EXXON COMPANY, U.S.A.
POST OFFICE BOX 4032 . CONCORD, CA 94524-2032

ENVIRONMENTAL ENGINEERING

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

March 5, 1992

Former Exxon RAS 7-3006
720 High Street
Oakland, California

Mr. Larry Seto
Alameda County Health Agency
Division of Hazardous Materials
80 Swan Way, Suite 200
Oakland, California 94621

Dear Mr. Seto:

Attached for your review and comment is the **Letter Report on Groundwater Monitoring for Fourth Quarter 1991** for the above referenced site in Oakland. The report, prepared by RESNA of Fremont, California, details the results of the December, 1991 ground water monitoring well sampling event.

Exxon continues to hand-bail free phase product as an interim migration control measure for the site.

If you have any questions, or need further information, please do not hesitate to contact me at the above listed phone number.

Sincerely,

Marla D. Guensler

Attachments

c - w/attachment:
Mr. L. Feldman - San Francisco Bay Region Water Quality Control Board
Mr. V. A. sevier

w/o attachment:
Mr. P. J. Brininstool
Mr. L. W. Lindeen
Mr. M. E. Detterman - RESNA, Fremont

MDG:ss
0651E/73006.ltr

41674 Christy Street
Fremont, CA 94538
Phone: (510) 659-0404
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RESNA
Environmental Solutions Through Applied Science, Engineering & Construction

LETTER REPORT
on
GROUNDWATER MONITORING FOR FOURTH QUARTER 1991
at
Exxon Station No. 7-3006
720 High Street
Oakland, California

RESNA Job No. 87042-9

SITE CONTACTS

Site Name: Exxon Station No. 7-3006
Site Address: 720 High Street
Oakland, California 94601
(415) 533-6066

Owner: Victor Chu

Exxon Environmental Engineer:

Marla D. Guensler
Environmental Engineer
Environmental Engineering, Marketing Department
Exxon Company, U.S.A.
2300 Clayton Road, Suite 1250
Concord, California 94520
(415) 246-8768

Consultant: RESNA Industries (RESNA)
42501 Albrae Street, Suite 100
Fremont, California 94538
(510) 440-3300

SITE BACKGROUND

The site is located at 720 High Street, in a predominantly industrial area of Oakland, California (Site Vicinity Map, Plate P-1). It is bound on the northwest by High Street, on the southwest by Coliseum Way, on the northeast by a former dry-cleaning facility, and on the south by Alameda Avenue. RESNA, formerly Applied GeoSystems (AGS), drilled borings B-14 through B-20 in November 1989 and drilled borings B-21 through B-30 in November 1990. AGS installed groundwater monitoring wells MW-2 through MW-9 in September 1987, MW-1 in May 1988, MW-10 through MW-13 in November 1989, and MW-14 and MW-15 in November 1990. The locations of the borings, wells, and pertinent site facilities are shown on the Generalized Site Plan, Plate P-2.

SITE ACTIVITIES OCTOBER THROUGH DECEMBER 1991

Activities conducted at the site during the past quarter were monthly groundwater monitoring and quarterly sampling and analyses (see attached Field Procedures):

- Depths to groundwater were measured and subjective evaluations were performed on the initial water samples from each well on November 13 and December 10, 1991.
- Free-phase product was bailed when encountered on November 13 and December 9, 1991.
- On December 10, 1991, each well without free-phase product was purged and groundwater samples were collected (MW-1 and MW-6 through W-15) and submitted for analysis.

SITE ACTIVITIES PLANNED FOR JANUARY THROUGH MARCH 1992

Activities planned for the next quarter:

- Design a remediation system for groundwater.
- Prepare engineering drawings and submit with permit applications for remediation system installation.
- Prepare permit applications for groundwater discharge.
- Continue monthly groundwater monitoring and product removal.
- Conduct quarterly groundwater sampling and analysis in March 1992.
- Report monthly monitoring and quarterly analytical results.

RESULTS OF SUBJECTIVE EVALUATIONS

In November, free-phase product thicknesses of 0.02, 0.24, and 0.12 foot were observed in initial water samples collected from wells MW-2, MW-3, and MW-4, respectively. In December 1991, product thickness for the same wells were 0.03, 1.01, and 1.00 foot, respectively. Product thicknesses increased compared to those observed in third quarter 1991. Depth to groundwater dropped an average of 0.24 foot between September and November 1991. In general, except for wells MW-2, MW-10, and MW-15, the water levels fluctuated up or down less than 0.05 foot between the November and December monitoring events. The water level in wells MW-2, MW-10, and MW-15 rose 0.86, 0.90, and 0.47 foot,

respectively. Cumulative results of subjective evaluations and water-level data are presented in Table 1.

GROUNDWATER GRADIENT AND FLOW DIRECTION

The monitoring wells at this site are constructed in various permeable zones. For continuity, the groundwater elevation data from wells constructed in the shallow gravel zone were used to estimate the difference in groundwater elevation across the site on November 13 and December 10, 1991 (Table 2). The groundwater elevation contours are shown on the Groundwater Elevation Maps, Plates P-3 and P-4. Plates P-3 and P-4 suggest that groundwater flowed toward the southwest with an estimated gradient of 0.02. This is consistent with the previous flow direction and gradient results. Plates P-3 and P-4, when compared to previous results, suggest that the groundwater level and gradient in the northern portion of the site may be affected by the open underground storage tank excavation on the adjacent site.

ANALYTICAL METHODS AND RESULTS OF GROUNDWATER SAMPLES

Groundwater samples were analyzed for total petroleum hydrocarbons as gasoline (TPHg) by Environmental Protection Agency (EPA) modified Method 8015, total petroleum hydrocarbons as diesel (TPHd) by EPA Method 8015, and for benzene, toluene, ethylbenzene, and total xylenes (BTEX) by EPA Method 602. Samples were analyzed at Pace laboratory in Novato, California (Hazardous Waste Testing Laboratory Certification No. 148). Copies of Chain of Custody Records and Analysis Reports are attached.

In wells with detectable hydrocarbons, concentrations of TPHg ranged from 0.071 to 99 parts per million (ppm), and benzene concentrations ranged from 0.0007 to 18 ppm. Concentration of TPHd were detected at concentration ranging from less than 0.05 to 3.7 ppb. In general, concentrations of gasoline hydrocarbons increased compared to the September 1991 results (Table 3). To illustrate the distribution of hydrocarbons, concentration maps were prepared for TPHg and benzene (Plates P-5 and P-6, respectively). The maps suggest that dissolved hydrocarbons are mainly found beneath the southwestern half of the site.

REMEDIATION OF GROUNDWATER

Groundwater wells with free-phase product have been periodically bailed. A groundwater recovery system is being evaluated for construction.

RECOMMENDATIONS

We recommend that copies of this report be sent to the following:

- Mr. Larry Seto, Alameda County Health Agency, Department of Environmental Health, 80 Swan Way, Room 200, Oakland, California 94621, and

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

Please call if you have any questions.

Sincerely,
RESNA Industries Inc.

Rasmi El-Jurf
Project Engineer

Mark E. Detterman, R.G.
Project Manager

Enclosures:
Table 1: Results of Subjective Evaluation of Water Samples.
Table 2: Summary of Groundwater Elevations.
Table 3: Results of Groundwater Analyses.
Plate P-1: Site Vicinity Map.
Plate P-2: Generalized Site Plan.
Plate P-3: Groundwater Elevation Map (November 13, 1991).
Plate P-4: Groundwater Elevation Map (December 10, 1991).
Plate P-5: Concentration of TPHg in Groundwater.
Plate P-6: Concentration of Benzene in Groundwater.
Field Procedures
Well Purge Data Sheets
Chain of Custody Records and Certified Analysis Reports

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TABLE 1
RESULTS OF SUBJECTIVE EVALUATION OF WATER SAMPLES
(page 1 of 6)

Date	Depth to Water (ft)	Floating Product (ft)	Sheen	Emulsion
MW-1				
04/25/89	7.55	NONE	NONE	NONE
04/27/89	10.16	NONE	SLIGHT	NONE
09/06/89	10.88	NONE	SLIGHT	NONE
09/22/89	11.06	NONE	NONE	NONE
11/01/89	10.82	NONE	NONE	NONE
11/15/89	11.07	NONE	NONE	NONE
12/06/89	10.33	NONE	NONE	NONE
02/20/90	8.81	NONE	NONE	NONE
04/19/90	9.33	NONE	NONE	NONE
07/03/90	8.44	NONE	NONE	NONE
07/26/90	8.99	NONE	NONE	NONE
08/20/90	9.50	NONE	NONE	NONE
09/19/90	9.99	NONE	NONE	NONE
11/27/90	10.62	NONE	NONE	NONE
01/17/91	10.31	NONE	NONE	NONE
03/26/91	7.97	NONE	NONE	NONE
05/02/91	8.88	NONE	NONE	NONE
06/20/91	9.62	NONE	NONE	NONE
08/07/91	10.20	NONE	NONE	NONE
09/17/91	10.40	NONE	NONE	NONE
11/13/91	10.20	NONE	NONE	NONE
12/10/91	10.23	NONE	NONE	NONE
MW-2				
04/25/89	9.27	2.16	N/A	NONE
07/19/89	10.81	1.56	N/A	NONE
07/27/89	10.18	0.13	N/A	HEAVY
09/06/89	10.89	0.09	N/A	SLIGHT
09/22/89	11.56	0.56	N/A	SLIGHT
11/01/89	10.85	0.09	N/A	NONE
11/15/89	11.05	0.07	N/A	NONE
12/06/89	10.23	0.13	N/A	NONE
02/20/90	8.86	0.29	N/A	NONE
04/19/90	9.09	0.10	N/A	NONE
07/03/90	8.75	0.05	N/A	NONE
07/26/90	8.71	0.10	N/A	NONE
08/20/90	9.25	0.02	N/A	NONE
09/19/90	9.79	0.02	N/A	NONE
11/27/90	10.40	0.07	N/A	NONE
01/17/91	10.03	0.05	N/A	NONE
03/26/91	8.98	0.08	N/A	NONE
05/02/91	8.73	0.02	N/A	NONE
06/20/91	9.11	0.02	N/A	NONE
08/07/91	10.00	0.04	N/A	NONE
09/17/91	10.11	0.02	N/A	NONE
11/13/91	9.88	0.02	N/A	NONE
12/10/91	9.02	0.03	N/A	NONE

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TABLE 1
RESULTS OF SUBJECTIVE EVALUATION OF WATER SAMPLES
(page 2 of 6)

Date	Depth to Water (ft)	Floating Product (ft)	Sheen	Emulsion
MW-3				
04/25/89	7.57	0.08	N/A	NONE
07/19/89	10.33	0.66	N/A	NONE
07/27/89		covered by soil		
09/06/89	11.22	0.07	N/A	SLIGHT
09/22/89	11.38	0.28	N/A	SLIGHT
11/01/89	10.90	0.01	N/A	NONE
11/15/89	11.18	0.11	N/A	NONE
12/06/89	10.29	NONE	SLIGHT	NONE
02/20/90	8.73	0.04	N/A	NONE
04/19/90	9.20	0.09	N/A	NONE
07/03/90	8.50	0.03	N/A	NONE
07/26/90	8.58	0.04	N/A	NONE
08/20/90	9.21	0.01	N/A	NONE
09/19/90	10.02	0.35	N/A	NONE
11/27/90	10.72	0.42	N/A	NONE
01/17/91	10.05	0.10	N/A	NONE
03/26/91	7.65	0.10	N/A	NONE
05/02/91	8.54	0.03	N/A	NONE
06/20/91	8.89	0.03	N/A	NONE
08/07/91	9.99	0.03	N/A	NONE
09/17/91	10.32	0.22	N/A	NONE
11/13/91	10.14	0.24	N/A	NONE
12/10/91	10.10	1.01	N/A	NONE
MW-4				
04/25/89	7.26	0.16	N/A	NONE
07/19/89	10.32	0.72	N/A	NONE
07/27/89		covered by soil		
09/06/89	11.40	0.07	N/A	SLIGHT
09/22/89	11.64	0.19	N/A	SLIGHT
11/01/89	11.00	NONE	SLIGHT	NONE
11/15/89	11.18	0.10	N/A	NONE
12/06/89	10.25	NONE	SLIGHT	NONE
02/20/90	8.40	NONE	N/A	NONE
04/19/90	9.04	0.03	N/A	NONE
07/03/90	8.00	—	N/A	MODERATE
07/26/90	8.57	0.04	N/A	NONE
08/20/90	9.08	0.01	N/A	NONE
09/19/90	9.76	0.03	N/A	NONE
11/27/90	10.83	0.09	N/A	NONE
01/17/91	9.96	0.20	N/A	NONE
03/26/91	6.20	0.09	N/A	NONE
05/02/91	7.50	0.04	N/A	NONE
06/20/91	7.79	0.04	N/A	NONE
08/07/91	9.81	0.05	N/A	NONE
09/17/91	10.02	0.10	N/A	NONE
11/13/91	9.90	0.12	N/A	NONE
12/10/91	9.92	1.00	N/A	NONE

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TABLE 1
RESULTS OF SUBJECTIVE EVALUATION OF WATER SAMPLES
(page 3 of 6)

Date	Depth to Water (ft)	Floating Product (ft)	Sheen	Emulsion
MW-5				
04/25/89	8.06	0.32	NONE	NONE
07/18/89		well destroyed		
MW-6				
04/25/89	8.02	NONE	NONE	NONE
09/06/89	13.64	0.08	N/A	SLIGHT
09/22/89	13.79	0.07	N/A	SLIGHT
11/01/89	12.78	NONE	SLIGHT	NONE
11/15/89	12.91	NONE	SLIGHT	NONE
12/06/89	11.84	NONE	NONE	NONE
02/20/90	9.08	NONE	NONE	NONE
04/19/90	9.72	NONE	NONE	NONE
07/03/90	8.00	NONE	NONE	NONE
07/26/90	8.70	NONE	NONE	NONE
08/20/90	9.62	NONE	NONE	NONE
09/19/90	10.25	NONE	MODERATE	NONE
11/27/90	10.82	NONE	SLIGHT	NONE
01/17/91	9.93	NONE	NONE	NONE
03/26/91	8.45	NONE	NONE	NONE
05/02/91	8.90	NONE	NONE	NONE
06/20/91	9.47	NONE	SLIGHT	NONE
08/07/91	10.10	NONE	SLIGHT	NONE
09/17/91	10.21	NONE	SLIGHT	NONE
11/13/91	9.62	NONE	SLIGHT	NONE
12/10/91	9.59	NONE	SLIGHT	NONE
MW-7				
04/25/89	8.66	NONE	NONE	NONE
09/06/89	11.72	NONE	SLIGHT	NONE
09/22/89	11.89	NONE	NONE	NONE
12/06/89	10.46	NONE	NONE	NONE
02/20/90	8.44	NONE	NONE	NONE
04/19/90	9.54	NONE	NONE	NONE
07/03/90	7.45	NONE	NONE	NONE
07/26/90	8.08	NONE	NONE	NONE
08/20/90	8.82	NONE	NONE	NONE
09/19/90	9.01	NONE	NONE	NONE
11/27/90	9.54	NONE	NONE	NONE
01/17/91	8.50	NONE	NONE	NONE
03/26/91	5.92	NONE	NONE	NONE
05/02/91	7.72	NONE	NONE	NONE
06/20/91	8.19	NONE	NONE	NONE
08/07/91	8.70	NONE	NONE	NONE
09/17/91	8.77	NONE	NONE	NONE
11/13/91	8.51	NONE	NONE	NONE
12/10/91	8.58	NONE	NONE	NONE

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TABLE 1
RESULTS OF SUBJECTIVE EVALUATION OF WATER SAMPLES
(page 4 of 6)

Date	Depth to Water (ft)	Floating Product (ft)	Sheen	Emulsion
MW-8				
04/25/89	8.31	0.66	N/A	NONE
07/19/89	10.97	1.25	N/A	NONE
07/27/89	10.34	0.08	N/A	HEAVY
09/06/89	11.09	0.17	N/A	SLIGHT
09/22/89	11.58	0.36	N/A	SLIGHT
11/01/89	11.03	NONE	NONE	NONE
11/15/89	11.25	0.01	N/A	NONE
12/06/89	10.30	NONE	SLIGHT	NONE
02/20/90	8.00	0.01	N/A	NONE
04/19/90	8.50	NONE	NONE	NONE
07/03/90	7.55	NONE	NONE	NONE
07/26/90	7.86	NONE	NONE	NONE
08/20/90	8.92	NONE	NONE	NONE
09/19/90	9.55	NONE	NONE	NONE
11/27/90	10.29	0.01	N/A	NONE
01/17/91	9.97	NONE	HEAVY	NONE
03/26/91	8.45	NONE	MODERATE	NONE
05/02/91	8.85	NONE	LIGHT	NONE
06/20/91	9.45	NONE	SLIGHT	NONE
08/07/91	10.00	NONE	SLIGHT	NONE
09/17/91	10.11	NONE	SLIGHT	NONE
11/13/91	9.63	NONE	SLIGHT	NONE
12/10/91	9.66	NONE	SLIGHT	NONE
MW-9				
04/25/89	8.25	NONE	NONE	NONE
09/06/89		covered by soil		
09/22/89		covered by soil		
12/06/89	10.12	NONE	NONE	NONE
02/20/90	9.38	NONE	NONE	NONE
04/19/90	9.40	NONE	NONE	NONE
07/03/90	8.79	NONE	NONE	NONE
07/26/90	8.70	NONE	NONE	NONE
08/20/90	9.09	NONE	NONE	NONE
09/19/90	9.52	NONE	NONE	NONE
11/27/90	9.89	NONE	NONE	NONE
01/17/91		covered by soil		
03/26/91		covered by soil		
05/02/91	9.10	NONE	NONE	NONE
06/20/91	8.76	NONE	NONE	NONE
08/07/91	9.37	NONE	NONE	NONE
09/17/91	9.57	NONE	NONE	NONE
11/13/91	9.46	NONE	NONE	NONE
12/10/91	9.30	NONE	NONE	NONE

TABLE 1
RESULTS OF SUBJECTIVE EVALUATION OF WATER SAMPLES
(page 5 of 6)

Date	Depth to Water (ft)	Floating Product (ft)	Sheen	Emulsion
MW-10				
12/06/89	10.46	NONE	NONE	NONE
02/20/90	8.12	NONE	NONE	NONE
04/19/90	8.54	NONE	NONE	NONE
07/03/90	7.88	NONE	NONE	NONE
07/26/90	8.19	NONE	NONE	NONE
08/20/90	10.33	NONE	NONE	NONE
09/19/90	9.49	NONE	NONE	NONE
11/27/90	9.89	NONE	NONE	NONE
01/17/91	9.19	NONE	NONE	NONE
03/26/91	7.48	NONE	NONE	NONE
05/02/91	8.16	NONE	NONE	NONE
06/20/91	8.75	NONE	NONE	NONE
08/07/91	9.53	NONE	NONE	NONE
09/17/91	9.72	NONE	NONE	NONE
11/13/91	10.02	NONE	NONE	NONE
12/10/91	9.12	NONE	NONE	NONE
MW-11				
12/06/89	10.62	NONE	NONE	NONE
02/20/90	9.20	NONE	NONE	NONE
04/19/90	9.80	NONE	NONE	NONE
07/03/90	8.90	NONE	NONE	NONE
07/26/90	9.36	NONE	NONE	NONE
08/20/90	9.90	NONE	NONE	NONE
09/19/90	10.39	NONE	NONE	NONE
11/27/90	10.97	NONE	NONE	NONE
01/17/91	10.76	NONE	NONE	NONE
03/26/91	8.80	NONE	NONE	NONE
05/02/91	9.38	NONE	NONE	NONE
06/20/91	10.16	NONE	NONE	NONE
08/07/91	10.69	NONE	NONE	NONE
09/17/91	10.80	NONE	NONE	NONE
11/13/91	10.44	NONE	NONE	NONE
12/10/91	10.48	NONE	NONE	NONE
MW-12				
12/06/89	8.00	NONE	NONE	NONE
02/20/90	6.33	NONE	NONE	NONE
04/19/90	7.18	NONE	NONE	NONE
07/03/90	7.41	NONE	NONE	NONE
07/26/90	6.54	NONE	NONE	NONE
08/20/90	7.23	NONE	NONE	NONE
09/19/90	7.77	NONE	NONE	NONE
11/27/90	8.15	NONE	NONE	NONE
01/17/91	8.06	NONE	NONE	NONE
03/26/91	7.21	NONE	NONE	NONE
05/02/91	7.60	NONE	SLIGHT	NONE
06/20/91	8.02	NONE	SLIGHT	NONE
08/07/91	8.25	NONE	SLIGHT	NONE
09/17/91	8.20	NONE	SLIGHT	NONE
11/13/91	7.77	NONE	SLIGHT	NONE
12/10/91	7.75	NONE	SLIGHT	NONE

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TABLE 1
RESULTS OF SUBJECTIVE EVALUATION OF WATER SAMPLES
(page 6 of 6)

Date	Depth to Water (ft)	Floating Product (ft)	Sheen	Emulsion
MW-13				
12/06/89	9.35	NONE	NONE	NONE
02/20/90	7.73	NONE	NONE	NONE
04/19/90	8.68	NONE	NONE	NONE
07/03/90	8.00	NONE	NONE	NONE
07/26/90	7.95	NONE	NONE	NONE
08/20/90	8.66	NONE	NONE	NONE
09/19/90	9.13	NONE	NONE	NONE
11/27/90	9.49	NONE	NONE	NONE
01/17/91	9.61	NONE	NONE	NONE
03/26/91	9.25	NONE	NONE	NONE
05/02/91	9.31	NONE	NONE	NONE
06/20/91	9.73	NONE	NONE	NONE
08/07/91		WELL NOT ACCESSIBLE		
09/17/91	9.72	NONE	NONE	NONE
11/13/91	9.06	NONE	NONE	NONE
12/10/91	9.04	NONE	NONE	NONE
MW-14				
11/27/90	9.88	NONE	NONE	NONE
01/17/91	9.13	NONE	NONE	NONE
03/26/91	8.51	NONE	NONE	NONE
05/02/91	8.45	NONE	NONE	NONE
06/20/91	8.38	NONE	NONE	NONE
08/07/91	9.04	NONE	NONE	NONE
09/17/91	9.14	NONE	NONE	NONE
11/13/91	8.83	NONE	NONE	NONE
12/10/91	8.90	NONE	NONE	NONE
MW-15				
11/27/90	8.67	NONE	NONE	NONE
01/17/91	8.03	NONE	NONE	NONE
03/26/91		covered by soil		
05/02/91	7.09	NONE	NONE	NONE
06/20/91	7.06	NONE	NONE	NONE
08/07/91	7.59	NONE	NONE	NONE
09/17/91	7.89	NONE	NONE	NONE
11/13/91	9.07	NONE	NONE	NONE
12/10/91	8.60	NONE	NONE	NONE

N/A = Not applicable.

TABLE 2
SUMMARY OF GROUNDWATER ELEVATIONS

Well Number	Casing Elevation (ft)	Depth to Water (ft)	Ground-Water Elevation (ft)
November 13, 1991			
MW-1	12.87	10.20	2.67
MW-7	14.84	8.51	6.33
MW-10	14.05	10.02	4.03
MW-12	12.61	7.77	4.84
MW-13	14.20	9.06	5.14
MW-14	15.18	8.83	6.35
MW-15	13.73	9.07	4.66
December 10, 1991			
MW-1	12.87	10.23	2.64
MW-7	14.84	8.58	6.26
MW-10	14.05	9.12	4.93
MW-12	12.61	7.75	4.86
MW-13	14.20	9.04	5.16
MW-14	15.18	8.90	6.28
MW-15	13.73	8.60	5.13

Casing elevations were surveyed by a certified surveyor, Ron Archer, to mean sea level.

TABLE 3
RESULTS OF GROUNDWATER ANALYSES
(page 1 of 5)

Date	Sample No.	TPHg ppm	B ppm	T ppm	E ppm	X ppm	TPHd ppm	TOG ppm	VOC ppm
MW-1									
05/88	W-11-MW1*	0.240	0.090	0.005	0.015	0.025	--	--	ND
12/89	W-11-MW1	0.63	0.012	0.0056	0.0037	0.025	0.24	--	--
04/90	W-09-MW1	<0.020	<0.0005	<0.00050	<0.00050	<0.00050	<0.10	--	--
07/90	W-11-MW1	0.13	0.006	<0.00050	<0.00050	<0.00050	0.16	--	--
11/90	W-10-MW1	<0.050	0.0007	<0.00050	<0.00050	<0.00050	<0.10	--	--
03/91	W-07-MW1	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	--	--
06/91	W-10-MW1	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	--	--
09/91	W-10-MW1	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	--	--	--
12/91	W-10-MW1	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.050	--	--
MW-2									
09/87	W-25-MW2	1.445	0.233	0.81	0.056	0.209	--	--	--
05/88	free product								
12/89	free product								
04/90	free product								
07/90	free product								
11/90	free product								
03/91	free product								
06/91	free product								
09/91	free product								
12/91	free product								
MW-3									
09/87	W-25-MW3	2.101	0.360	1.062	0.068	0.298	0.66	--	--
05/88	W-14-MW3	8.7	3.98	0.28	0.24	0.6	--	--	--
12/89	free product								
04/90	free product								
07/90	free product								
11/90	free product								
03/91	free product								
06/91	free product								
09/91	free product								
12/91	free product								

See notes on page 5 of 5.

TABLE 3
RESULTS OF GROUNDWATER ANALYSES
(page 2 of 5)

Date	Sample No.	TPHg ppm	B ppm	T ppm	E ppm	X ppm	TPHd ppm	TOG ppm	VOC ppm
MW-4									
09/87	W-25-MW4	0.925	0.070	0.007	0.010	0.016	0.74	–	–
05/88	free product								
12/89	free product								
04/90	free product								
07/90	emulsion								
11/90	free product								
03/91	free product								
06/91	free product								
09/91	free product								
12/91	free product								
MW-5									
09/87	W-25-MW5	26.66	0.56	1.71	1.58	7.15	37.22	–	–
05/88	free product								
07/89	well destroyed								
MW-6									
05/88	W-15-MW6	29.3	12.82	0.55	1.44	5.50	–	–	–
12/89	W-18-MW6	9.0	0.37	0.013	0.0026	0.43	4.8	–	–
04/90	W-30-MW6	27	3.0	0.12	0.49	2.1	26	–	–
07/90	W-30-MW6	30	5.5	1.4	1.2	3.1	13	–	–
11/90	W-10-MW6	15	4.4	0.12	0.8	2.3	7.6	–	–
03/91	W-08-MW6	55	10	0.38	1.6	6.9	<0.10	–	–
06/91	sheen								
09/91	W-10-MW6	17	4.5	0.16	0.89	3.1	–	–	–
12/91	W-09-MW6	32.0	6.0	0.29	1.4	4.7	1.2	–	–

See notes on page 5 of 5.

TABLE 3
RESULTS OF GROUNDWATER ANALYSES
(page 3 of 5)

Date	Sample No.	TPHg ppm	B ppm	T ppm	E ppm	X ppm	TPHd ppm	TOG ppm	VOC ppm
MW-7									
09/87	W-25-MW7	1.531	0.258	0.002	<0.002	0.042	2.79	–	ND
05/88	W-15-MW7	--	0.300**	<0.010**	<0.010**	<0.010**	0.190	–	ND
12/89	W-11-MW7	1.70	0.22	0.0053	0.0050	0.0086	2.5	<5	ND
04/90	W-10-MW7	2.7	0.22	0.0086	0.0070	0.020	3.5	–	ND
07/90	W-17-MW7	2.5	0.38	0.013	0.016	0.035	0.91	–	ND
11/90	W-09-MW7	2.3	0.63	0.016	0.032	0.029	1.3	–	0.0024■
03/91	W-06-MW7	3.5	0.42	0.018	0.017	0.027	<0.10	–	ND
06/91	W-08-MW7	3.1	0.27	0.0088	0.033	0.019	<0.10	–	--
09/91	W-09-MW7	2.4	0.39	0.01	0.015	0.018	--	–	–
12/91	W-08-MW7	1.7	0.29	0.0053	0.0071	<0.0005	0.53	–	--
MW-8									
09/87	W-25-MW8	1.325	0.081	0.074	0.042	0.182	--	–	–
05/88	free product								
12/89	W-11-MW8	42	2.6	0.63	0.21	3.7	34	–	--
04/90	W-14-MW8	49	2.1	0.82	1.1	4.8	53	–	--
07/90	W-23-MW8	44	4.0	1.5	2.0	6.3	32	–	–
11/90	free product								
03/91	sheen								
06/91	sheen								
09/91	W-10-MW8	57	14	7.8	3.1	12	–	–	--
12/91	W-09-MW8	66	9.5	5.0	3.1	12	1.4	--	--
MW-9									
05/88	W-14-MW9	<0.05	<0.0005	0.001	<0.001	<0.001	--	–	ND
12/89	W-14-MW9	0.1	0.0018	0.0037	0.0014	0.0088	0.11	<5	ND
04/90	W-10-MW9	<0.020	<0.00050	<0.00050	<0.00050	<0.00050	<0.10	–	ND
07/90	W-10-MW9	<0.020	<0.00050	<0.00050	<0.00050	<0.00050	<0.10	–	ND
11/90	W-09-MW9	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	–	ND
03/91	covered by soil								
06/91	W-09-MW9	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	–	–
09/91	W-10-MW9	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	–	--	--
12/91	W-09-MW9	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	0.052	–	--

See notes on page 5 of 5.

TABLE 3
RESULTS OF GROUNDWATER ANALYSES
(page 4 of 5)

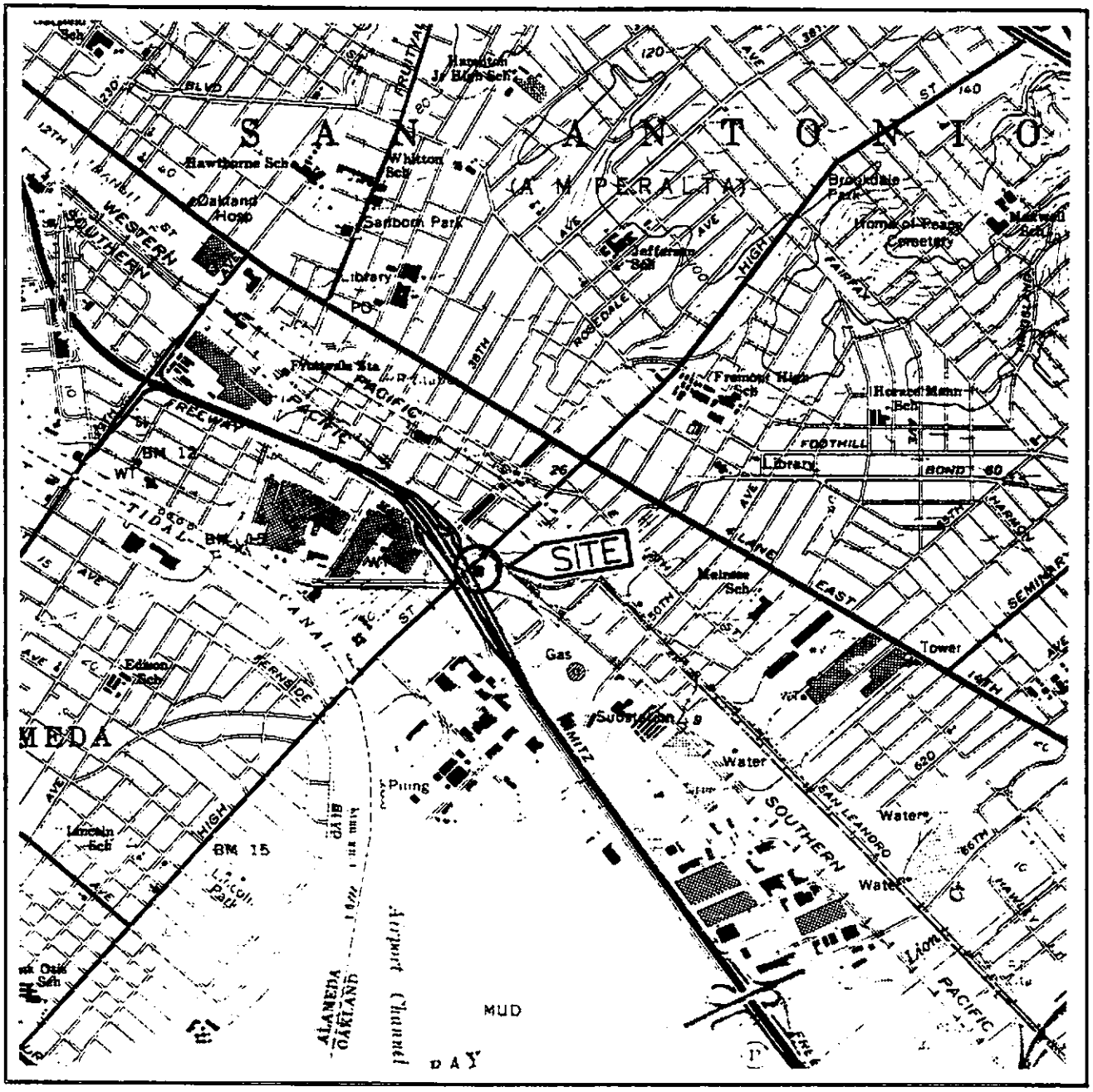
Date	Sample No.	TPHg ppm	B ppm	T ppm	E ppm	X ppm	TPHd ppm	TOG ppm	VOC ppm
MW-10									
12/89	W-12-MW10	0.32	0.0037	0.014	0.0056	0.032	<0.10	--	--
04/90	W-09-MW10	<0.020	<0.00050	<0.00050	<0.00050	<0.00050	<0.10	--	ND
07/90	W-11-MW10	<0.020	<0.00050	<0.00050	<0.00050	<0.00050	<0.10	--	--
11/90	W-09-MW10	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	--	--
03/91	W-07-MW10	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	--	--
06/91	W-09-MW10	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	--	--
09/91	W-10-MW10	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	--	--
12/91	W-9-MW10	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.050	--	--
MW-11									
12/89	W-11-MW11	0.078	0.0059	0.00063	<0.0005	48	<0.10	--	--
04/90	W-12-MW11	<0.020	<0.00050	<0.00050	<0.00050	<0.00050	<0.10	--	--
07/90	W-12-MW11	<0.020	<0.00050	<0.00050	<0.00050	<0.00050	<0.10	--	--
11/90	W-10-MW11	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	--	--
03/91	W-08-MW11	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	--	--
06/91	W-10-MW11	<0.050	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	--	--
09/91	W-11-MW11	<0.050	<0.0005	0.0007	<0.0005	<0.0005	--	--	--
12/91	W-10-MW11	<0.050	0.0007	<0.0005	<0.0005	<0.0005	<0.050	--	--
MW-12									
12/89	W-08-MW12	85	6.7	6.3	1.8	7.8	40	--	--
04/90	W-07-MW12	110	6.6	7.4	1.8	11	97	--	--
07/90	W-08-MW12	92	11	11	3.1	13	50	--	--
11/90	W-08-MW12	69	11	10	3.1	12	31	--	--
03/91	W-08-MW12	100	15	16	2.4	11	<0.10	--	--
06/91	sheen								
09/91	W-08-MW12	82	22	18	3.9	16	--	--	--
12/91	W-07-MW12	99	18	16	3	11	1.7	--	--

See notes on page 5 of 5.

TABLE 3
RESULTS OF GROUNDWATER ANALYSES
(page 5 of 5)

Date	Sample No.	TPHg ppm	B ppm	T ppm	E ppm	X ppm	TPHd ppm	TOG ppm	VOC ppm
MW-13									
12/89	W-10-MW13	52	2.1	2.0	1.4	6.1	31	–	–
04/90	W-09-MW13	59	1.8	1.5	1.4	7.2	54	–	–
07/90	W-10-MW13	53	4.5	3.1	2.2	7.8	26	–	–
11/90	W-09-MW13	20	4.5	1.1	0.88	3.3	1.6	–	–
03/91	W-09-MW13	72	10	8.3	1.7	6.9	<0.10	–	–
06/91	W-10-MW13	44	5.6	3.1	0.75	2.6	<0.10	–	–
09/91	W-10-MW13	40	11	6.5	2.4	8.1	--	–	–
12/91	W-09-MW13	72	11	7.4	2.5	9.4	3.7	–	–
MW14									
11/90	W-09-MW14	0.39	<0.0005	<0.0005	0.0036	0.0037	0.12	–	–
03/91	W-07-MW14	0.20	<0.0005	0.0015	0.0008	0.0036	<0.10	–	–
06/91	W-08-MW14	0.11	<0.0005	<0.0005	<0.0005	<0.0005	<0.10	–	–
09/91	W-09-MW14	0.45	<0.0005	<0.0005	0.0032	0.0023	–	–	–
12/91	W-08-MW14	0.071	0.0005	<0.0005	<0.0005	<0.0005	0.28	–	–
MW-15									
11/90	W-08-MW15	2.7	0.21	0.0055	0.6	0.25	0.34	–	–
03/91	covered by soil								
06/91	W-07-MW15	0.38	<0.0005	<0.0005	<0.0005	0.0013	<0.10	–	–
09/91	W-08-MW15	0.49	0.0029	0.0017	0.033	0.0013	--	–	–
12/91	W-08-MW15	1.6	0.014	0.0011	0.066	0.0098	0.30	–	–

TPHg = Total petroleum hydrocarbons as gasoline
BTEX = Benzene, toluene, ethylebenzene, and total xylenes constituents
TPHd = Total petroleum hydrocarbons as diesel
TOG = Total oil and grease
< = Not detected at method detection limit (stated); ND = No VOC detected other than BTEX
■ = Chloromethane
* = W-08-MW15 = water sample - depth - well number
** = Analyzed by Environmental Protection Agency Method 624 (volatile organic compounds)



Source: U.S. Geological Survey
7.5–Minute Quadrangle
Oakland East, California

N

Approximate Scale

2000 1000 0 2000 4000

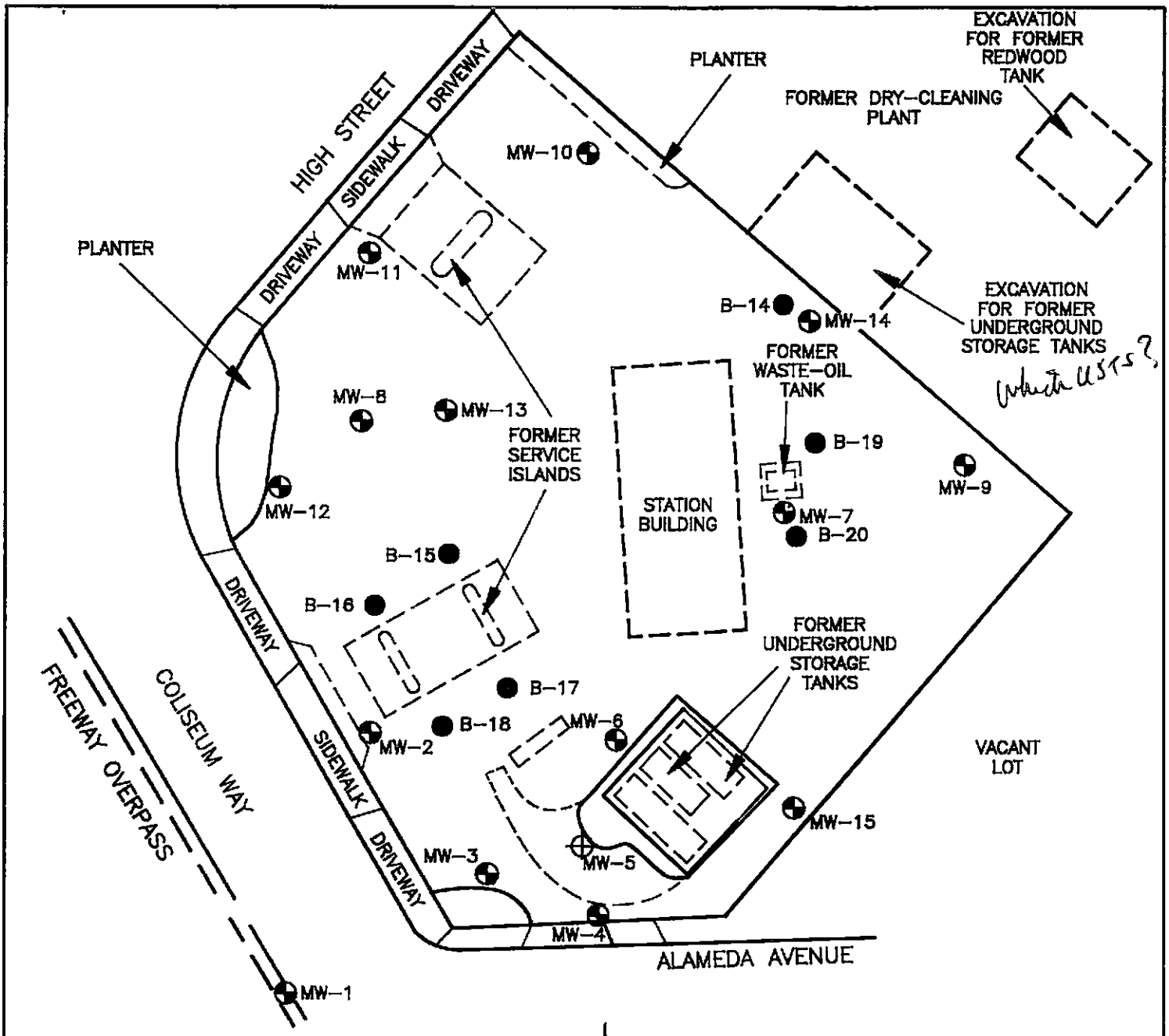
feet

RESNA

PROJECT NO. 87042-7

SITE VICINITY MAP
Exxon Station No. 7-3006
720 High Street
Oakland, California

PLATE
P - 1

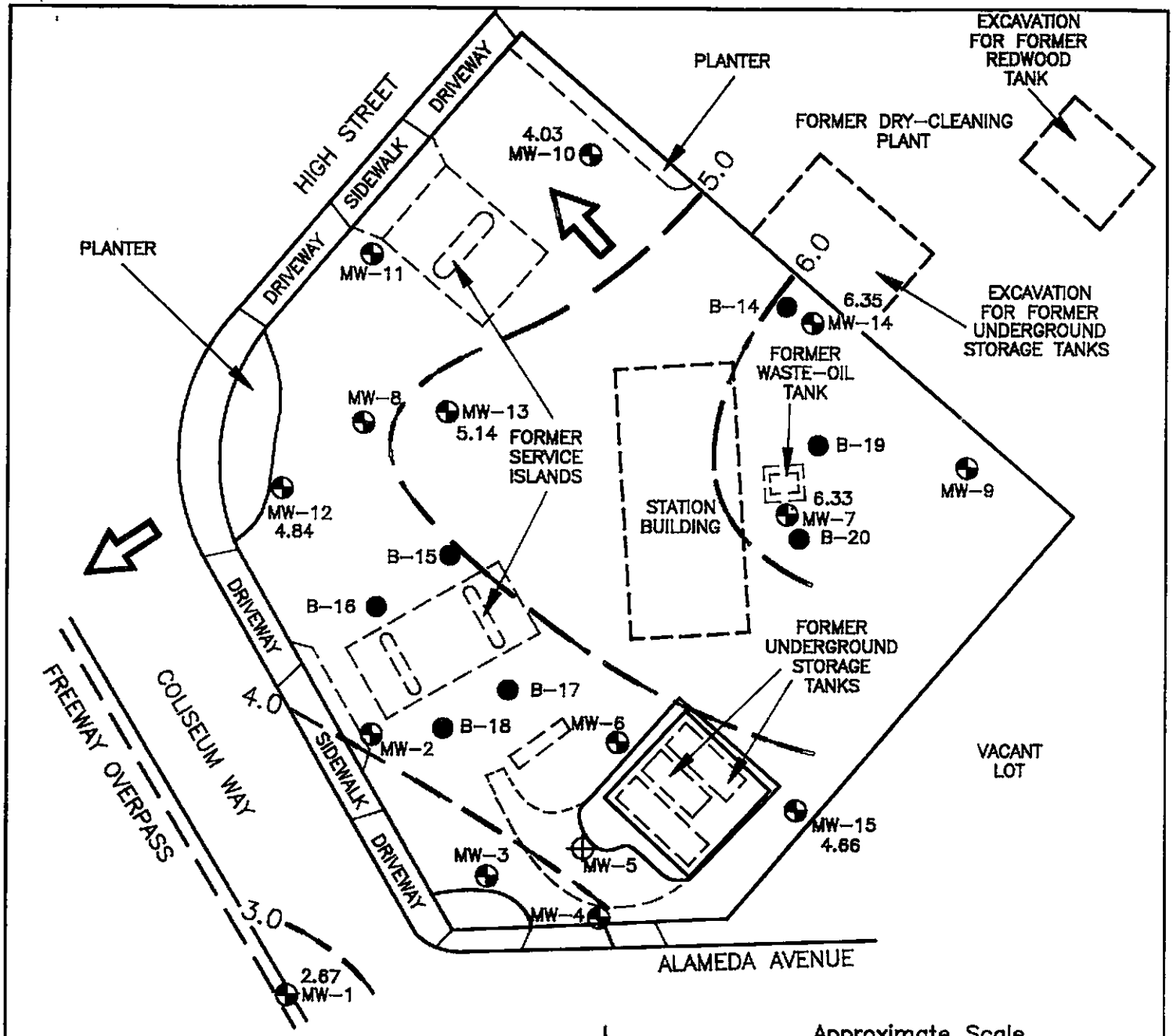


RESNA

PROJECT NO. 87042-7

GENERALIZED SITE PLAN
Exxon Station No. 7-3006
720 High Street
Oakland, California

PLATE
P-2



6.0 = Line of equal elevation of groundwater in feet above mean sea level

= Approximate direction of groundwater flow (November 13, 1991)

= Area excavated

B-20 = Soil boring drilled by Applied GeoSystems

MW-9 = Monitoring well installed by Applied GeoSystems

MW-5 = Monitoring well (destroyed) installed by Applied GeoSystems

N

Approximate Scale

40 20 0 40 80

feet

Source: Modified from plan supplied by Exxon Company, USA

NOTE: Contours are based on interpretation of available data, and are not intended to imply certainty.

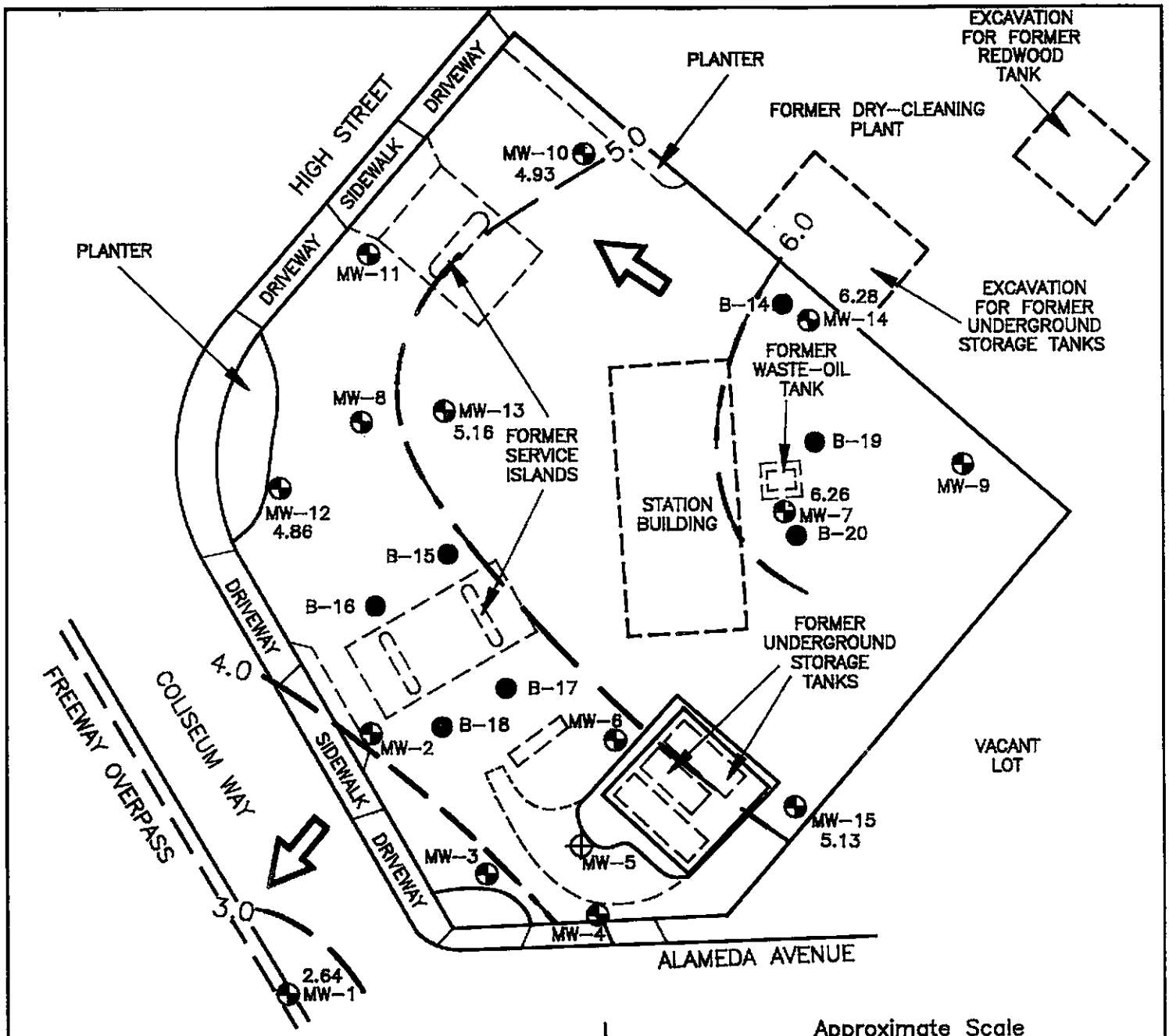
RESNA

PROJECT NO. 87042-7

GROUNDWATER ELEVATION MAP
(November 13, 1991)
Exxon Station No. 7-3006
720 High Street
Oakland, California

PLATE

P-3



6.0 = Line of equal elevation of groundwater in feet above mean sea level

= Approximate direction of groundwater flow (December 10, 1991)

= Area excavated

B-20 = Soil boring drilled by Applied GeoSystems

MW-9 = Monitoring well installed by Applied GeoSystems

MW-5 = Monitoring well (destroyed) installed by Applied GeoSystems

Approximate Scale

40 20 0 40 80

feet

Source: Modified from plan supplied by Exxon Company, USA

NOTE: Contours are based on interpretation of available data, and are not intended to imply certainty.

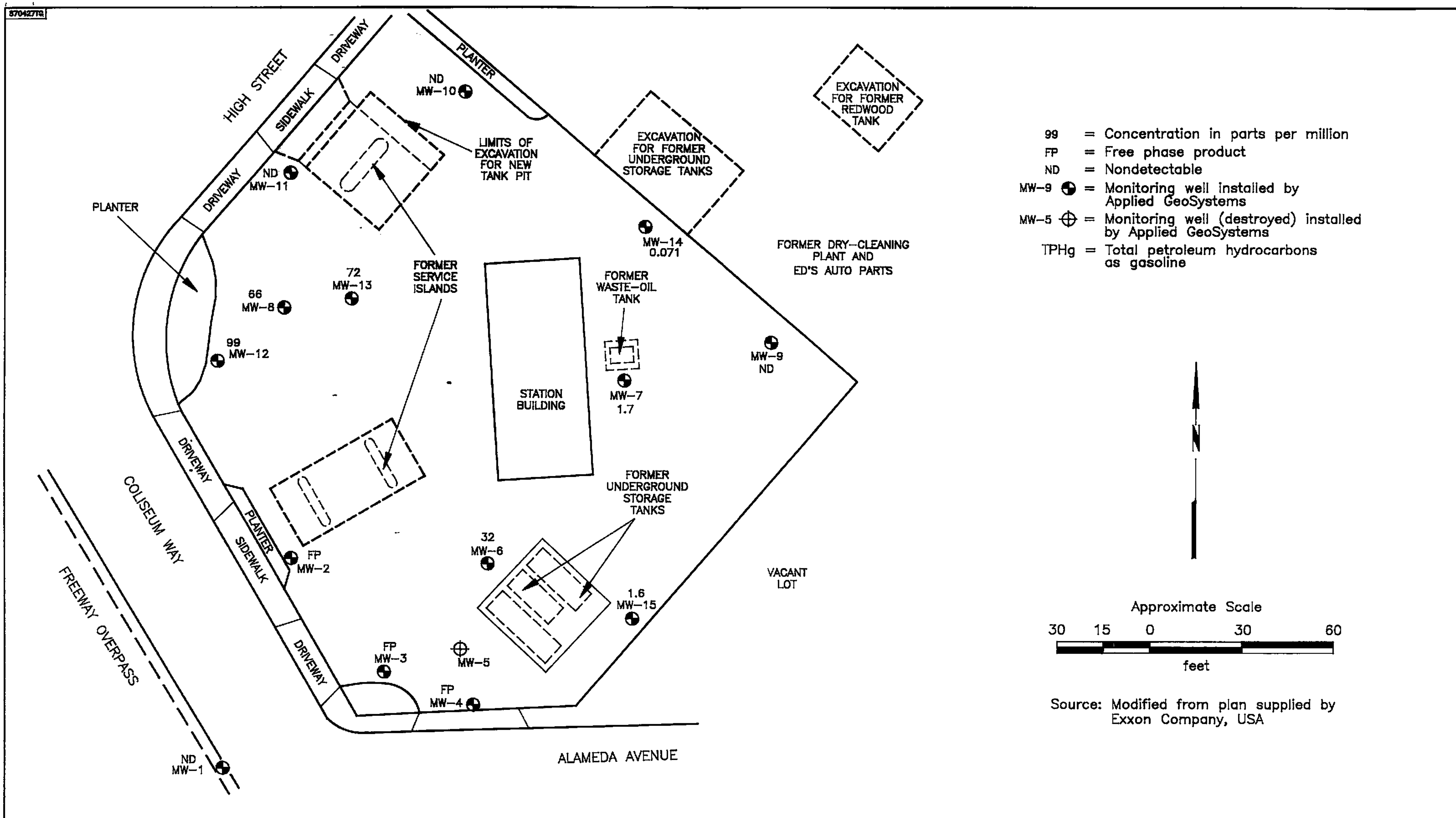
RESNA

PROJECT NO. 87042-7

GROUNDWATER ELEVATION MAP
(December 10, 1991)
Exxon Station No. 7-3006
720 High Street
Oakland, California

PLATE

P-4


87042TG
HIGH STREET
DRIVEWAY
SIDEWALK
PLANTER
ND
MW-10
LIMITS OF EXCAVATION FOR NEW TANK PIT
EXCAVATION FOR FORMER UNDERGROUND STORAGE TANKS
EXCAVATION FOR FORMER REDWOOD TANK
ND
MW-11
PLANTER
FORMER SERVICE ISLANDS
MW-14
0.071
FORMER DRY-CLEANING PLANT AND ED'S AUTO PARTS
72
MW-13
66
MW-8
FORMER WASTE-OIL TANK
99
MW-12
MW-9
ND
STATION BUILDING
MW-7
1.7
COLISEUM WAY
DRIVEWAY
PLANTER
SIDEWALK
FORMER UNDERGROUND STORAGE TANKS
32
MW-6
FP
MW-2
VACANT LOT
FREEWAY OVERPASS
1.6
MW-15
FP
MW-3
MW-5
DRIVEWAY
FP
MW-4
ND
MW-1
ALAMEDA AVENUE
99 = Concentration in parts per million
FP = Free phase product
ND = Nondetectable
MW-9 = Monitoring well installed by Applied GeoSystems
MW-5 = Monitoring well (destroyed) installed by Applied GeoSystems
TPHg = Total petroleum hydrocarbons as gasoline
N
Approximate Scale
30 15 0 30 60
feet
Source: Modified from plan supplied by Exxon Company, USA

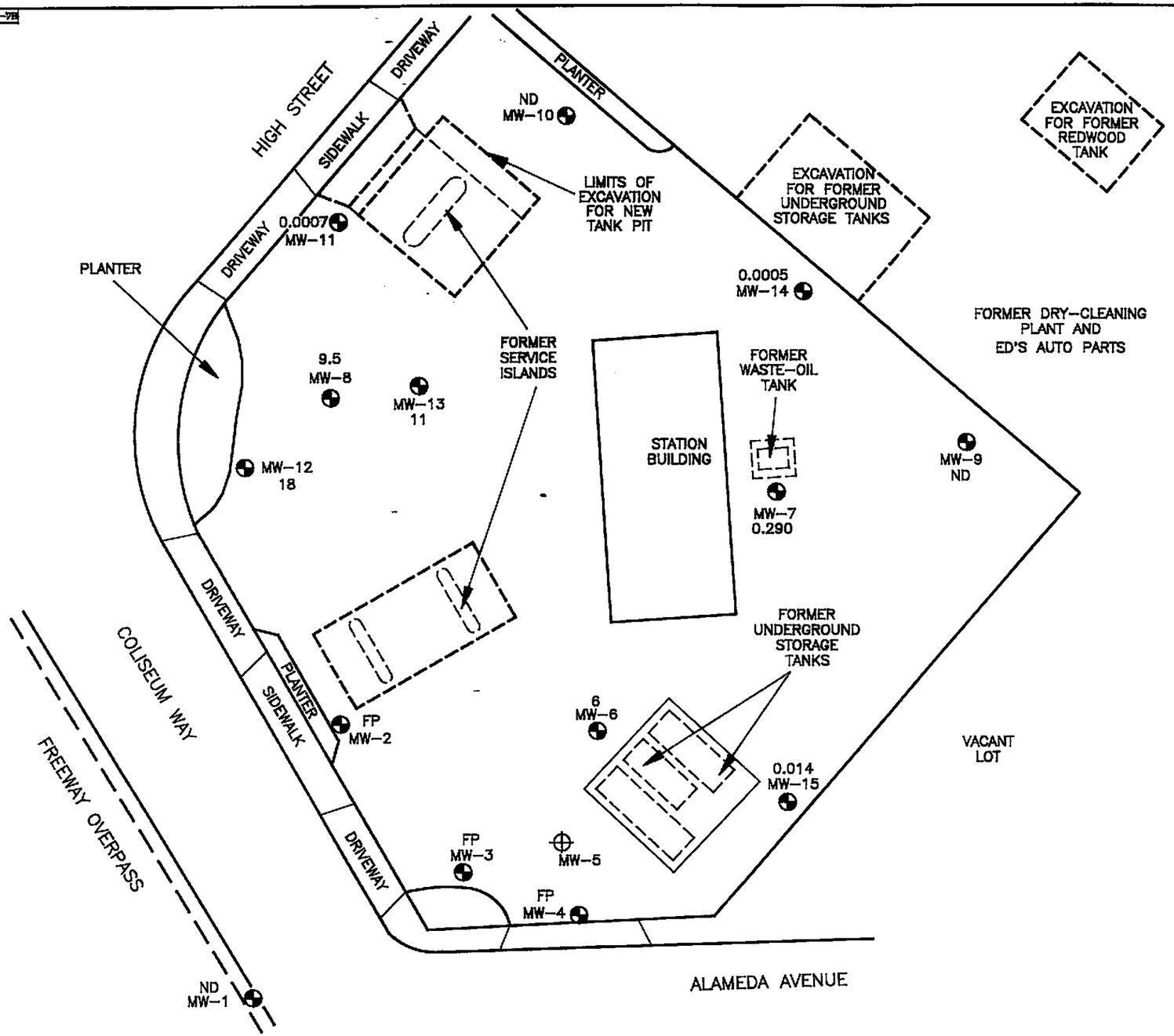
RESNA

PROJECT NO. 87042-7

CONCENTRATION OF TPHg IN GROUNDWATER
Exxon Station No. 7-3006
720 High Street
Oakland, California

PLATE
P-5

87042-7B



18 = Concentration in parts per million
FP = Free phase product
ND = Nondetectable
MW-9 = Monitoring well installed by Applied GeoSystems
MW-5 = Monitoring well (destroyed) installed by Applied GeoSystems

N

Approximate Scale

30 15 0 30 60

feet

Source: Modified from plan supplied by Exxon Company, USA

RESNA

PROJECT NO. 87042-7

CONCENTRATION OF BENZENE IN GROUNDWATER
Exxon Station No. 7-3006
720 High Street
Oakland, California

PLATE
P-6

FIELD PROCEDURES

Monitoring and Subjective Analysis of Groundwater

The depth to static water level was measured to the nearest 0.01 foot with a Solinst electronic water-level indicator. In wells with free product, an Oil Recovery Systems oil-water interface probe was used to measure the depth of the product and the depth of the product-water interface. Groundwater samples were then collected for subjective analysis from each well by gently lowering approximately half the length of a Teflon bailer past the air-water interface. The bailer was washed with Alconox (a commercial biodegradable detergent) and rinsed with deionized water before each use. The samples were retrieved and examined for evidence of floating product, sheen, and emulsion.

Groundwater Sampling for Laboratory Analyses

Before collecting groundwater samples, the wells were purged of approximately 3 well volumes of water or until temperature, pH, and conductivity stabilized. A water sample was collected from each well after the well had recharged to more than 80 percent of the static level, (see attached well purge data sheets). A clean bailer was used for collecting each water sample. Half the length of the bailer was lowered past the air-water interface to retrieve the water sample. The bailer was retrieved and the water samples slowly decanted into laboratory-cleaned sample containers. For TPHg and BTEX analyses, 40-milliliter, volatile organic analysis glass sample vials with Teflon-lined caps were used. Hydrochloric acid was added to the samples as a preservative. The sample vials were promptly capped, labeled, and placed in iced storage for transport to a State-certified analytical laboratory for testing. A Chain of Custody Record was initiated in the field and chain-of-custody protocol was observed throughout subsequent handling of the samples.

The purged ground water and product were stored onsite in sealed, properly labeled, 17E, 55-gallon, liquid-waste drums approved for this use by the Department of Transportation. The water is scheduled for removal from the site in February 1992.

Applied GeoSystems — 3233 Mission Boulevard, Fremont, CA 94539 (415) 651-1906
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GROUND-WATER SAMPLING

EXXON OAKLAND

* CASING not notched

Project No. 87042-9
Date 11/10/91
Page 2 of 2

SUBJECTIVE ANALYSIS

PSH

WELL NO.	INITIAL DEPTH TO WATER	TIME	TOTAL DEPTH	PRODUCT THICKNESS	SHEEN	EMULSION	NOTICEABLE PRODUCT ODOR
MW 1	10.20				no	no	no
MW 9	9.46				no	no	no
MW 10	10.02				no	no	no
MW 11	10.44				no	no	no
MW 14	8.83				no	no	no
MW 15	9.07				no	no	yes
MW 7	8.51				no	no	yes
MW 6	9.62				no	no	yes
MW 13	9.06				no	no	yes
MW 8	9.63				no	no	yes
MW 12	7.77				no	no	yes
MW-2	9.88		9.86	.01	—	—	—
MW 3	10.14		9.90	.24	—	—	—
MW 4	9.90		9.78	.12	—	—	—

* to sample

* PSH

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GROUND-WATER SAMPLING

Project No. 87042-09
Date 12-09-91 & 12-10-91
Page 1 of 3

SUBJECTIVE ANALYSIS

WELL NO.	INITIAL DEPTH TO WATER	TIME	TOTAL DEPTH	PRODUCT THICKNESS	SHEEN	EMULSION	NOTICEABLE PRODUCT ODOR
MW 1	10.23 ft.	15:45	29.00 ft.	NONE	~~0~~	~~0~~	NONE
MW 11	10.48 ft	15:50	30.00 ft.	NONE	~~0~~	~~0~~	NONE
MW 10	9.12 ft.	16:00	25.00 ft.	NONE	~~0~~	~~0~~	NONE
MW 9	9.30 ft	16:05	31.50 ft.	NONE	~~0~~	~~0~~	NONE
MW 15	8.60 ft.	16:10	16.80 ft.	NONE	~~0~~	~~0~~	NONE

WELL VOLUME CALCULATIONS

WELL NO.	DIAMETER BOREHOLE	MW DIAMETER	LENGTH OF WATER COLUMN (ft)	VOLUME/FT.	ONE WELL VOLUME
MW 1	8.25	4"		1.53	
MW 11	8.25	4"		1.53	
MW 10	8.25	4"		1.53	
MW 9	8.25	4"		1.53	
MW 15	8.25	4"		1.53	

WELL PURGING

WELL NO.	TOTAL VOLUME PURGED	METHOD OF MEASUREMENT	DEPTH TO WATER	TIME	% RECOVERY
12-10-MW1	25.0	Stick & Drum	11.33 ft.	9:30	90 %
12-10-MW11	10.0	" "	11.02 ft	11:00	98 %
12-9-MW10	10.0	" "	9.98 ft.	11:20	90 %
12-9-MW9	10.0	" "	10.55 ft	12:30	80 %
12-8-MW15	10.0	" "	11.00 ft	13:50	80 %

TEMP., pH, CONDUCTIVITY

	GALS TIME/T	pH	COND.	GAL TIME/T	pH	COND.	GALS TIME/T	pH	COND	FINAL DEPTH TO WATER	% RECOVERY
2	2:45	52.6	7.90 8.82	28	7:55	57.9	65.6	8.99			
1	8:10	58.1	6.93 6.38								
	8:40	59.9	6.53 5.09								
	9:40	59.1	6.27 6.70								
	10	60.6	5.96 11.76								

REVERSE SIDE

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GROUND-WATER SAMPLING

Project No. 87042-09
Date 12-09-91 & 12-10-91
Page 3 of 3

SUBJECTIVE ANALYSIS

WELL NO.	INITIAL DEPTH TO WATER	TIME	TOTAL DEPTH	PRODUCT THICKNESS	SHEEN	EMULSION	NOTICEABLE PRODUCT ODOR
MW 12	7.75 ft.	16:40	14.75 ft.	NONE	Ø	Ø	SLIGHT.
MW 2	9.02 ft.	16:45	8.89 FREE	.03 YES	YES	YES	STRONG
MW 3	10.10 ft	16:50	9.99 FREE	1.01 YES	YES	YES	STRONG
MW 4	9.92 ft	16:55	9.82 FREE	1.00 YES	YES	YES	STRONG

WELL VOLUME CALCULATIONS

WELL NO.	DIAMETER BOREHOLE	MW DIAMETER	LENGTH OF WATER COLUMN (ft)	VOLUME/FT.	ONE WELL VOLUME
MW 12	8.25	4"		1.33	

WELL PURGING

WELL NO.	TOTAL VOLUME PURGED	METHOD OF MEASUREMENT	DEPTH TO WATER	TIME	% RECOVERY
W-7-MW12	10.0	STICK & DRUM	7.75 ft.	16:30	100 %

TEMP., pH, CONDUCTIVITY

WELL NO.	GAL TIME/T, pH, COND.	GAL TIME/T, pH, COND.	GAL TIME/T, pH, COND.	FINAL DEPTH TO WATER	% RECOVERY
MW12	10/1948 67.2 6.94 7.89	/	/		

COMMENTS ON REVERSE SIDE

[signature]

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(415) 883-6100

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

1 of 4

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

Consultant Name: AGS
Address: 42501 ALBRAE St., FREMONT
Project Contact: RASmi
Project #: 87042-9
Phone #: (510) 659-0404
Fax #:
Consultant Work Release #:

Exxon Contact: BILL Wang
Phone #: 246-8768
Site RAS #: 7-3006
Site Location: 720 High St, OAKLAND
Laboratory Work Release #: 90041965 9118169

Sampled by (please print): Jeff Andrews
Sampler Signature: [signature]
Date Sampled: 12-10-91

	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	Hold				Remarks
	W-8-MW15 Rinsate	121091 13:50		W/HCL	1									/				13561.3
L	W-8-MW15	13:50			3	~~2~~ 1A			/	/								13545.1
	W-8-MW14 Rinsate	14:15			1									/				62.1
L	W-8-MW14	14:15			3	~~2~~ 1A			/	/								46.0
	W-9-MW13 Rinsate	15:00			1									/				63.0
L	W-9-MW13	15:00			3	~~2~~ 1A			/	/								47.8
	W-9-MW6 Rinsate	15:30			1									/				64.8
L	W-9-MW6	15:30			3	~~2~~ 1A			/	/								48.6
	W-9-MW8 Rinsate	16:00			1									/				65.6
L	W-9-MW8	16:00		↓	3	~~2~~ 1A			/	/								49A

Cooler No.: 613,1012

Cooler Seal Intact
☐ Yes
☐ No

Turnaround Time (circle choice)
24 hr.
48 hr.
72 hr.
96 hr.
(5 workday (standard)) — circled

Relinquished by/Affiliation	Accepted by/Affiliation	Date	Time
[signature]	[signature]	12-10-91	18:21
[signature] Rese	[signature] - Pace	12-13-91	11:50
[signature] - Pace	[signature] PACE	12-13	1630

Shipment Method

Shipment Date

Additional Comments:

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

0 10.C17114

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2 of 4

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

Consultant Name: AGS
Address: 42501 Albrae St, FREMONT
Project Contact: RAsmi Project #: 87042-9
Phone #: 659-0404 Fax #:
Consultant Work Release #:

Exxon Contact: BILL WANG Phone #: 246-8768
Site RAS #: 7-3006
Site Location: 720 High St, OAKLAND
Laboratory Work Release #: 90041965 9118691

Sampled by (please print): Jeff Andrews
Sampler Signature: Jeff Andrews Date Sampled: 12-10-91

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	Hold				Remarks
W-10-MW1 Rinsate	12-10-91 8:30		(W/HCl)	1									✓				13556.7
W-10-MW1	12-10-91 8:30			3				✓	✓								13550.8
W-10-MW11 Rinsate	11:00			1									✓				57.5
W-10-MW11	11:00			3				✓	✓								51.6
W-9-MW10 Rinsate	11:20			1									✓				58.3
W-9-MW10	11:20			3				✓	✓								52.4
W-9-MW9 Rinsate	12:30			1									✓				59.1
W-9-MW9	12:30			3				✓	✓								53.2
W-8-MW7 Rinsate	13:30			1									✓				60.5
W-8-MW7	13:30			3				✓	✓								54.0

Relinquished by/Affiliation	Accepted by/Affiliation	Date	Time
Jeff Andrews	RAsmi El...	12-10-91	18:21
[illegible] Rasmi	Ed [illegible] - Pace	12-13-91	11:50
Ed [illegible] - Pace	[illegible] PACE	12-13	1630

Cooler No.

Cooler Seal Intact
☐ Yes
☐ No

Turnaround Time (circle choice)
24 hr.
48 hr.
72 hr.
~~96 hr.~~
(5 workday (standard)) — circled

Shipment Method

Shipment Date

Additional Comments:

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

411712.18

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

Consultant Name: AGS
Address: 42501 Albrae St, FREMONT
Project Contact: RA Smi Project #: 87042-9
Phone #: 659-0404 Fax #:
Consultant Work Release #:

Exxon Contact: BILL WANG Phone #: 246-8768
Site RAS #: 7-3006
Site Location: 720 High St, OAKLAND
Laboratory Work Release #: 9004 1965 9118191

Sampled by (please print): JEFF ANDREWS
Sampler Signature: [signature] Date Sampled: 12-10-91

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	Hold	Remarks
W-7-MW12 Rinsate	12-10-91 16:30			1									✓	13566.4
W-7-MW12	12-10-91 16:30			3	✓			✓	✓					13555.9
W-10-MW1 Liter	8:30			2				✓	✓					
W-10-MW11 Liter	11:00			2				✓	✓					
W-9-MW10	11:20			2				✓	✓					
W-9-MW9	12:30			2				✓	✓					
W-8-MW7	13:30			2				✓	✓					
W-8-MW15	13:50			2				✓	✓					
W-8-MW14	14:15			2				✓	✓					
W-9-MW6	15:30		✓	2				✓	✓					

Relinquished by/Affiliation	Accepted by/Affiliation	Date	Time
[signature]	[signature]	12-10-91	18:21
[signature] Rinse	[signature]	12-13-91	11:50
[signature]	[signature] PACE	12-13	1630

Cooler No.
Cooler Seal Intact: ☐ Yes ☐ No
Turnaround Time (circle choice): 24 hr. 48 hr. 72 hr. 96 hr. 5 workday (standard)
Shipment Method
Shipment Date

Additional Comments:

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

4117515

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

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

4 of 4

Consultant Name: AGS
Address: 42501 Albrae St, FREMONT
Project Contact: RAgmi
Project #: 87042-9
Phone #: 659-0404
Fax #:
Consultant Work Release #:

Exxon Contact: BILL WANG
Phone #: 246-8768
Site RAS #: 7-3006
Site Location: 720 High St, OAKLAND
Laboratory Work Release #: 9001965 9118691

Sampled by (please print): JEFF ANDREWS
Sampler Signature: [signature]
Date Sampled: 12 10 91

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					Remarks
W-9-MW 8 Liter	121091 16:00		HCL	2				/	/								
W-7-MW 12 Liters	16:30		↓	2				/	/								

Cooler No.

Cooler Seal Intact
☐ Yes
☐ No

Turnaround Time (circle choice)
24 hr.
48 hr.
72 hr.
96 hr.
(5 workday (standard)) — circled

Relinquished by/Affiliation	Accepted by/Affiliation	Date	Time
[signature]	RAgmi [signature]	12-10-91	18:21
[signature] Reserv	[signature]	12-13-91	11:50
[signature]	[signature] PACE	12-13	1630

Shipment Method

Shipment Date

Additional Comments:

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

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REPORT OF LABORATORY ANALYSIS

December 24, 1991

Mr. Rasmi Aljurf
Resna/Applied Geosystems
41674 Christy Street
Fremont, CA 94538

RE: PACE Project No. 411213.518
Client Reference: Exxon 7-3006

Dear Mr. Aljurf:

Enclosed is the report of laboratory analyses for samples received December 16, 1991.

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

Sincerely,

Carol Reid
Project Manager

Enclosures

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

REPORT OF LABORATORY ANALYSIS

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

Parameter	Units	MDL		DATE ANALYZED
PACE Sample Number:			70 0135508	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-10-MW 1	
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/19/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND	12/19/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/19/91
Benzene	ug/L	0.5	ND	12/19/91
Toluene	ug/L	0.5	ND	12/19/91
Ethylbenzene	ug/L	0.5	ND	12/19/91
Xylenes, Total	ug/L	0.5	ND	12/19/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	ND	12/22/91
Date Extracted			12/17/91	

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

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REPORT OF LABORATORY ANALYSIS

Mr. Rasmi Aljurf
Page 4

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

PACE Sample Number:			70 0135486	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-9-MW 6	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/20/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	2500	32000	12/20/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/20/91
Benzene	ug/L	100	6000	12/20/91
Toluene	ug/L	25	290	12/20/91
Ethylbenzene	ug/L	25	1400	12/20/91
Xylenes, Total	ug/L	25	4700	12/20/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	1.2	12/22/91
Date Extracted			12/17/91	

MDL Method Detection Limit

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REPORT OF LABORATORY ANALYSIS

Mr. Rasmi Aljurf
Page 10

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

PACE Sample Number:			70 0135540	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-8-MW 7	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/18/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	500	1700	12/18/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/18/91
Benzene	ug/L	5.0	290	12/18/91
Toluene	ug/L	5.0	5.3	12/18/91
Ethylbenzene	ug/L	5.0	7.1	12/18/91
Xylenes, Total	ug/L	5.0	ND	12/18/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	0.53	12/22/91
Date Extracted			12/17/91	

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

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REPORT OF LABORATORY ANALYSIS

Mr. Rasmi Aljurf
Page 5

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

PACE Sample Number:			70 0135494	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-9-MW 8	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/20/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	5000	66000	12/20/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/20/91
Benzene	ug/L	125	9500	12/20/91
Toluene	ug/L	50	5000	12/20/91
Ethylbenzene	ug/L	50	3100	12/20/91
Xylenes, Total	ug/L	50	12000	12/20/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	1.4	12/22/91
Date Extracted			12/17/91	

MDL Method Detection Limit

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REPORT OF LABORATORY ANALYSIS

Mr. Rasmi Aljurf
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December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

PACE Sample Number:			70 0135532	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-9-MW 9	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/18/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND	12/18/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/18/91
Benzene	ug/L	0.5	ND	12/18/91
Toluene	ug/L	0.5	ND	12/18/91
Ethylbenzene	ug/L	0.5	ND	12/18/91
Xylenes, Total	ug/L	0.5	ND	12/18/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	0.052	12/22/91
Date Extracted			12/17/91	

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

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REPORT OF LABORATORY ANALYSIS

Mr. Rasmi Aljurf
Page 8

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

PACE Sample Number:			70 0135524	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-9-MW 10	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/19/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND	12/19/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/19/91
Benzene	ug/L	0.5	ND	12/19/91
Toluene	ug/L	0.5	ND	12/19/91
Ethylbenzene	ug/L	0.5	ND	12/19/91
Xylenes, Total	ug/L	0.5	ND	12/19/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	ND	12/22/91
Date Extracted			12/17/91	

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

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REPORT OF LABORATORY ANALYSIS

Mr. Rasmi Aljurf
Page 7

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

PACE Sample Number:			70 0135516	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-10-MW 11	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/19/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	ND	12/19/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/19/91
Benzene	ug/L	0.5	0.7	12/19/91
Toluene	ug/L	0.5	ND	12/19/91
Ethylbenzene	ug/L	0.5	ND	12/19/91
Xylenes, Total	ug/L	0.5	ND	12/19/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	ND	12/22/91
Date Extracted			12/17/91	

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

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REPORT OF LABORATORY ANALYSIS

Mr. Rasmi Aljurf
Page 11

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

Parameter	Units	MDL		DATE ANALYZED
PACE Sample Number:			70 0135559	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-7-MW 12	
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/18/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	25000	99000	12/18/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/18/91
Benzene	ug/L	250	18000	12/18/91
Toluene	ug/L	250	16000	12/18/91
Ethylbenzene	ug/L	250	3000	12/18/91
Xylenes, Total	ug/L	250	11000	12/18/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	1.7	12/22/91
Date Extracted			12/17/91	

MDL Method Detection Limit

These data have been reviewed and are approved for release.

Mark A. Valentini

Mark A. Valentini, Ph.D.
Regional Director

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

REPORT OF LABORATORY ANALYSIS

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

Parameter	Units	MDL		DATE ANALYZED
PACE Sample Number:			70 0135478	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-9-MW 13	
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/20/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	4000	72000	12/20/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/20/91
Benzene	ug/L	200	11000	12/20/91
Toluene	ug/L	40	7400	12/20/91
Ethylbenzene	ug/L	40	2500	12/20/91
Xylenes, Total	ug/L	40	9400	12/20/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	3.7	12/22/91
Date Extracted			12/17/91	

MDL Method Detection Limit

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FAX: 415-883-2673

REPORT OF LABORATORY ANALYSIS

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

PACE Sample Number:			70 0135460	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-8-MW 14	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/19/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	71	12/19/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/19/91
Benzene	ug/L	0.5	0.5	12/19/91
Toluene	ug/L	0.5	ND	12/19/91
Ethylbenzene	ug/L	0.5	ND	12/19/91
Xylenes, Total	ug/L	0.5	ND	12/19/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	0.28	12/20/91
Date Extracted			12/17/91	

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

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TEL: 415-883-6100
FAX: 415-883-2673

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THE ASSURANCE OF QUALITY

REPORT OF LABORATORY ANALYSIS

Resna/Applied Geosystems
41674 Christy Street
Fremont, CA 94538

December 24, 1991
PACE Project Number: 411213518

Attn: Mr. Rasmi Aljurf

Client Reference: Exxon 7-3006

PACE Sample Number:			70 0135451	
Date Collected:			12/10/91	
Date Received:			12/16/91	
Client Sample ID:			W-8-MW 15	
Parameter	Units	MDL		DATE ANALYZED
ORGANIC ANALYSIS				
TPH GASOLINE/BTEX				
TOTAL FUEL HYDROCARBONS, (LIGHT):			-	12/18/91
Purgeable Fuels, as Gasoline (EPA 8015)	ug/L	50	1600	12/18/91
PURGEABLE AROMATICS (BTXE BY EPA 8020):			-	12/18/91
Benzene	ug/L	0.5	14	12/18/91
Toluene	ug/L	0.5	1.1	12/18/91
Ethylbenzene	ug/L	0.5	66	12/18/91
Xylenes, Total	ug/L	0.5	9.8	12/18/91
TPH DIESEL, BY EPA METHOD 8015				
Extractable Fuels, as Diesel	mg/L	0.050	0.30	12/18/91
Date Extracted			12/17/91	

MDL Method Detection Limit

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FAX: 415-883-2673

Mr. Rasmi Aljurf
Page 12

QUALITY CONTROL DATA

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

TPH DIESEL, BY EPA METHOD 8015
Batch: 70 08675
Samples: 70 0135451, 70 0135460, 70 0135478, 70 0135486, 70 0135494
70 0135508, 70 0135516, 70 0135524, 70 0135532, 70 0135540
70 0135559

METHOD BLANK:

Parameter	Units	MDL	Method Blank
Extractable Fuels, as Diesel	mg/L	0.050	ND

LABORATORY CONTROL SAMPLE AND CONTROL SAMPLE DUPLICATE:

Parameter	Units	MDL	Reference Value	Recv	Dupl Recv	RPD
Extractable Fuels, as Diesel	mg/L	0.050	1.00	57%	58%	1%

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

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QUALITY CONTROL DATA

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

TPH GASOLINE/BTEX
Batch: 70 08585
Samples: 70 0135451

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	309	108%	104%	3%
Benzene	ug/L	0.5	40.0	85%	85%	0%
Toluene	ug/L	0.5	40.0	90%	91%	1%
Ethylbenzene	ug/L	0.5	40.0	90%	91%	1%
Xylenes, Total	ug/L	0.5	80.0	94%	95%	1%

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

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QUALITY CONTROL DATA

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

TPH GASOLINE/BTEX
Batch: 70 08590
Samples: 70 0135532, 70 0135540, 70 0135559

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	323	103%	103%	0%
Benzene	ug/L	0.5	40.0	90%	104%	14%
Toluene	ug/L	0.5	40.0	90%	104%	14%
Ethylbenzene	ug/L	0.5	40.0	90%	103%	13%
Xylenes, Total	ug/L	0.5	80.0	90%	103%	13%

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

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Client Reference: Exxon 7-3006

TPH GASOLINE/BTEX
Batch: 70 08630
Samples: 70 0135460, 70 0135508, 70 0135516, 70 0135524

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	323	100%	100%	0%
Benzene	ug/L	0.5	40.0	90%	104%	14%
Toluene	ug/L	0.5	40.0	91%	103%	12%
Ethylbenzene	ug/L	0.5	40.0	90%	102%	12%
Xylenes, Total	ug/L	0.5	80.0	93%	104%	11%

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

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

December 24, 1991
PACE Project Number: 411213518

Client Reference: Exxon 7-3006

TPH GASOLINE/BTEX
Batch: 70 08688
Samples: 70 0135478, 70 0135486, 70 0135494

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	323	98%	103%	4%
Benzene	ug/L	0.5	40.0	86%	84%	2%
Toluene	ug/L	0.5	40.0	86%	95%	9%
Ethylbenzene	ug/L	0.5	40.0	88%	96%	8%
Xylenes, Total	ug/L	0.5	80.0	91%	100%	9%

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