

EXXON COMPANY, U.S.A.

POST OFFICE BOX 4032 . CONCORD, CA 94524-2032

ENVIRONMENTAL ENGINEERING

MARLA D. GUENSLER
SENIOR ENVIRONMENTAL ENGINEER
(510) 246-8776

September 11, 1992

Mr. Rick Mueller
City of Pleasanton Fire Department
4444 Railroad Street
Pleasanton, California 94566-0802

RE: Exxon RAS 7-7003
349 Main Street
Pleasanton, California

Dear Mr. Mueller:

Attached for your review and comment is the **Letter Report, Quarterly Groundwater Monitoring** for the above referenced Exxon station in Pleasanton. The report, prepared by RESNA, of San Jose, California, details the results of the second quarter 1992 monitoring event which occurred in June 1992.

Should you have any questions or comments, or require additional information, please do not hesitate to contact me at the above listed phone number.

Sincerely,

Marla D. Guensler

Attachment

c - w/attachment:

Mr. L. Feldman - San Francisco Bay Region Water Quality Control Board

w/o attachment:

Mr. M. Briggs - RESNA, San Jose

MDG/pdp
2450E/77003LTR



A RESNA Company

RESNA

Working To Restore Nature

3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
Fax: (408) 264-2435

**LETTER REPORT
QUARTERLY GROUNDWATER MONITORING
Second Quarter 1992**

at
Exxon Station 7-7003
349 Main Street
Pleasanton, California

19025.05



3315 Almaden Expressway, Suite 34
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Phone: (408) 264-7723
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September 10, 1992
00901MGUE
19025.05

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

Subject: Letter Report on Second Quarter 1992 Groundwater Monitoring 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 second quarter 1992 groundwater monitoring performed by RESNA Industries Inc. (RESNA) at the above-subject site. The Exxon site is located at 349 Main Street on the southwestern corner of Angela and Main Streets in Pleasanton, California, as shown on Plate 1.

The objectives of this quarterly monitoring are to evaluate trends in 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 underground gasoline 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 underground gasoline-storage tanks (USTs) in July and August 1989 (AGS, October 1, 1989), and an environmental investigation between January and June 1990 that included drilling 13 boreholes around the three former UST locations and installing groundwater monitoring wells MW-1 through MW-5 in five of the boreholes (AGS, August 1, 1990). AGS performed a Supplemental Subsurface Investigation that included the drilling of six boreholes north and northwest of the former USTs and the installation of groundwater monitoring wells MW-6 and MW-7 between February and March 1991 (AGS, October 1991). Quarterly monitoring was initiated by AGS in the first quarter of 1990 (AGS, August 1, 1990) and is continuing. Pertinent site features include a service station building, two

dispenser islands, two USTs and a used-oil UST located northeast of the station building (Plate 2). The results of these investigations are presented in the reports listed in the references section of this letter report. 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

For the latest quarterly groundwater monitoring, RESNA personnel collected groundwater monitoring data from the five onsite monitoring wells (MW-1 through MW-5) and two offsite monitoring wells (MW-6 and MW-7) on June 9, 1992. During field work at the site, RESNA personnel measured depth-to-water (DTW) levels in the groundwater monitoring wells, subjectively analyzed water from the wells for the presence of floating product, and purged and sampled the groundwater from four of the onsite monitoring wells and two offsite monitoring wells. During the June monitoring, the groundwater elevation from monitoring well MW-5 appeared to be anomalously high and the water present in the well was suspected to be residual groundwater trapped in the well bottom during lowering of the water table, and was not sampled. Field methods used by RESNA personnel are described in Appendix A, Groundwater Sampling Protocol.

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. Data from Table 1 were used to produce hydrographs which show fluctuations in local groundwater elevations. Hydrographs for the seven monitoring wells are included in Appendix B. Based on the June 9, 1992, groundwater elevation data, the interpreted local groundwater gradient is approximately 0.20 toward the northwest. Groundwater Gradient Map (Plate 3) shows the interpreted local groundwater gradient for this quarter, which is generally consistent with previously interpreted groundwater gradients.

No evidence of floating product or noticeable hydrocarbon vapor was observed in the water samples collected for subjective analysis from the seven wells. Results of the subjective analyses are summarized in Table 1.

The four onsite monitoring wells and two offsite monitoring wells were purged and sampled in accordance with the enclosed groundwater sampling protocol (Appendix A). Well purge data sheets and stabilization graphs for the monitored parameters temperature, turbidity, pH, and conductivity for monitoring wells MW-1 through MW-4, MW-6, and MW-7 are included in Appendix A.

Results of Laboratory Analysis

Groundwater samples from the monitoring wells were analyzed for total petroleum hydrocarbons as gasoline (TPHg) and the gasoline constituents benzene, toluene, ethylbenzene, and total xylenes (BTEX) by modified Environmental Protection Agency (EPA) Methods 5030/8015/8020; volatile organic compounds (VOCs) by EPA Method 601; and organic lead using the California Department of Health Services Method #338. In addition, groundwater from wells MW-1 and MW-3 were analyzed for total oil and grease (TOG) by Standard Method 5520B/F. 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 are attached to this letter report included in Appendix C.

The chemical analyses results of this and previous, quarterly monitoring events are summarized in Table 2, Cumulative Results of Laboratory Analyses of Groundwater Samples for Gasoline Hydrocarbon Compounds; and Table 3, Cumulative Results of Laboratory Analyses of Groundwater Samples Analysis for Lead, TOG, and VOCs. Graphic interpretations of TPHg and benzene concentrations in the local groundwater for this quarterly monitoring are shown on Plate 4, TPHg Concentrations in Groundwater, and Plate 5, Benzene Concentrations in Groundwater. Chemical analyses data from Table 2 were used to produce histograms which show fluctuations in TPHg concentrations over time. Histograms for MW-1 through MW-7 are included on the hydrographs in Appendix B.

Results of this quarter's laboratory analyses of groundwater samples from wells MW-1 through MW-4, MW-6, and MW-7 indicate that:

- o TPHg was nondetectable in wells MW-3, MW-4, and MW-6.
- o TPHg was detected in the groundwater at concentrations of 4,500 parts per billion (ppb) in MW-1, 150 ppb in MW-2, and 81 ppb in MW-7.
- o Benzene was nondetectable in wells MW-3, MW-6, MW-7 and was less than the California Department of Health Services Maximum Contaminant Level (MCL) of 1.0 ppb benzene in drinking water in well MW-4 (0.6 ppb).
- o Benzene was detected in the groundwater at concentrations of 27 ppb in well MW-1 and 1.9 ppb in MW-2; which are greater than the MCL of 1.0 ppb benzene in drinking water.

- o Concentrations of the other purgeable gasoline constituents (toluene, ethylbenzene, and total xylenes) were nondetectable in wells MW-3, MW-6, and MW-7.
- o Concentrations of the other purgeable gasoline constituents (toluene, ethylbenzene, and total xylenes) in wells MW-1, MW-2, and MW-4 ranged between nondetectable to 400 ppb (ethylbenzene in MW-1); which are less than the MCLs of 680 ppb ethylbenzene and 1,750 ppb total xylenes, and the State Drinking Water Action Level (DWAL) of 100 ppb toluene.
- o Organic lead was nondetectable in all wells sampled.
- o TOG was nondetectable in wells MW-1 and MW-3.
- o VOCs were nondetectable in all wells sampled, except for a concentration of 0.7 ppb 1,2-Dichloroethane detected in well MW-4. This concentration exceeds the MCL of 0.5 ppb for this constituent.

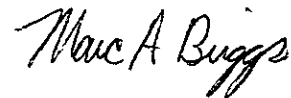
Copies of this report should be forwarded to:

Mr Lester Feldman
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, California 94612

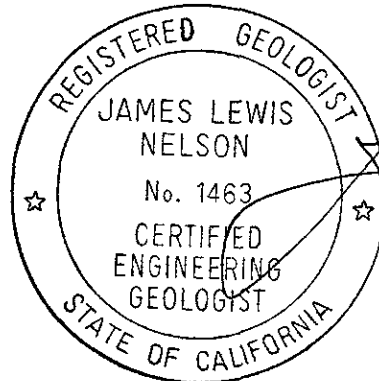
Mr. Rick Mueller
Pleasanton Fire Department
4444 Railroad Street
Pleasanton, California 94566

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

Sincerely,
RESNA Industries Inc.



Marc A. Briggs
Assistant Project Geologist



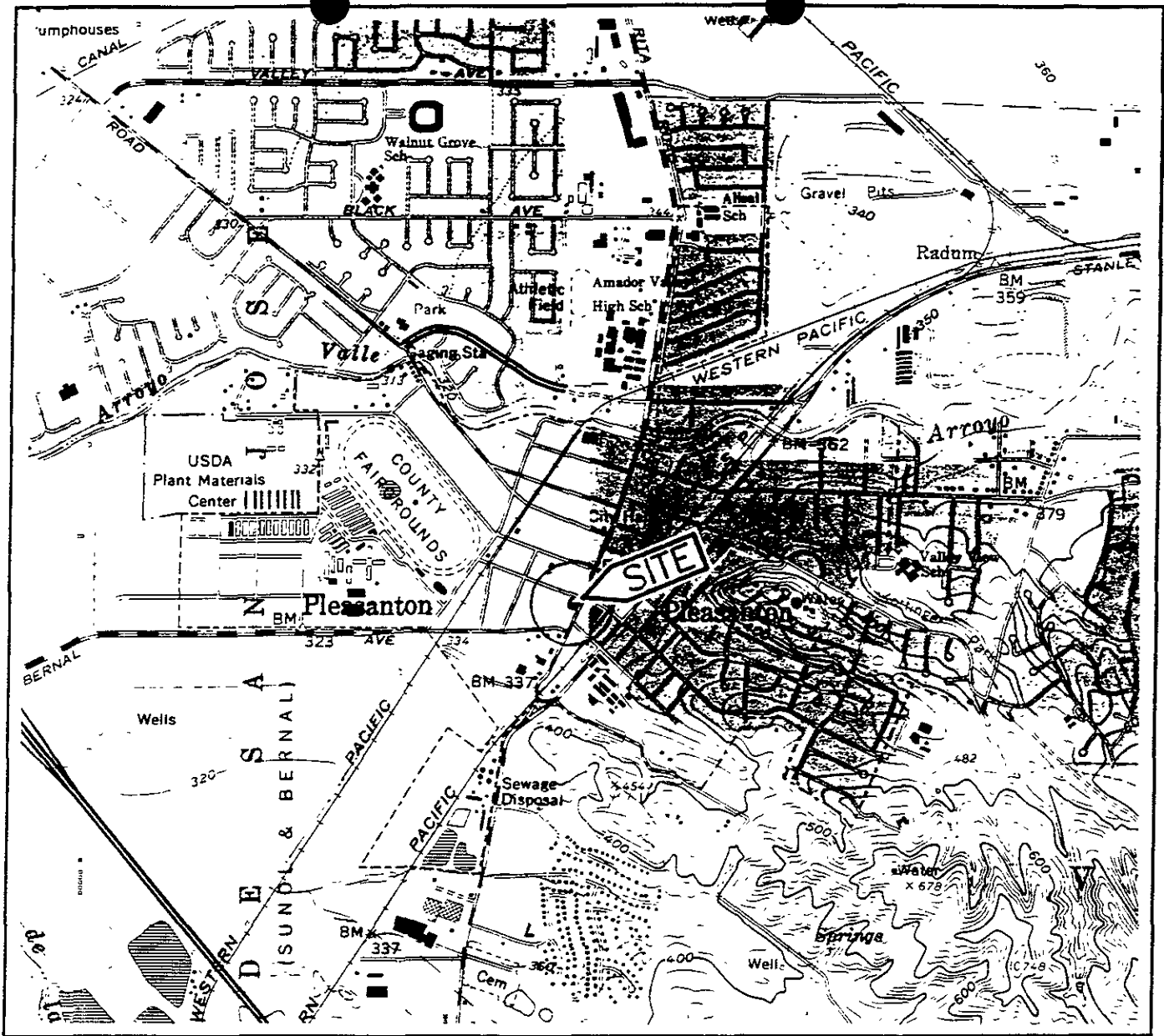
James L. Nelson
C.E.G. No. 1463

Enclosures: References

- | | |
|-------------|---|
| Plate 1, | Site Vicinity Map |
| Plate 2, | Generalized Site Plan |
| Plate 3, | Groundwater Gradient Map, June 9, 1992 |
| Plate 4, | TPHg Concentrations in Groundwater, June 9, 1992 |
| Plate 5, | Benzene Concentrations in Groundwater, June 9, 1992 |
| Table 1, | Cumulative Groundwater Monitoring Data |
| Table 2, | Cumulative Results of Laboratory Analyses of Groundwater Samples for Gasoline Hydrocarbon Compounds |
| Table 3, | Cumulative Results of Laboratory Analyses of Groundwater Samples Analysis for Lead, TOG, and VOCs |
| Appendix A: | Groundwater Sampling Protocol, Well Purge Data Sheets, and Stabilization Graphs |
| Appendix B: | Hydrograph and TPHg Concentration Graphs |
| Appendix C: | Chain of Custody Records and Laboratory Analysis Reports |

REFERENCES

- Applied GeoSystems. October 1, 1989. Report on Limited Subsurface Environmental Investigation at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025-1.
- Applied GeoSystems. August 1, 1990. Report on Supplemental Subsurface Environmental Investigation at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025-2.
- Applied GeoSystems. February 26, 1991. Letter Report Fourth Quarter 1990 Groundwater Monitoring at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. AGS 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.
- California Department of Health Services, October, 1990. Title 22, California Administrative Code, Section 64444.5.
- 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.

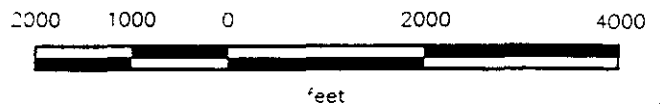


Base: U.S. Geological Survey
 7.5-Minute Quadrangles
 Dublin/Livermore, California.
 Photorevised 1980

LEGEND

● = Site Location

Approximate Scale



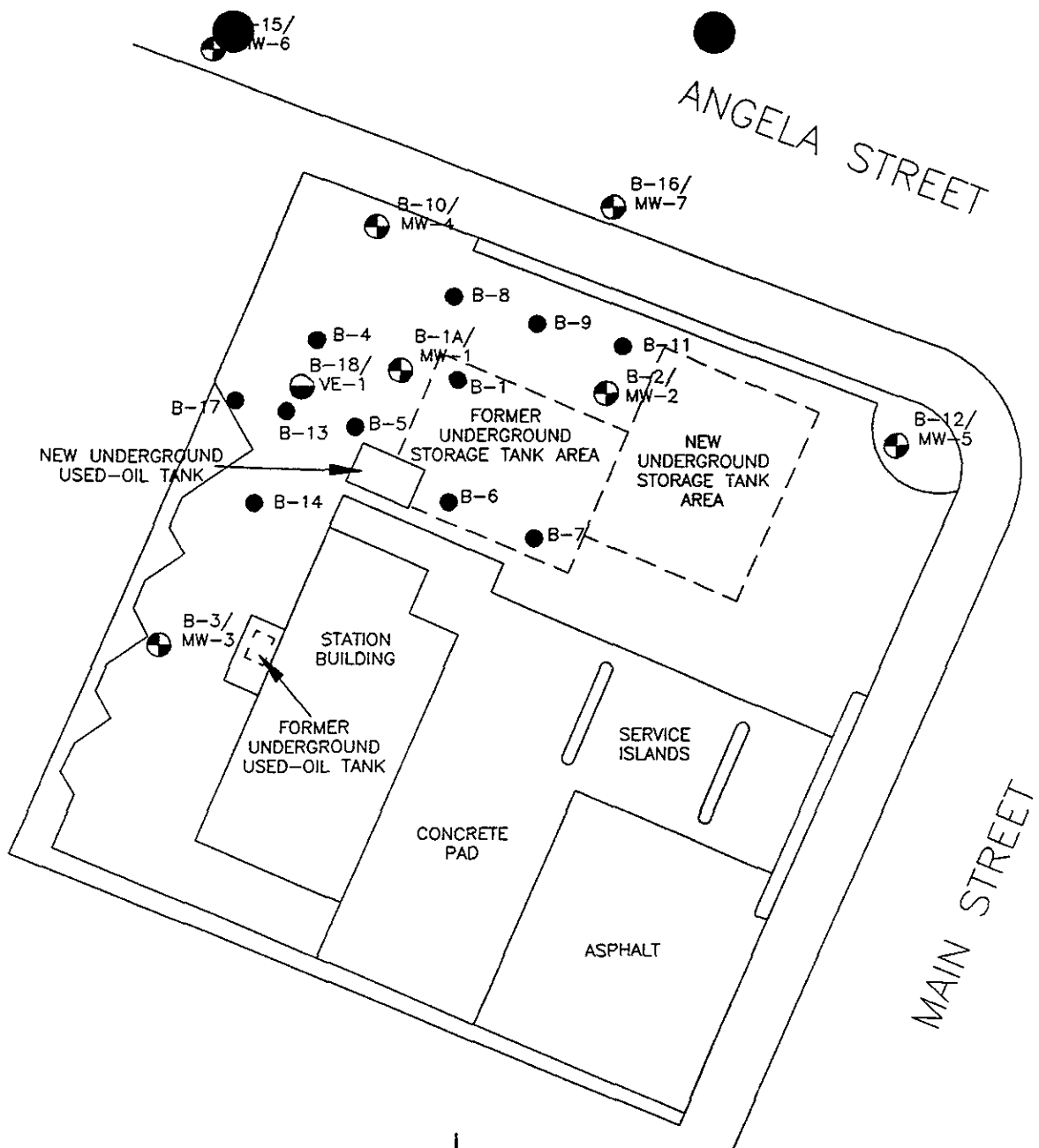
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SITE VICINITY MAP
Exxon Service Station 7-7003
349 Main Street
Pleasanton, California

PLATE

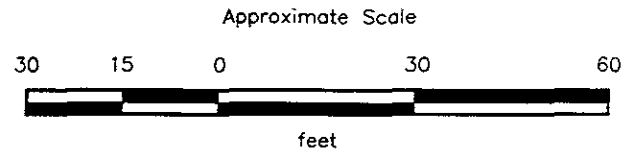
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EXPLANATION

- B-16/
MW-7 = Monitoring well
- B-18/
VE-1 = Vapor extraction well
- B-17 = Soil boring



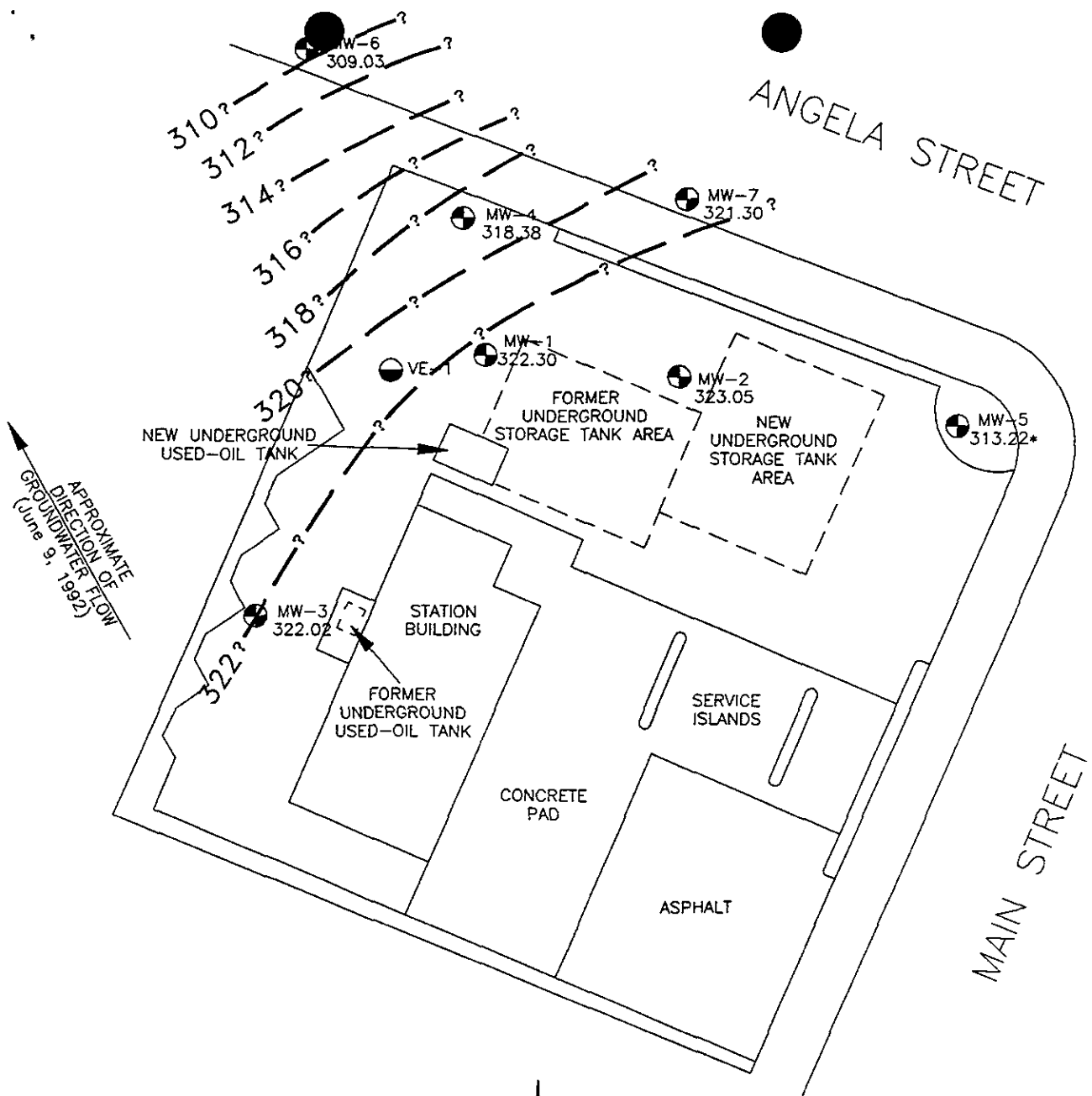
Source: Surveyed by Ron Archer Civil Engineer, Inc.,
June 1990 and April 1991.





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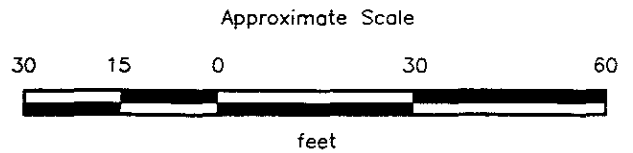
GENERALIZED SITE PLAN
Exxon Service Station 7-7003
349 Main Street
Pleasanton, California

PLATE
2



EXPLANATION

- 322 = Line of equal elevation of groundwater in feet above mean sea level (MSL)
- 323.05 = Elevation of groundwater in feet above MSL, June 9, 1992
- MW-7  = Monitoring well
- VE-1  = Vapor extraction well
- * = Not used in groundwater gradient interpretation



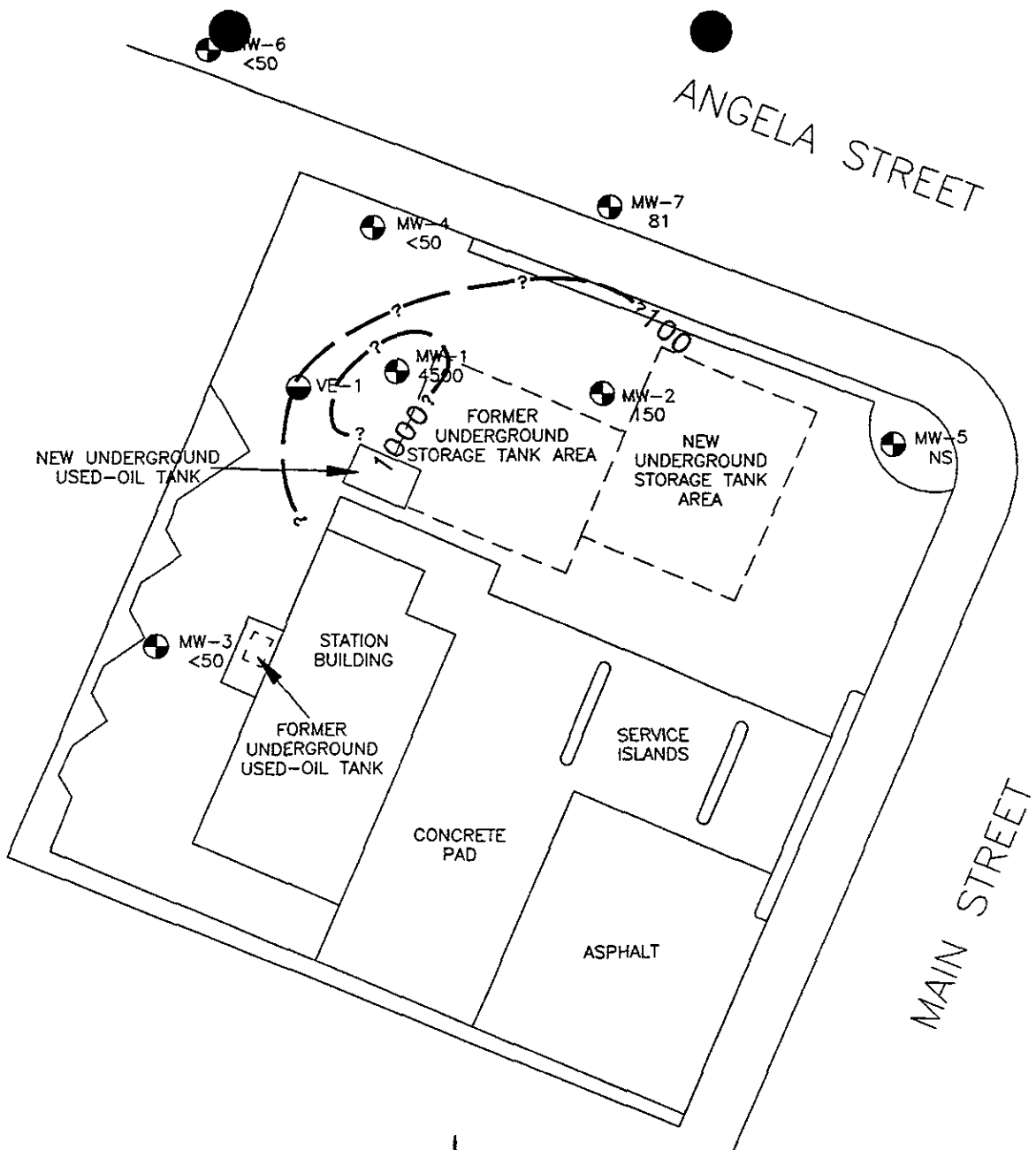
Source: Surveyed by Ron Archer Civil Engineer, Inc., June 1990 and April 1991.

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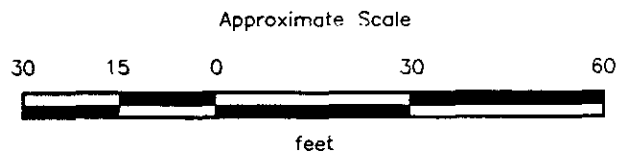
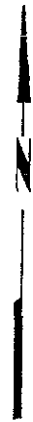
GROUNDWATER GRADIENT MAP
Exxon Service Station 7-7003
349 Main Street
Pleasanton, California

PLATE
3



EXPLANATION

- 1000 = Line of equal concentration of TPHg in groundwater in parts per billion (ppb)
- 4500 = Concentration of TPHg in groundwater in ppb, June 9, 1992
- MW-7 = Monitoring well
- VE-1 = Vapor extraction well
- NS = Not sampled (see text)



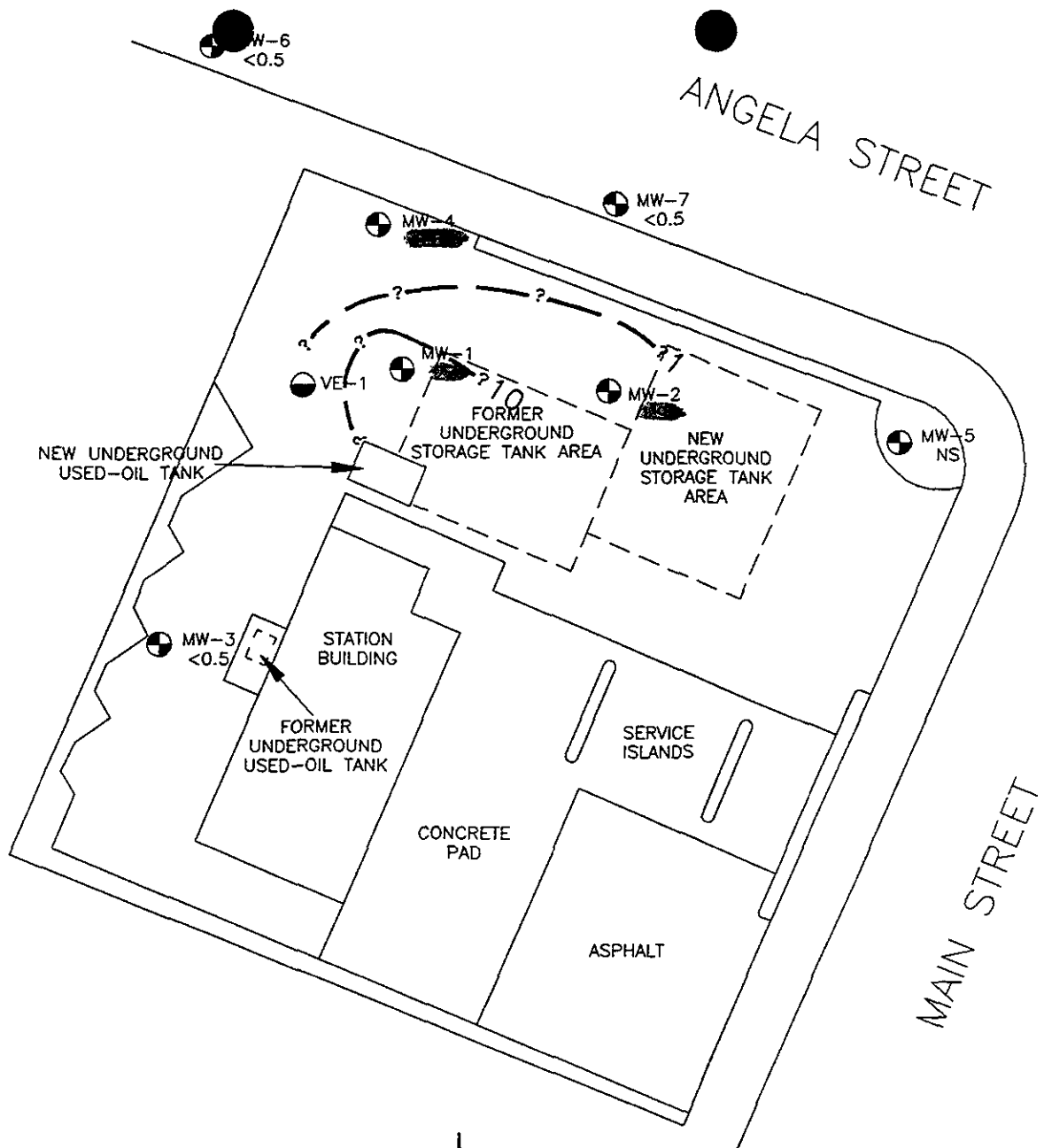
Source: Surveyed by Ron Archer Civil Engineer, Inc., June 1990 and April 1991.



**TPHg CONCENTRATIONS
IN GROUNDWATER
Exxon Service Station 7-7003
349 Main Street
Pleasanton, California**

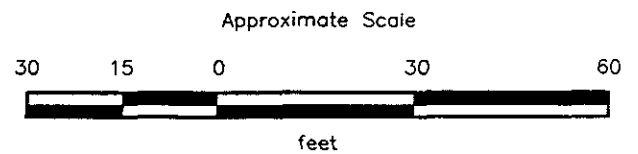
**PLATE
4**

PROJECT 19025.05



EXPLANATION

- 10 = Line of equal concentration of benzene in groundwater in parts per billion (ppb)
- 27 = Concentration of benzene in groundwater in ppb, June 9, 1992
- MW-7 = Monitoring well
- VE-1 = Vapor extraction well
- NS = Not sampled (see text)



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

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**BENZENE CONCENTRATIONS
IN GROUNDWATER
Exxon Service Station 7-7003
349 Main Street
Pleasanton, California**

**PLATE
5**

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Exxon Service Station 7-7003
Pleasanton, California
(Page 1 of 2)

Date	Depth to Water (ft)	Groundwater Elevation (ft)	Product Thickness (ft)	Sheen
<u>MW-1 (Wellhead Elevation = 343.83 ft)</u>				
02/23/90	26.08	317.75	None	None
06/15/90	26.49	317.34	None	None
08/90	26.47	317.36	None	None
12/18/90	28.00	315.83	None	None
03/19/91	23.63	320.20	None	None
06/27/91	22.11	321.72	None	None
09/26/91	27.75	316.08	None	None
01/10/92	25.61	318.22	None	None
03/12/92	22.52	321.31	None	None
06/09/92	21.53	322.30	None	None
<u>MW-2 (Wellhead Elevation = 344.22 ft)</u>				
02/23/90	26.31	317.31	None	None
06/15/90	26.25	317.97	None	None
08/90	26.15	318.07	None	None
12/18/90	27.94	316.28	None	None
03/19/91	23.41	320.81	None	None
06/27/91	21.63	322.59	None	None
09/26/91	27.19	317.03	None	None
01/10/92	25.67	318.55	None	None
03/12/92	22.28	321.94	None	None
06/09/92	21.17	323.05	None	None
<u>MW-3 (Wellhead Elevation = 342.90 ft)</u>				
02/23/90	24.78	318.12	None	None
06/15/90	25.29	317.61	None	None
08/90	25.40	317.50	None	None
12/18/90	26.84	316.06	None	None
03/19/91	22.13	320.77	None	None
06/27/91	21.04	322.86	None	None
09/26/91	26.63	316.27	None	None
01/10/92	24.26	318.64	None	None
03/12/92	21.60	321.30	None	None
06/09/92	20.88	322.02	None	None

See notes on page 2 of 2

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Exxon Service Station 7-7003
Pleasanton, California
(Page 2 of 2)

Date	Depth to Water (ft)	Groundwater Elevation (ft)	Product Thickness (ft)	Sheen
<u>MW-4 (Wellhead Elevation = 343.38 ft)</u>				
06/15/90	30.94	312.44	None	None
08/90	31.21	312.17	None	None
12/18/90	32.86	310.52	None	None
03/19/91	26.76	316.62	None	None
06/27/91	25.91	317.47	None	None
09/26/91	32.29	311.09	None	None
01/10/92	29.06	314.32	None	None
03/12/92	24.25	319.13	None	None
06/09/92	25.00	318.38	None	None
<u>MW-5 (Wellhead Elevation = 345.20 ft)</u>				
06/15/90	26.94	318.26	None	None
08/90	26.90	318.30	None	None
12/18/90	28.31	316.89	None	None
03/19/91	23.98	321.22	None	None
06/27/91	22.41	322.79	None	None
09/26/91	27.77	317.43	None	None
01/10/92	26.38	318.82	None	None
03/12/92	22.08	323.12	None	None
06/09/92	31.98	313.22	None	None
<u>MW-6 (Wellhead Elevation = 342.25 ft)</u>				
03/19/91	34.42	307.83	None	None
06/27/91	35.01	307.24	None	None
09/26/91	40.34	301.91	None	None
01/10/92	36.20	306.05	None	None
03/12/92	31.95	310.30	None	None
06/09/92	33.22	309.03	None	None
<u>MW-7 (Wellhead Elevation = 343.62 ft)</u>				
03/19/91	24.68	318.94	None	None
06/27/91	23.10	320.52	None	None
09/26/91	Not accessible			
01/10/92	26.98	316.64	None	None
03/12/92	21.85	321.77	None	None
06/09/92	22.32	321.30	None	None

Elevations relative to mean sea level datum. (Surveyed by Ron Archer Civil Engineer, Inc.)
Depth to water measured from top of wellhead casing

TABLE 2
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF GROUNDWATER
SAMPLES FOR GASOLINE HYDROCARBON COMPOUNDS

Exxon Service Station 7-7003

Pleasanton, California

(Page 1 of 3)

Well/ Sample Number	Date	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes
MW-1						
W-28-MW1	02/23/90	3,300	21	9.2	59	19
W-27-MW1	06/15/90	1,300	7.9	5.9	32	58
W-29-MW1	08/90	2,500	77	280	50	250
W-28-MW1	12/18/90	390	9	2	43	400
W-23-MW1	03/19/91	4,500	45	12	240	300
W-22-MW1	06/27/91	710	5.4	2.6	29	34
W-28-MW1	09/26/91	290	1.9	<0.5	0.6	0.6
W-25-MW1	01/10/92*	5,400	52	15	690	496
MW1	03/13/92	14,000	87	22	1200	1000
W-21.5-MW1	06/09/92	4,500	27	5.9	400	300
MW-2						
W-29-MW2	02/23/90	650	3	2	0.98	6.5
W-27-MW2	06/15/90	670	<0.5	2.6	<0.5	<0.5
W-28-MW2	08/90	1,300	24	130	37	170
W-28-MW2	12/18/90	470	<0.3	0.5	1	3
W-23-MW2	03/19/91	700	10	3.4	6.1	3.8
W-21-MW2	06/27/91	1,400	8.7	2.1	8.8	33
W-27-MW2	09/26/91	300	<0.5	0.6	0.6	3.9
W-25-MW2	01/10/92*	800	9.3	1.0	2.4	3.2
MW2	03/13/92	350	<0.5	0.6	3.0	1.0
W-21-MW2	06/09/92	150	1.9	2.5	1.1	5.1
MW-3						
W-27-MW3	02/23/90	<20	<0.5	<0.5	<0.5	<0.5
W-27-MW3	06/15/90	200	<0.5	<0.5	<0.5	<0.5
W-27-MW3	08/90	3,200	54	380	23	400
W-27-MW3	12/18/90	200	8	12	6	24
W-22-MW3	03/19/91	<50	<0.5	<0.5	<0.5	<0.5
W-21-MW3	06/27/91	<50	<0.5	<0.5	<0.5	<0.5
W-27-MW3	09/26/91	<50	<0.5	<0.5	<0.5	<0.5
W-24-MW3	01/10/92*	<50	<0.5	<0.5	<0.5	<0.5
MW3	03/13/92	<50	<0.5	<0.5	<0.5	<0.5
W-21-MW3	06/09/92	<50	<0.5	<0.5	<0.5	<0.5

See notes on page 3 of 3

TABLE 2
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF GROUNDWATER
SAMPLES FOR GASOLINE HYDROCARBON COMPOUNDS
Exxon Service Station 7-7003
Pleasanton, California
(Page 2 of 3)

Well/ Sample Number	Date	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes	
MW-4							
W-34-MW4	06/15/90	<20	<0.5	<0.5	<0.5	<0.5	
W-33-MW4	08/90	120	5.2	5.4	5.4	9.9	
W-33-MW4	12/18/90	50	7	1	<0.3	2	
W-26-MW4	03/19/91	160	1.8	0.8	2.2	11	
W-25-MW4	06/27/91	<50	<0.5	<0.5	<0.5	<0.5	
W-32-MW4	09/26/91	<50	<0.5	<0.5	<0.5	<0.5	
W-29-MW4	01/10/92*	98	0.9	<0.5	7.6	4.4	
MW4	03/13/92	82	1.2	<0.5	5.3	4.3	
W-25-MW4	06/09/92	<50	0.6	1.0	<0.5	2.5	
MW-5							
W-26-MW5	06/15/90	<20	<0.5	<0.5	<0.5	<0.5	
W-28-MW5	08/90	210	9.7	12	7.6	17	
W-28-MW5	12/18/90	190	2	3.5	2	8	
W-23-MW5	03/19/91	<50	<0.5	<0.5	<0.5	<0.5	
W-22-MW5	06/27/91	<50	<0.5	<0.5	<0.5	<0.5	
W-28-MW5	09/26/91	<50	<0.5	<0.5	<0.5	<0.5	
W-26-MW5	01/10/92*	<50	<0.5	<0.5	<0.5	0.6	
MW5	03/13/92	<50	<0.5	<0.5	<0.5	<0.5	
	06/09/92	Not Sampled-Insufficient Water					
MW-6							
W-34-MW6	03/19/91	<50	<0.5	<0.5	<0.5	<0.5	
W-35-MW6	06/27/91	<50	2.6	1.8	0.8	<0.30	
W-40-MW6	09/26/91	<50	<0.5	<0.5	<0.5	<0.5	
W-36-MW6	01/10/92*	<50	<0.5	<0.5	<0.5	<0.5	
MW6	03/13/92	<50	<0.5	<0.5	<0.5	<0.5	
W-33-MW6	06/09/92	<50	<0.5	<0.5	<0.5	<0.5	

See notes on page 3 of 3

TABLE 2
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF GROUNDWATER
SAMPLES FOR GASOLINE HYDROCARBON COMPOUNDS
Exxon Service Station 7-7003
Pleasanton, California
(Page 3 of 3)

Well/ Sample Number	Date	TPHg	Benzene	Toluene	Ethyl- benzene	Total Xylenes
MW-7						
W-24-MW7	03/19/91	140	<0.5	<0.5	<0.5	<0.5
W-23-MW7	06/27/91	100	5.2	5.6	3.9	16
	09/26/91		Well Inaccessible			
W-26-MW7	01/10/92*	<50	<0.5	<0.5	<0.5	<0.5
MW7	03/13/92	120	<0.5	<0.5	<0.5	<0.5
W-22-MW7	06/09/92	81	<0.5	0.5	<0.5	<0.5

TPHg = total petroleum hydrocarbons as gasoline.

ppb = parts per billion

< = below the detection limits of the analysis

(No. following < indicates applicable detection limit)

* = sample collected for fourth quarter 1991 monitoring

Sample identification:

W-22-MW7

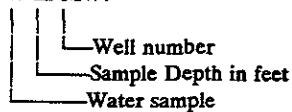


TABLE 3
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF GROUNDWATER
SAMPLES ANALYSIS FOR LEAD, TOG, AND VOCs
Exxon Service Station 7-7003
Pleasanton, California
(Page 1 of 3)

Sample Number	Date	Lead ppm	TOG ppm	VOCs ppb
MW-1				
W-28-MW1	02/23/90	0.01	NA	NA
W-27-MW1	06/15/90	<0.05	NA	NA
W-29-MW1	08/90	<0.05	NA	NA
W-28-MW1	12/18/90	<0.1*	NA	NA
W-23-MW1	03/19/91	<0.1*	NA	12.0 ^b
W-22-MW1	06/27/91	<0.1*	NA	ND
W-28-MW1	09/26/91	<0.1*	NA	ND
W-25-MW1	01/10/92	<0.1*	NA	6.1 ¹
MW1	03/13/92			2.1 ⁵
				14 ¹
				1.2 ⁴
				0.5 ⁶
				0.8 ³
W-21.5-MW1	06/09/92	<0.1*	<5.0	ND
MW-2				
W-29-MW2	02/23/90	0.008	NA	NA
W-27-MW2	06/15/90	<0.05	NA	NA
W-28-MW2	08/90	<0.05	NA	NA
W-28-MW2	12/18/90	<0.1*	NA	NA
W-23-MW2	03/19/91	<0.1*	NA	ND
W-21-MW2	06/27/91	<0.1*	NA	ND
W-27-MW2	09/26/91	<0.1*	NA	ND
W-25-MW2	01/10/92	<0.1*	NA	ND
MW2	03/13/92		NA	ND
W-21-MW2	06/09/92	<0.1*	NA	ND
MW-3				
W-27-MW3	02/23/90	0.01	NA	NA
W-27-MW3	06/15/90	<0.05	NA	NA
W-27-MW3	08/90	<0.05	NA	NA
W-27-MW3	12/18/90	<0.1*	<5.0	4.1 ³
W-22-MW3	03/19/91	<0.1*	<5.0	ND
W-21-MW3	06/27/91	<0.1*	<5.0	ND
W-27-MW3	09/26/91	<0.1*	<5.0	ND
W-24-MW3	01/10/92	<0.1*	5.1	ND
MW3	03/13/92		5.0	ND
W-21-MW3	06/09/92	<0.1*	<5.0	ND

See notes on page 3 of 3

TABLE 3
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF GROUNDWATER
SAMPLES ANALYSIS FOR LEAD, TOG, AND VOCs
Exxon Service Station 7-7003
Pleasanton, California
(Page 2 of 3)

Sample Number	Date	Lead ppm	TOG ppm	VOCs ppb
MW-4				
W-34-MW4	06/15/90	<0.05	NA	NA
W-33-MW4	08/90	<0.05	NA	NA
W-33-MW4	12/18/90	<0.1*	NA	NA
W-26-MW4	03/19/91	<0.1*	NA	ND
W-25-MW4	06/27/91	<0.1*	NA	ND
W-32-MW4	09/26/91	<0.1*	NA	1.0 ⁴
W-29-MW4	01/10/92	<0.1*	NA	1.0 ⁴
MW4	03/13/92		NA	ND
W-25-MW4	06/09/92	<0.1*	NA	0.7 ⁴
MW-5				
W-26-MW5	06/15/90	0.06	NA	NA
W-28-MW5	08/90	<0.05	NA	NA
W-28-MW5	12/18/90	<0.1*	NA	NA
W-23-MW5	03/19/91	<0.1*	NA	0.5 ¹
				1.0 ²
W-22-MW5	06/27/91	<0.1*	NA	ND
W-28-MW5	09/26/91	<0.1*	NA	ND
W-26-MW5	01/10/92	<0.1*	NA	ND
MW5	03/13/92		NA	ND
	06/09/92	Not Sampled-Insufficient Water		
MW-6				
W-34-MW6	03/19/91	<0.1*	NA	ND
W-35-MW6	06/27/91	<0.1*	NA	ND
W-40-MW6	09/26/91	<0.1*	NA	ND
W-36-MW6	01/10/92	<0.1*	NA	ND
MW6	03/13/92		NA	ND
W-33-MW6	06/09/92	<0.1*	NA	ND

See notes on page 3 of 3

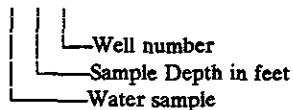
TABLE 3
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF GROUNDWATER
SAMPLES ANALYSIS FOR LEAD, TOG, AND VOCs
Exxon Service Station 7-7003
Pleasanton, California
(Page 3 of 3)

Sample Number	Date	Lead ppm	TOG ppm	VOCs ppb
MW-7				
W-24-MW7	03/19/91	<0.1*	NA	0.7 ¹
W-23-MW7	06/27/91	<0.1*	NA	0.8 ²
	09/26/91	Well Inaccessible		ND
W-26-MW7	01/10/92	<0.1*	NA	ND
MW7	03/13/92		NA	ND
W-22-MW7	06/09/92	<0.1*	NA	ND

ppm = parts per million
 ppb = parts per billion
 TOG = Total oil and grease
 VOCs = Volatile organic compounds (EPA Method 601)
 * = Organic lead
 1 = Chloroform
 2 = Bromodichloromethane
 3 = Tetrachloroethene
 4 = 1,2-Dichloroethane
 5 = Methylene Chloride
 6 = Trichloroethene
 ND = Compounds not detected; see laboratory report for method detection limit
 < = Below the detection limits of the analysis.
 NA = Not analyzed

Sample identification:

W-22-MW7



APPENDIX A

**GROUNDWATER SAMPLING PROTOCOL,
WELL PURGE DATA SHEETS,
AND STABILIZATION GRAPHS**

GROUNDWATER SAMPLING PROTOCOL

The static water level and floating product level, if present, in each well that contained water and/or floating product were measured with an ORS Interphase Probe Model No. 1068018; this instrument is accurate to the nearest 0.01 foot. These groundwater depths were subtracted from wellhead elevations (measured in February 22, 1990, and revised June 5, 1990, and April 9, 1991, by Ron Archer, Civil Engineer, Inc., of Pleasanton, California, a licensed land surveyor), including corrections for product thickness, when necessary, for gradient evaluation by multiplying product thickness (PT) by a correction factor 0.8 and subtracting from DTW (Adjusted DTW = DTW - [PT × 0.8]), to calculate the differences in groundwater elevations.

Water samples collected for subjective evaluation were collected by gently lowering approximately half the length of a clean Teflon® bailer past the air-water interface (if possible) and collecting a sample from near the surface of the water in the well. The samples were checked for measurable floating hydrocarbon product. Any floating product is removed from the well.

Before water samples were collected from the groundwater monitoring wells, the wells were purged until stabilization of the temperature, pH, and conductivity was obtained. Approximately four to six well casing volumes were purged before those characteristics stabilized. Water samples from the wells that do not obtain stability of the temperature, pH, and conductivity are considered to be "grab samples". Turbidity measurements were collected from the purged well water. The quantity of water purged from the wells was calculated as follows:

1 well casing volume = $\pi r^2 h (7.48)$ where:

- r = radius of the well casing in feet.
- h = column of water in the well in feet (well depth - depth to water)
- 7.48 = conversion constant from cubic feet to gallons

gallons of water purged/gallons in 1 well casing volume = well casing volumes removed.

After purging, each well was allowed to recharge to the approximate initial water level. Water samples were then collected with an Environmental Protection Agency (EPA) approved Teflon® sampler which had been cleaned with Alconox® and deionized water. Water samples from the wells that do not recover to approximately 80% (due to slow recharging of the well) of the initial water level within the time between purging and sampling are considered to be "grab samples". The water samples were carefully poured

into 40-milliliter glass vials or one-liter glass amber bottles, which were filled so as to produce a positive meniscus. Each sample container was preserved with hydrochloric acid, when applicable, sealed with a cap containing a Teflon® septum, and subsequently examined for air bubbles to avoid headspace which would allow volatilization to occur. The samples were promptly transported in iced storage in a thermally-insulated ice chest, accompanied by a Chain of Custody Record, to a California-certified laboratory.

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 19025.05

Date: June 9, 1992

Page 1 of 1

Well No. MW-1

Time Started 2:40

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY
2:40	Start purging MW-1				
2:44	12	75.0	7.42	1000	clear
2:48	24	74.0	7.14	990	clear
2:54	36	74.3	7.14	990	clear
2:55	Stop purging MW-2				

Notes:

Well Diameter (inches) : 4"
 Depth to Bottom (feet) : 39.17
 Depth to Water - initial (feet) : 21.35
 Depth to Water - final (feet) : 21.53
 % recovery : 100%
 Time Sampled : 6:00
 Gallons per Well Casing Volume : 11.51
 Gallons Purged : 36.0
 Well Casing Volume Purged : 3.12
 Approximate Pumping Rate (gpm) : 2.57

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 19025.05

Date: June 9, 1992

Page 1 of 1

Well No. MW-2

Time Started 12:43

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
12:43	Start purging MW-2				
12:47	12	72.8	7.27	1000	clear
12:51	24	72.0	7.10	990	clear
12:55	36	71.8	7.04	990	clear
	Stop purging MW-2				

Notes:

Well Diameter (inches) : 4"
 Depth to Bottom (feet) : 39.25
 Depth to Water - initial (feet) : 21.17
 Depth to Water - final (feet) : 21.17
 % recovery : 100%
 Time Sampled : 5:00
 Gallons per Well Casing Volume : 11.80
 Gallons Purged : 36.0
 Well Casing Volume Purged : 3.05
 Approximate Pumping Rate (gpm) : 2.77

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 19025.05

Date: June 9, 1992

Page 1 of 1

Well No. MW-3

Time Started 12:12

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
12:12	Start purging MW-3				
12:17	12	71.8	7.43	960	clear
12:21	24	71.9	7.14	960	clear
12:25	36	72.1	7.03	970	clear
12:26	Stop purging MW-3				

Notes:

Well Diameter (inches) : 4"
 Depth to Bottom (feet) : 39.00
 Depth to Water - initial (feet) : 20.88
 Depth to Water - final (feet) : 20.88
 % recovery : 100%
 Time Sampled : 4:00
 Gallons per Well Casing Volume : 11.83
 Gallons Purged : 36.0
 Well Casing Volume Purged : 3.04
 Approximate Pumping Rate (gpm) : 2.57

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 19025.05

Date: June 9, 1992

Page 1 of 1

Well No. MW-4

Time Started 1:45

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
1:45	Start purging MW-				
1:50	15	76.3	7.55	1010	clear
1:55	27	75.0	7.20	1000	clear
1:56	Dry				
2:11	Pump on				
2:17	45	77.0	7.39	1000	clear
2:18	Stop purging MW-				

Notes:

Well Diameter (inches) : 4"
 Depth to Bottom (feet) : 47.55
 Depth to Water - initial (feet): 25.00
 Depth to Water - final (feet) : 25.00
 % recovery : 100%
 Time Sampled : 5:30
 Gallons per Well Casing Volume : 14.72
 Gallons Purged : 45.0
 Well Casing Volume Purged : 3.06
 Approximate Pumping Rate (gpm) : 2.81

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 19025.05

Date: June 9, 1992

Page 1 of 1

Well No. MW-6

Time Started 11:20

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
11:20	Start purging MW-6				
11:25	16.4	70.6	7.04	760	sl. clear
11:31	32.8	70.8	6.87	810	sl. clear
11:36	49.0	71.2	6.92	830	sl. clear
11:37	Stop purging MW-6				
Notes:					
Well Diameter (inches) : 4"					
Depth to Bottom (feet) : 58.0					
Depth to Water - initial (feet) : 33.22					
Depth to Water - final (feet) : 33.22					
% recovery : 100%					
Time Sampled : 3:30					
Gallons per Well Casing Volume : 16.18					
Gallons Purged : 49.0					
Well Casing Volume Purged : 3.03					
Approximate Pumping Rate (gpm) : 2.88					

WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 19025.05

Date: June 9, 1992

Page 1 of 1

Well No. MW-7

Time Started 3:24

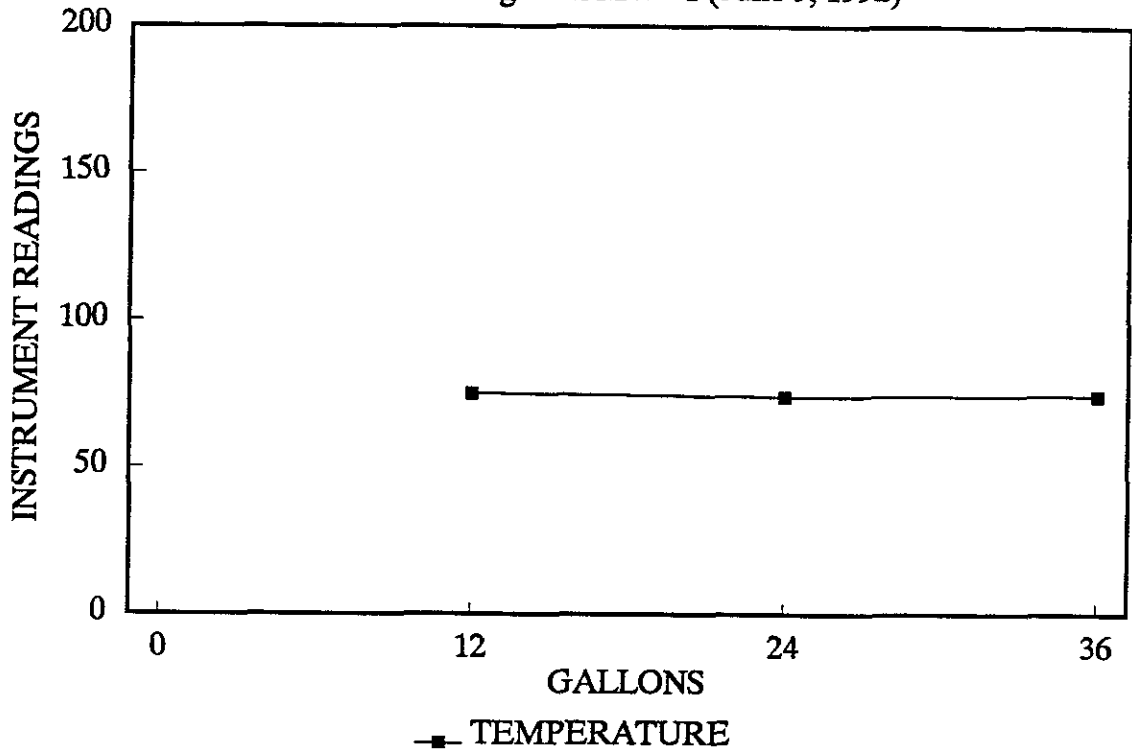
TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
3:24	Start purging MW-7				
3:29	15	74.6	7.53	1000	clear
3:34	30	73.5	7.34	980	clear
3:38	45	72.5	7.23	970	clear
	Stop purging MW-7				

Notes:

Well Diameter (inches) : 4"
 Depth to Bottom (feet) : 44.90
 Depth to Water - initial (feet) : 22.32
 Depth to Water - final (feet) : 22.32
 % recovery : 100%
 Time Sampled : 4:30
 Gallons per Well Casing Volume : 14.74
 Gallons Purged : 45.0
 Well Casing Volume Purged : 3.05
 Approximate Pumping Rate (gpm) : 3.0

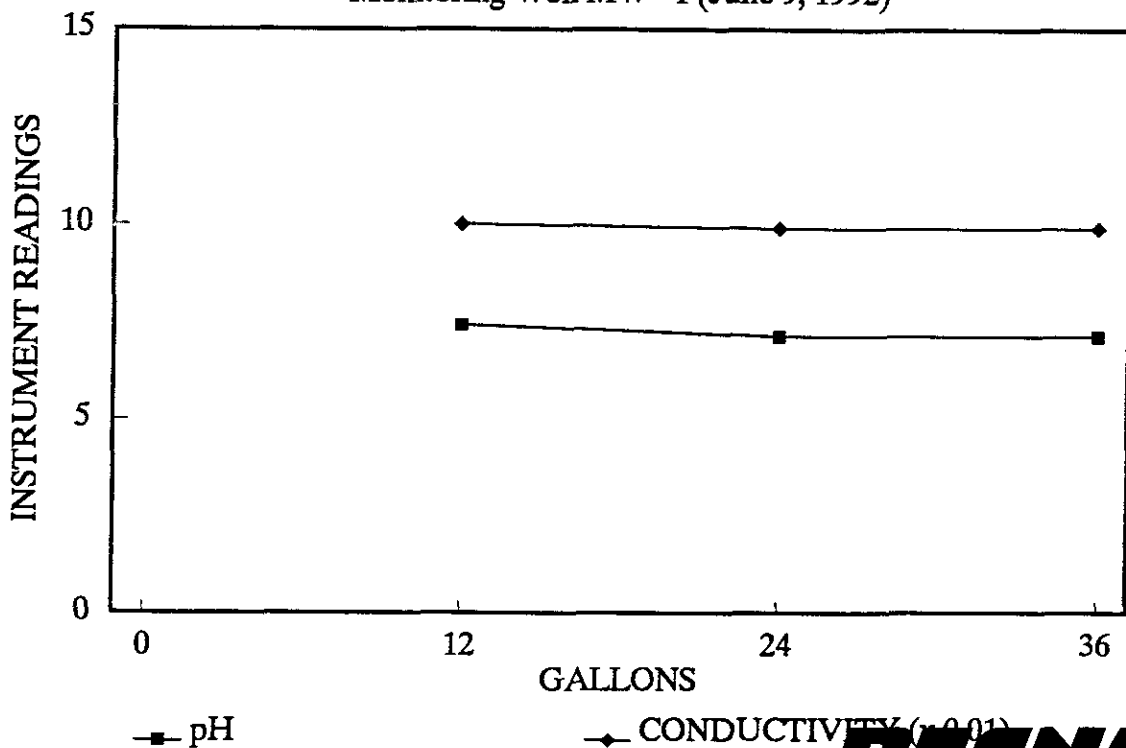
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-1 (June 9, 1992)



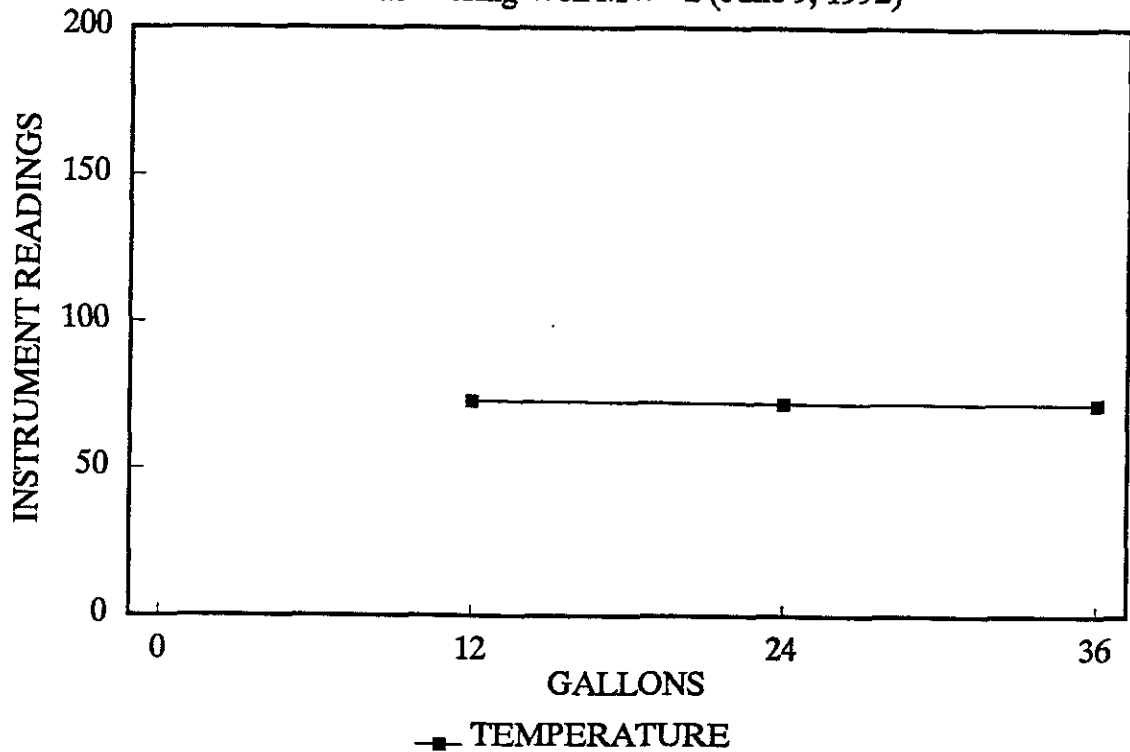
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-1 (June 9, 1992)



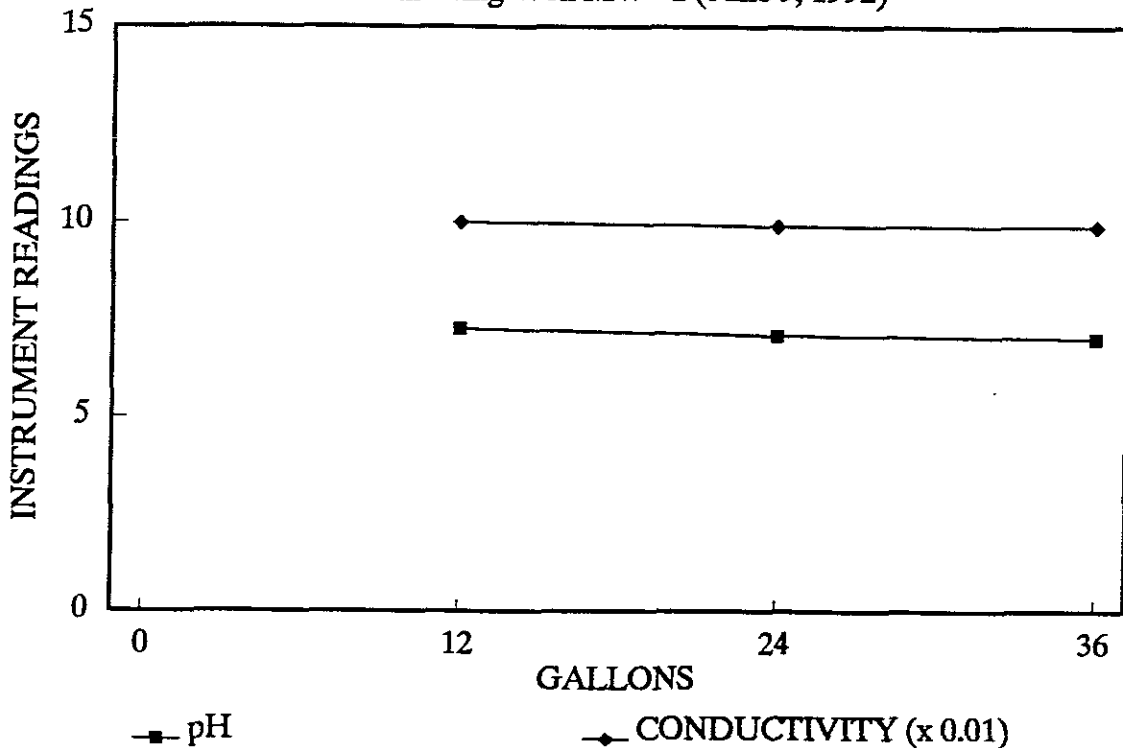
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-2 (June 9, 1992)



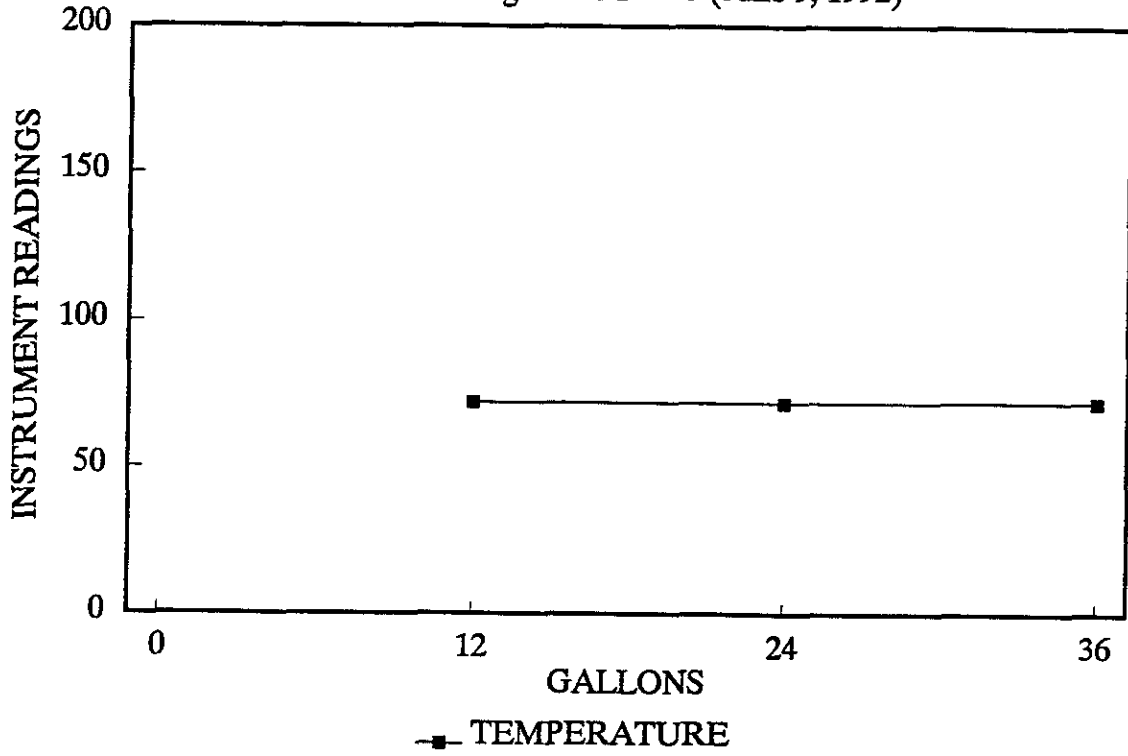
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-2 (June 9, 1992)



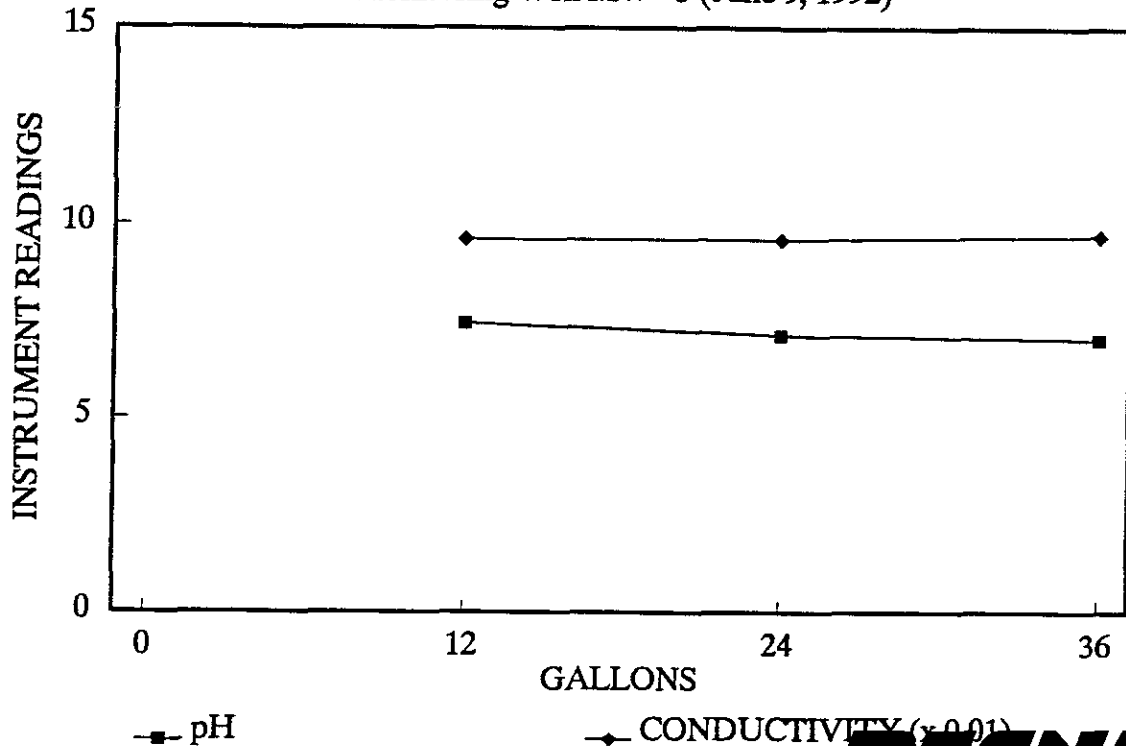
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-3 (June 9, 1992)



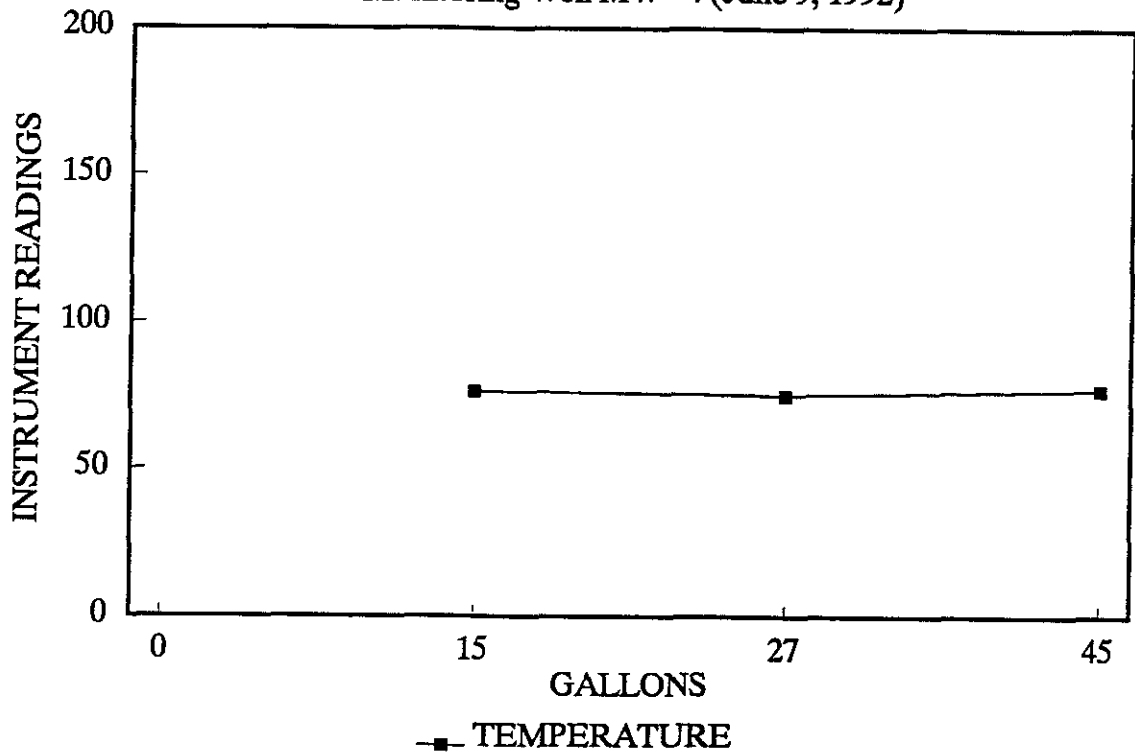
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-3 (June 9, 1992)



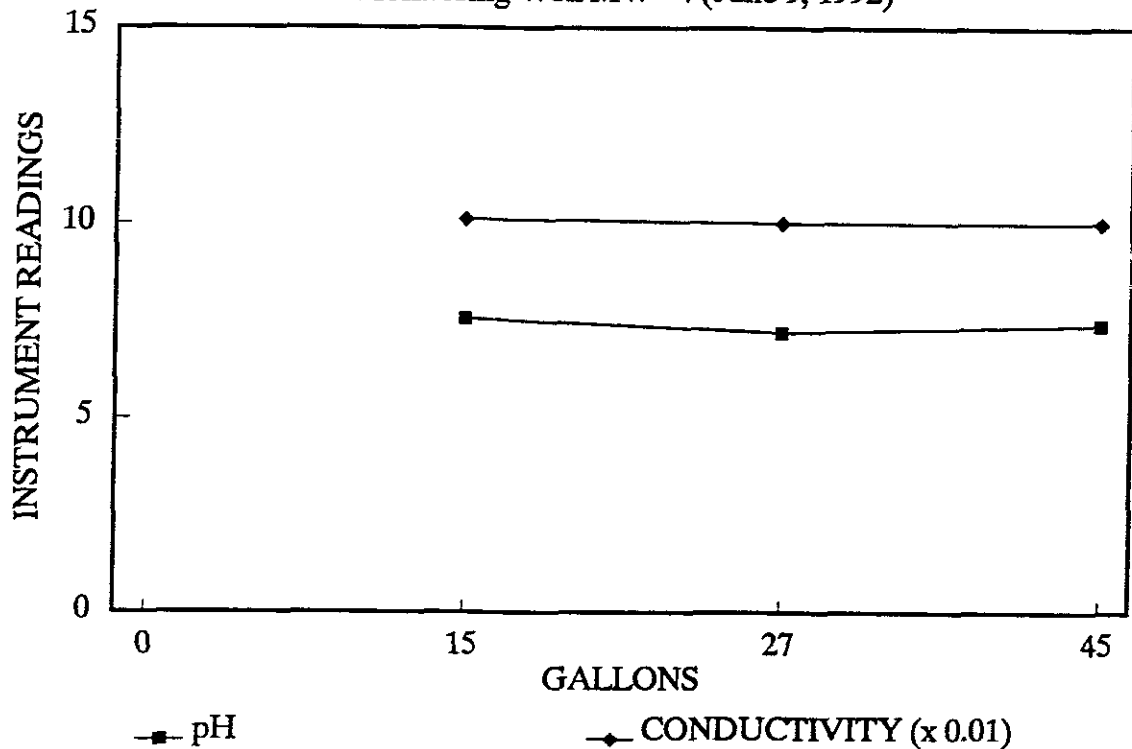
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-4 (June 9, 1992)



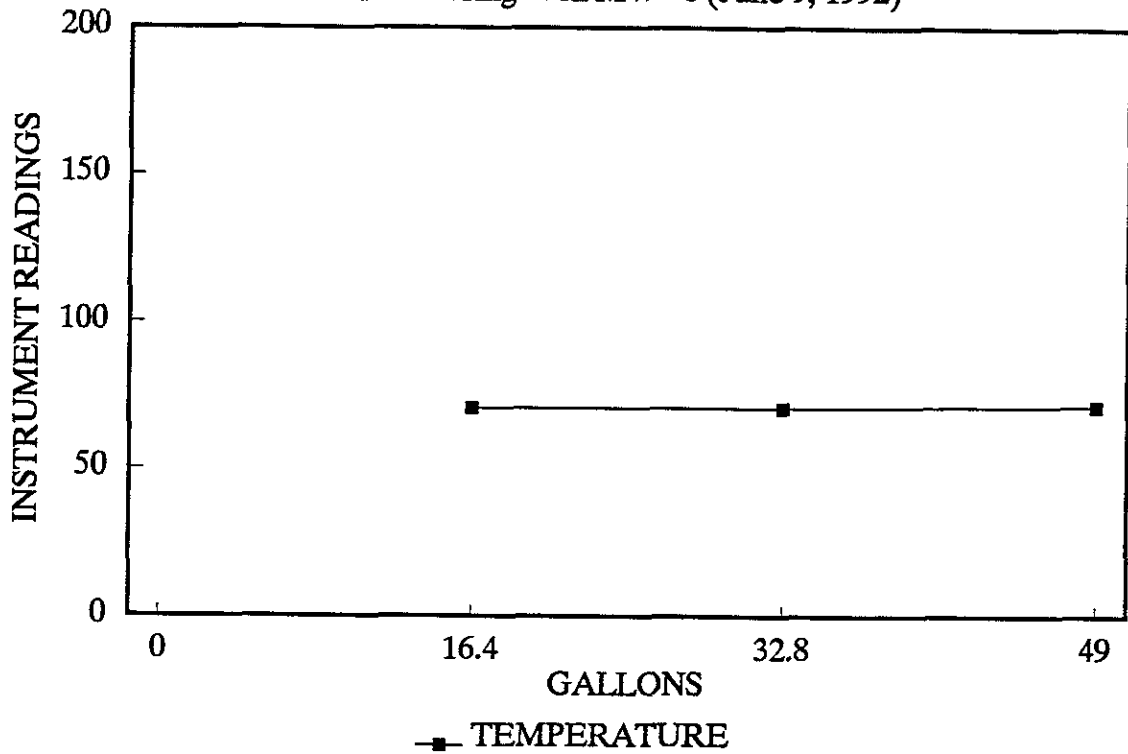
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-4 (June 9, 1992)



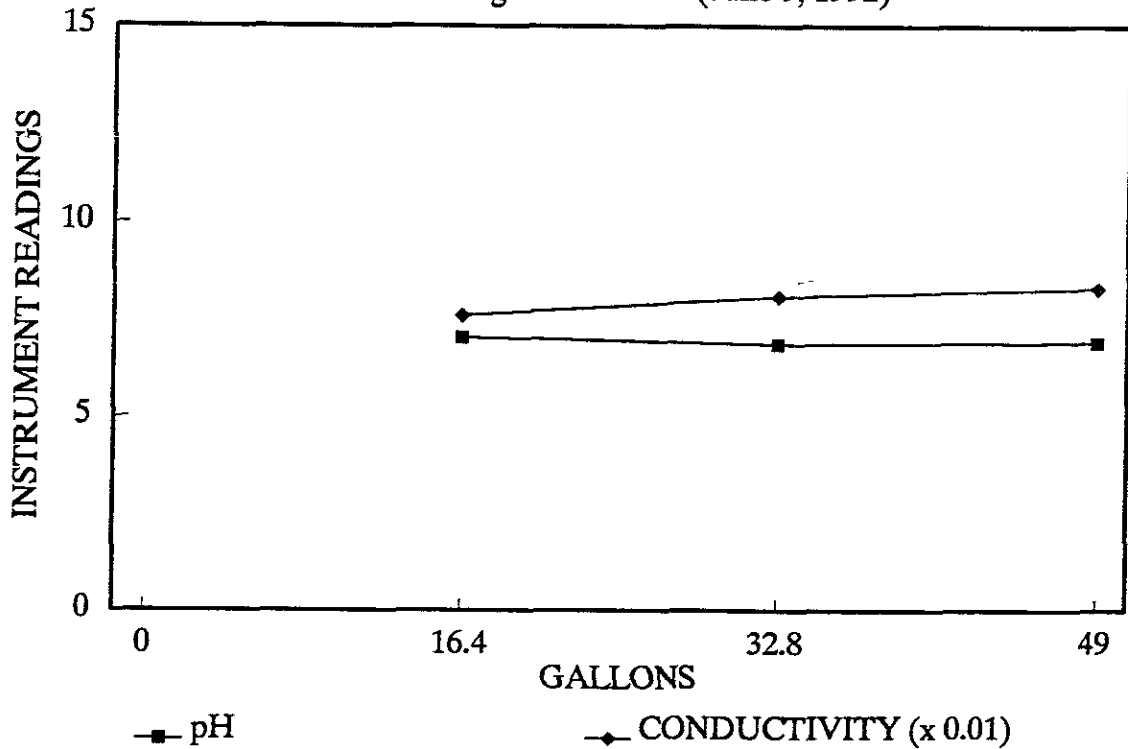
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-6 (June 9, 1992)



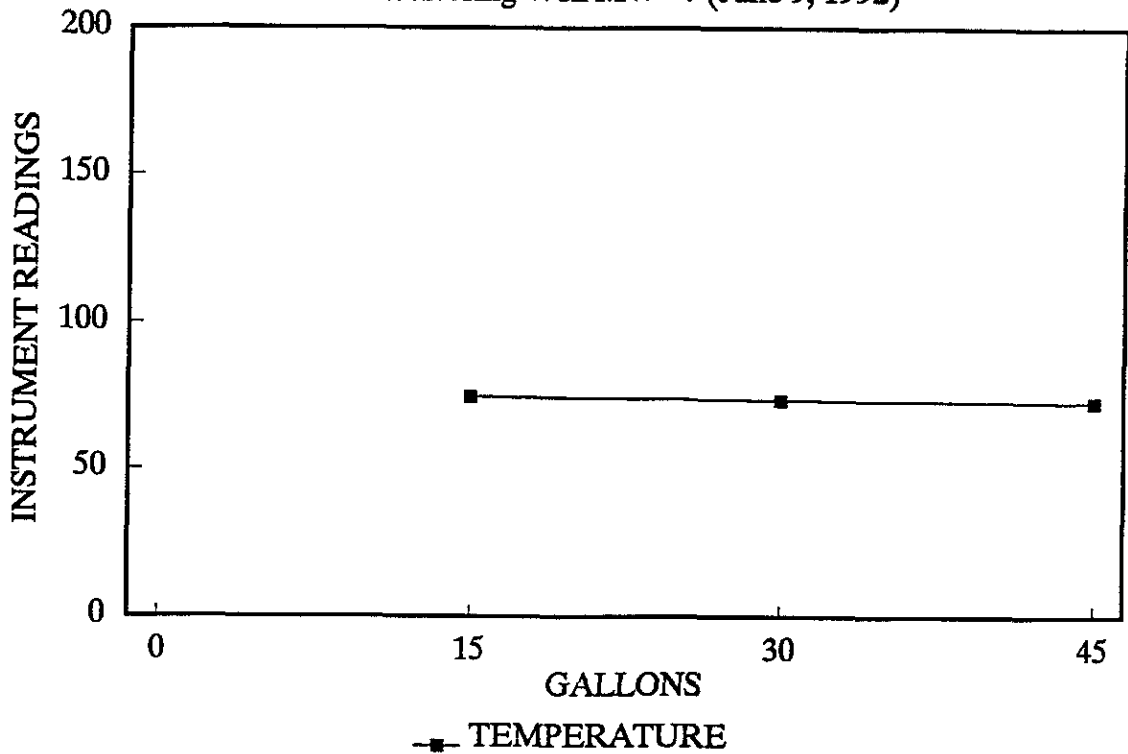
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-6 (June 9, 1992)



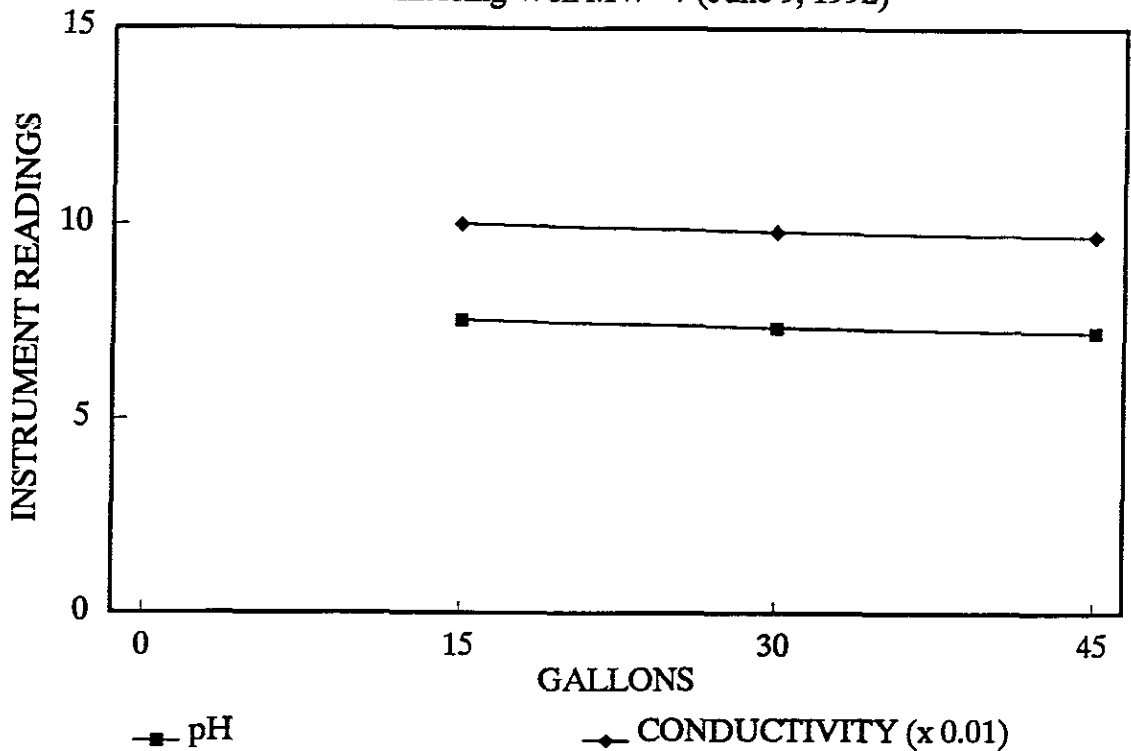
EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-7 (June 9, 1992)



EXXON 7003 STABILIZATION GRAPH

Monitoring Well MW-7 (June 9, 1992)



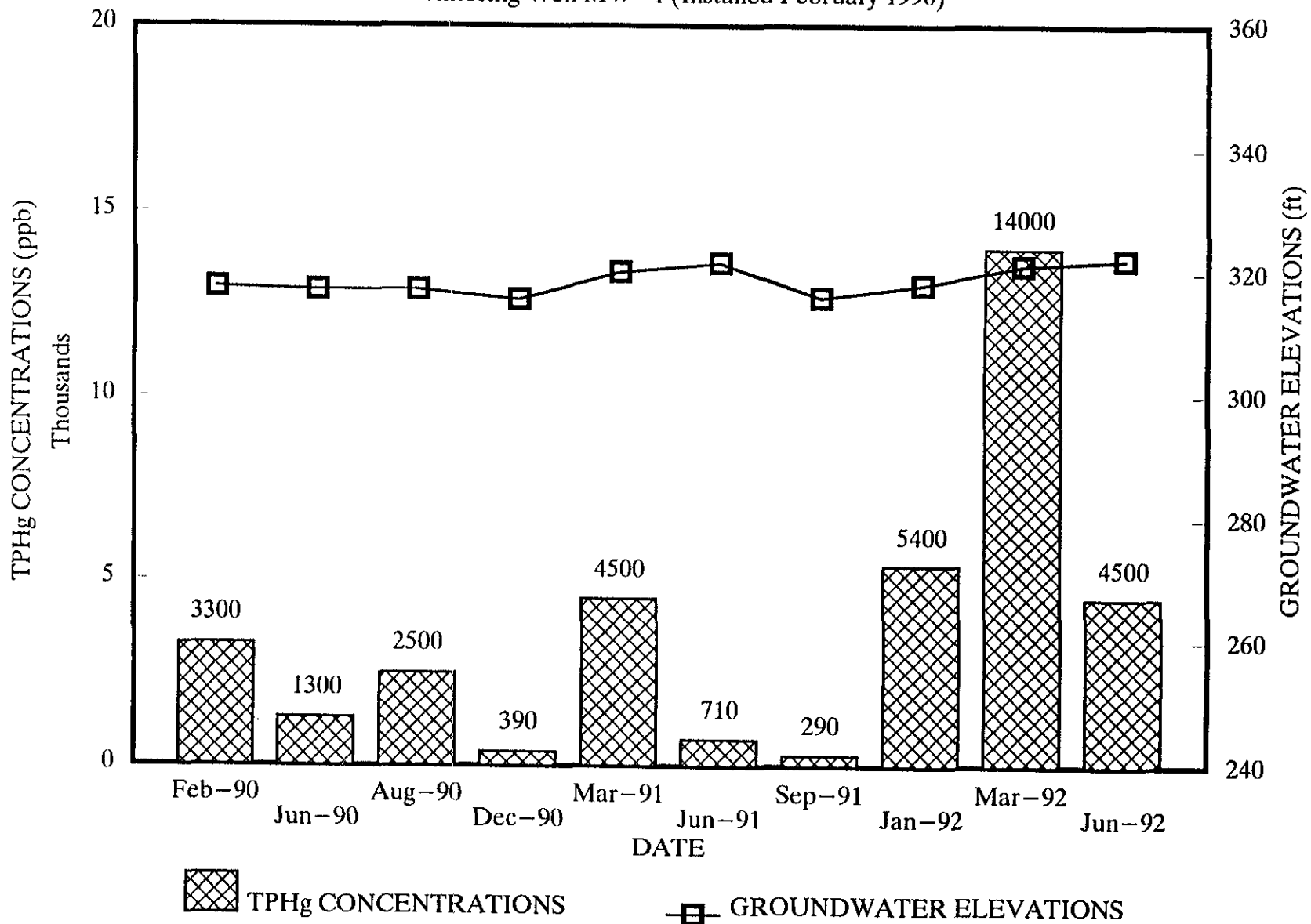
RESNA

APPENDIX B

HYDROGRAPH AND TPH_g CONCENTRATION GRAPHS

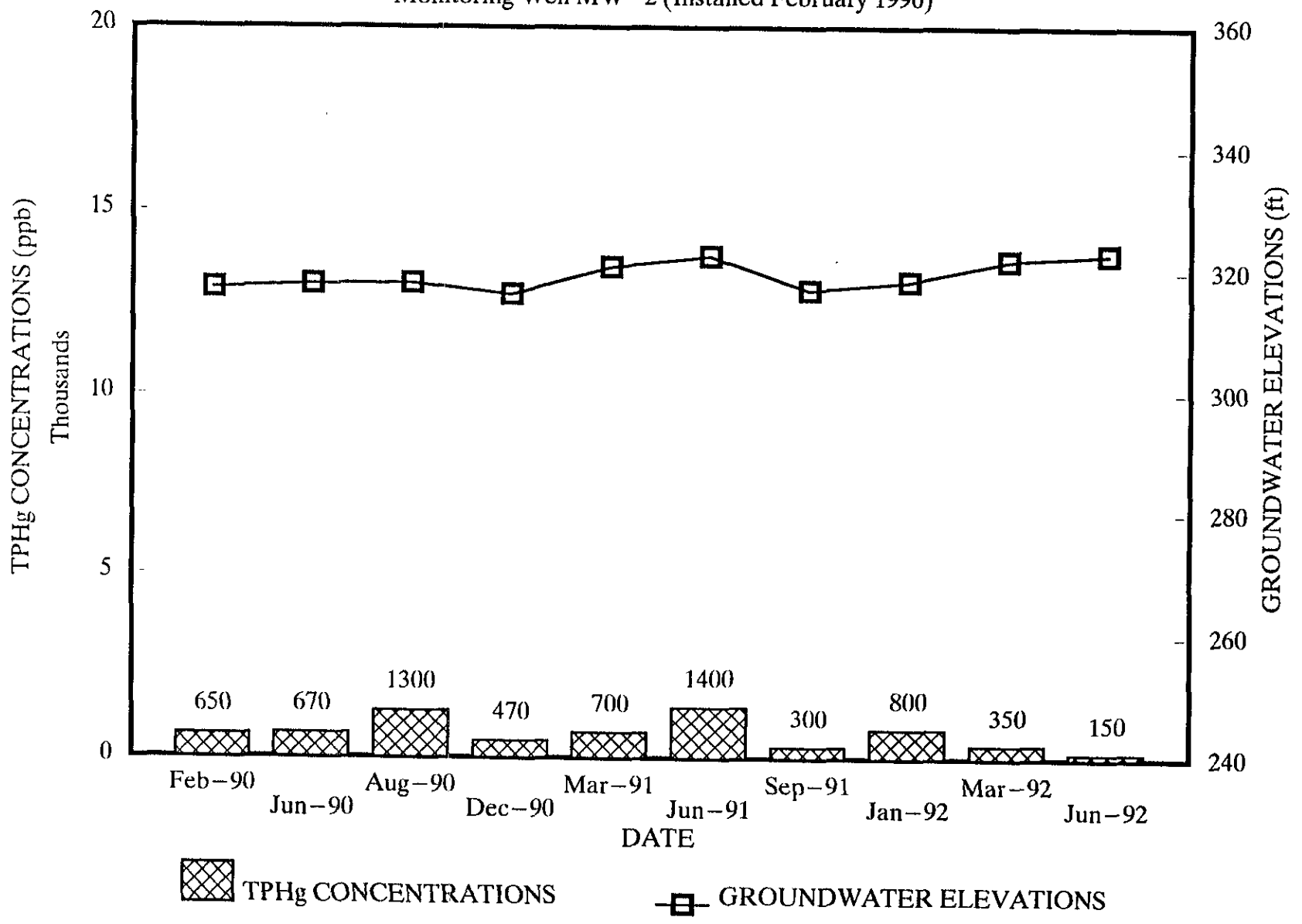
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EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92
Monitoring Well MW-1 (Installed February 1990)

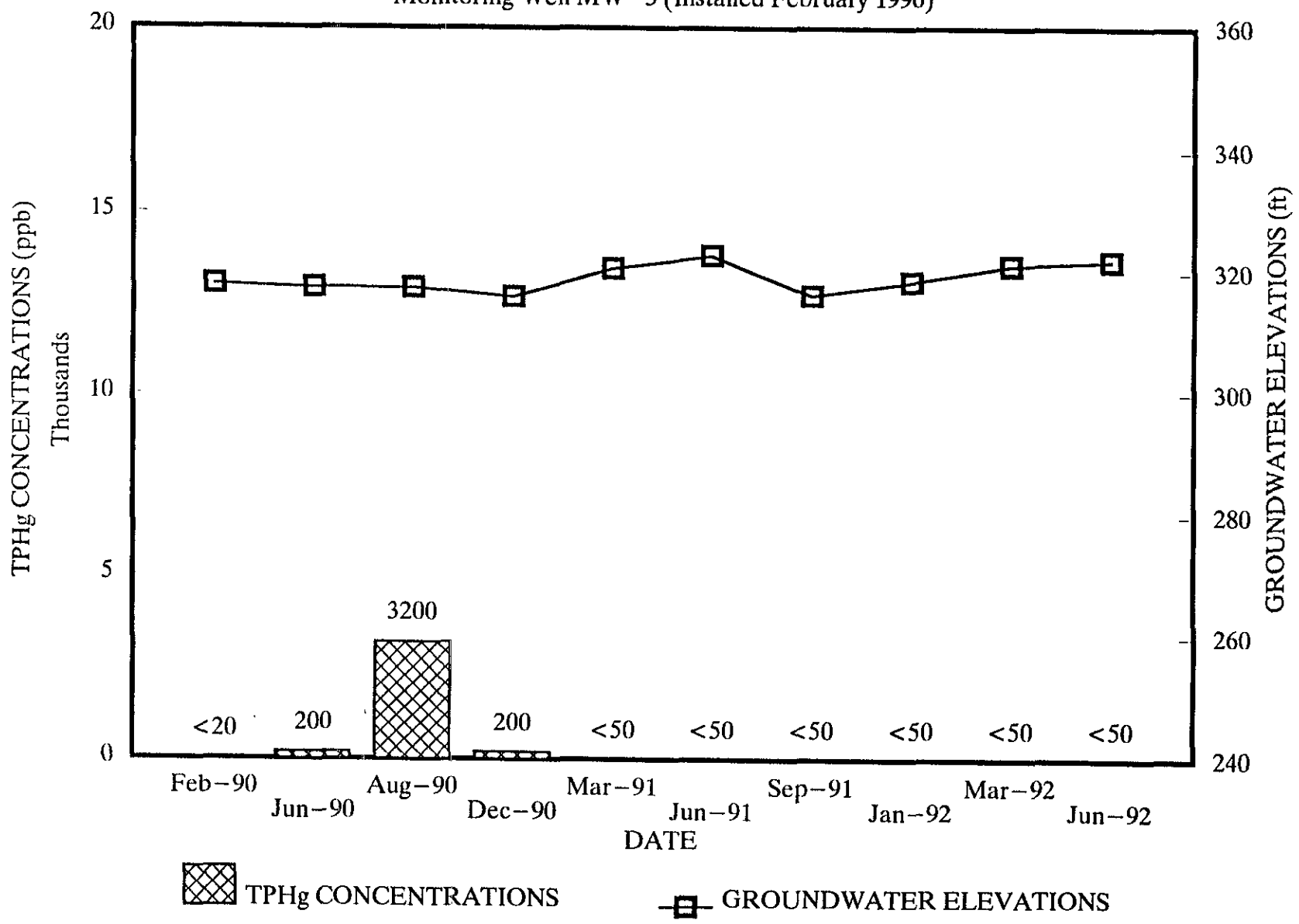


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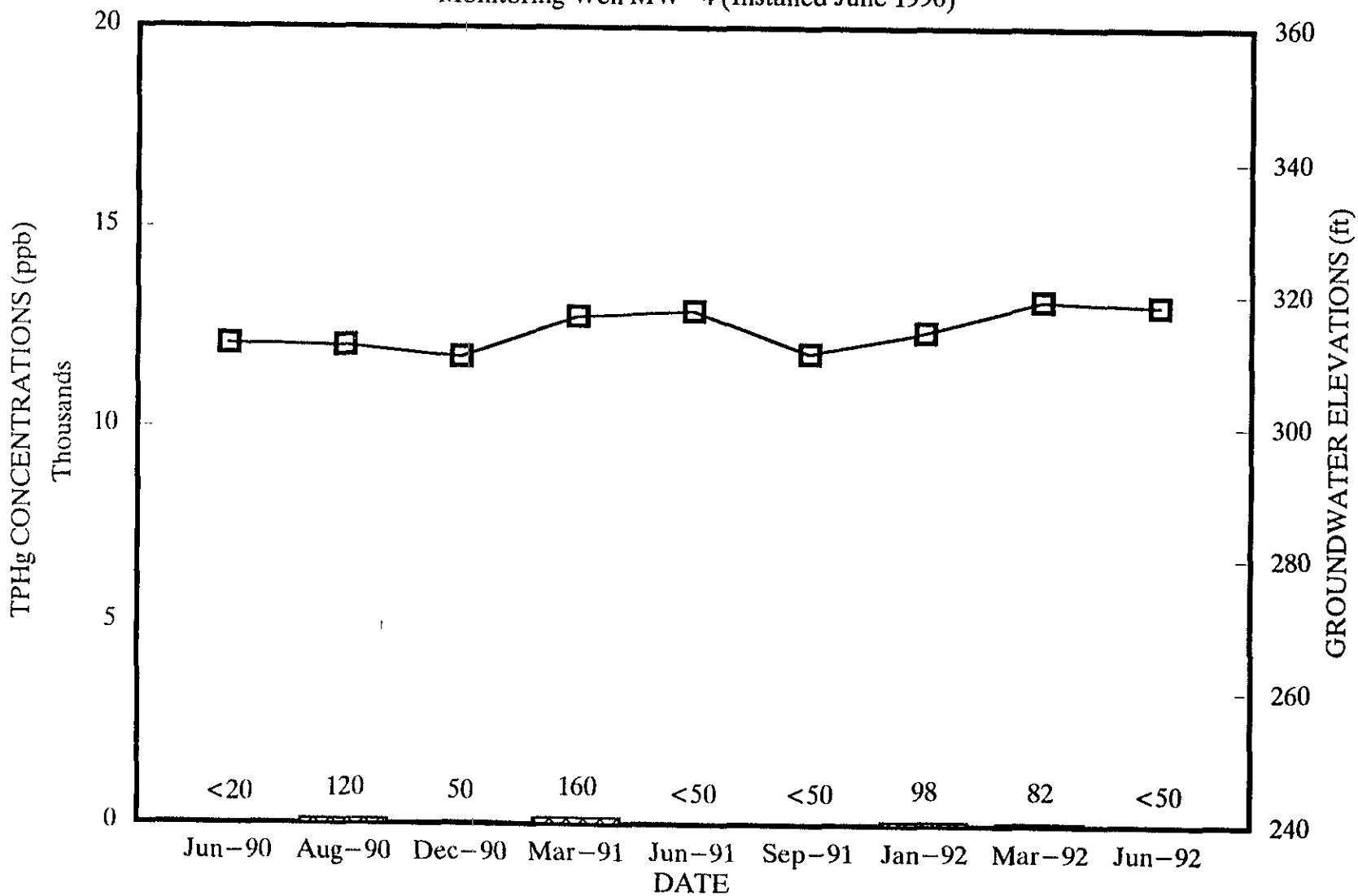
EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92
Monitoring Well MW-2 (Installed February 1990)



EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92
Monitoring Well MW-3 (Installed February 1990)



EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92
Monitoring Well MW-4 (Installed June 1990)



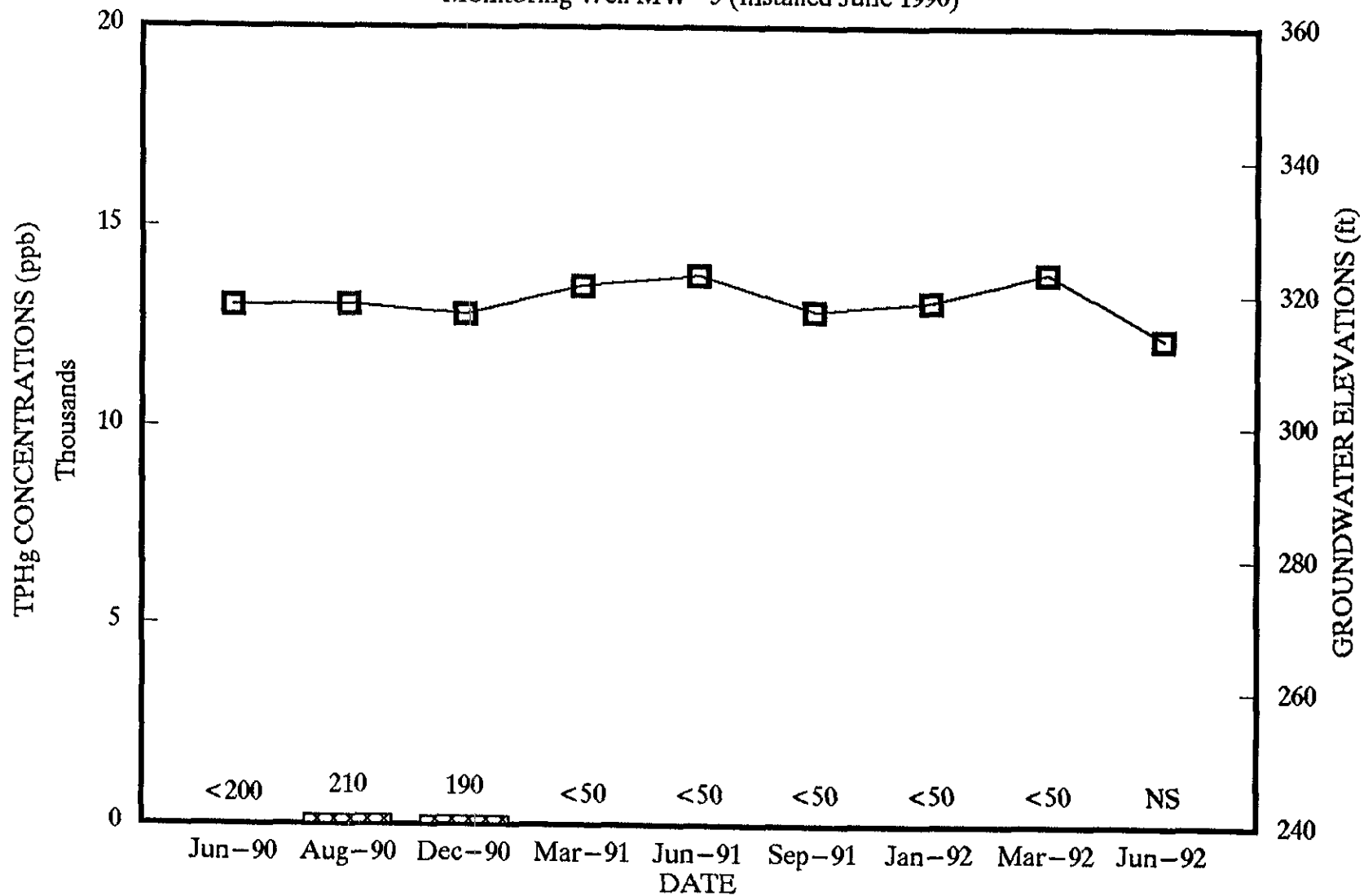
TPHg CONCENTRATIONS



GROUNDWATER ELEVATIONS

RESNA

EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92
Monitoring Well MW-5 (Installed June 1990)

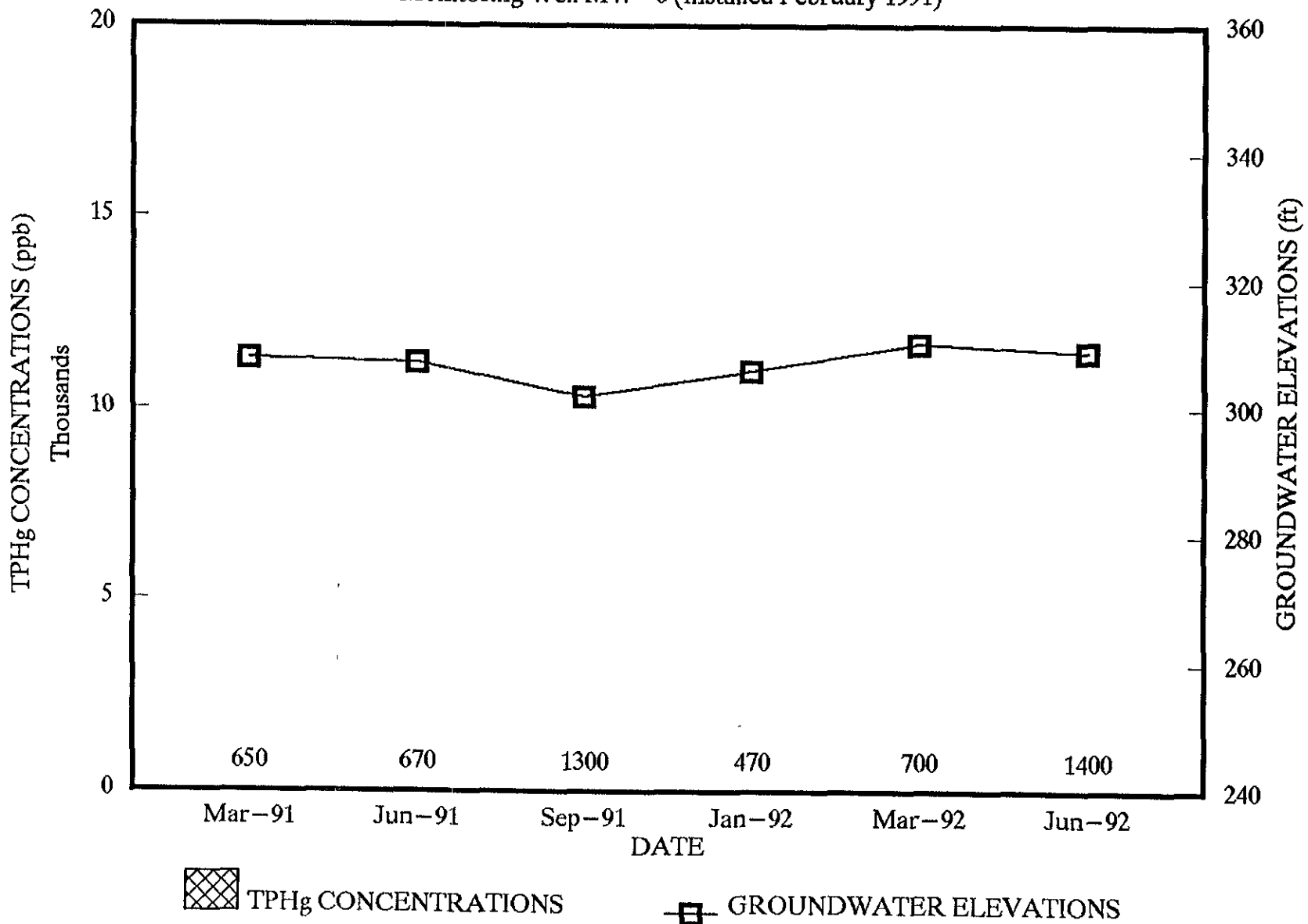


 TPHg CONCENTRATIONS

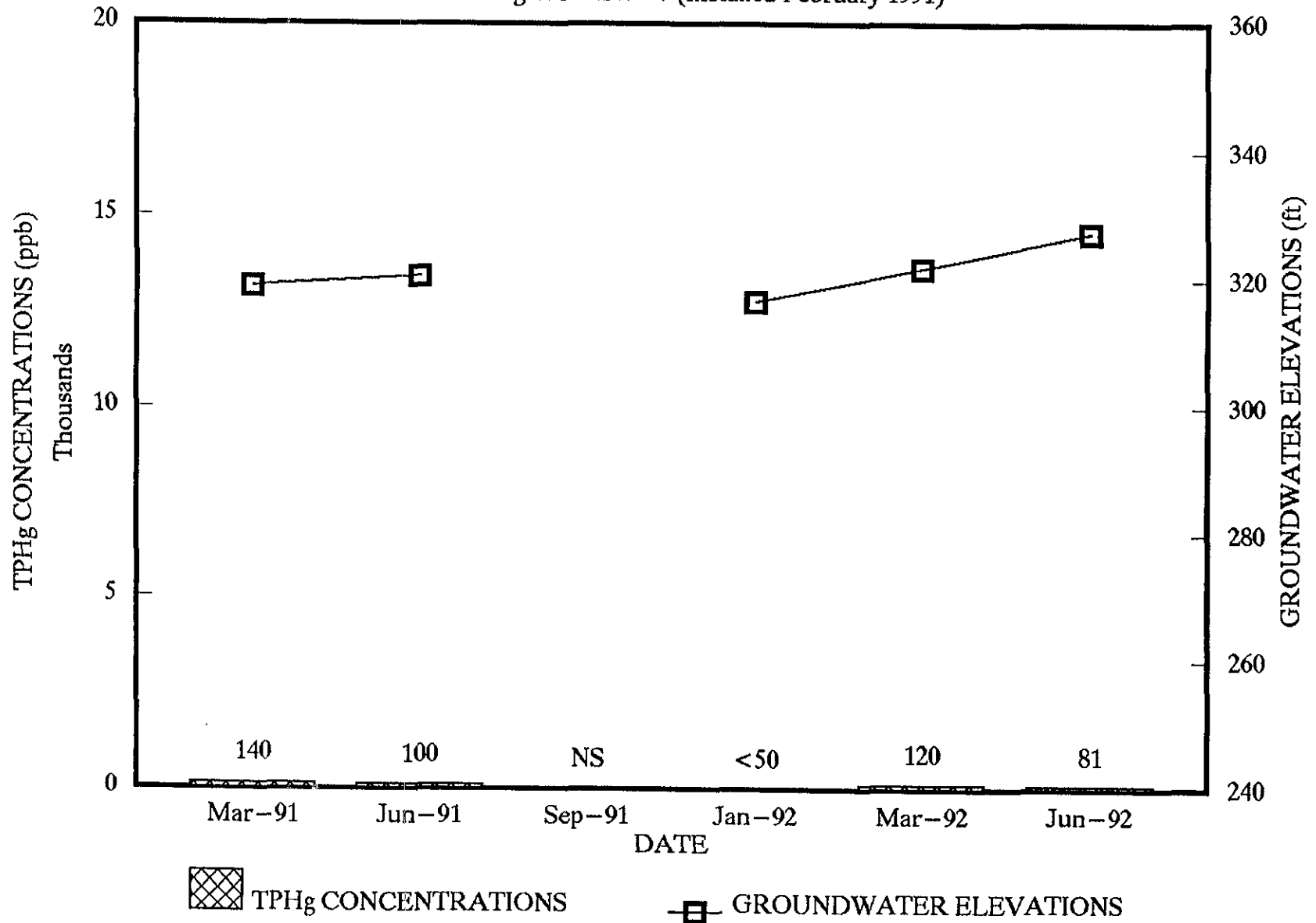
 GROUNDWATER ELEVATIONS

RESNA

EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1991-92
Monitoring Well MW-6 (Installed February 1991)



EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1991-92
Monitoring Well MW-7 (Installed February 1991)



APPENDIX C

**CHAIN OF CUSTODY RECORDS AND
LABORATORY ANALYSIS REPORTS**

June 22, 1992

Mr. Brian Worden
Resna
42501 Albrae Street, Suite 100
Fremont, CA 94538

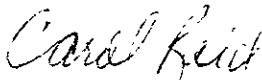
RE: PACE Project No. 420612.514
Client Reference: Exxon 7-7003 (EE)

Dear Mr. Worden:

Enclosed is the report of laboratory analyses for samples received June 12, 1992.

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

Sincerely,



Carol Reid
Project Manager

Enclosures

Resna
42501 Albrae Street, Suite 100
Fremont, CA 94538

June 22, 1992
PACE Project Number: 420612514

Attn: Mr. Brian Worden

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164001
Date Collected: 06/09/92
Date Received: 06/12/92
Client Sample ID: W-21.5-MW1

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>DATE ANALYZED</u>
------------------	--------------	------------	----------------------

ORGANIC ANALYSIS

TPH GASOLINE/BTEX

TOTAL FUEL HYDROCARBONS, (LIGHT):		-		06/16/92
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	4500	06/16/92
PURGEABLE AROMATICS (BTXE BY EPA 8020):		-		06/16/92
Benzene	ug/L	0.5	27	06/16/92
Toluene	ug/L	0.5	5.9	06/16/92
Ethylbenzene	ug/L	2.5	400	06/16/92
Xylenes, Total	ug/L	2.5	300	06/16/92

PURGEABLE HALOCARBONS, EPA METHOD 601

Dichlorodifluoromethane	ug/L	2.0	ND	06/17/92
Chloromethane	ug/L	2.0	ND	06/17/92
Vinyl Chloride	ug/L	2.0	ND	06/17/92
Bromomethane	ug/L	2.0	ND	06/17/92
Chloroethane	ug/L	2.0	ND	06/17/92
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND	06/17/92
1,1-Dichloroethene	ug/L	0.5	ND	06/17/92
Methylene Chloride	ug/L	2.0	ND	06/17/92
trans-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
cis-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
1,1-Dichloroethane	ug/L	0.5	ND	06/17/92
Chloroform	ug/L	0.5	ND	06/17/92
1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND	06/17/92
Carbon Tetrachloride	ug/L	0.5	ND	06/17/92
1,2-Dichloroethane (EDC)	ug/L	0.5	ND	06/17/92
Trichloroethene (TCE)	ug/L	0.5	ND	06/17/92
1,2-Dichloropropane	ug/L	0.5	ND	06/17/92

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

Mr. Brian Worden
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June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164001
 Date Collected: 06/09/92
 Date Received: 06/12/92
 Client Sample ID: W-21.5-MWI

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

PURGEABLE HALOCARBONS, EPA METHOD 601

Bromodichloromethane	ug/L	0.5	ND	06/17/92
2-Chloroethylvinyl ether	ug/L	0.5	ND	06/17/92
cis-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
trans-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
1,1,2-Trichloroethane	ug/L	0.5	ND	06/17/92
Tetrachloroethene	ug/L	0.5	ND	06/17/92

Dibromochloromethane	ug/L	0.5	ND	06/17/92
Chlorobenzene	ug/L	0.5	ND	06/17/92
Bromoform	ug/L	0.5	ND	06/17/92
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	06/17/92
1,3-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,4-Dichlorobenzene	ug/L	0.5	ND	06/17/92

1,2-Dichlorobenzene	ug/L	0.5	ND	06/17/92
Bromochloromethane (Surrogate Recovery)			82%	06/17/92
1,4-Dichlorobutane (Surrogate Recovery)			103%	06/17/92

TOTAL OIL AND GREASE (SM 5520)

Total Oil & Grease SM 5520	mg/L	5.0	ND	06/17/92
Date Extracted			06/16/92	

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

Mr. Brian Worden
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June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164010
 Date Collected: 06/09/92
 Date Received: 06/12/92
 Client Sample ID: W-21-MW2

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

TPH GASOLINE/BTEX

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	06/16/92
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	150	06/16/92
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	06/16/92
Benzene	ug/L	0.5	1.9	06/16/92
Toluene	ug/L	0.5	2.5	06/16/92
Ethylbenzene	ug/L	0.5	1.1	06/16/92
Xylenes, Total	ug/L	0.5	5.1	06/16/92

PURGEABLE HALOCARBONS, EPA METHOD 601

Dichlorodifluoromethane	ug/L	2.0	ND	06/17/92
Chloromethane	ug/L	2.0	ND	06/17/92
Vinyl Chloride	ug/L	2.0	ND	06/17/92
Bromomethane	ug/L	2.0	ND	06/17/92
Chloroethane	ug/L	2.0	ND	06/17/92
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND	06/17/92
1,1-Dichloroethene	ug/L	0.5	ND	06/17/92
Methylene Chloride	ug/L	2.0	ND	06/17/92
trans-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
cis-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
1,1-Dichloroethane	ug/L	0.5	ND	06/17/92
Chloroform	ug/L	0.5	ND	06/17/92

1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND	06/17/92
Carbon Tetrachloride	ug/L	0.5	ND	06/17/92
1,2-Dichloroethane (EDC)	ug/L	0.5	ND	06/17/92
Trichloroethene (TCE)	ug/L	0.5	ND	06/17/92
1,2-Dichloropropane	ug/L	0.5	ND	06/17/92
Bromodichloromethane	ug/L	0.5	ND	06/17/92
2-Chloroethylvinyl ether	ug/L	0.5	ND	06/17/92

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

Mr. Brian Worden
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June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164010
 Date Collected: 06/09/92
 Date Received: 06/12/92
 Client Sample ID: W-21-MW2

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

PURGEABLE HALOCARBONS, EPA METHOD 601

cis-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
trans-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
1,1,2-Trichloroethane	ug/L	0.5	ND	06/17/92
Tetrachloroethene	ug/L	0.5	ND	06/17/92
Dibromochloromethane	ug/L	0.5	ND	06/17/92
Chlorobenzene	ug/L	0.5	ND	06/17/92
Bromoform	ug/L	0.5	ND	06/17/92
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	06/17/92
1,3-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,4-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,2-Dichlorobenzene	ug/L	0.5	ND	06/17/92
Bromochloromethane (Surrogate Recovery)			78%	06/17/92
1,4-Dichlorobutane (Surrogate Recovery)			100%	06/17/92

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

Mr. Brian Worden
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June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164028
 Date Collected: 06/09/92
 Date Received: 06/12/92
 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

TPH GASOLINE/BTEX

TOTAL FUEL HYDROCARBONS, (LIGHT):		-		06/16/92
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND	06/16/92
PURGEABLE AROMATICS (BTXE BY EPA 8020):		-		06/16/92
Benzene	ug/L	0.5	ND	06/16/92
Toluene	ug/L	0.5	ND	06/16/92
Ethylbenzene	ug/L	0.5	ND	06/16/92
Xylenes, Total	ug/L	0.5	ND	06/16/92

PURGEABLE HALOCARBONS, EPA METHOD 601

Dichlorodifluoromethane	ug/L	2.0	ND	06/17/92
Chloromethane	ug/L	2.0	ND	06/17/92
Vinyl Chloride	ug/L	2.0	ND	06/17/92
Bromomethane	ug/L	2.0	ND	06/17/92
Chloroethane	ug/L	2.0	ND	06/17/92
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND	06/17/92
1,1-Dichloroethene	ug/L	0.5	ND	06/17/92
Methylene Chloride	ug/L	2.0	ND	06/17/92
trans-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
cis-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
1,1-Dichloroethane	ug/L	0.5	ND	06/17/92
Chloroform	ug/L	0.5	ND	06/17/92
1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND	06/17/92
Carbon Tetrachloride	ug/L	0.5	ND	06/17/92
1,2-Dichloroethane (EDC)	ug/L	0.5	ND	06/17/92
Trichloroethene (TCE)	ug/L	0.5	ND	06/17/92
1,2-Dichloropropane	ug/L	0.5	ND	06/17/92
Bromodichloromethane	ug/L	0.5	ND	06/17/92
2-Chloroethylvinyl ether	ug/L	0.5	ND	06/17/92

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

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June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164028
 Date Collected: 06/09/92
 Date Received: 06/12/92
 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 HALOCARBONS, EPA METHOD 601

cis-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
trans-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
1,1,2-Trichloroethane	ug/L	0.5	ND	06/17/92
Tetrachloroethene	ug/L	0.5	ND	06/17/92
Dibromochloromethane	ug/L	0.5	ND	06/17/92
Chlorobenzene	ug/L	0.5	ND	06/17/92

Bromoform	ug/L	0.5	ND	06/17/92
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	06/17/92
1,3-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,4-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,2-Dichlorobenzene	ug/L	0.5	ND	06/17/92
Bromochloromethane (Surrogate Recovery)			77%	06/17/92

1,4-Dichlorobutane (Surrogate Recovery)			100%	06/17/92
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TOTAL OIL AND GREASE (SM 5520)

Total Oil & Grease SM 5520	mg/L	5.0	ND	06/17/92
Date Extracted			06/16/92	

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

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June 22, 1992
PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164036
Date Collected: 06/09/92
Date Received: 06/12/92
Client Sample ID: W-25-MW4

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

TPH GASOLINE/BTEX

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	06/17/92
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND	06/17/92
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	06/17/92
Benzene	ug/L	0.5	0.6	06/17/92
Toluene	ug/L	0.5	1.0	06/17/92
Ethylbenzene	ug/L	0.5	ND	06/17/92

Xylenes, Total	ug/L	0.5	2.5	06/17/92
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PURGEABLE HALOCARBONS, EPA METHOD 601

Dichlorodifluoromethane	ug/L	2.0	ND	06/17/92
Chloromethane	ug/L	2.0	ND	06/17/92
Vinyl Chloride	ug/L	2.0	ND	06/17/92
Bromomethane	ug/L	2.0	ND	06/17/92
Chloroethane	ug/L	2.0	ND	06/17/92
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND	06/17/92

1,1-Dichloroethene	ug/L	0.5	ND	06/17/92
Methylene Chloride	ug/L	2.0	ND	06/17/92
trans-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
cis-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
1,1-Dichloroethane	ug/L	0.5	ND	06/17/92
Chloroform	ug/L	0.5	ND	06/17/92

1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND	06/17/92
Carbon Tetrachloride	ug/L	0.5	ND	06/17/92
1,2-Dichloroethane (EDC)	ug/L	0.5	0.7	06/17/92
Trichloroethene (TCE)	ug/L	0.5	ND	06/17/92
1,2-Dichloropropane	ug/L	0.5	ND	06/17/92
Bromodichloromethane	ug/L	0.5	ND	06/17/92

2-Chloroethylvinyl ether	ug/L	0.5	ND	06/17/92
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MDL Method Detection Limit
ND Not detected at or above the MDL.

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June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164036
 Date Collected: 06/09/92
 Date Received: 06/12/92
 Client Sample ID: W-25-MW4

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

PURGEABLE HALOCARBONS, EPA METHOD 601

cis-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
trans-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
1,1,2-Trichloroethane	ug/L	0.5	ND	06/17/92
Tetrachloroethene	ug/L	0.5	ND	06/17/92
Dibromochloromethane	ug/L	0.5	ND	06/17/92
Chlorobenzene	ug/L	0.5	ND	06/17/92
Bromoform	ug/L	0.5	ND	06/17/92
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	06/17/92
1,3-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,4-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,2-Dichlorobenzene	ug/L	0.5	ND	06/17/92
Bromochloromethane (Surrogate Recovery)			79%	06/17/92
1,4-Dichlorobutane (Surrogate Recovery)			95%	06/17/92

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

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June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164044
 Date Collected: 06/09/92
 Date Received: 06/12/92
 Client Sample ID: W-33-MW6

Parameter	Units	MDL		DATE ANALYZED
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ORGANIC ANALYSIS

TPH GASOLINE/BTEX

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	06/16/92
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND	06/16/92
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	06/16/92
Benzene	ug/L	0.5	ND	06/16/92
Toluene	ug/L	0.5	ND	06/16/92
Ethylbenzene	ug/L	0.5	ND	06/16/92
Xylenes, Total	ug/L	0.5	ND	06/16/92

PURGEABLE HALOCARBONS, EPA METHOD 601

Dichlorodifluoromethane	ug/L	2.0	ND	06/17/92
Chloromethane	ug/L	2.0	ND	06/17/92
Vinyl Chloride	ug/L	2.0	ND	06/17/92
Bromomethane	ug/L	2.0	ND	06/17/92
Chloroethane	ug/L	2.0	ND	06/17/92
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND	06/17/92
1,1-Dichloroethene	ug/L	0.5	ND	06/17/92
Methylene Chloride	ug/L	2.0	ND	06/17/92
trans-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
cis-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
1,1-Dichloroethane	ug/L	0.5	ND	06/17/92
Chloroform	ug/L	0.5	ND	06/17/92

1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND	06/17/92
Carbon Tetrachloride	ug/L	0.5	ND	06/17/92
1,2-Dichloroethane (EDC)	ug/L	0.5	ND	06/17/92
Trichloroethene (TCE)	ug/L	0.5	ND	06/17/92
1,2-Dichloropropane	ug/L	0.5	ND	06/17/92
Bromodichloromethane	ug/L	0.5	ND	06/17/92
2-Chloroethylvinyl ether	ug/L	0.5	ND	06/17/92

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

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June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164044
 Date Collected: 06/09/92
 Date Received: 06/12/92
 Client Sample ID: W-33-MW6

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

PURGEABLE HALOCARBONS, EPA METHOD 601

cis-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
trans-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
1,1,2-Trichloroethane	ug/L	0.5	ND	06/17/92
Tetrachloroethene	ug/L	0.5	ND	06/17/92
Dibromochloromethane	ug/L	0.5	ND	06/17/92
Chlorobenzene	ug/L	0.5	ND	06/17/92
Bromoform	ug/L	0.5	ND	06/17/92
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	06/17/92
1,3-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,4-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,2-Dichlorobenzene	ug/L	0.5	ND	06/17/92
Bromochloromethane (Surrogate Recovery)			86%	06/17/92
1,4-Dichlorobutane (Surrogate Recovery)			93%	06/17/92

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

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June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164052
 Date Collected: 06/09/92
 Date Received: 06/12/92
 Client Sample ID: W-22-MW7

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

TPH GASOLINE/BTEX

TOTAL FUEL HYDROCARBONS, (LIGHT):			-	06/16/92
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	81	06/16/92
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	06/16/92
Benzene	ug/L	0.5	ND	06/16/92
Toluene	ug/L	0.5	0.5	06/16/92
Ethylbenzene	ug/L	0.5	ND	06/16/92
Xylenes, Total	ug/L	0.5	ND	06/16/92

PURGEABLE HALOCARBONS, EPA METHOD 601

Dichlorodifluoromethane	ug/L	2.0	ND	06/17/92
Chloromethane	ug/L	2.0	ND	06/17/92
Vinyl Chloride	ug/L	2.0	ND	06/17/92
Bromomethane	ug/L	2.0	ND	06/17/92
Chloroethane	ug/L	2.0	ND	06/17/92
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND	06/17/92
1,1-Dichloroethene	ug/L	0.5	ND	06/17/92
Methylene Chloride	ug/L	2.0	ND	06/17/92
trans-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
cis-1,2-Dichloroethene	ug/L	0.5	ND	06/17/92
1,1-Dichloroethane	ug/L	0.5	ND	06/17/92
Chloroform	ug/L	0.5	ND	06/17/92

1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND	06/17/92
Carbon Tetrachloride	ug/L	0.5	ND	06/17/92
1,2-Dichloroethane (EDC)	ug/L	0.5	ND	06/17/92
Trichloroethene (TCE)	ug/L	0.5	ND	06/17/92
1,2-Dichloropropane	ug/L	0.5	ND	06/17/92
Bromodichloromethane	ug/L	0.5	ND	06/17/92
2-Chloroethylvinyl ether	ug/L	0.5	ND	06/17/92

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

Mr. Brian Worden
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June 22, 1992
PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0164052
Date Collected: 06/09/92
Date Received: 06/12/92
Client Sample ID: W-22-MW7

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

PURGEABLE HALOCARBONS, EPA METHOD 601

cis-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
trans-1,3-Dichloropropene	ug/L	0.5	ND	06/17/92
1,1,2-Trichloroethane	ug/L	0.5	ND	06/17/92
Tetrachloroethene	ug/L	0.5	ND	06/17/92
Dibromochloromethane	ug/L	0.5	ND	06/17/92
Chlorobenzene	ug/L	0.5	ND	06/17/92
Bromoform	ug/L	0.5	ND	06/17/92
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	06/17/92
1,3-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,4-Dichlorobenzene	ug/L	0.5	ND	06/17/92
1,2-Dichlorobenzene	ug/L	0.5	ND	06/17/92
Bromochloromethane (Surrogate Recovery)			84%	06/17/92
1,4-Dichlorobutane (Surrogate Recovery)			99%	06/17/92

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

These data have been reviewed and are approved for release.

Mark A. Valentini
Mark A. Valentini, Ph.D.
Regional Director

Mr. Brian Worden
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QUALITY CONTROL DATA

June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

TOTAL OIL AND GREASE (SM 5520)
 Batch: 70 13269
 Samples: 70 0164001, 70 0164028

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Total Oil & Grease SM 5520	mg/L	5.0	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Total Oil & Grease SM 5520	mg/L	5.0	20	92%	86%	6%

MDL Method Detection Limit
 RPD Relative Percent Difference

Mr. Brian Worden
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QUALITY CONTROL DATA

June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

TPH GASOLINE/BTEX
 Batch: 70 13250
 Samples: 70 0164044, 70 0164052

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-
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	Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	428	101%	100%	0%
Benzene	ug/L	0.5	40.0	98%	99%	1%
Toluene	ug/L	0.5	40.0	102%	102%	0%
Ethylbenzene	ug/L	0.5	40.0	101%	103%	1%
Xylenes, Total	ug/L	0.5	80.0	103%	105%	1%

MDL Method Detection Limit
 RPD Relative Percent Difference

Mr. Brian Worden
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QUALITY CONTROL DATA

June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

TPH GASOLINE/BTEX
 Batch: 70 13281
 Samples: 70 0164001, 70 0164010, 70 0164028

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-
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	Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	376	115%	117%	1%
Benzene	ug/L	0.5	40.0	94%	93%	1%
Toluene	ug/L	0.5	40.0	97%	95%	2%
Ethylbenzene	ug/L	0.5	40.0	96%	94%	2%
Xylenes, Total	ug/L	0.5	80.0	98%	96%	2%

MDL Method Detection Limit
 RPD Relative Percent Difference

Mr. Brian Worden
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QUALITY CONTROL DATA

June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

TPH GASOLINE/BTEX
 Batch: 70 13304
 Samples: 70 0164036

METHOD BLANK:

Parameter	Units	MDL	Method Blank
TOTAL FUEL HYDROCARBONS, (LIGHT):			-
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-
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	Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	337	119%	109%	8%
Benzene	ug/L	0.5	40.0	105%	97%	7%
Toluene	ug/L	0.5	40.0	111%	102%	8%
Ethylbenzene	ug/L	0.5	40.0	112%	103%	8%
Xylenes, Total	ug/L	0.5	80.0	113%	104%	8%

MDL Method Detection Limit
 RPD Relative Percent Difference

Mr. Brian Worden
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QUALITY CONTROL DATA

June 22, 1992
 PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

VOLATILE HALOCARBONS AND AROMATICS

Batch: 70 13253
 Samples: 70 0164001, 70 0164010, 70 0164028, 70 0164036, 70 0164044
 70 0164052

METHOD BLANK:

<u>Parameter</u>	<u>Units</u>	<u>MDL</u>	<u>Method Blank</u>
VOLATILE HALOCARBONS BY EPA 8010			
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	1.0(*)

MDL Method Detection Limit
 (*) Possible laboratory contamination.

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Mr. Brian Worden
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QUALITY CONTROL DATA

June 22, 1992
PACE Project Number: 420612514

Client Reference: Exxon 7-7003 (EE)

VOLATILE HALOCARBONS AND AROMATICS

Batch: 70 13253
Samples: 70 0164001, 70 0164010, 70 0164028, 70 0164036, 70 0164044
70 0164052

METHOD BLANK:

Parameter	Units	MDL	Method Blank
1,2-Dichlorobenzene	ug/L	0.5	ND
Bromochloromethane (Surrogate Recovery)			110%
1,4-Dichlorobutane (Surrogate Recovery)			105%
VOLATILE AROMATICS BY EPA 8020			
Benzene	ug/L	0.3	ND
Toluene	ug/L	0.3	ND
Ethylbenzene	ug/L	0.5	ND
Xylenes, Total	ug/L	0.5	ND
Fluorobenzene (Surrogate Recovery)			94%

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
1,1-Dichloroethane	ug/L	0.5	10.00	118%	113%	4%
Trichloroethene (TCE)	ug/L	0.5	10.00	92%	88%	4%
trans-1,3-Dichloropropene	ug/L	0.5	3.8	97%	91%	6%
Tetrachloroethene	ug/L	0.5	10.00	92%	92%	0%
Benzene	ug/L	0.3	10.00	100%	100%	0%
Toluene	ug/L	0.3	10.00	100%	99%	1%
Xylenes, Total	ug/L	0.5	20.00	100%	98%	2%

MDL Method Detection Limit
RPD Relative Percent Difference



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 Alton Business Park
 30 Hughes St., Suite 206, 92718
 (714) 380-9559

Consultant Name: Resna
 Address: 42501 Albrae, Fremont, CA
 Project Contact: Brian Norden Project #: 19025-5
 Phone #: 570-659-0404 Fax #: 570-651-2218
 Consultant Work Release #:
 Exxon Contact: Marka Guenster Phone #:
 Site RAS #: 7-7003
 Site Location: 349 Main St. Pleasanton, CA
 Laboratory Work Release #: 90066059

Sampled by (please print) <u>Robin A. Adams</u>					SOIL				WATER				Total Oil & Grease SM 5520		Remarks
Sampler Signature <u>Robin A. Adams</u>		Date Sampled <u>6-9-92</u>			TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	Organic Lead DHS Method	TPH/GAS/BTEX EPA 8015/802	TPH/Diesel EPA 8015	Organic Lead DHS Method	TPH EPA 418.1	60/80/100 Pb 0			
Sample Description	Collection Date/Time	Matrix	Prsv.	# of Cont.											
BBI	3:20		HCl	3	do not run per CR (SM)			X					16399.4	Hold	
W-21.5-MW1	6:00		HCl	3/3/2				X					400.1	Hold Pb-0	
W-21-MW2	5:00		HCl	3/3/2				X					4015	Hold Pb-0	
W-21-MW3	4:00		HCl	3/3/2				X					400.8	Hold Pb-0	
W-25-MW4	5:30		HCl	3/3/2				X					400.6	Hold Pb-0	
W-33-MW6	3:30		HCl	3/3/2				X					400.4	Hold Pb-0	
W-22-MW7	4:30		HCl	3/3/2				X					400.2	Hold Pb-0	
					do not run org Pb per CR (SM) 6/15/92										

Cooler No.	Reinquished by/Affiliation	Accepted by/Affiliation	Date	Time
Cooler Seal Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<u>Robin A. Adams</u>	<u>Resna</u>	<u>6-12-92</u>	<u>13:50</u>
Turnaround Time (circle choice) 24 hr. 48 hr. 72 hr. 96 hr. <u>5 workday (standard)</u>	<u>Ed Luthy</u>	<u>Resna</u>	<u>6-12</u>	<u>1940</u>
Shipment Method	Additional Comments:			
Shipment Date				

Distribution: White - Original Yellow - Exxon Pink - Lab Goldenroc - Consultant Field Staff

420612.514

June 29, 1992

Mr. Brian Worden
Resna
42501 Albrae Street, Suite 100
Fremont, CA 94538

RE: PACE Project No. 420622.502
Client Reference: Exxon 7-7003 (EE)

Dear Mr. Worden:

Enclosed is the report of laboratory analyses for samples received June 12, 1992.

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

Sincerely,


Carol Reid
Project Manager

Enclosures

Resna
 42501 Albrae Street, Suite 100
 Fremont, CA 94538

June 29, 1992
 PACE Project Number: 420622502

Attn: Mr. Brian Worden

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:	70 0167450
Date Collected:	06/09/92
Date Received:	06/12/92
Client Sample ID:	W-21.5 MWI
Parameter	AKA 164001
	<u>UNITS</u> <u>MDL</u> <u>DATE ANALYZED</u>

INORGANIC ANALYSIS

ORGANIC LEAD IN WATER; DHS METHOD #338				
Organic Lead, as Pb	mg/L	0.1	ND	06/25/92

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

Mr. Brian Worden
Page 2

June 29, 1992
PACE Project Number: 420622502

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0167469
Date Collected: 06/09/92
Date Received: 06/12/92
Client Sample ID: W-21 MW2
Parameter Units MDL AKA 164010 DATE ANALYZED

INORGANIC ANALYSIS

ORGANIC LEAD IN WATER; DHS METHOD #338
Organic Lead, as Pb mg/L 0.1 ND 06/25/92

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

Mr. Brian Worden
 Page 3

June 29, 1992
 PACE Project Number: 420622502

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:	70 0167477
Date Collected:	06/09/92
Date Received:	06/12/92
Client Sample ID:	W-21 MW3
Parameter	<u>Units</u> <u>MDL</u> <u>AKA 164028</u> <u>DATE ANALYZED</u>

INORGANIC ANALYSIS

ORGANIC LEAD IN WATER; DHS METHOD #338				
Organic Lead, as Pb	mg/L	0.1	ND	06/25/92

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

Mr. Brian Worden
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June 29, 1992
PACE Project Number: 420622502

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0167485
Date Collected: 06/09/92
Date Received: 06/12/92
Client Sample ID: W-25 MW4
Parameter Units MDL AKA 164036 DATE ANALYZED

INORGANIC ANALYSIS

ORGANIC LEAD IN WATER; DHS METHOD #338
Organic Lead, as Pb mg/L 0.1 ND 06/25/92

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

Mr. Brian Worden
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June 29, 1992
 PACE Project Number: 420622502

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0167493
 Date Collected: 06/09/92
 Date Received: 06/12/92
 Client Sample ID: W-33 MW6
 Parameter Units MDL AKA 164044 DATE ANALYZED

INORGANIC ANALYSIS

ORGANIC LEAD IN WATER; DHS METHOD #338
 Organic Lead, as Pb mg/L 0.1 ND 06/25/92

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

Mr. Brian Worden
Page 6

June 29, 1992
PACE Project Number: 420622502

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number: 70 0167507
Date Collected: 06/09/92
Date Received: 06/12/92
Client Sample ID: W-22 MW7
Parameter Units MDL AKA 164052 DATE ANALYZED

INORGANIC ANALYSIS

ORGANIC LEAD IN WATER; DHS METHOD #338
Organic Lead, as Pb mg/L 0.1 ND 06/25/92

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

These data have been reviewed and are approved for release.



Mark A. Valentini, Ph.D.
Regional Director

Mr. Brian Worden
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QUALITY CONTROL DATA

June 29, 1992
 PACE Project Number: 420622502

Client Reference: Exxon 7-7003 (EE)

Organic Lead, as Pb
 Batch: 70 13543

Samples: 70 0167450, 70 0167469, 70 0167477, 70 0167485, 70 0167493
 70 0167507

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Organic Lead, as Pb	mg/L	0.1	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dup1 Recv	RPD
Organic Lead, as Pb	mg/L	0.1	1.0	105%	110%	4%

MDL Method Detection Limit
 ND Not detected at or above the MDL.
 RPD Relative Percent Difference



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Consultant's Name: Rena Page of

Address: 42501 Alhambra, Fremont Site Location: 349 Main St

Project #: 19025-5 Consultant Project #: 19025-5

Project Contact: Brian Worden Phone #: Fax #:

EXXON Contact: Marla Guensler BE C&M Laboratory Work Release #: 90066059

EXXON RAS #: 7-7003

Sampled by (print): Sampler's Signature:

Shipment Method: Air Bill #: Shipment Date:

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

Sample Description	Collection Date/Time	Matrix Soil/Water	Prsv	# of Cont	PACE Sample #	TPH/GAS/BTEX EPA 8015/8020	TPH/Diesel EPA 8015	TRPH EPA 418.1	Diagnose Pb	Sample Condition as Received				COMMENTS
										Temperature ° C. <u> </u>	Cooler #. <u> </u>	Inbound Seal Yes No	Outbound Seal Yes No	
W-21.5 MW1	6-9	W			16745.0				X					16400.1 AKA
W-21-MW2	6-9	W			469				X					401.0
W-21 MW3	6-9	W			47.7				X					02.8
W-25 MW4	6-9	W			48.5				X					03.6
W-33 MW6	6-9	W			193				X					04.4
W-22 MW7	6-9	W			50.7				X					05.2
5/1, C/4														

Relinquished by/Affiliation	Date	Time	Accepted by/Affiliation	Date	Time	Additional Comments:
			<u>Steph Matrino PACE</u>	<u>6/22/02</u>		<u>Originally logged in under proj 420612514</u>