RESNA
Working To Restore Nature

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LETTER REPORT
QUARTERLY GROUNDWATER MONITORING
Fourth Quarter 1992
at
Exxon Station 7-7003
349 Main Street
Pleasanton, California

19025.05

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February 1, 1993
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 Fourth 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 fourth 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 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 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 former and existing gasoline underground storage tanks (USTs) at the site.

Prior to the present monitoring, RESNA, formerly Applied GeoSystems (AGS), performed and environmental investigation related to the removal and replacement of three gasoline USTs and one used-oil UST in August 1989 (AGS, October 1, 1989), and 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 directing analyses of soil and groundwater samples (AGS, August 1, 1990). AGS drilled six 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 of 1990

(AGS, August 1, 1990) and is continuing. Pertinent site features include a service station building, two dispenser islands, two USTs located in the northeastern portion of the site, and a used-oil UST located northeast of the station building (Plate 2). 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

For the latest quarterly groundwater monitoring, RESNA personnel collected groundwater monitoring data from four onsite monitoring wells (MW-1, MW-3 through MW-5) and two offsite monitoring wells (MW-6 and MW-7) on December 12, 1992. ~~Monitoring well MW-2 was inaccessible during the quarterly monitoring and was not sampled.~~ 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 the four onsite monitoring wells and the two offsite monitoring wells. 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 (MW-1 through MW-7) are included in Appendix B. Based on the December 12, 1992, groundwater elevation data, the interpreted local groundwater gradient and flow direction is approximately 0.30 toward the northwest. 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 floating product or noticeable hydrocarbon vapor was observed in the water samples collected for subjective analysis from the six wells monitored. 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, subjective evidence of turbidity, pH, and conductivity for monitoring wells MW-1, and MW-3 through MW-7 are included on the Well Purge Data Sheets 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) using modified Environmental Protection Agency (EPA) Methods 5030/8015/8020. In addition, groundwater from wells MW-1 and MW-3 were analyzed for total oil and grease (TOG) using Standard Method 5520, and 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 C.

The chemical analytical 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 for Lead, TOG, and VOCs. Graphic representations of TPHg and benzene concentrations in the local groundwater for this quarterly monitoring are shown on Plate 4, TPHg/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, and MW-3 through MW-7 indicate that:

- Except for 1.3 parts per billion (ppb) total xylenes in MW-3, TPHg and BTEX were nondetectable in wells MW-3 and MW-6.

- TPHg was detected in the groundwater at concentrations ranging between 99 ppb in MW-4 to 14,000 ppb in MW-1.

- benzene concentrations from wells MW-1, MW-4, MW-5, and MW-7 ranged from 0.9 ppb (MW-5) to 53 ppb (MW-1). Concentrations of benzene in wells MW-1, MW-4, and MW-7 are equal to or exceed the Department of Health Services (DHS) Maximum Contaminant Level (MCL) of 1.0 ppb benzene in drinking water;

- toluene, ethylbenzene, and total xylenes were detected at concentrations 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 water in wells MW-4, MW-5, and MW-7; except for the presence of 1,100 ppb ethylbenzene in well MW-1.

- o TOG was nondetectable in wells MW-1 and MW-3.
- o VOCs were nondetectable in wells MW-4.
- o 29 ppb Methylene Chloride, 49 ppb Chloroform, 9.0 Trichloroethene, and 6.3 Tetrachloroethene were detected in well MW-1.

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

If you have any questions or comments, please call us at (408) 264-7723 or (800) 926-0815.

Sincerely,
RESNA Industries Inc.

Marc A. Briggs
Project Geologist

REGISTERED GEOLOGIST
JAMES LEWIS NELSON
No. 1463
CERTIFIED ENGINEERING GEOLOGIST
STATE OF CALIFORNIA

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
Plate 4: TPHg/Benzene Concentrations in Groundwater

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 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

Alameda County Flood Control and Water Conservation District (Zone 7). 1986. Water Level Contours Map. Water Resources Engineering.

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.

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. 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.

Applied GeoSystems. October 31, 1991. Letter Report Second Quarter 1991 Groundwater Monitoring at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025.03.

Applied GeoSystems. December 5, 1991. Letter Report Third Quarter 1991 Groundwater Monitoring at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025.03.

California Department of Health Services, State of California. October 24, 1990. Summary of California Drinking Water Standards

REFERENCES

California Department of Water Resources. 1966. Evaluation of Groundwater Resources, Livermore and Sunol Valleys, Appendix A: Geology. Bulletin No. 118-2.

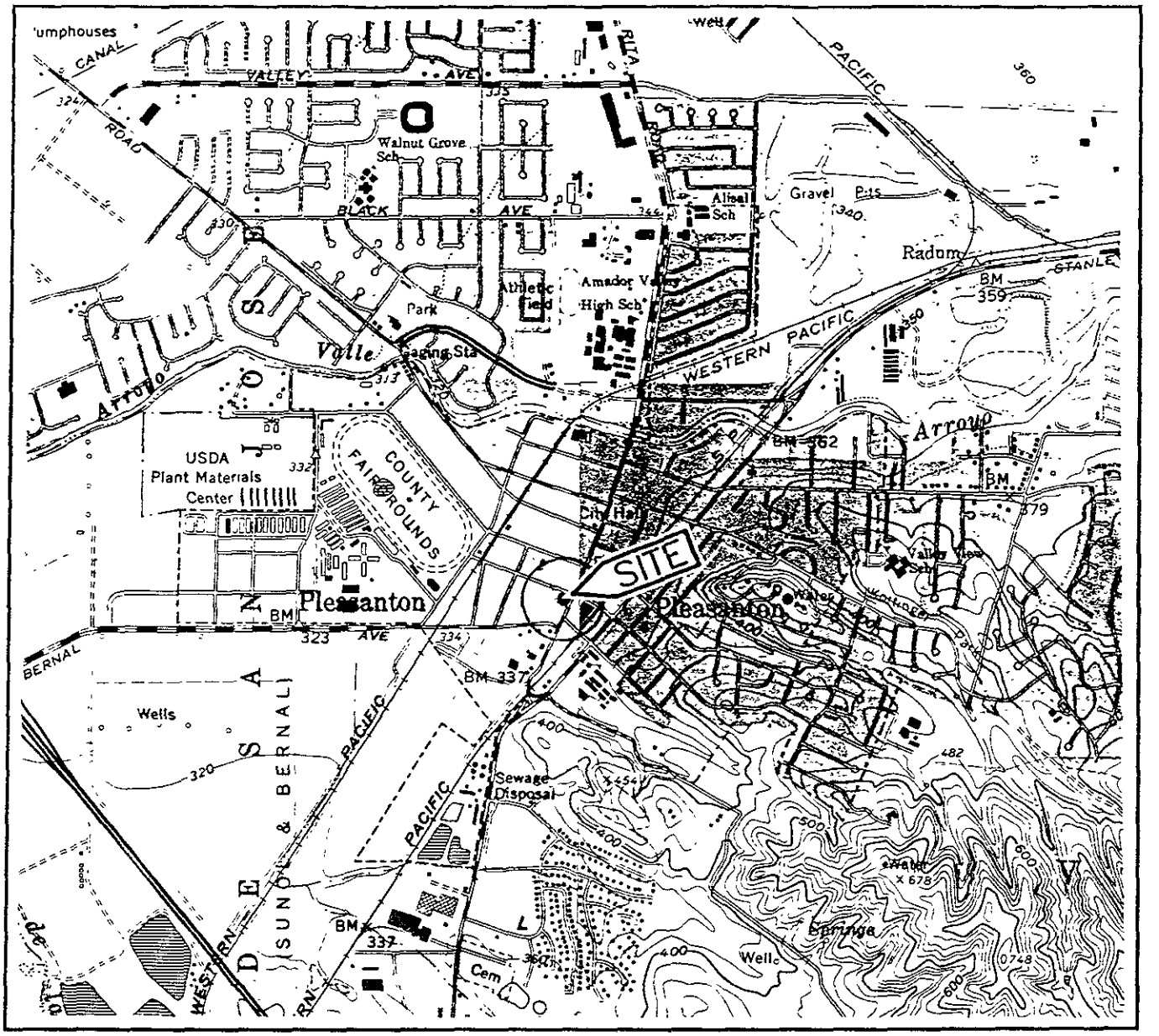
California Department of Water Resources. 1974. Evaluation of Groundwater Resources, Livermore and Sunol Valleys. Bulletin No. 118-2, page 153.

RESNA Industries Inc. March 30, 1992. Letter Report Fourth Quarter 1991 Groundwater Monitoring at Exxon Station No. 7-7003, 349 Main Street, Pleasanton, California. Job No. 19025.03.

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.

RESNA Industries Inc. November 30, 1992. Letter Report Third 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

N

Approximate Scale

2000 1000 0 2000 4000

feet

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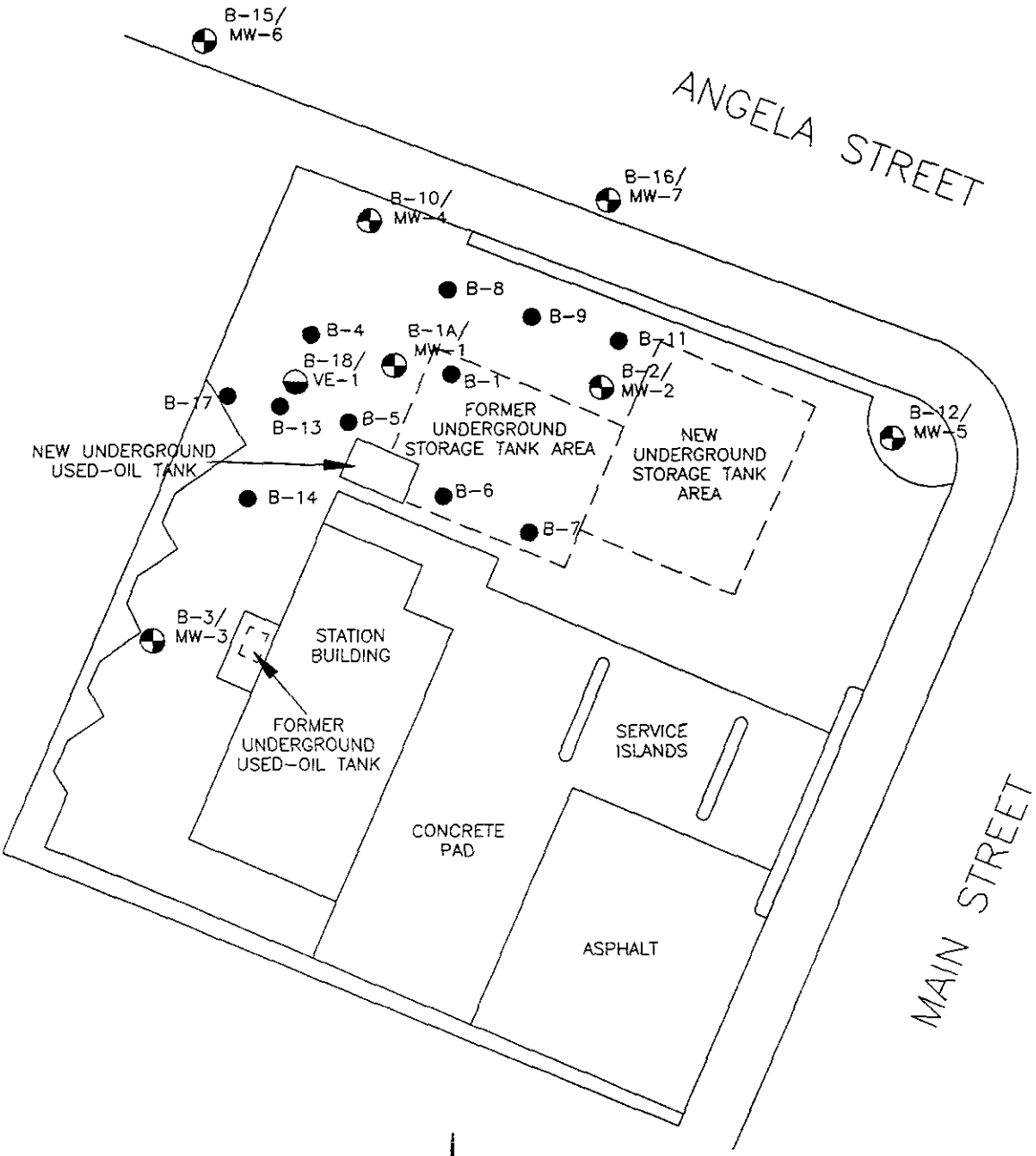
SITE VICINITY MAP
Exxon Service Station 7-7003
349 Main Street
Pleasanton, California

PLATE
1



EXPLANATION

B-16/ MW-7 = Monitoring well

B-18/ VE-1 = Vapor extraction well

B-17 = Soil boring

N

Approximate Scale

30 15 0 30 60

feet

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

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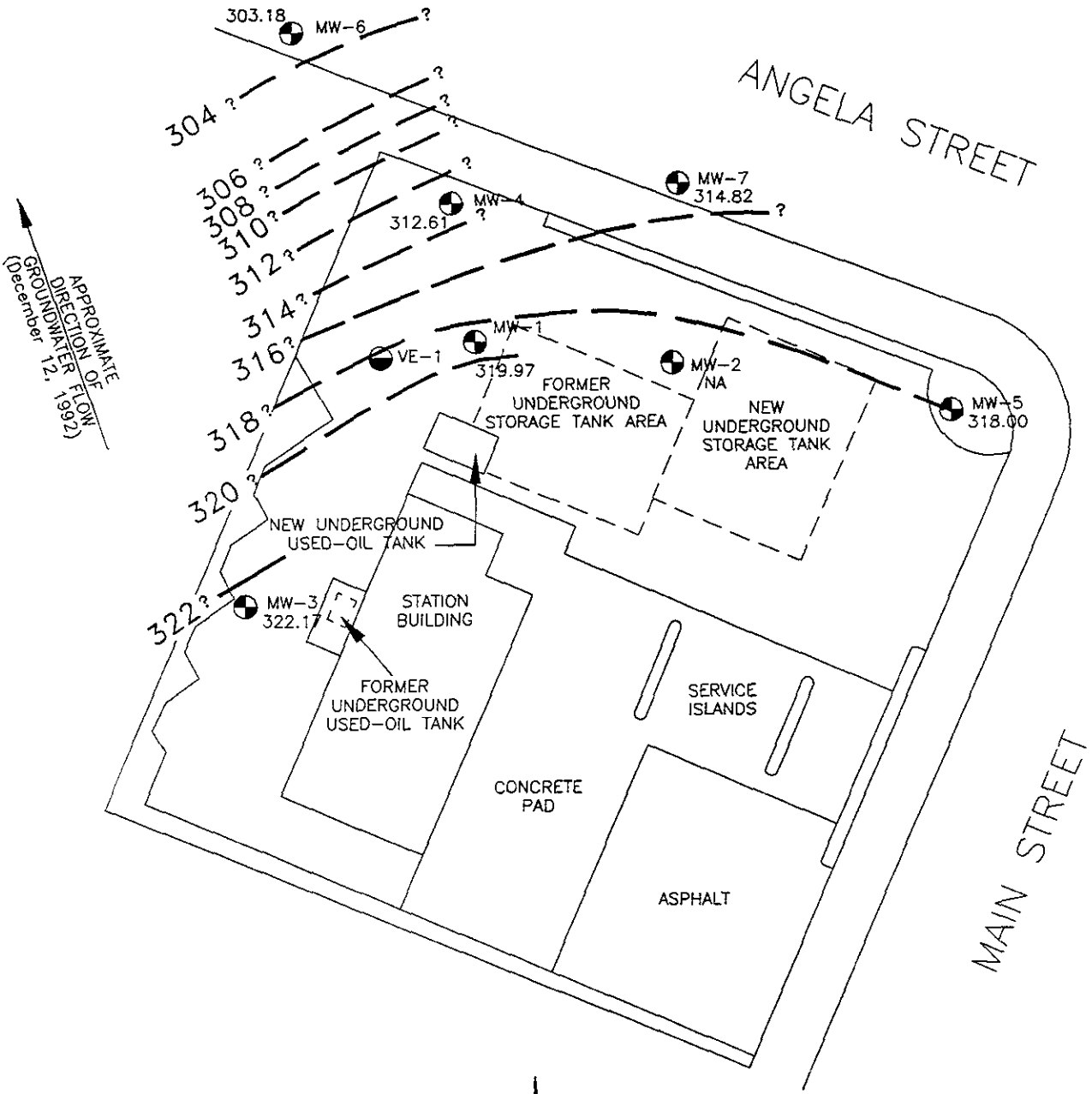
GENERALIZED SITE PLAN
Exxon Service Station 7-7003
349 Main Street
Pleasanton, California

PLATE
2



EXPLANATION

322 = Line of equal elevation of groundwater in feet above mean sea level (MSL)

322.17 = Elevation of groundwater in feet above MSL, December 12, 1992

VE-1 = Vapor extraction well

MW-7 = Monitoring well

NA = Not Accessible

Approximate Scale

30 15 0 30 60

feet

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

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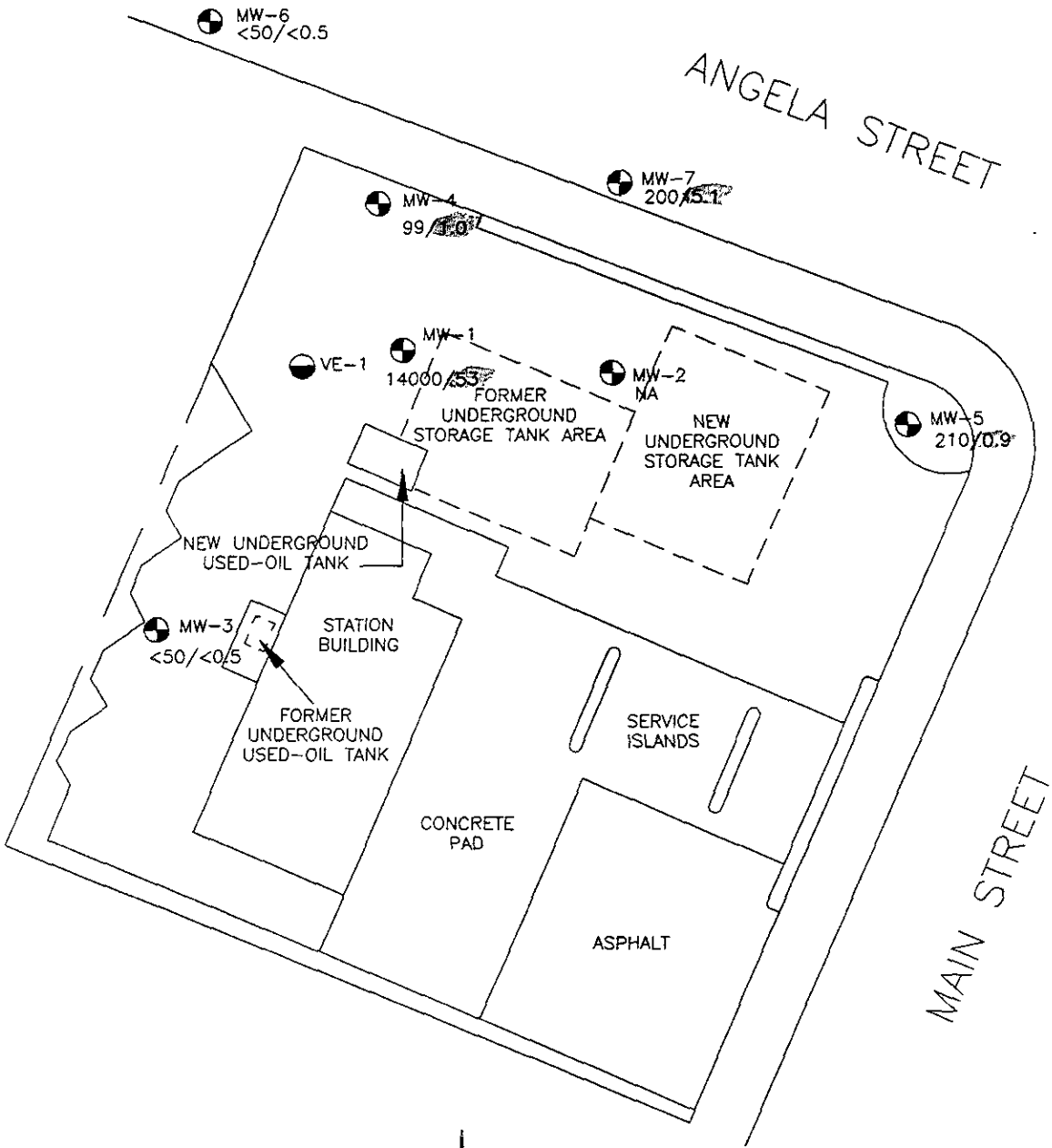
GROUNDWATER GRADIENT MAP
Exxon Service Station 7-7003
349 Main Street
Pleasanton, California

PLATE 3



EXPLANATION

14000/53 = Concentration of TPHg/benzene in groundwater in parts per billion, December 12, 1992

VE-1 = Vapor extraction well

MW-7 = Monitoring well

NA = Not Accessible

Approximate Scale

30 15 0 30 60

feet

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

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

PLATE 4

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Exxon Service Station 7-7003
Pleasanton, California
(Page 1 of 3)

Date	Depth to Water (ft)	Groundwater Elevation (ft)	Product Thickness (ft)	Sheen
MW-1 (Wellhead Elevation = 343.83 ft)				
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
09/28/92	29.84	313.99	None	None
12/12/92	23.86	319.97	None	None
MW-2 (Wellhead Elevation = 344.22 ft)				
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
09/28/92	29.58	314.64	None	None
12/12/92	Not Sampled - Well inaccessible			
MW-3 (Wellhead Elevation = 342.90 ft)				
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
09/28/92	28.67	314.23	None	None
12/12/92	20.73	322.17	None	None

See notes on page 3 of 3

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Exxon Service Station 7-7003
Pleasanton, California
(Page 2 of 3)

Date	Depth to Water (ft)	Groundwater Elevation (ft)	Product Thickness (ft)	Sheen
MW-4 (Wellhead Elevation = 343.38 ft)				
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
09/28/92	34.41	308.97	None	None
12/12/92	30.77	312.61	None	None
MW-5 (Wellhead Elevation = 345.20 ft)				
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
09/28/92	30.26	314.94	None	None
12/12/92	27.20	318.00	None	None
MW-6 (Wellhead Elevation = 342.25 ft)				
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
09/28/92	40.96	301.29	None	None
12/12/92	39.07	303.18	None	None

See notes on page 3 of 3

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Exxon Service Station 7-7003
Pleasanton, California
(Page 3 of 3)

Date	Depth to Water (ft)	Groundwater Elevation (ft)	Product Thickness (ft)	Sheen
MW-7 (Wellhead Elevation = 343.62 ft)				
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
09/28/92	31.92	311.70	None	None
12/12/92	28.80	314.82	None	None
VE-1 (Wellhead Elevation = 343.38 ft)				
09/28/92	31.92	311.40	None	None
12/12/92	Not Monitored			

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
Exx MW1	09/29/92	60	<0.5	0.9	<0.5	<0.5
W-24.0-MW1	12/12/92	14,000	53	18	1,100	570
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
Exx MW2	09/29/92	71	<0.5	<0.5	<0.5	<0.5
MW2	12/12/92	Not Sampled				
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
Exx MW3	09/28/92	<50	<0.5	<0.5	<0.5	<0.5
W-21.0-MW3	12/12/92	<50	<0.5	<0.5	<0.5	1.3

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
Exx MW4	09/29/92	<50	<0.5	<0.5	<0.5	<0.5
W-31.0-MW4	12/12/92	99	1.0	0.9	7.0	11
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				
Exx MW5	09/28/92	<50	<0.5	<0.5	<0.5	<0.5
W-27.0-MW5	12/12/92*	210	0.9	11	0.5	3.1
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
Exx MW6	09/28/92	<50	<0.5	<0.5	<0.5	<0.5
W-39.0-MW6	12/12/92	<50	<0.5	<0.5	<0.5	<0.5

See notes on page 3 of 3

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TABLE 3
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF GROUNDWATER
SAMPLES 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[1]
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
Exx MW1	09/29/92	NA	<5.0	ND
W-24.0-MW1	12/12/92	NA	<5.0	49[1]
				6.3[3]
				29[5]
				9.0[6]
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
Exx MW2	09/29/92	NA	NA	ND
MW2	12/12/92	Not Sampled		
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

See notes on page 3 of 3

TABLE 3
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF GROUNDWATER
SAMPLES 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-3 (cont)				
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
Exx MW3	09/28/92	NA	<5.0	ND
W-21.0-MW3	12/12/92	NA	<5.0	NA
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]
Exx MW4	09/29/92	NA	NA	ND
W-31.0-MW4	12/12/92	NA	NA	ND
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		
Exx MW5	09/28/92	NA	NA	ND
W-27.0-MW5	12/12/92	NA	NA	NA
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

See notes on page 3 of 3

TABLE 3
CUMULATIVE RESULTS OF LABORATORY ANALYSES OF GROUNDWATER
SAMPLES 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-6 (cont)				
MW6	03/13/92		NA	ND
W-33-MW6	06/09/92	<0.1*	NA	ND
Exx MW6	09/28/92	NA	NA	ND
W-39.0-MW6	12/12/92	NA	NA	NA
MW-7				
W-24-MW7	03/19/91	<0.1*	NA	0.7[1] 0.8[2]
W-23-MW7	06/27/91	<0.1*	NA	ND
	09/26/91	Well Inaccessible		
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
Exx MW7	09/28/92	NA	NA	ND
W-29.0-MW6	12/12/92	NA	NA	NA

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
- W — Water sample
- 22 — Sample Depth in feet
- MW7 — Well number

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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; which 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 a licensed land surveyor, Ron Archer, Civil Engineer, Inc., of Pleasanton, California, 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". Subjective turbidity observations were noted 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.

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WELL PURGE DATA SHEET

Project Name: Exxon 7-7003 Job No. 19025.05

Date: December 12, 1992 Page 1 of 1

Well No. MW-1 Time Started 3:00

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY
3:00	Start purging MW-1				
3:00	0	61.6	6.55	940	clear
3:06	10	65.3	6.48	980	clear
3:12	20	64.0	6.46	940	clear
3:15	30	64.6	6.47	940	clear
3:15	dry				
3:45	40	62.8	6.47	980	clear
3:46	Stop purging MW-1				

Notes:

Well Diameter (inches) :	4"
Depth to Bottom (feet) :	39.00
Depth to Water - initial (feet) :	23.86
Depth to Water - final (feet) :	23.87
% recovery :	99.9%
Time Sampled :	4:45
Gallons per Well Casing Volume :	9.88
Gallons Purged :	40.0
Well Casing Volume Purged :	4.05
Approximate Pumping Rate (gpm) :	0.87

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WELL PURGE DATA SHEET

Project Name: Exxon 7-7003 Job No. 19025.05

Date: December 12, 1992 Page 1 of 1

Well No. MW-3 Time Started 12:15

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY
12:15	Start purging MW-3				
12:15	0	57.3	6.75	700	clear
12:19	12	60.6	6.72	660	clear
12:23	24	59.8	6.67	740	clear
12:27	36	57.0	6.77	700	clear
		Dry			
1:01	48	59.1	6.62	740	clear
1:02	Stop purging MW-3				

Notes:

Well Diameter (inches) :	4"
Depth to Bottom (feet) :	38.85
Depth to Water - initial (feet) :	20.73
Depth to Water - final (feet) :	20.73
% recovery :	100.0%
Time Sampled :	2:00
Gallons per Well Casing Volume :	11.83
Gallons Purged :	48.0
Well Casing Volume Purged :	4.03
Approximate Pumping Rate (gpm) :	0.94

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WELL PURGE DATA SHEET

Project Name: Exxon 7-7003 Job No. 19025.05

Date: December 12, 1992 Page 1 of 1

Well No. MW-4 Time Started 1:30

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY
1:30	Start purging MW-4				
1:30	0	60.3	6.58	990	clear
1:34	11	63.5	6.53	1030	clear
1:38	22	64.2	6.53	1030	clear
1:42	33	63.7	6.48	1020	clear
		Dry			
2:15	44	62.8	6.50	1000	clear
2:16	Stop purging MW-4				

Notes:

Well Diameter (inches) :	4"
Depth to Bottom (feet) :	47.30
Depth to Water - initial (feet) :	30.77
Depth to Water - final (feet) :	30.77
% recovery :	100.0%
Time Sampled :	3:25
Gallons per Well Casing Volume :	10.79
Gallons Purged :	44.0
Well Casing Volume Purged :	4.08
Approximate Pumping Rate (gpm) :	0.96

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WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 19025.05

Date: December 12, 1992

Well No. MW-5

Time Started 12:00

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY
12:00	Start purging MW-5				
12:00	0	57.5	6.62	930	cloudy
12:03	6	61.1	6.57	1000	cloudy
12:04	6.5	Dry			
12:43	12	57.9	6.60	950	cloudy
12:44	13.5	Dry			
	Stop purging MW-5				

Notes:

Well Diameter (inches) :	4"
Depth to Bottom (feet) :	33.20
Depth to Water - initial (feet):	27.20
Depth to Water - final (feet) :	27.20
% recovery :	100.0%
Time Sampled :	2:25
Gallons per Well Casing Volume :	3.92
Gallons Purged :	13.5
Well Casing Volume Purged :	3.45
Approximate Pumping Rate (gpm) :	0.31

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WELL PURGE DATA SHEET

Project Name: Exxon 7-7003

Job No. 19025.05

Date: December 12, 1992

Well No. MW-6

Time Started 10:00

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY
10:00	Start purging MW-6				
10:00	0	57.2	7.24	740	cloudy
10:04	12.5	59.8	7.21	740	cloudy
10:08	25	60.2	7.16	770	cloudy
10:12	37.5	61.1	7.12	810	cloudy
10:16	50	60.8	7.04	820	cloudy
	Stop purging MW-6				

Notes:

Well Diameter (inches) :	4"
Depth to Bottom (feet) :	58.00
Depth to Water - initial (feet) :	39.07
Depth to Water - final (feet) :	39.07
% recovery :	100.0%
Time Sampled :	11:40
Gallons per Well Casing Volume :	12.36
Gallons Purged :	50.0
Well Casing Volume Purged :	4.05
Approximate Pumping Rate (gpm) :	3.13

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WELL PURGE DATA SHEET

Project Name: Exxon 7-7003 Job No. 19025.05

Date: December 12, 1992 Page 1 of 1

Well No. MW-7 Time Started 10:40

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY
10:40	Start purging MW-7				
10:40	0	58.4	6.91	970	clear
10:45	10.3	61.6	6.84	1040	clear
10:50	20.6	62.3	6.79	1040	clear
10:51	Dry				
11:25	30.9	57.6	6.75	990	clear
11:30	41.3	61.4	6.66	1010	clear
	Stop purging MW-7				

Notes:

Well Diameter (inches) :	4"
Depth to Bottom (feet) :	44.65
Depth to Water - initial (feet) :	28.80
Depth to Water - final (feet) :	28.80
% recovery :	100.0%
Time Sampled :	12:40
Gallons per Well Casing Volume :	10.35
Gallons Purged :	41.3
Well Casing Volume Purged :	3.99
Approximate Pumping Rate (gpm) :	0.59

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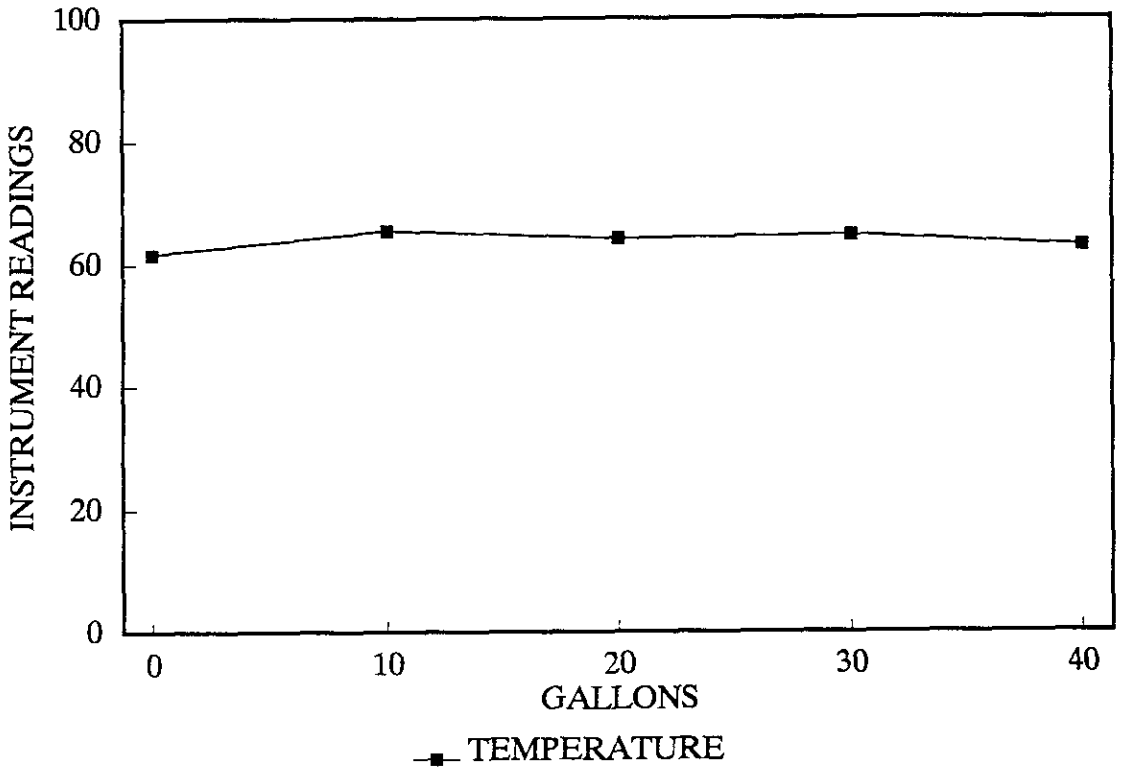
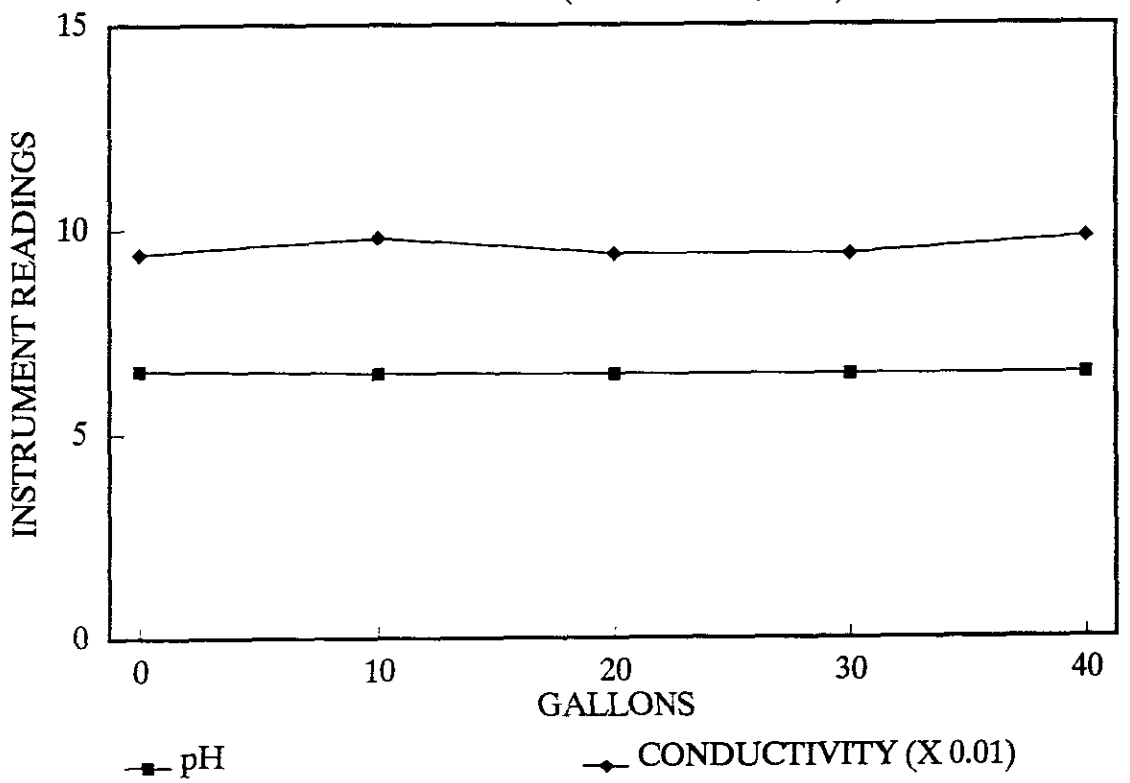
EXXON STATION 7003 STABILIZATION GRAPH
Well MW-1 (December 12, 1992)



EXXON STATION 7003 STABILIZATION GRAPH
Well MW-1 (December 12, 1992)



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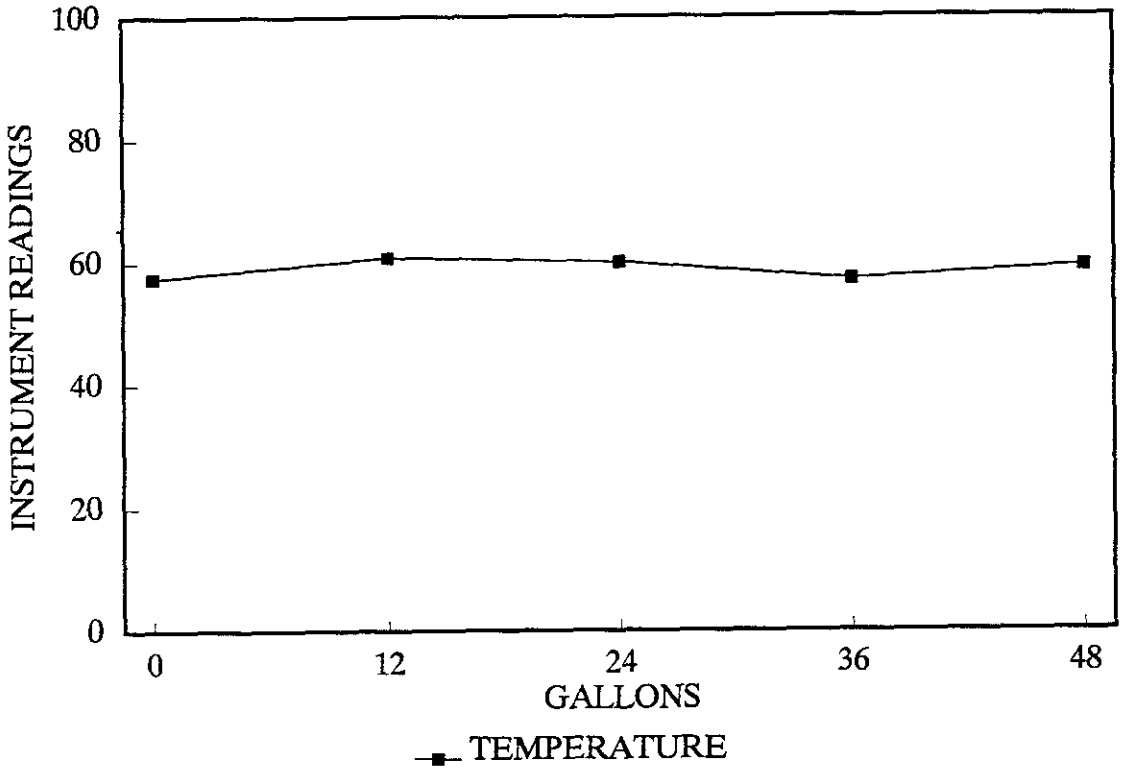
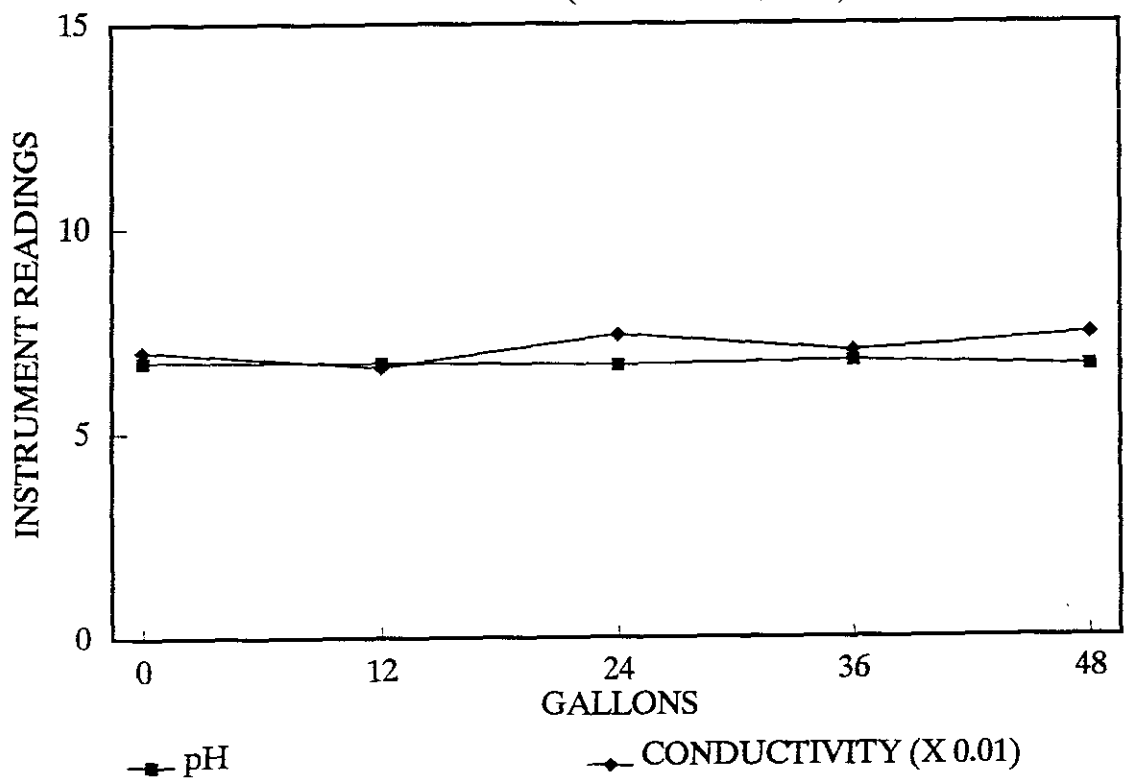
EXXON STATION 7003 STABILIZATION GRAPH
Well MW-3 (December 12, 1992)



EXXON STATION 7003 STABILIZATION GRAPH
Well MW-3 (December 12, 1992)



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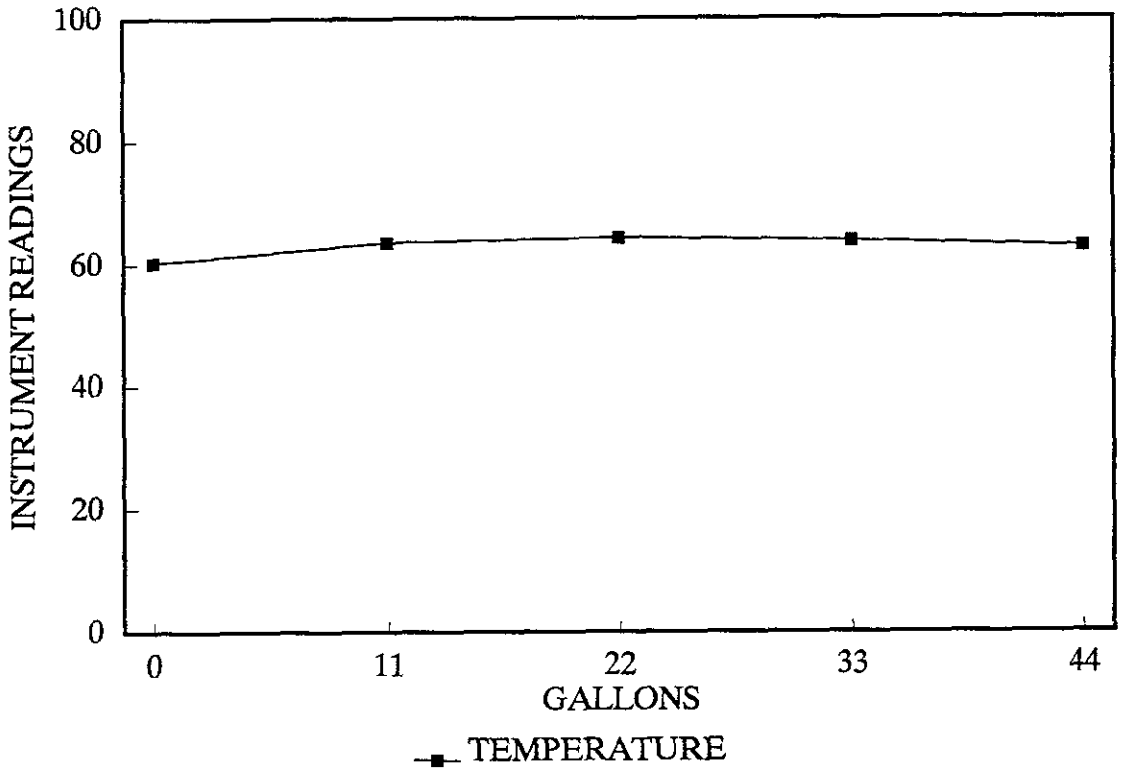
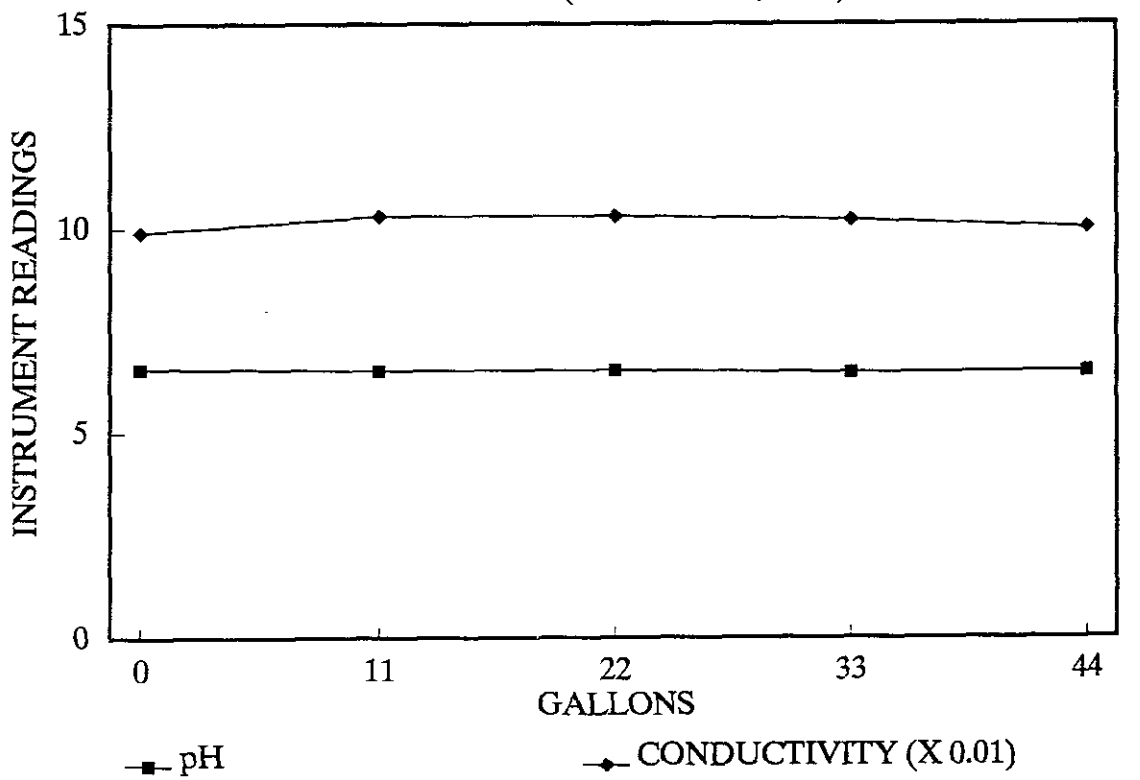
EXXON STATION 7003 STABILIZATION GRAPH
Well MW-4 (December 12, 1992)



EXXON STATION 7003 STABILIZATION GRAPH
Well MW-4 (December 12, 1992)



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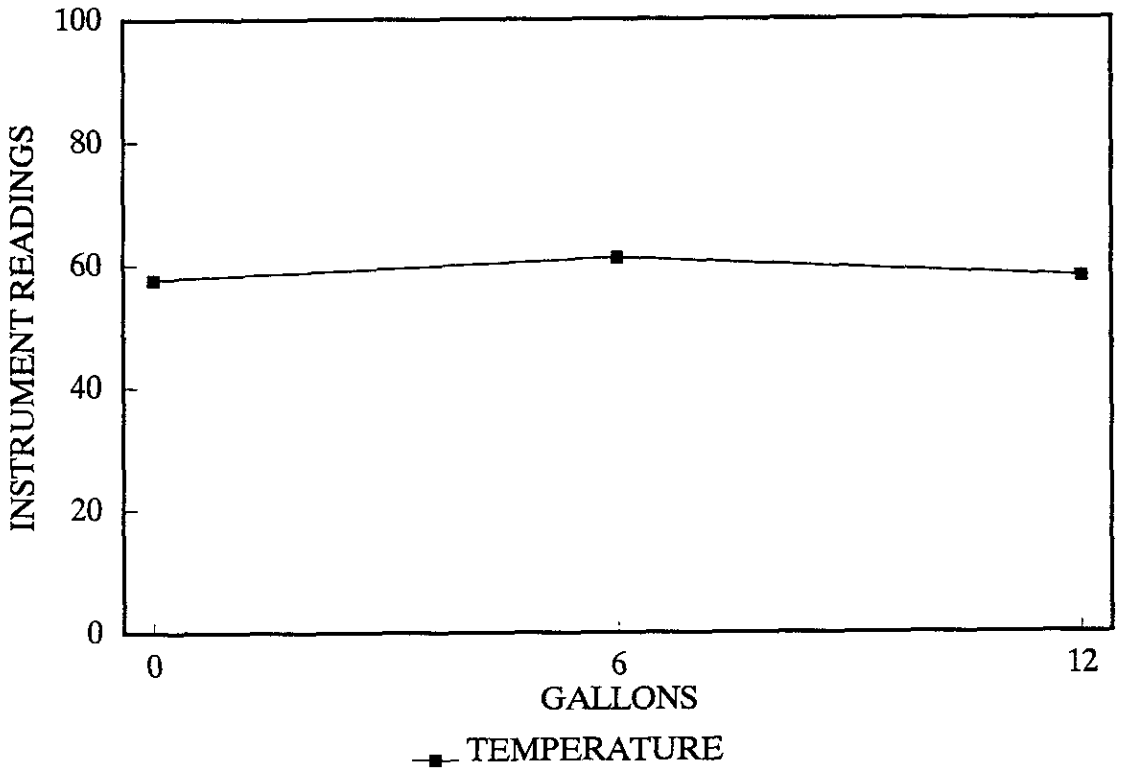
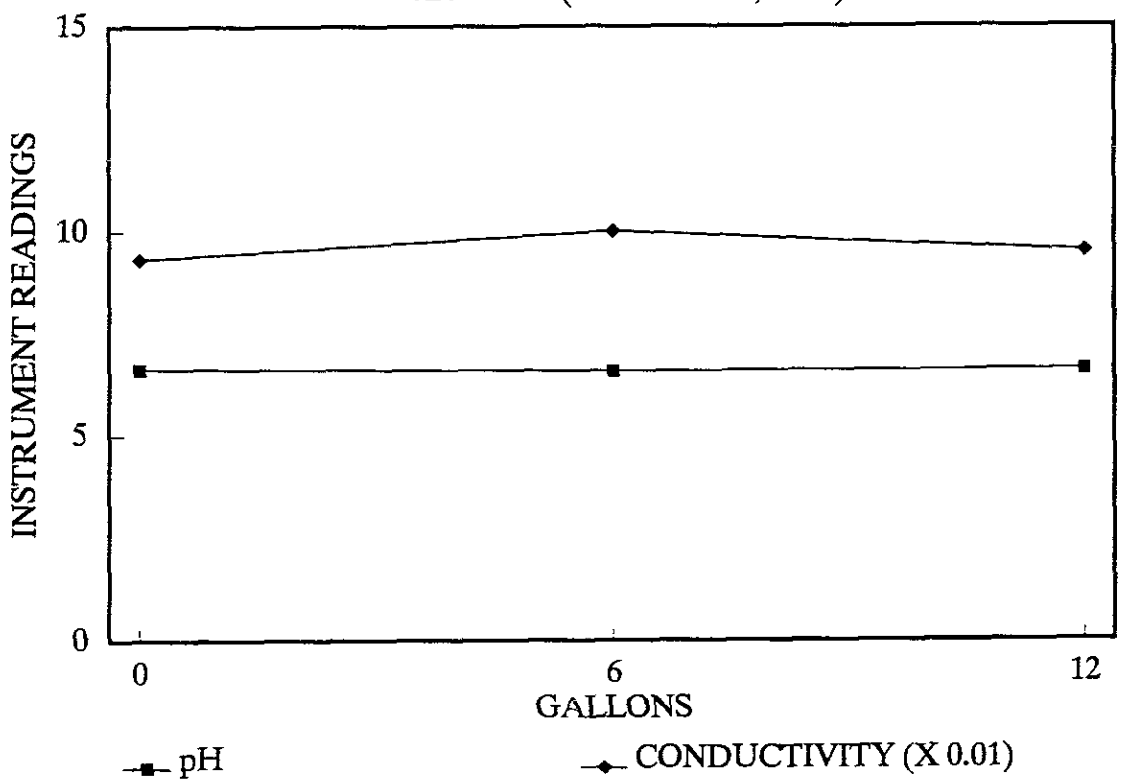
EXXON STATION 7003 STABILIZATION GRAPH
Well MW-5 (December 12, 1992)



EXXON STATION 7003 STABILIZATION GRAPH
Well MW-5 (December 12, 1992)



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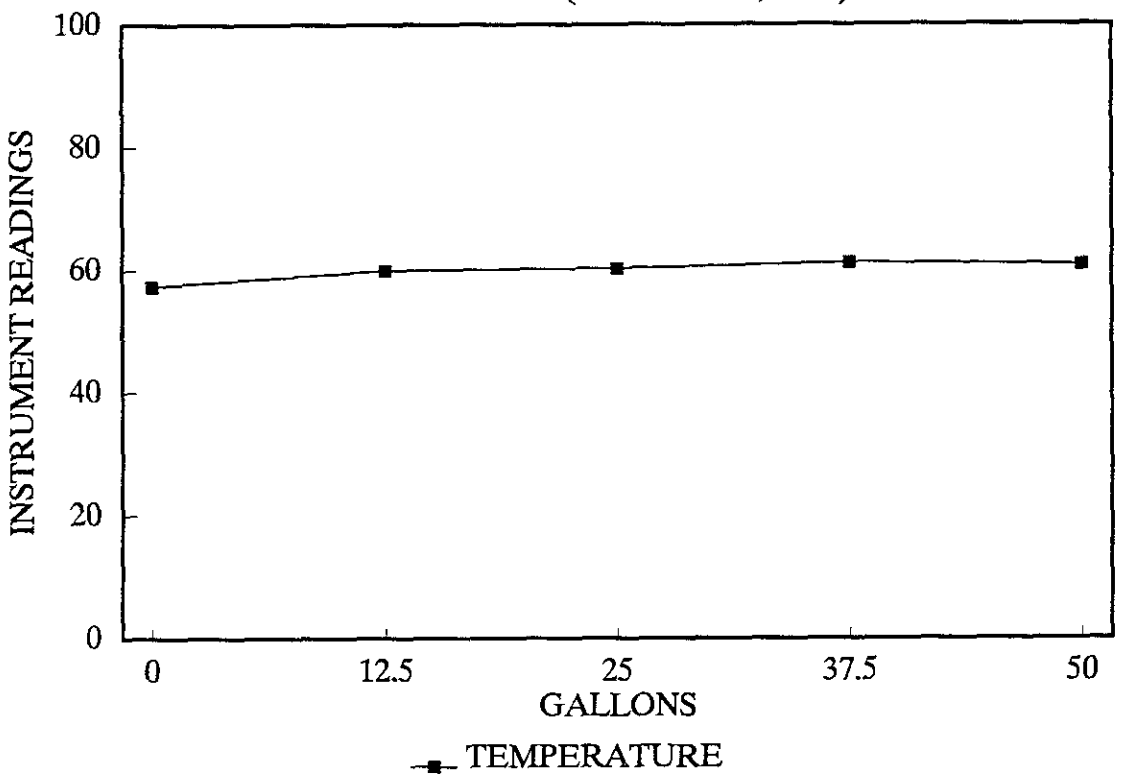
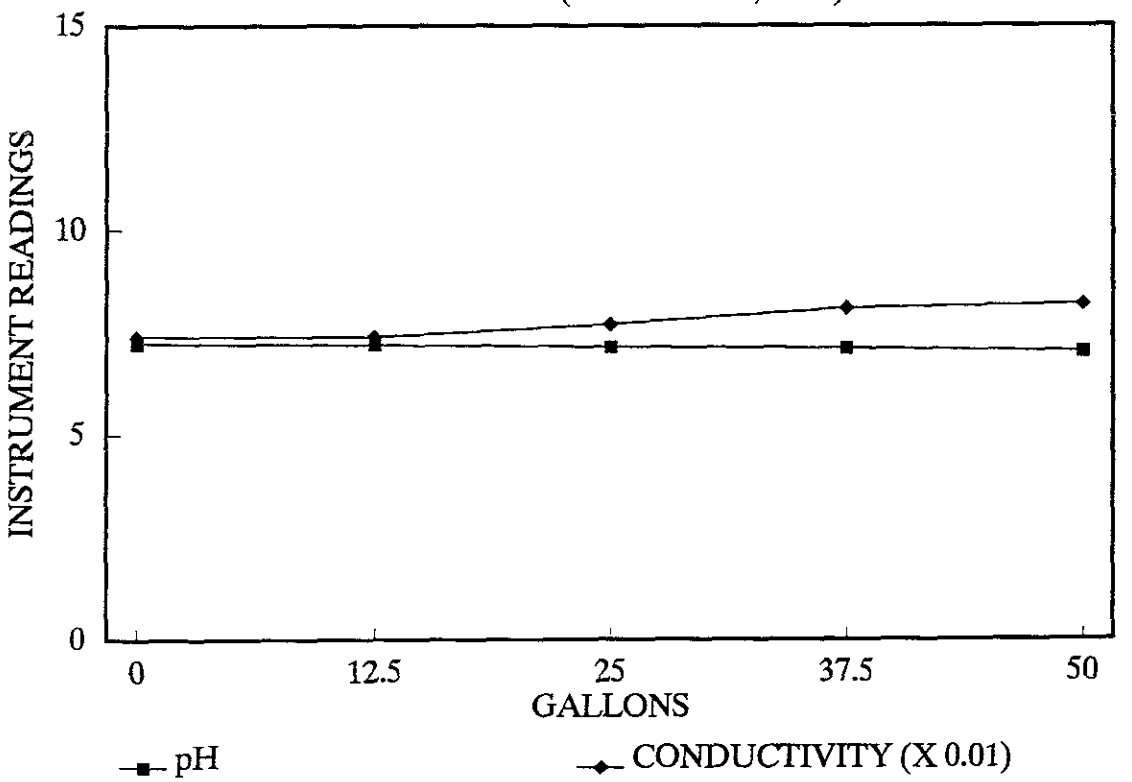
EXXON STATION 7003 STABILIZATION GRAPH
Well MW-6 (December 12, 1992)



EXXON STATION 7003 STABILIZATION GRAPH
Well MW-6 (December 12, 1992)



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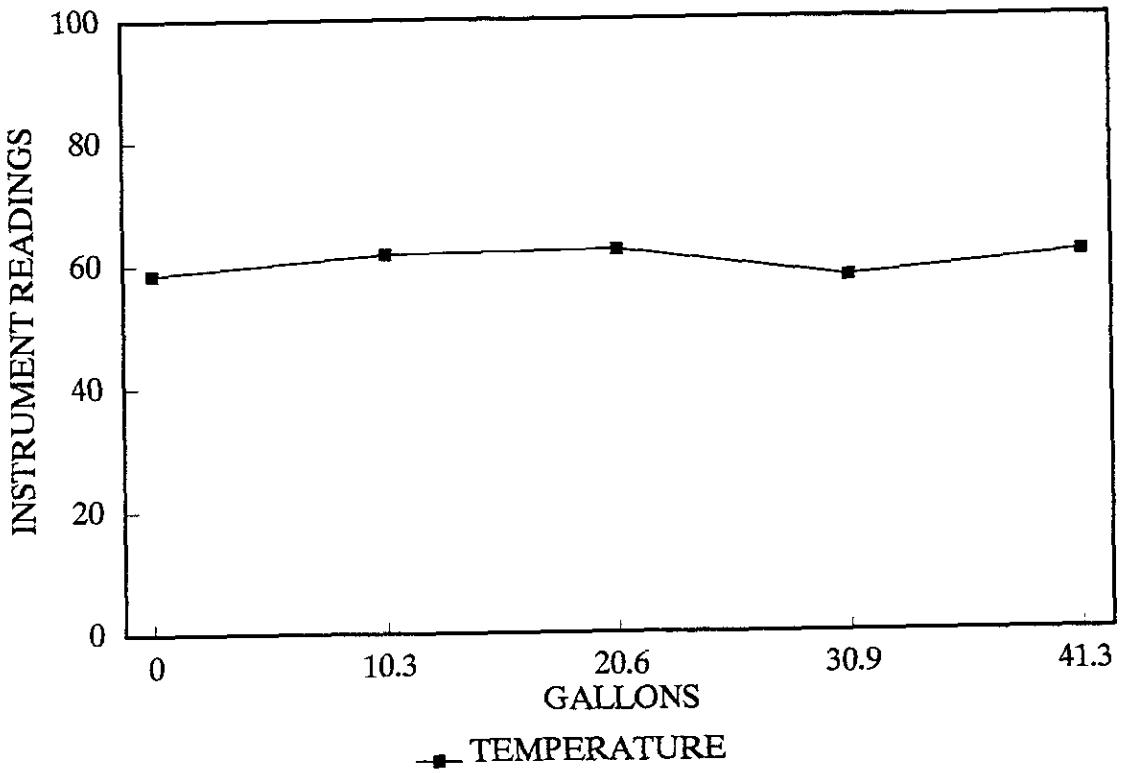
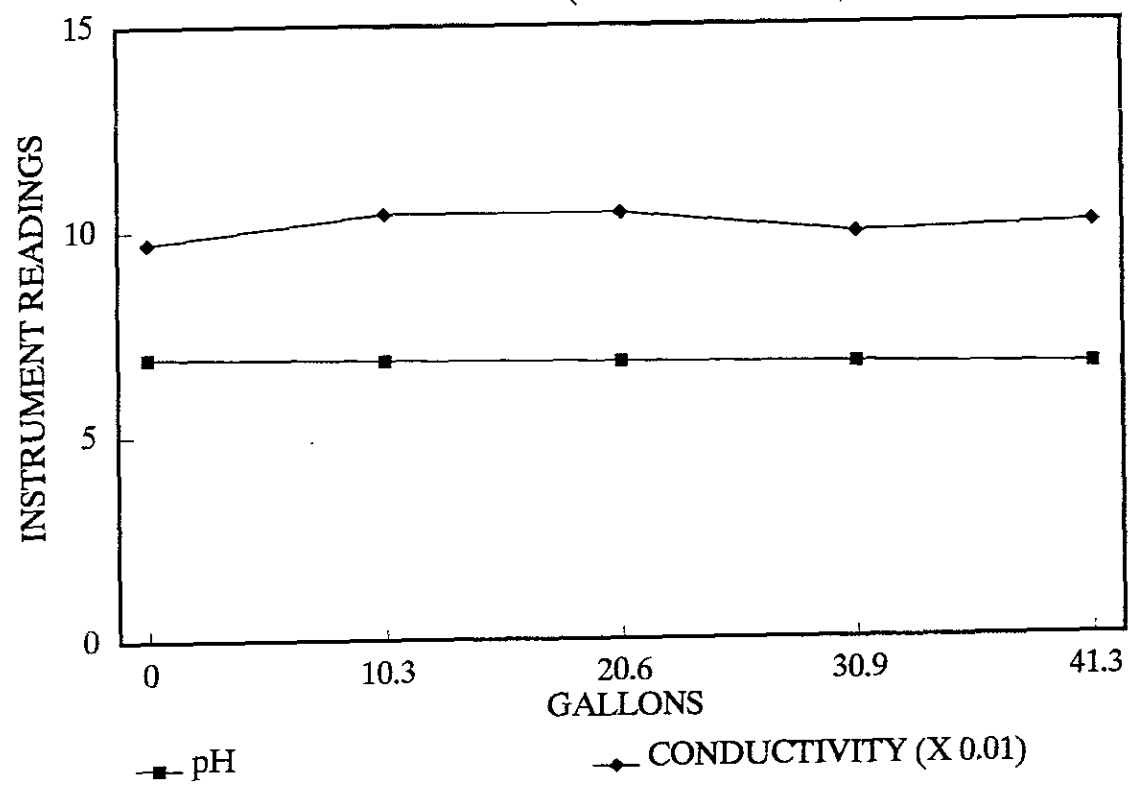
EXXON STATION 7003 STABILIZATION GRAPH
Well MW-7 (December 12, 1992)



EXXON STATION 7003 STABILIZATION GRAPH
Well MW-7 (December 12, 1992)



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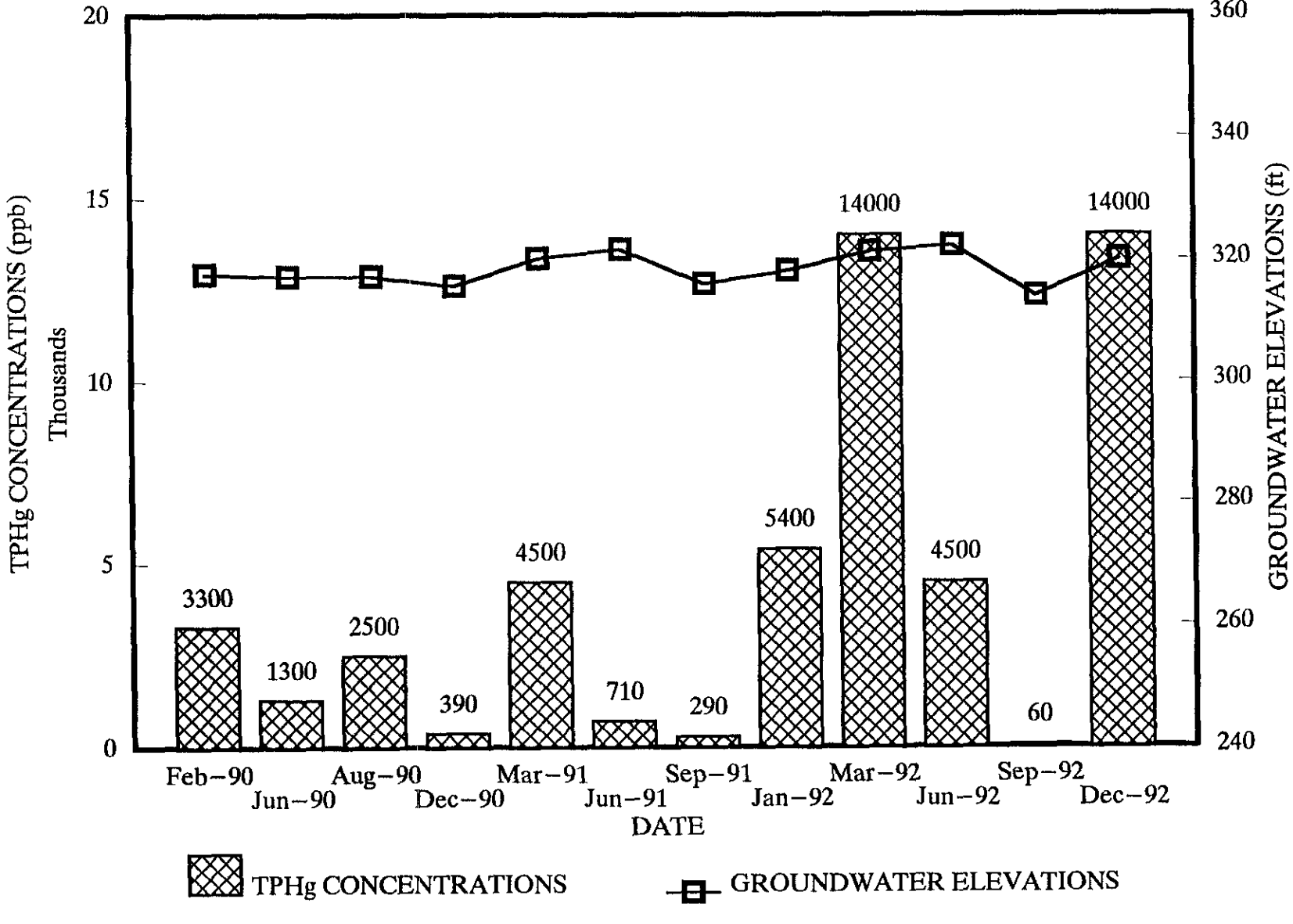
APPENDIX B

HYDROGRAPH AND TPHg CONCENTRATION GRAPHS

EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92

Monitoring Well MW-1 (Installed February 1990)



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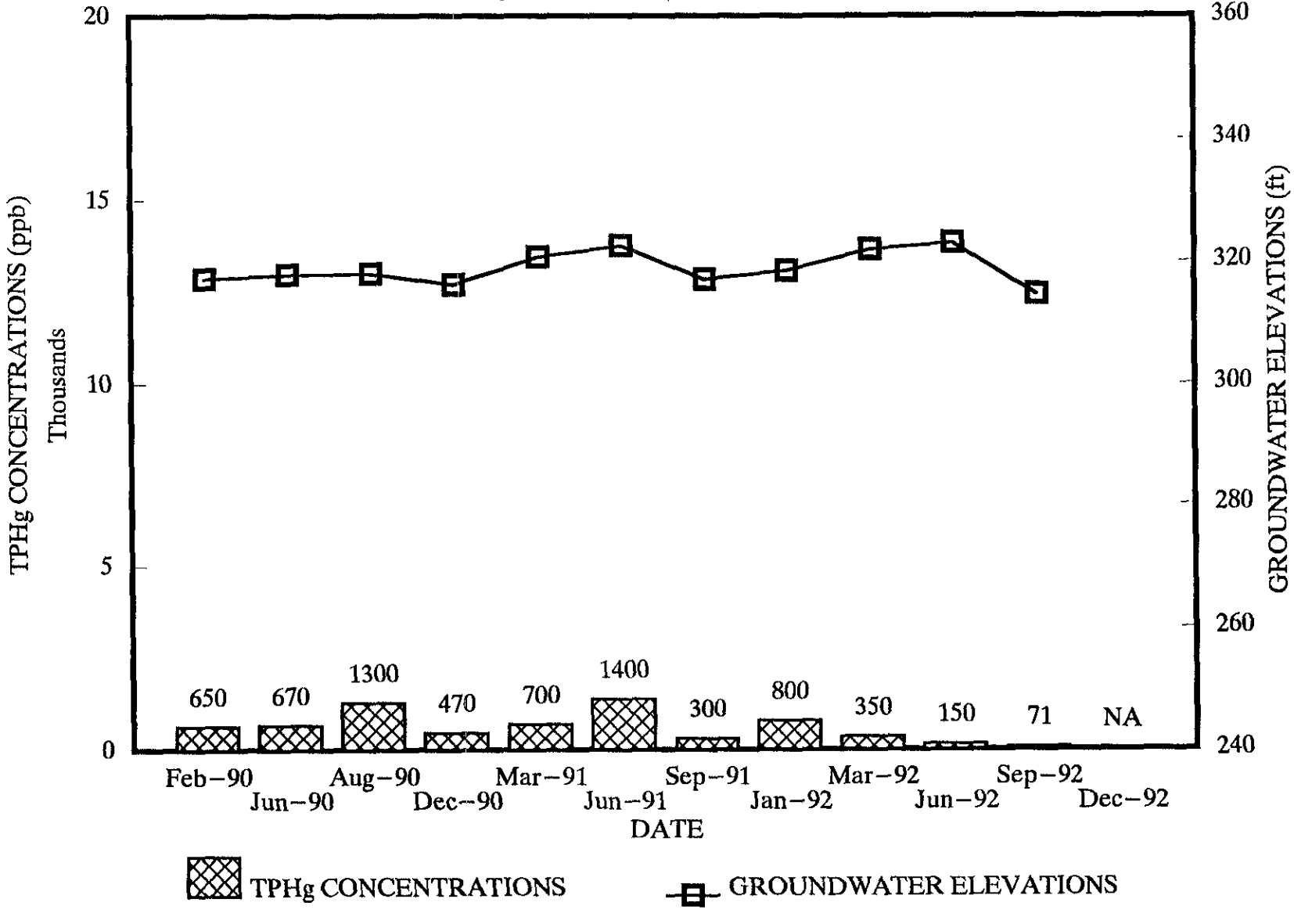
EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92

Monitoring Well MW-2 (Installed February 1990)



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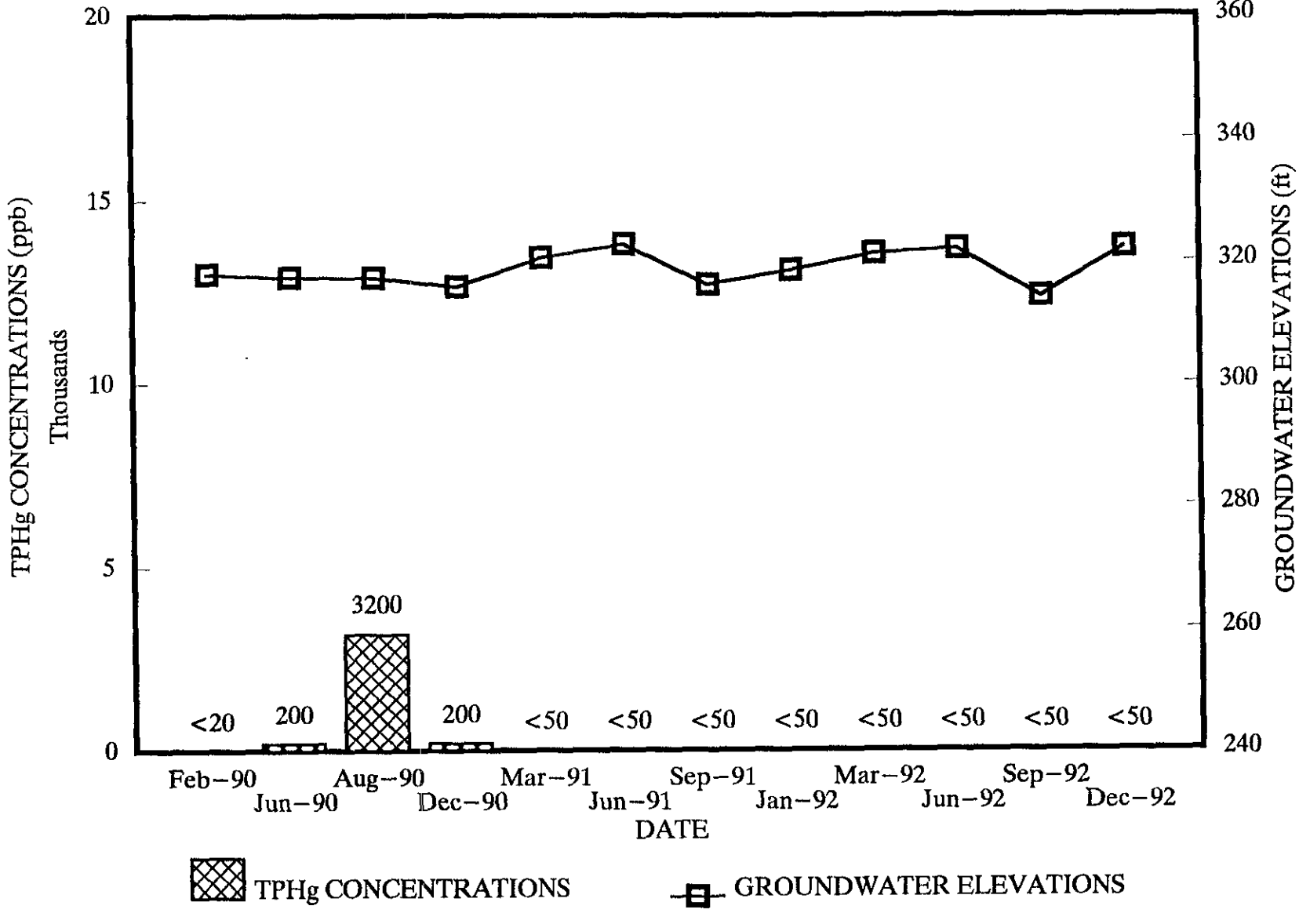
EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92

Monitoring Well MW-3 (Installed February 1990)



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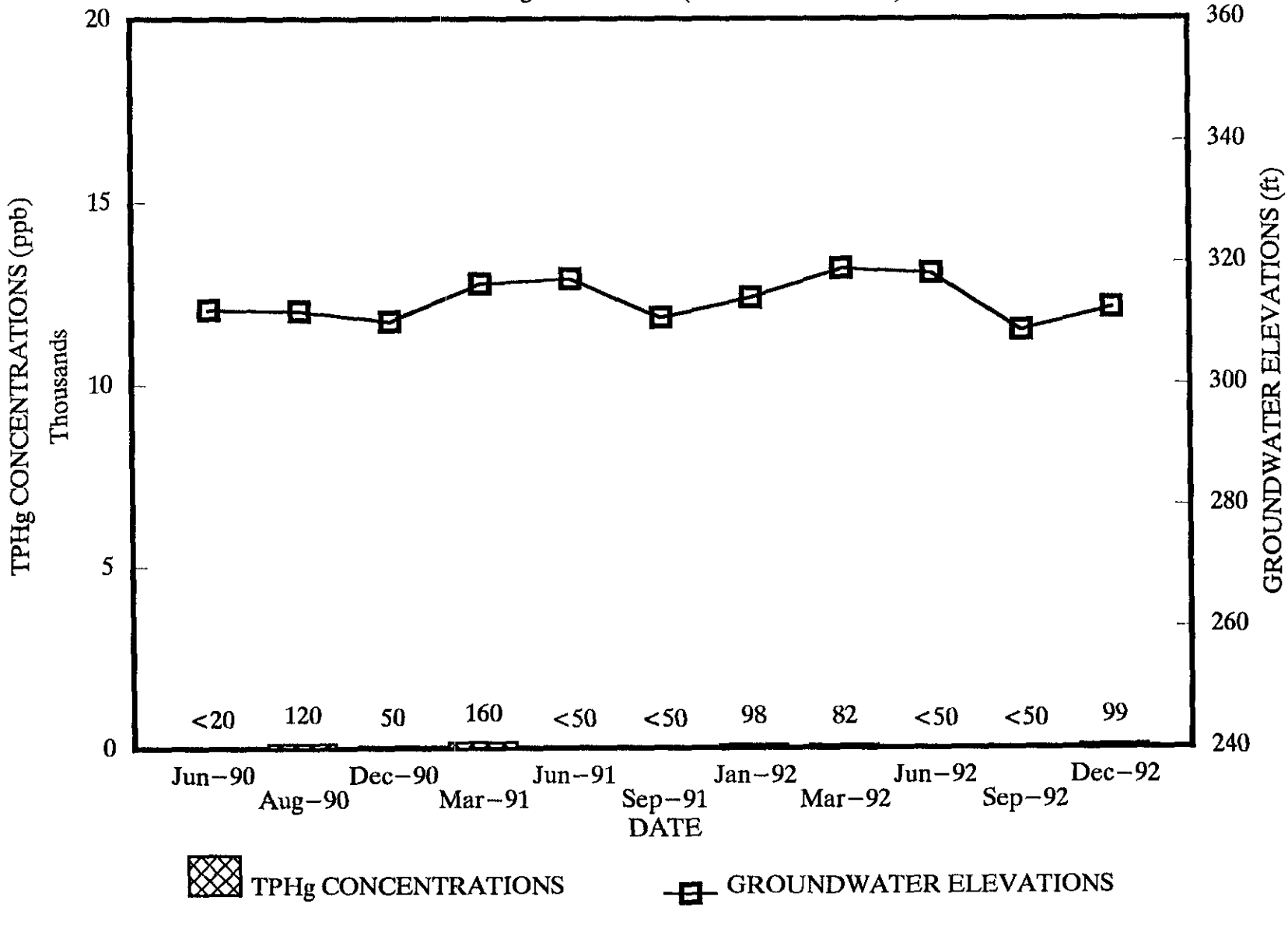
EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92

Monitoring Well MW-4 (Installed June 1990)



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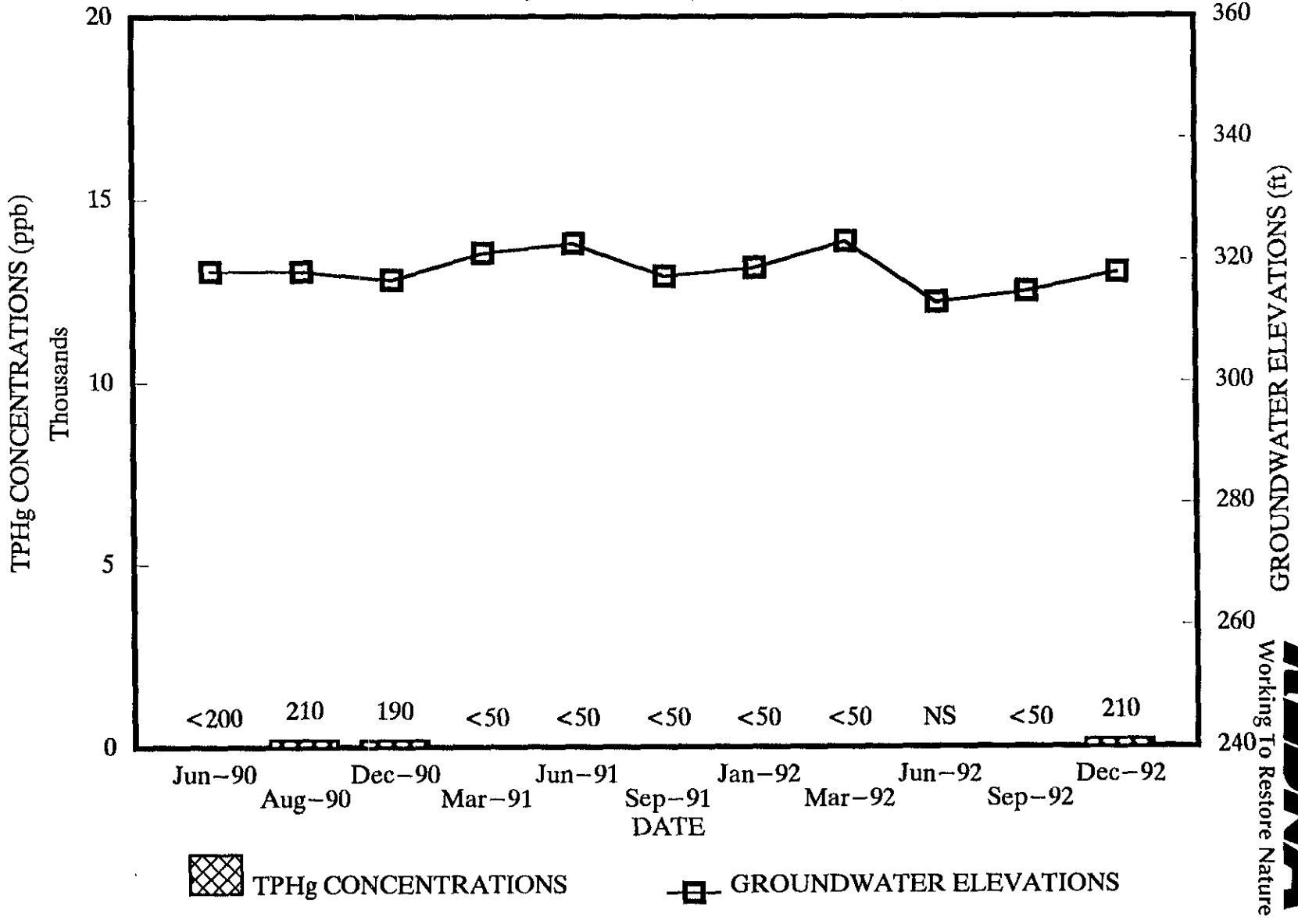
EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1990-92

Monitoring Well MW-5 (Installed June 1990)



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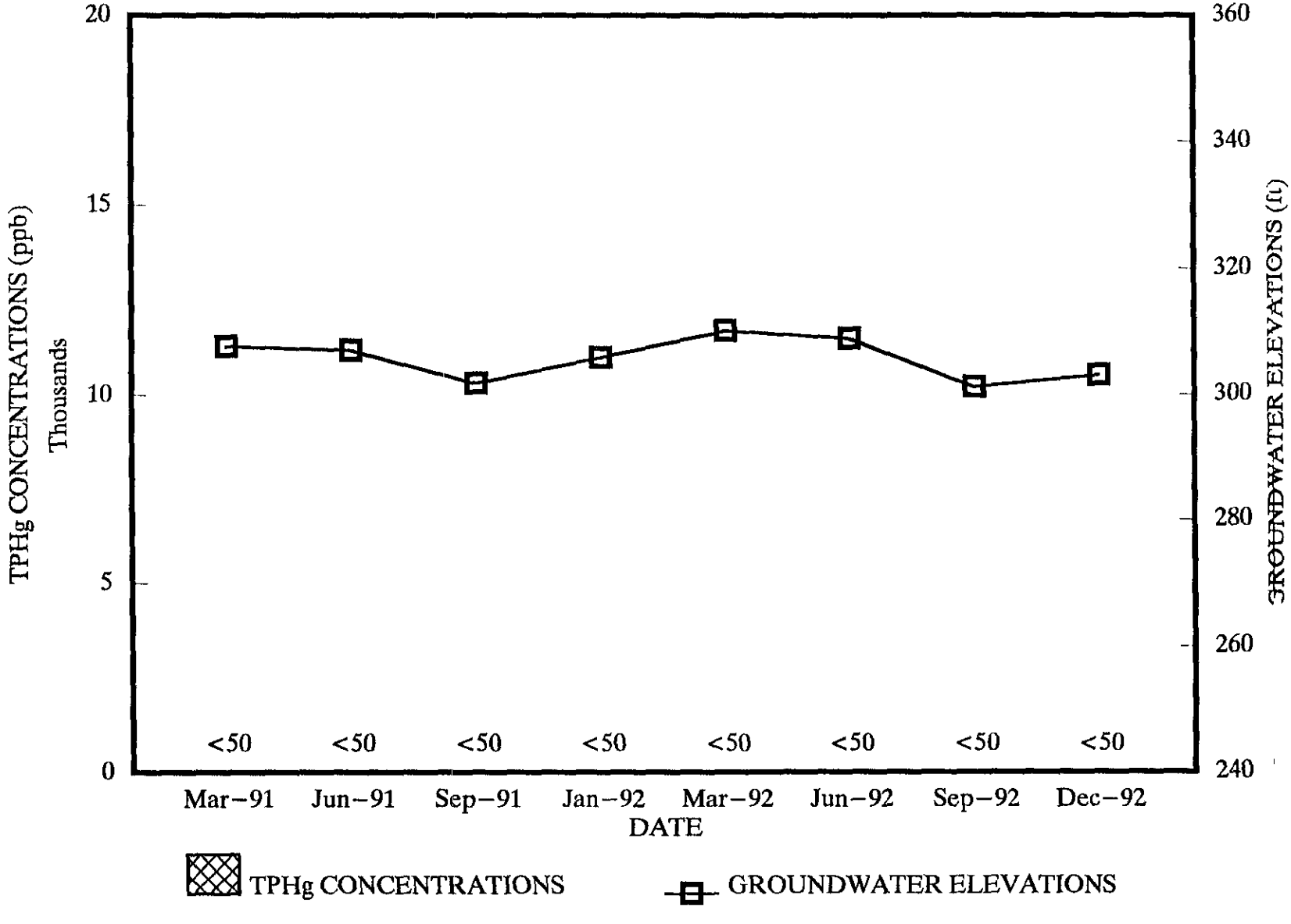
EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1991-92

Monitoring Well MW-6 (Installed February 1991)

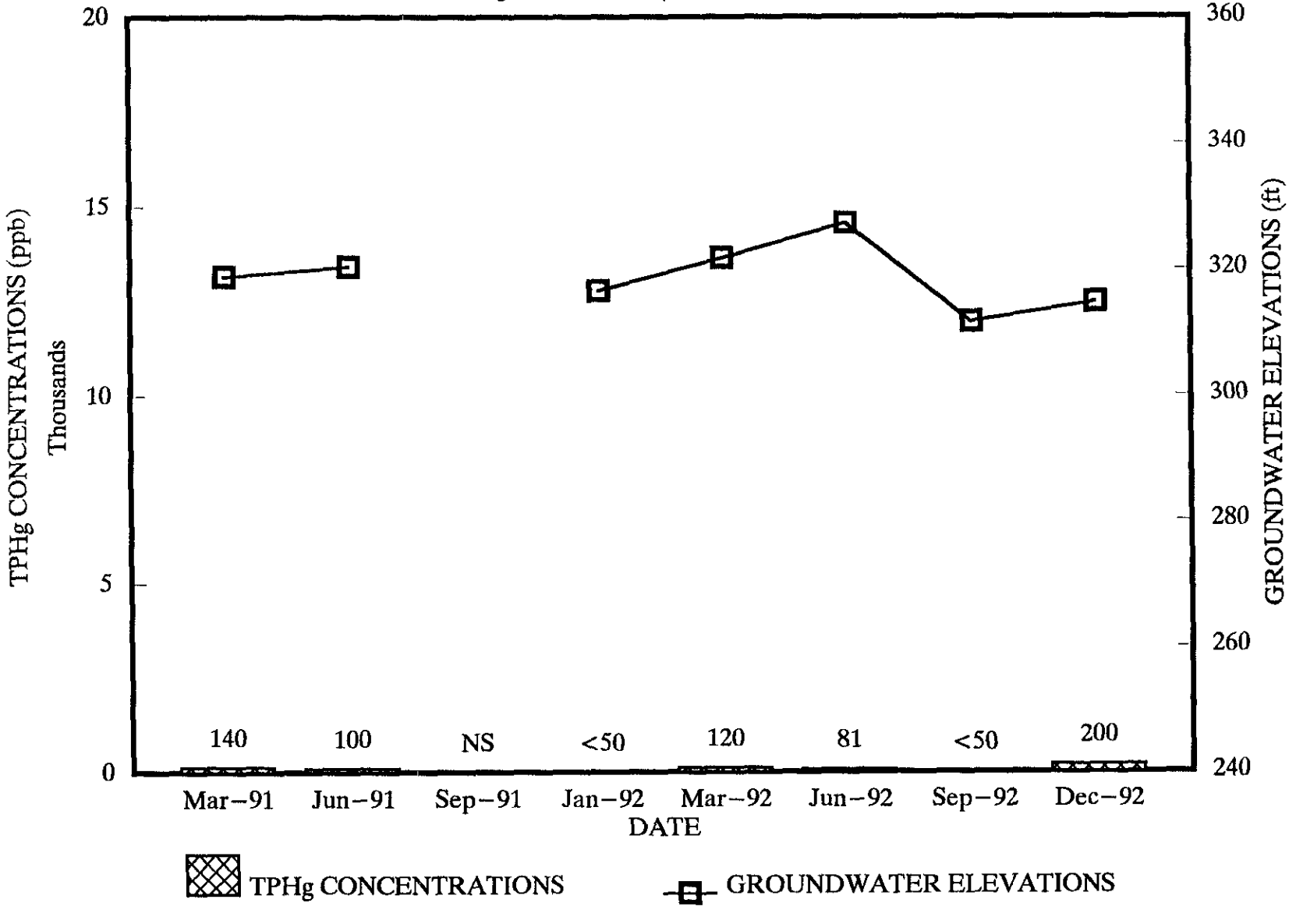


RESNA

Working To Restore Nature

EXXON 7-7003 HYDROGRAPH AND TPHg CONCENTRATION GRAPH 1991-92

Monitoring Well MW-7 (Installed February 1991)



RESNA

Working To Restore Nature

APPENDIX C

CHAIN OF CUSTODY RECORDS AND LABORATORY ANALYSIS REPORTS

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REPORT OF LABORATORY ANALYSIS

December 21, 1992

Mr. Marc Briggs
Resna/Applied Geosystems
3315 Almaden Expressway Suite 34
San Jose, CA 95118

RE: PACE Project No. 421214.503
Client Reference: Exxon 7-7003 (EE)

Dear Mr. Briggs:

Enclosed is the report of laboratory analyses for samples received December 14, 1992.

Footnotes are given at the end of the report.

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

Sincerely,

Stephanie Matzo

Stephanie Matzo
Project Manager

Enclosures

11 Digital Drive
Novato, CA 94949
TEL: 415-883-6100
FAX: 415-883-2673

pace INCORPORATED
THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS

Resna/Applied Geosystems
3315 Almaden Expressway Suite 34
San Jose, CA 95118

December 21, 1992
PACE Project Number: 421214503

Attn: Mr. Marc Briggs

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:			70 0264197	
Date Collected:			12/12/92	
Date Received:			12/14/92	
			W-24.0-MW1	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/21/92
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	1000	14000	12/21/92
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	12/21/92
Benzene	ug/L	10	53	12/21/92
Toluene	ug/L	10	18	12/21/92
Ethylbenzene	ug/L	10	1100	12/21/92
Xylenes, Total	ug/L	10	570	12/21/92
HALOGENATED VOLATILE COMPOUNDS EPA 8010				
Dichlorodifluoromethane	ug/L	20	ND	12/17/92
Chloromethane	ug/L	20	ND	12/17/92
Vinyl Chloride	ug/L	20	ND	12/17/92
Bromomethane	ug/L	20	ND	12/17/92
Chloroethane	ug/L	20	ND	12/17/92
Trichlorofluoromethane (Freon 11)	ug/L	20	ND	12/17/92
1,1-Dichloroethene	ug/L	5.0	ND	12/17/92
Methylene Chloride	ug/L	20	29	12/17/92
trans-1,2-Dichloroethene	ug/L	5.0	ND	12/17/92
cis-1,2-Dichloroethene	ug/L	5.0	ND	12/17/92
1,1-Dichloroethane	ug/L	5.0	ND	12/17/92
Chloroform	ug/L	5.0	49	12/17/92
1,1,1-Trichloroethane (TCA)	ug/L	5.0	ND	12/17/92
Carbon Tetrachloride	ug/L	5.0	ND	12/17/92
1,2-Dichloroethane (EDC)	ug/L	5.0	ND	12/17/92
Trichloroethene (TCE)	ug/L	5.0	9.0	12/17/92
1,2-Dichloropropane	ug/L	5.0	ND	12/17/92
Bromodichloromethane	ug/L	5.0	ND	12/17/92
2-Chloroethylvinyl ether	ug/L	5.0	ND	12/17/92
cis-1,3-Dichloropropene	ug/L	5.0	ND	12/17/92

REPORT OF LABORATORY ANALYSIS

Mr. Marc Briggs
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December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

Parameter	Units	MDL		DATE ANALYZED
PACE Sample Number:			70 0264197	
Date Collected:			12/12/92	
Date Received:			12/14/92	
Client Sample ID:			W-24.0-MW1	
ORGANIC ANALYSIS				
HALOGENATED VOLATILE COMPOUNDS EPA 8010				
trans-1,3-Dichloropropene	ug/L	5.0	ND	12/17/92
1,1,2-Trichloroethane	ug/L	5.0	ND	12/17/92
Tetrachloroethene	ug/L	5.0	6.3	12/17/92
Dibromochloromethane	ug/L	5.0	ND	12/17/92
Chlorobenzene	ug/L	5.0	ND	12/17/92
Bromoform	ug/L	5.0	ND	12/17/92
1,1,2,2-Tetrachloroethane	ug/L	5.0	ND	12/17/92
1,3-Dichlorobenzene	ug/L	5.0	ND	12/17/92
1,4-Dichlorobenzene	ug/L	5.0	ND	12/17/92
1,2-Dichlorobenzene	ug/L	5.0	ND	12/17/92
Bromochloromethane (Surrogate Recovery)			97%	12/17/92
1,4-Dichlorobutane (Surrogate Recovery)			100%	12/17/92
OIL AND GREASE, SILICA GEL (LUFT)				
Oil and Grease, Gravimetric (SM5520)	mg/L	5.0	ND	12/17/92
Date Extracted			12/17/92	

REPORT OF LABORATORY ANALYSIS

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:			70 0264200	
Date Collected:			12/12/92	
Date Received:			12/14/92	
Client Sample ID:			W-21.0-MW3	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/19/92
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	12/19/92
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	12/19/92
Benzene	ug/L	0.5	ND	12/19/92
Toluene	ug/L	0.5	ND	12/19/92
Ethylbenzene	ug/L	0.5	ND	12/19/92
Xylenes, Total	ug/L	0.5	1.3	12/19/92
OIL AND GREASE, SILICA GEL (LUFT)				
Oil and Grease, Gravimetric (SM5520)	mg/L	5.0	ND	12/17/92
Date Extracted			12/17/92	

REPORT OF LABORATORY ANALYSIS

Mr. Marc Briggs
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December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

Parameter	Units	MDL		DATE ANALYZED
PACE Sample Number:			70 0264219	
Date Collected:			12/12/92	
Date Received:			12/14/92	
Client Sample ID:			W-31.0-MW4	
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/19/92
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	99	12/19/92
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	12/19/92
Benzene	ug/L	0.5	1.0	12/19/92
Toluene	ug/L	0.5	0.9	12/19/92
Ethylbenzene	ug/L	0.5	7.0	12/19/92
Xylenes, Total	ug/L	0.5	11	12/19/92
HALOGENATED VOLATILE COMPOUNDS EPA 8010				
Dichlorodifluoromethane	ug/L	2.0	ND	12/16/92
Chloromethane	ug/L	2.0	ND	12/16/92
Vinyl Chloride	ug/L	2.0	ND	12/16/92
Bromomethane	ug/L	2.0	ND	12/16/92
Chloroethane	ug/L	2.0	ND	12/16/92
Trichlorofluoromethane (Freon 11)	ug/L	2.0	ND	12/16/92
1,1-Dichloroethene	ug/L	0.5	ND	12/16/92
Methylene Chloride	ug/L	2.0	ND	12/16/92
trans-1,2-Dichloroethene	ug/L	0.5	ND	12/16/92
cis-1,2-Dichloroethene	ug/L	0.5	ND	12/16/92
1,1-Dichloroethane	ug/L	0.5	ND	12/16/92
Chloroform	ug/L	0.5	ND	12/16/92
1,1,1-Trichloroethane (TCA)	ug/L	0.5	ND	12/16/92
Carbon Tetrachloride	ug/L	0.5	ND	12/16/92
1,2-Dichloroethane (EDC)	ug/L	0.5	ND	12/16/92
Trichloroethene (TCE)	ug/L	0.5	ND	12/16/92
1,2-Dichloropropane	ug/L	0.5	ND	12/16/92
Bromodichloromethane	ug/L	0.5	ND	12/16/92
2-Chloroethylvinyl ether	ug/L	0.5	ND	12/16/92
cis-1,3-Dichloropropene	ug/L	0.5	ND	12/16/92
trans-1,3-Dichloropropene	ug/L	0.5	ND	12/16/92
1,1,2-Trichloroethane	ug/L	0.5	ND	12/16/92
Tetrachloroethene	ug/L	0.5	ND	12/16/92

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:			70 0264219	
Date Collected:			12/12/92	
Date Received:			12/14/92	
Client Sample ID:			W-31.0-MW4	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
HALOGENATED VOLATILE COMPOUNDS EPA 8010				
Dibromochloromethane	ug/L	0.5	ND	12/16/92
Chlorobenzene	ug/L	0.5	ND	12/16/92
Bromoform	ug/L	0.5	ND	12/16/92
1,1,2,2-Tetrachloroethane	ug/L	0.5	ND	12/16/92
1,3-Dichlorobenzene	ug/L	0.5	ND	12/16/92
1,4-Dichlorobenzene	ug/L	0.5	ND	12/16/92
1,2-Dichlorobenzene	ug/L	0.5	ND	12/16/92
Bromochloromethane (Surrogate Recovery)			120%	12/16/92
1,4-Dichlorobutane (Surrogate Recovery)			140%	12/16/92

REPORT OF LABORATORY ANALYSIS

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:			70 0264227	
Date Collected:			12/12/92	
Date Received:			12/14/92	
Client Sample ID:			W-27.0-MW5	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/19/92
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	210	12/19/92
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	12/19/92
Benzene	ug/L	0.5	0.9	12/19/92
Toluene	ug/L	0.5	11	12/19/92
Ethylbenzene	ug/L	0.5	0.5	12/19/92
Xylenes, Total	ug/L	0.5	3.1	12/19/92

Mr. Marc Briggs
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December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

PACE Sample Number:			70 0264235	
Date Collected:			12/12/92	
Date Received:			12/14/92	
Client Sample ID:			W-39.0-MW6	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/19/92
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	ND	12/19/92
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	12/19/92
Benzene	ug/L	0.5	ND	12/19/92
Toluene	ug/L	0.5	ND	12/19/92
Ethylbenzene	ug/L	0.5	ND	12/19/92
Xylenes, Total	ug/L	0.5	ND	12/19/92

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THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS

Mr. Marc Briggs
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December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

Parameter	Units	MDL		DATE ANALYZED
PACE Sample Number:			70 0264243	
Date Collected:			12/12/92	
Date Received:			12/14/92	
Client Sample ID:			W-29.0-MW7	
ORGANIC ANALYSIS				
PURGEABLE FUELS AND AROMATICS				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/19/92
Purgeable Fuels, as Gasoline (EPA 8015M)	ug/L	50	200	12/19/92
PURGEABLE AROMATICS (BTXE BY EPA 8020M):			-	12/19/92
Benzene	ug/L	0.5	5.1	12/19/92
Toluene	ug/L	0.5	6.9	12/19/92
Ethylbenzene	ug/L	0.5	3.3	12/19/92
Xylenes, Total	ug/L	0.5	19	12/19/92

These data have been reviewed and are approved for release.

Darrell C. Cain
Regional Director

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Novato, CA 94949
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FAX: 415-883-2673

Mr. Marc Briggs
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FOOTNOTES
for pages 1 through 8

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

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

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Client Reference: Exxon 7-7003 (EE)

HALOGENATED VOLATILE COMPOUNDS EPA 8010
Batch: 70 17625
Samples: 70 0264219

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)			145%
1,4-Dichlorobutane (Surrogate Recovery)			127%

Mr. Marc Briggs
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QUALITY CONTROL DATA

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

HALOGENATED VOLATILE COMPOUNDS EPA 8010
Batch: 70 17625
Samples: 70 0264219

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	94%	74%	23%
Trichloroethene (TCE)	ug/L	0.5	10.00	85%	68%	22%
1,1,2-Trichloroethane	ug/L	0.5	10.00	94%	87%	7%
Tetrachloroethene	ug/L	0.5	10.00	109%	85%	24%

Mr. Marc Briggs
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QUALITY CONTROL DATA

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

PURGEABLE FUELS AND AROMATICS
Batch: 70 17690
Samples: 70 0264200, 70 0264219, 70 0264227, 70 0264235, 70 0264243

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	Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015M	ug/L	50	292	103%	87%	16%
Benzene	ug/L	0.5	40.0	101%	102%	0%
Toluene	ug/L	0.5	40.0	102%	103%	0%
Ethylbenzene	ug/L	0.5	40.0	105%	105%	0%
Xylenes, Total	ug/L	0.5	80.0	102%	101%	0%

Mr. Marc Briggs
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QUALITY CONTROL DATA

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

PURGEABLE FUELS AND AROMATICS
Batch: 70 17691
Samples: 70 0264197

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	Recv	Dupl Recv	RPD
Purgeable Fuels, as Gasoline (EPA 8015M	ug/L	50	408	98%	94%	4%
Benzene	ug/L	0.5	40.0	109%	103%	5%
Toluene	ug/L	0.5	40.0	104%	98%	5%
Ethylbenzene	ug/L	0.5	40.0	104%	99%	4%
Xylenes, Total	ug/L	0.5	80.0	106%	100%	5%

Mr. Marc Briggs
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QUALITY CONTROL DATA

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

TOTAL OIL AND GREASE (GRAV. EPA 9070)
Batch: 70 17629
Samples: 70 0264197, 70 0264200

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Total Oil and Grease (Freon Extractable	mg/L	5.0	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Total Oil and Grease (Freon Extractable	mg/L	5.0	20	80%	90%	11%

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Mr. Marc Briggs
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QUALITY CONTROL DATA

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

VOLATILE HALOCARBONS AND AROMATICS
Batch: 70 17681
Samples: 70 0264197

METHOD BLANK:

Parameter	Units	MDL	Method Blank
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	0.7	ND
1,2-Dichlorobenzene	ug/L	0.5	ND
Bromochloromethane (Surrogate Recovery)			57%

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Mr. Marc Briggs
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QUALITY CONTROL DATA

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

VOLATILE HALOCARBONS AND AROMATICS
Batch: 70 17681
Samples: 70 0264197

METHOD BLANK:

Parameter	Units	MDL	Method Blank
1,4-Dichlorobutane (Surrogate Recovery)			99%
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)			105%

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	97%	95%	2%
Trichloroethene (TCE)	ug/L	0.5	10.00	114%	115%	0%
trans-1,3-Dichloropropene	ug/L	0.5	3.8	120%	121%	0%
Tetrachloroethene	ug/L	0.5	10.00	128%	130%	1%
Benzene	ug/L	0.3	10.00	65%	67%	3%
Toluene	ug/L	0.3	10.00	85%	85%	0%
Xylenes, Total	ug/L	0.5	20.00	106%	108%	1%

Mr. Marc Briggs
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FOOTNOTES
for pages 10 through 16

December 21, 1992
PACE Project Number: 421214503

Client Reference: Exxon 7-7003 (EE)

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

11 Digital Drive
Novato, CA 94949
TEL: 415-883-6100
FAX: 415-883-2673

pace INCORPORATED
THE ASSURANCE OF QUALITY

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

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

EXXON COMPANY, U.S.A.
P.O. Box 4415, Houston, TX 77210-4415
CHAIN OF CUSTODY

Consultant Name: Resna
Address: 42501 Albrae Fremont CA.
Project Contact: Marc Briggs   Project #: 19025-05
Phone #: 1-800-926 0815   Fax #: 408-264-2435
Consultant Work Release #: ~~1902505~~ 90060059 per Marc Briggs 12/10/92
Exxon Contact: Marla Guensler   Phone #:
Site RAS #: 7-7003
Site Location: 349 Main St. Pleasanton   (STAT)
Laboratory Work Release #: PACE

Sampled by (please print): Robin A. Adair
Sampler Signature: Robin A. Adair   Date Sampled

Sample Description	Collection Date/Time	Matrix	Prsv.	# of Cont.	SOIL TPH/GAS/BTEX EPA 8015/8020	SOIL TPH/Diesel EPA 8015	SOIL Organic Lead DHS Method	WATER TPH/GAS/BTEX EPA 8015/602	WATER TPH/Diesel EPA 8015	WATER Organic Lead DHS Method	TRPH EPA 418.1	Total Oil & Grease SM 5520	601/8010				Remarks
BB1	12-12-92 11:35		HCL	3				Hold							2641	8.9	Hold
W-24.0-MW1	4:45		HCL	3/2				X				X	X			19.7	NOTE: TOG
W-21.0-MW3	2:00	H_2O	HCL	3/2				X				X				20.0	Please preserve upon receipt
W-31.0-MW4	3:25		HCL	3/3				X					X			21.9	
W-27.0-MW5	2:25		HCL	3				X								22.7	
W-39.0-MW6	11:40		HCL	3				X								23.5	
W-29.0-MW7	12:40		HCL	3				X								24.3	

4212214.503

Cooler No.	Relinquished by/Affiliation	Accepted by/Affiliation	Date	Time
Cooler Seal Intact ☒ Yes ☐ No	Robin A. Adair, Resna	[signature] RESNA	12-14-92	8:00 AM
	[signature] RESNA	[signature] - Pace	12-14-92 / 12/14	" / 1225
Turnaround Time (circle choice): 24 hr. 48 hr. 72 hr. ~~96 hr.~~ (5 workday (standard))	[signature] - Pace	Jim [signature] / Pace	12/14	1330

Shipment Method
Shipment Date

Additional Comments:

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

11/4 . /