND AROMATICS**

TOTAL FUEL HYDROCARBONS, (LIGHT):		-	11/27/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	3500
PURGEABLE AROMATICS (BTXE BY EPA 8020M):		-	11/27/93
Benzene	ug/L	0.5	22
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	220
Xylenes, Total	ug/L	0.5	56

Mr. Marc Briggs  
Page 12December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:

70 0197090

Date Collected:

11/18/93

Date Received:

11/19/93

Client Sample ID:

W-20-VE1

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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**ORGANIC ANALYSIS****PURGEABLE FUELS AND AROMATICS****TOTAL FUEL HYDROCARBONS, (LIGHT):**

Purgeable Fuels, as Gasoline (EPA 8015M) ug/L      50      3600      11/29/93

**PURGEABLE AROMATICS (BTXE BY EPA 8020M):**

Benzene      ug/L      0.5      5.8      11/29/93

Toluene      ug/L      0.5      2.0      11/29/93

Ethylbenzene      ug/L      0.5      220      11/29/93

Xylenes, Total      ug/L      0.5      180      11/29/93

Mr. Marc Briggs  
Page 13

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0197112  
 Date Collected: 11/18/93  
 Date Received: 11/19/93  
 Client Sample ID: W-21-MW1

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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**ORGANIC ANALYSIS**

**PURGEABLE FUELS AND AROMATICS**

TOTAL FUEL HYDROCARBONS, (LIGHT):		-	11/27/93
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	500	5900
PURGEABLE AROMATICS (BTXE BY EPA 8020M):		-	11/27/93
Benzene	ug/L	5.0	24
Toluene	ug/L	5.0	10
Ethylbenzene	ug/L	5.0	470
Xylenes, Total	ug/L	5.0	300

**HALOGENATED VOLATILE COMPOUNDS EPA 8010**

Dichlorodifluoromethane	ug/L	2.0	ND	11/23/93
Chloromethane	ug/L	2.0	ND	11/23/93
Vinyl Chloride	ug/L	2.0	ND	11/23/93
Bromomethane	ug/L	2.0	ND	11/23/93
Chloroethane	ug/L	2.0	ND	11/23/93
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND	11/23/93
1,1-Dichloroethene	ug/L	0.5	ND	11/23/93
Methylene Chloride	ug/L	2.0	ND	11/23/93
trans-1,2-Dichloroethene	ug/L	0.5	ND	11/23/93
cis-1,2-Dichloroethene	ug/L	0.5	ND	11/23/93
1,1-Dichloroethane	ug/L	0.5	ND	11/23/93
Chloroform	ug/L	0.5	ND	11/23/93

**1,1,1-Trichloroethane (TCA)**

Carbon Tetrachloride	ug/L	0.5	ND	11/23/93
1,2-Dichloroethane (EDC)	ug/L	0.5	ND	11/23/93
Trichloroethene (TCE)	ug/L	0.5	ND	11/23/93
1,2-Dichloropropane	ug/L	0.5	ND	11/23/93
Bromodichloromethane	ug/L	0.5	ND	11/23/93

**2-Chloroethylvinyl ether**

cis-1,3-Dichloropropene	ug/L	0.5	ND	11/23/93
trans-1,3-Dichloropropene	ug/L	0.5	ND	11/23/93
1,1,2-Trichloroethane	ug/L	0.5	ND	11/23/93
Tetrachloroethene	ug/L	0.5	ND	11/23/93

Mr. Marc Briggs  
 Page 14

December 01, 1993  
 PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0197112  
 Date Collected: 11/18/93  
 Date Received: 11/19/93  
 Client Sample ID: W-21-MW1

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
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**ORGANIC ANALYSIS**

**HALOGENATED VOLATILE COMPOUNDS EPA 8010**

Dibromochloromethane	ug/L	0.5	ND	11/23/93
Chlorobenzene	ug/L	0.5	ND	11/23/93
Bromoform	ug/L	0.5	ND	11/23/93
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	11/23/93
1,3-Dichlorobenzene	ug/L	0.5	ND	11/23/93
1,4-Dichlorobenzene	ug/L	0.5	ND	11/23/93
1,2-Dichlorobenzene	ug/L	0.5	ND	11/23/93
Bromochloromethane (Surrogate Recovery)	%		89	11/23/93
1,4-Dichlorobutane (Surrogate Recovery)	%		107	11/23/93

These data have been reviewed and are approved for release.

Darrell C. Cain  
 Regional Director

Mr. Marc Briggs  
Page 15

FOOTNOTES  
for pages 1 through 14

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

MDL Method Detection Limit  
ND Not detected at or above the MDL.

Mr. Marc Briggs  
Page 16

QUALITY CONTROL DATA

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

HALOGENATED VOLATILE COMPOUNDS EPA 8010

Batch: 70 26632

Samples: 70 0197112

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
Dichlorodifluoromethane	ug/L	2.0	ND
Chloromethane	ug/L	2.0	ND
Vinyl Chloride	ug/L	2.0	ND
Bromomethane	ug/L	2.0	ND
Chloroethane	ug/L	2.0	ND
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND
1,1-Dichloroethene	ug/L	0.5	ND
Methylene Chloride	ug/L	2.0	2.2 (1),(2)
trans-1,2-Dichloroethene	ug/L	0.5	ND
cis-1,2-Dichloroethene	ug/L	0.5	ND
1,1-Dichloroethane	ug/L	0.5	ND
Chloroform	ug/L	0.5	ND
1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND
Carbon Tetrachloride	ug/L	0.5	ND
1,2-Dichloroethane (EDC)	ug/L	0.5	ND
Trichloroethene (TCE)	ug/L	0.5	ND
1,2-Dichloropropane	ug/L	0.5	ND
Bromodichloromethane	ug/L	0.5	ND
2-Chloroethylvinyl ether	ug/L	0.5	ND
cis-1,3-Dichloropropene	ug/L	0.5	ND
trans-1,3-Dichloropropene	ug/L	0.5	ND
1,1,2-Trichloroethane	ug/L	0.5	ND
Tetrachloroethene	ug/L	0.5	ND
Dibromochloromethane	ug/L	0.5	ND
Chlorobenzene	ug/L	0.5	ND
Bromoform	ug/L	0.5	ND
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND
1,3-Dichlorobenzene	ug/L	0.5	ND
1,4-Dichlorobenzene	ug/L	0.5	ND
1,2-Dichlorobenzene	ug/L	0.5	ND
Bromochloromethane (Surrogate Recovery)		94%	

Mr. Marc Briggs  
Page 17

## QUALITY CONTROL DATA

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

HALOGENATED VOLATILE COMPOUNDS EPA 8010

Batch: 70 26632

Samples: 70 0197112

## METHOD BLANK:

Parameter	Units	MDL	Method Blank
1,4-Dichlorobutane (Surrogate Recovery)			107%

## LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
1,1-Dichloroethane	ug/L	0.5	20	107%	107%	0%
Trichloroethene (TCE)	ug/L	0.5	20	119%	107%	10%
1,1,2-Trichloroethane	ug/L	0.5	20	100%	97%	3%
Tetrachloroethene	ug/L	0.5	20	107%	98%	8%

Mr. Marc Briggs  
Page 18

QUALITY CONTROL DATA

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

HALOGENATED VOLATILE COMPOUNDS EPA 8010

Batch: 70 26656

Samples: 70 0197015

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Dichlorodifluoromethane	ug/L	2.0	ND
Chloromethane	ug/L	2.0	ND
Vinyl Chloride	ug/L	2.0	ND
Bromomethane	ug/L	2.0	ND
Chloroethane	ug/L	2.0	ND
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND
1,1-Dichloroethene	ug/L	0.5	ND
Methylene Chloride	ug/L	2.0	ND
trans-1,2-Dichloroethene	ug/L	0.5	ND
cis-1,2-Dichloroethene	ug/L	0.5	ND
1,1-Dichloroethane	ug/L	0.5	ND
Chloroform	ug/L	0.5	ND
1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND
Carbon Tetrachloride	ug/L	0.5	ND
1,2-Dichloroethane (EDC)	ug/L	0.5	ND
Trichloroethene (TCE)	ug/L	0.5	ND
1,2-Dichloropropane	ug/L	0.5	ND
Bromodichloromethane	ug/L	0.5	ND
2-Chloroethylvinyl ether	ug/L	0.5	ND
cis-1,3-Dichloropropene	ug/L	0.5	ND
trans-1,3-Dichloropropene	ug/L	0.5	ND
1,1,2-Trichloroethane	ug/L	0.5	ND
Tetrachloroethene	ug/L	0.5	ND
Dibromochloromethane	ug/L	0.5	ND
Chlorobenzene	ug/L	0.5	ND
Bromoform	ug/L	0.5	ND
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND
1,3-Dichlorobenzene	ug/L	0.5	ND
1,4-Dichlorobenzene	ug/L	0.5	ND
1,2-Dichlorobenzene	ug/L	0.5	ND
Bromochloromethane (Surrogate Recovery) %		116	
1,4-Dichlorobutane (Surrogate Recovery) %		117	

Mr. Marc Briggs  
Page 19

## QUALITY CONTROL DATA

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

HALOGENATED VOLATILE COMPOUNDS EPA 8010  
Batch: 70 26656  
Samples: 70 0197015

## LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Dupl Recv	Dupl Recv	RPD
1,1-Dichloroethane	ug/L	0.5	20	130%	120%	8%
Trichloroethene (TCE)	ug/L	0.5	20	117%	109%	7%
1,1,2-Trichloroethane	ug/L	0.5	20	125%	115%	8%
Tetrachloroethene	ug/L	0.5	20	113%	103%	9%

Mr. Marc Briggs  
 Page 20

QUALITY CONTROL DATA

December 01, 1993  
 PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PURGEABLE FUELS AND AROMATICS

Batch: 70 26660

Samples: 70 0196817, 70 0196825, 70 0196833

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT): Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Dupl Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	1000	99%	94%	5%
Benzene	ug/L	0.5	40.0	94%	94%	0%
Toluene	ug/L	0.5	40.0	91%	89%	2%
Ethylbenzene	ug/L	0.5	40.0	89%	86%	3%
Xylenes, Total	ug/L	0.5	120	91%	88%	3%

Mr. Marc Briggs  
Page 21

QUALITY CONTROL DATA

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PURGEABLE FUELS AND AROMATICS

Batch: 70 26665

Samples: 70 0197015, 70 0197031, 70 0197058, 70 0197074, 70 0197112

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT): Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference	Dupl	RPD
			Value	Recv	
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	1000	96%	91%
Benzene	ug/L	0.5	100	100%	100%
Toluene	ug/L	0.5	100	100%	99%
Ethylbenzene	ug/L	0.5	100	100%	100%
Xylenes, Total	ug/L	0.5	300	98%	98%

**REPORT OF LABORATORY ANALYSIS**

Mr. Marc Briggs  
 Page 22

QUALITY CONTROL DATA

December 01, 1993  
 PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PURGEABLE FUELS AND AROMATICS

Batch: 70 26668

Samples: 70 0196965

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):		-	
Purgeable Fuels, as Gasoline (EPA 8015M	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)		-	
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference	Dupl	RPD
			Value	Recv	
Purgeable Fuels, as Gasoline (EPA 8015M	ug/L	50	1000	98%	97% 1%
Benzene	ug/L	0.5	100	101%	101% 0%
Toluene	ug/L	0.5	100	102%	101% 0%
Ethylbenzene	ug/L	0.5	100	102%	101% 0%
Xylenes, Total	ug/L	0.5	300	99%	99% 0%

# REPORT OF LABORATORY ANALYSIS

Mr. Marc Briggs  
 Page 23

## QUALITY CONTROL DATA

December 01, 1993  
 PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

### PURGEABLE FUELS AND AROMATICS

Batch: 70 26692

Samples: 70 0196850, 70 0196876

### METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT): Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

### LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Dupl Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	1000	101%	99%	2%
Benzene	ug/L	0.5	40.0	78%	82%	5%
Toluene	ug/L	0.5	40.0	87%	89%	2%
Ethylbenzene	ug/L	0.5	40.0	90%	88%	2%
Xylenes, Total	ug/L	0.5	120	94%	90%	4%

Mr. Marc Briggs  
Page 24

QUALITY CONTROL DATA

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

PURGEABLE FUELS AND AROMATICS

Batch: 70 26696

Samples: 70 0197090

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015M	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020M)			-
Benzene	ug/L	0.5	ND
Toluene	ug/L	0.5	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Dupl Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015M	ug/L	50	1000	105%	103%	1%
Benzene	ug/L	0.5	100	100%	95%	5%
Toluene	ug/L	0.5	100	99%	98%	1%
Ethylbenzene	ug/L	0.5	100	99%	96%	3%
Xylenes, Total	ug/L	0.5	300	97%	94%	3%

Mr. Marc Briggs  
Page 25

FOOTNOTES  
for pages 16 through 24

December 01, 1993  
PACE Project Number: 431119507

Client Reference: Exxon 7-7003 (EE)

- MDL Method Detection Limit  
ND Not detected at or above the MDL.  
RPD Relative Percent Difference  
(1) This compound is a common laboratory contaminant.  
(2) Quantitation was based upon a one point calibration.



# EXXON COMPANY, U.S.A.

P.O. Box 4415, Houston, TX 77210-4415

## CHAIN OF CUSTODY

43119507

Novato, CA, 11 Digital Drive, 94949  
(415) 883-6100

Huntington Beach, CA, 5702 Bolsa Avenue, 92649  
(714) 892-2565

Consultant's Name:

RESNA

Page 1 of 3

Address: 3315 Almaden Expressway F34 San Jose CA 95118

Site Location: 349 4th St.

Project #:

Consultant Project #: 130015.01

Consultant Work Release #:

Project Contact: Jeanne Burkhardt / Hart Bros

Phone #(408) 264-2223 Fax #264-2435 Laboratory Work Release #: Q9300255

EXXON Contact: Marla Quisenberry EE  C&M

Phone #(714) 876-8776 Fax #: EXXON RAS #: 7-7003

Sampled by (print): Chrys Allen

Sampler's Signature: Chrys Allen

Shipment Method: Courier

Air Bill #:

Shipment Date:

TAT:  24 hr  48 hr  72 hr  Standard (5 day)

### ANALYSIS REQUIRED

Sample Condition as Received

Temperature °C: PALE

Cooler #: COURIER

Inbound Seal Yes No

Outbound Seal Yes No

### COMMENTS

Sample Description	Collection Date/Time	Matrix Soil/Water	Presv	# of Cont	PACE Sample #	TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	TPH EPA 418.1	Hold
Rinsate 11/8		H2O HPLC	2	1	19681.7	X			
MW6R	"		2	1	19682.5	X			
W-28-MW6 12:30	11/8		3	1	19683.3	X			
MW3R	11/8		2	1	19684.1		X		
W-21-MW3 1:15	11/8		3	1	19685.0	X			
MW7R	11/8		2	1	19686.8		X		
W-20-MW7 5:30	11/8		3	1	19687.6	X			
MW5R	11/8		2	1	19688.3		X		
MW4R	11/8		2	1	19692.2		X		
W-21-MW5 11/8 1:30	11/8 1:30		3	1	19696.5	X			

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time	Additional Comments:
Chrys Allen	11/8	5:00	Mark H. Bunge	11/19	5:00	
Mac Dyer	11/19	13:35	Ed Galt - Pace	11/19	14:35	10/14
Elvira - Pace	11/19	16:45	Donna Briones - Pace	11/19	16:40	

EXXON COMPANY, U.S.A.

P.O. Box 4415, Houston, TX 77210-4415

CHAIN OF CUSTODY

1431114.507



Novato, CA, 11 Digital Drive, 94949  
(415) 883-6100



Huntington Beach, CA, 5702 Bolsa Avenue, 92649  
(714) 892-2565

Page 2 of 3

Consultant's Name:

RESNA

Address: 3315 Almaden Expressway San Jose CA 95118

Site Location: 349 Main St

Project #:

Consultant Project #: 130015.01

Consultant Work Release #:

Project Contact: Joanne Burkhardt / Mark Briggs

Phone #(408)264 7723 Fax #(408)264-2435

Laboratory Work Release #: 09300255

EXXON Contact: Mark Greenstein EE  C&M

Phone #(50)246-8796 Fax #

EXXON RAS #: 7-7003

Sampled by (print): Chris Allen

Sampler's Signature: Chris Allen

Shipment Method: Courier

Air Bill #:

Shipment Date:

TAT:  24 hr  48 hr  72 hr  Standard (5 day)

ANALYSIS REQUIRED

Sample Condition as Received

Temperature °C: PACE

Cooler #: COOLER

Inbound Seal Yes No

Outbound Seal Yes No

COMMENTS

Sample Description	Collection Date/Time	Matrix Soil/Water	Prsv	# of Cont	PACE Sample #	TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	TPH EPA 418.1	VOC Hold
W-23xxw4	11/18 1:15	H <sub>2</sub> O	HCl	6	14701.5	X			X
MW8R	11/18			2	14702.3				X
W-20-xxw8	11/18 2:00			3	14703.1	X			
MW2R	11/18			2	14704.0				X
W-20-M02	11/18 2:15			3	14705.8	X			
VE2R	11/18			2	14706.6				X
W-20-VE2	11/18 2:30			3	14707.4	X			
VI '' R	11/18			2	14708.2				X
	11/18			3	14709.0	X			X
	11/18			2	14710.4				X

Location

Date

Time

Accepted by/Affiliation

Date

Time

Additional Comments:

4/18	5:00	Mark Briggs	4/18	5:00
4/19	1335	E. Faith Rose	4/19	1435
4/19	1645	Sandra Briones Rose	4/19/93	1640

10/4



## EXXON COMPANY, U.S.A.

P.O. Box 4415, Houston, TX 77210-4415

## CHAIN OF CUSTODY

431119.50)

Novato, CA, 11 Digital Drive, 94949  
(415) 883-6100Huntington Beach, CA, 5702 Bolsa Avenue, 92649  
(714) 892-2565

Consultant's Name: RES/kt

Page 3 of 3

Address: 3315 Almaden Expressway #34 San Jose CA 95118						Site Location: 348 Main St														
Project #:			Consultant Project #: 130015.01			Consultant Work Release #:														
Project Contact: Jeanne Burkhardt/Kirk Brings			Phone # (408) 264-7723 Fax # 264-2435			Laboratory Work Release #: 09300255														
EXXON Contact: Linda Guenster <input checked="" type="checkbox"/> EB <input checked="" type="checkbox"/> C&M			Phone # (510) 246-8776 Fax #:			EXXON RAS #: 7-7003														
Sampled by (print): Chris Allen			Sampler's Signature: Chris Allen																	
Shipment Method: Courier			Air Bill #:			Shipment Date:														
TAT: <input type="checkbox"/> 24 hr <input type="checkbox"/> 48 hr <input type="checkbox"/> 72 hr <input checked="" type="checkbox"/> Standard (5 day)						ANALYSIS REQUIRED										Sample Condition as Received				
Sample Description		Collection Date/Time	Matrix Soil/Water	Prsv	# of Cont	PACE Sample #	TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	TPH EPA 418.1											Temperature °C: <u>50</u>
W-21-uu1		11/18	H <sub>2</sub> O HCl 6	19711.2	X	X	X	X	VOC											Cooler #: <u>COOLER</u>
																				Inbound Seal Yes No
																				Outbound Seal Yes No
																COMMENTS				

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time	Additional Comments:	
Chris Allen	11/18	5:00	Mark A Lugg	11/18	5:00		
Mark A. Lugg	11/19	13:35	Ed Sather - Pac	11/19	14:35		
Ed Sather - Pac	11/19	16:40	Sandra Brown - Pac	11/19/93	16:40		10/4