November 12, 1993

ENV - STUDIES, SURVEYS, & REPORTS
Exxon Service Station/Former Texaco Service Station
2200 E. 12th St., Oakland, CA

Mr. Richard Hiett
California Regional Water Quality Control Board
San Francisco Bay Region
2101 Webster Street, Suite 500
Oakland, CA 94612

Dear Mr. Hiett:

Enclosed please find the Quarterly Groundwater Monitoring Report, dated November 6, 1993, for the subject site.

If you have any questions, I can be contacted at (510) 236-9139.

Best Regards,

Karen E. Petryna
Environmental Project Coordinator
Texaco Environmental Services

KEP:hs
2200 A:\2200QCVR.RH

Enclosure

cc: Mr. Thomas Peacock - Alameda County Environmental Health Department
Mr. E. E. Villasenor - Exxon Company U.S.A.

RACoughlin-RRZielinski (w/o enclosure)

PR: 93.

RESNA
Working To Restore Nature

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

LETTER REPORT
GROUNDWATER MONITORING AND SAMPLING
Third Quarter 1993
at
Former Texaco Station
2200 East 12th Street
Oakland, California

62079.01

RESNA
Working To Restore Nature

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

November 2, 1993
62079.01

Ms. Karen Petryna
Texaco Environmental Services
108 Cutting Boulevard
Richmond, California 94804

Subject: Groundwater Monitoring and Sampling, Third Quarter 1993, Former Texaco Station, 2200 East 12th Street, Oakland, California.

Ms. Petryna:

At the request of Texaco Environmental Services, RESNA Industries Inc. (RESNA) has prepared this letter report which summarizes the results of quarterly groundwater monitoring at the former Texaco Service Station located at 2200 East 12th Street in Oakland, California (Plate 1, Site Vicinity Map) for the third quarter 1993 (July through September 1993). On August 26, 1993, quarterly groundwater monitoring and sampling was conducted to evaluate groundwater elevations, gradient and flow direction, the presence and thickness of any petroleum hydrocarbon sheen or floating product, and the distribution of dissolved hydrocarbons in 8 monitoring wells (MW-9A, MW-9B, MW-9C, MW-9D, MW-9F, MW-9G, MW-9H, and MW-9I) associated with this site. RESNA's groundwater sampling protocol and well purge data sheets are included in Appendix A.

GROUNDWATER MONITORING

Relative to groundwater elevations reported last quarter (May 18, 1993), elevations at the site decreased an average of 0.22 foot in wells MW-9A, MW-9C, MW-9D, MW-9G, MW-9H, and MW-9I, increased 0.14 foot in well MW-9B, and was unchanged in well MW-9F. The Groundwater Gradient Map (Plate 2) shows the groundwater beneath the site to be flowing towards the northwest with a hydraulic gradient of approximately 0.02. Neither floating product nor hydrocarbon sheen was observed in the wells. Historical and recent monitoring data are summarized in Table 1, Cumulative Groundwater Monitoring Data.

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Third Quarter 1993 Quarterly Report
2200 East 12th Street, Oakland, California.

November 2, 1993
62079.01

GROUNDWATER SAMPLING

Groundwater samples were submitted to Mobile Chem Laboratories (California Hazardous Materials Testing Laboratory Certification No. 1223) in Martinez, California under chain of custody protocol. The samples were analyzed for the gasoline constituents benzene, toluene, ethylbenzene, and total xylenes, and total petroleum hydrocarbons as gasoline (TPHg) using modified Environmental Protection Agency Methods 5030 and TPH LUFT with Method 602. The Laboratory Analysis Reports and Chain of Custody Documentation are included in Appendix B.

GROUNDWATER ANALYTICAL RESULTS

Concentrations of TPHg in groundwater samples collected were less than 50 parts per billion (ppb) (below the method detection limit [MDL]) in all wells sampled except in MW-9B (180 ppb). Dissolved benzene concentrations in groundwater samples collected were less than 0.5 ppb (below the MDL) in all wells sampled except in MW-9H (0.8 ppb) and MW-9B (36 ppb). Historical and recent analytical data are summarized in Table 2, Cumulative Results of Laboratory Analyses of Groundwater Samples.

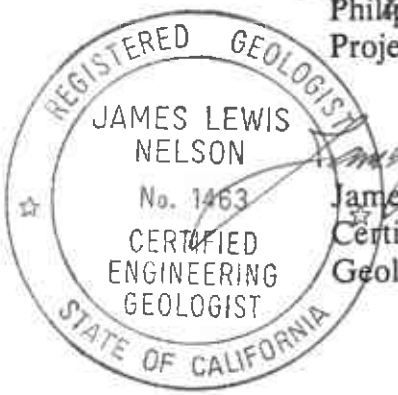
PURGE WATER RECYCLING

On September 1, 1993, approximately 125 gallons of purge water generated during purging and sampling of the eight monitoring wells were transported to Gibson Environmental in Redwood City, California for recycling. The Non-Hazardous Waste Data Form is included in Appendix C.

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

Sincerely,
RESNA Industries Inc.

Philip J. Mayberry
Project Geologist



James L. Nelson
Certified Engineering
Geologist No. 1463

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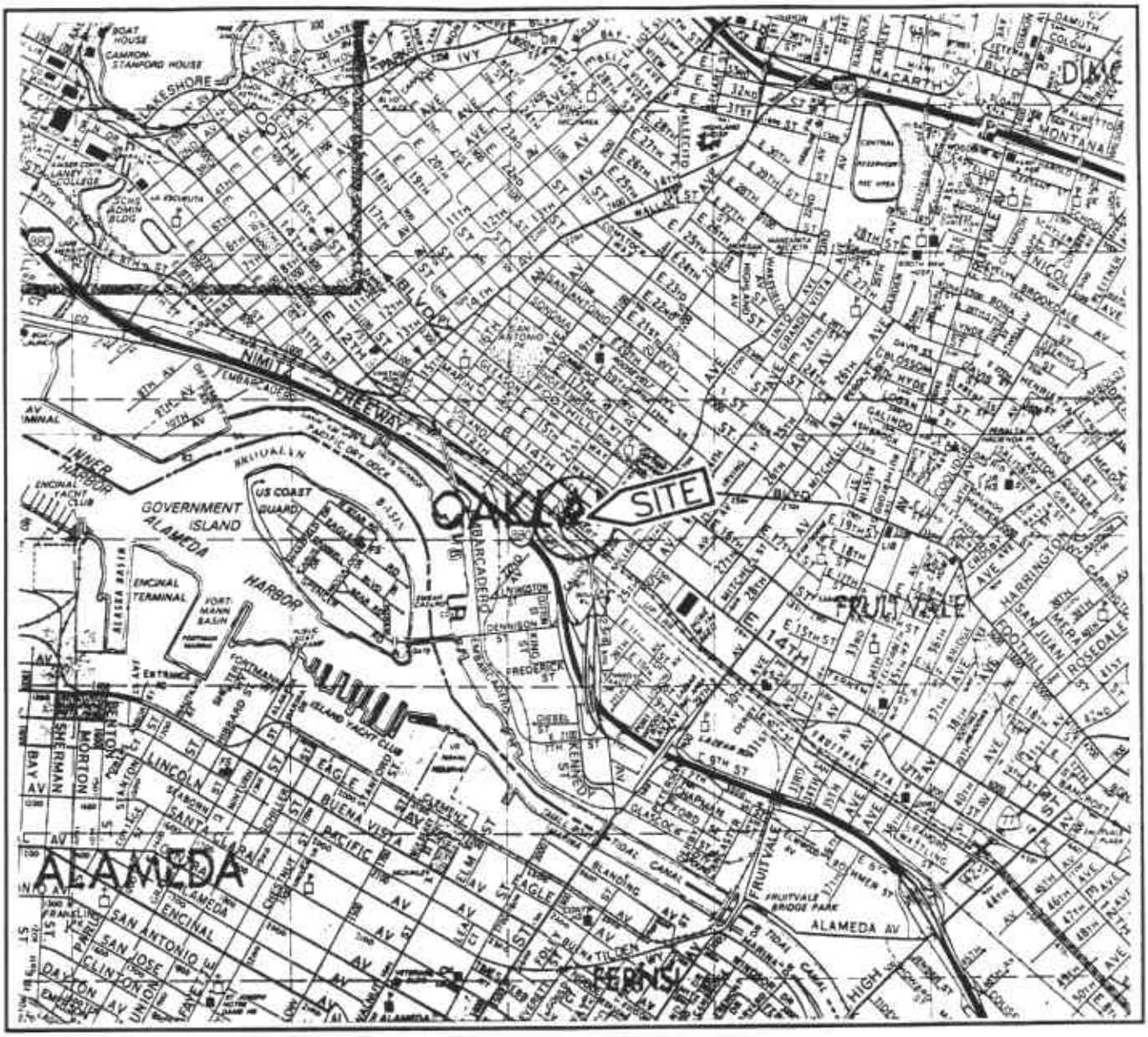
Enclosures:

Plate 1:	Site Vicinity Map
Plate 2:	Groundwater Gradient Map
Plate 3:	TPHg/Benzene Concentration in Groundwater
Table 1:	Cumulative Groundwater Monitoring Data
Table 2:	Cumulative Results of Laboratory Analyses of Groundwater Samples
Appendix A,	Groundwater Sampling Protocol and Well Purge Data Sheets
Appendix B,	Laboratory Analysis Reports and Chain of Custody Documentation
Appendix C,	Non-Hazardous Waste Data Form



Base: The Thomas Guide
Alameda County
Oakland, California.
1991

N

LEGEND

⊙ = Site Location

Approximate Scale

2200 1100 0 2200 4400

feet

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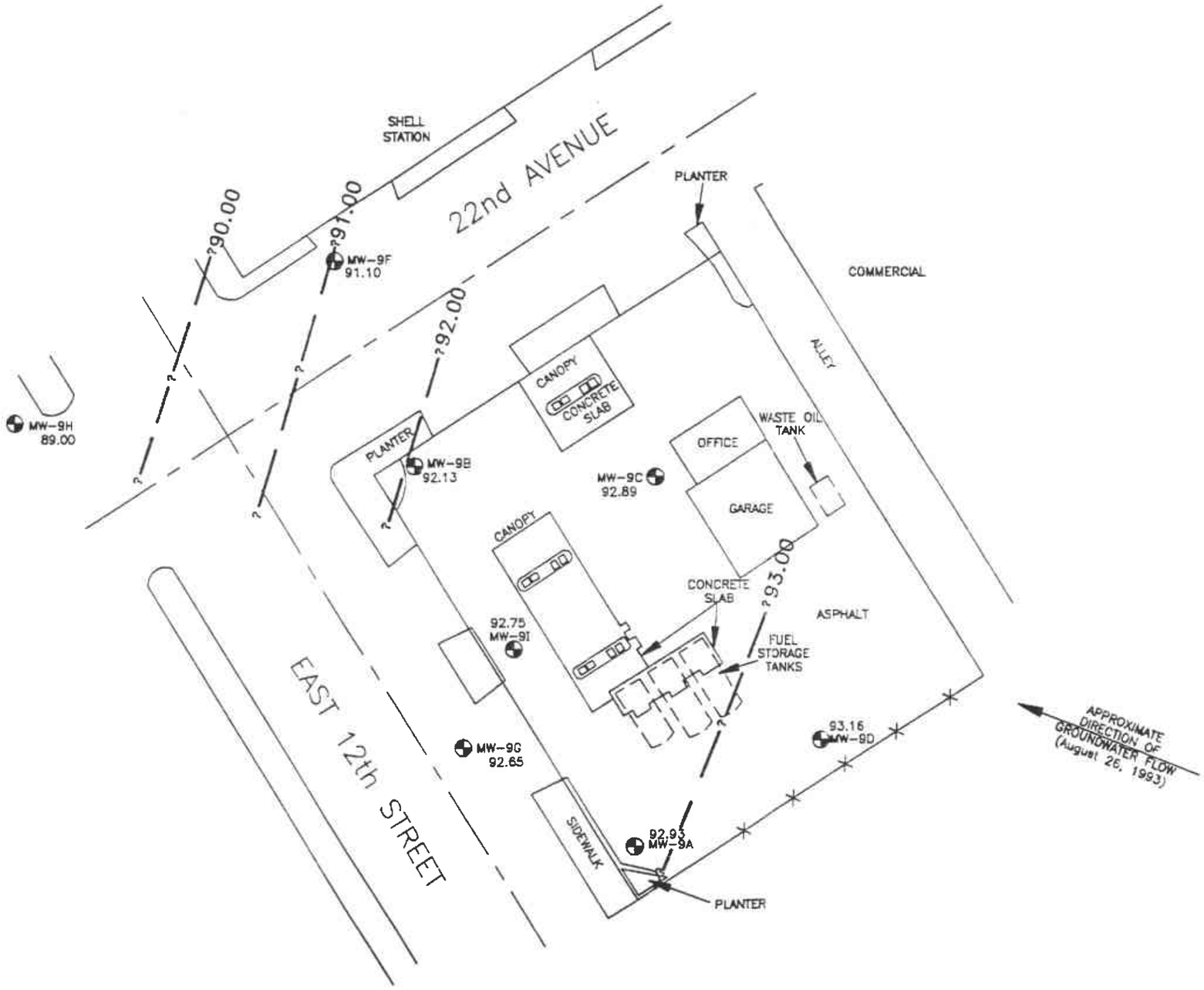
SITE VICINITY MAP
Former Texaco Station
2200 East 12th Street
Oakland, California

PLATE
1



EXPLANATION

MW-9I = Monitoring well (1988)

93.00 = Line of equal elevation of groundwater in feet relative to an arbitrary benchmark

93.16 = Elevation of groundwater in feet relative to an arbitrary benchmark, August 26, 1993

N

Approximate Scale

30 15 0 30 60

feet

Source: Modified from site plan provided by Harding Lawson Associates, dated July 20, 1992.

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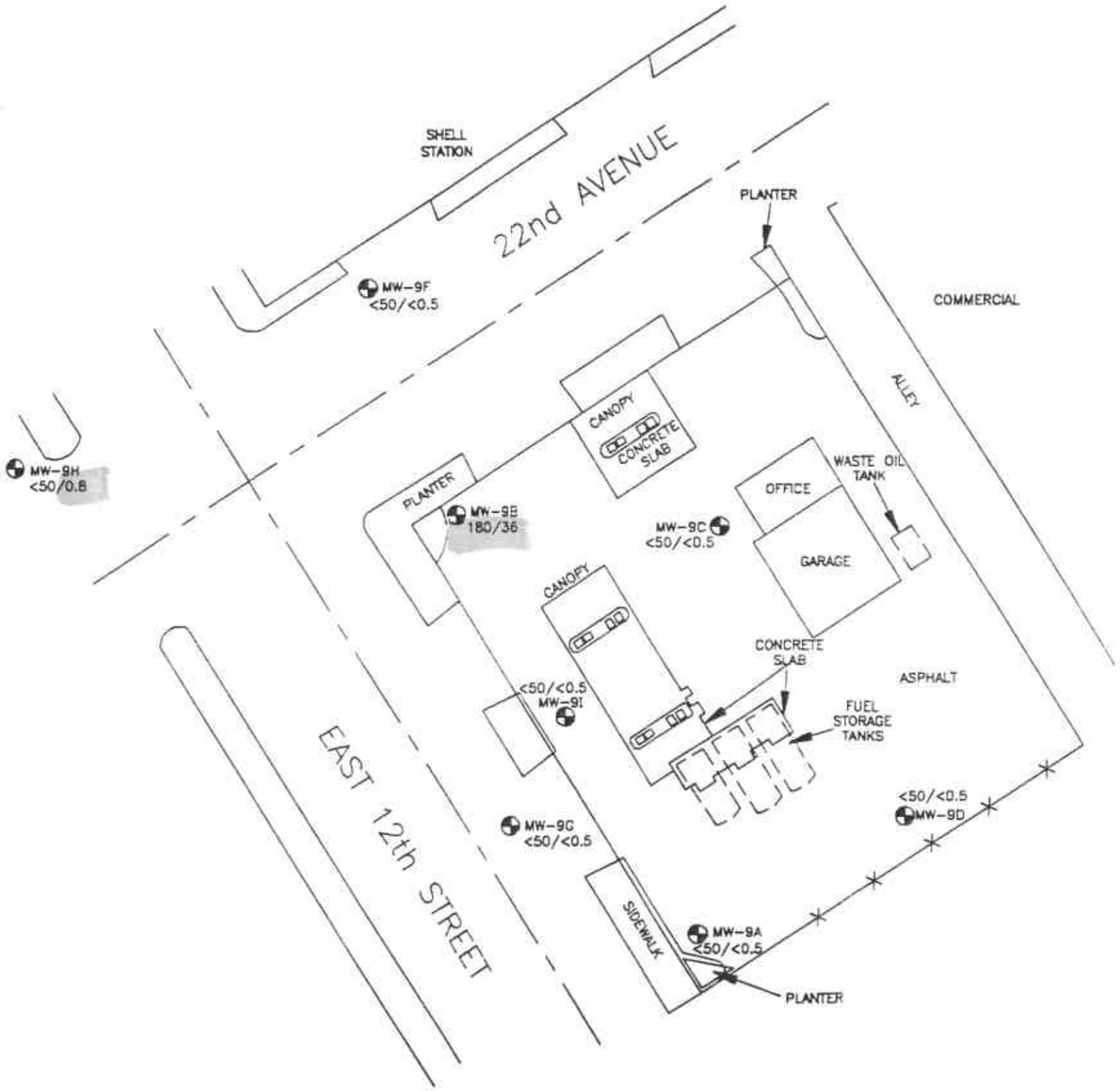
GROUNDWATER GRADIENT MAP
Former Texaco Station
2200 East 12th Street
Oakland, California

PLATE 2



EXPLANATION

MW-9I ⊕ = Monitoring well (1988)

180/36 = Concentration of TPHg/benzene in groundwater in parts per billion, August 26, 1993

N

Approximate Scale

30 15 0 30 60

feet

Source: Modified from site plan provided by Harding Lawson Associates, dated July 20, 1992.

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PROJECT 62079.01 6207903

TPHg/BENZENE CONCENTRATION IN GROUNDWATER
Former Texaco Station
2200 East 12th Street
Oakland, California

PLATE 3

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Former Texaco Station
2200 East 12th Street
Oakland, California
(Page 1 of 4)

Well	Date	Wellhead Elevation*	Depth to Water	Groundwater Elevation*
MW-9A				
HLA	10/12/89	100.07	7.25	92.82
	09/20/90		NA	NA
	10/19/90		7.23	92.84
	01/11/91		6.96	93.11
	04/30/91		6.74	93.33
	07/29/91		7.22	92.85
	10/25/91		7.49	92.58
	02/05/92		6.93	93.14
	05/05/92		6.95	93.12
RESNA	09/14/92		7.65	92.42
	11/16/92		7.35	92.72
	02/03/93		7.85	92.22
	05/18/93		6.95	93.12
	08/26/93		7.14	92.93
MW-9B				
HLA	10/12/89	98.41	6.14	92.27
	09/20/90		6.28	92.13
	10/19/90		6.21	92.20
	01/11/91		6.21	92.20
	04/30/91		5.74	92.67
	07/29/91		6.23	92.18
	10/25/91		6.42	91.99
	02/05/92		5.95	92.46
	05/05/92		5.92	92.49
RESNA	09/14/92		6.60	91.81
	11/16/92		6.35	92.06
	02/03/93		6.50	91.91
	05/18/93		6.42	91.99
	08/26/93		6.28	92.13
MW-9C				
HLA	10/12/89	99.73	6.99	92.74
	09/20/90		NA	NA
	10/19/90		6.96	92.77
	01/11/91		6.60	93.13
	04/30/91		6.32	93.41
	07/29/91		6.92	92.81
	10/25/91		7.13	92.60
	02/05/92		6.44	93.29
	05/05/92		6.50	93.23
RESNA	09/14/92		7.00	92.73

See notes on page 4 of 4.

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Former Texaco Station
2200 East 12th Street
Oakland, California
(Page 2 of 4)

Well	Date	Wellhead Elevation*	Depth to Water	Groundwater Elevation*
MW-9C Cont.				
	11/16/92		6.72	93.01
	02/03/93		5.75	93.98
	05/18/93		6.72	93.01
	08/26/93		6.84	92.89
MW-9D				
HLA	10/12/89	101.46	8.40	93.06
	09/20/90		8.47	92.99
	10/19/90		8.43	93.03
	01/11/91		7.97	93.49
	04/30/91			Well Inaccessible
	07/29/91		8.35	93.11
	10/25/91		8.54	92.92
	02/05/92		7.78	93.68
	05/05/92		7.90	93.56
RESNA	09/14/92		8.45	93.01
	11/16/92		8.10	93.36
	02/03/93		7.07	94.39
	05/18/93		7.85	93.61
	08/26/93		8.30	93.16
MW-9E				
HLA	10/12/89	98.41	5.70	92.71
	09/20/90		5.84	92.57
	10/19/90		5.78	92.63
	11/02/90			Well Abandoned
MW-9F				
HLA	10/12/89	96.96	6.07	90.89
	09/20/90		5.97	90.99
	10/19/90		5.94	91.02
	01/11/91		5.72	91.24
	04/30/91		5.74	91.22
	07/29/91		6.02	90.94
	10/25/91		6.11	90.85
	02/05/92		5.81	91.15
	05/05/92		5.86	91.10
RESNA	09/14/92			Not Measured
	11/16/92		5.82	91.14
	02/03/93		5.55	91.41
	05/18/93		5.86	91.10
	08/26/93		5.86	91.10

See notes on page 4 of 4.

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Former Texaco Station
2200 East 12th Street
Oakland, California
(Page 3 of 4)

Well	Date	Wellhead Elevation*	Depth to Water	Groundwater Elevation*
MW-9G				
HLA	10/12/89	98.51	6.01	92.50
	09/20/90		6.03	92.48
	10/19/90		5.92	92.59
	01/11/91		5.72	92.79
	04/30/91		5.74	93.04
	07/29/91		5.97	92.54
	10/25/91		6.16	92.35
	02/05/92		5.59	92.92
	05/05/92		5.60	92.91
RESNA	09/14/92			Not Measured
	11/16/92		5.78	92.73
	02/03/93		5.05	93.46
	05/18/93		5.62	92.89
	08/26/93		5.86	92.65
MW-9H				
HLA	10/12/89	97.14	8.35	88.79
	09/20/90		8.25	88.89
	10/19/90		8.17	88.97
	01/11/91		7.55	89.59
	04/30/91		8.02	89.12
	07/29/91		8.22	88.92
	10/25/91		8.25	88.89
	02/05/92		7.70	89.44
	05/05/92		8.12	89.02
RESNA	09/14/92			Not Measured
	11/16/92			Not Measured
	02/03/93		7.72	89.42
	05/18/93		8.12	89.02
	08/26/93		8.14	89.00
MW-9I				
HLA	11/15/90	98.66	6.01	92.65
	01/11/91		5.80	92.86
	04/30/91		5.45	93.21
	07/29/91		6.07	92.59
	10/25/91		6.23	92.43
	02/05/92		5.56	93.10
	05/05/92		5.60	93.06
RESNA	09/14/92		6.12	92.54
	11/16/92		5.82	92.84

See notes on page 4 of 4.

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Former Texaco Station
2200 East 12th Street
Oakland, California
(Page 4 of 4)

Well	Date	Wellhead Elevation*	Depth to Water	Groundwater Elevation*
MW-9I Cont.				
	02/03/93		4.92	93.74
	05/18/93		5.60	93.06
	08/26/93		5.91	92.75

Measurements in feet.
* : Elevation relative to temporary benchmark with an arbitrary elevation of 100.0 feet.
HLA : Monitoring by Harding Lawson Associates
RESNA : RESNA Industries Inc. began monitoring
RESNA assumes all wells are screened in the same hydrostratigraphic unit as identified by previous consultant.

TABLE 2
CUMULATIVE RESULTS OF LABORATORY ANALYSES
OF GROUNDWATER SAMPLES
Former Texaco Station
2200 East 12th Street
Oakland, California
(Page 1 of 4)

Well	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg
MW-9A						
HLA	06/13/88	<0.5	<1.0	<2.0	<1.0	NA
	10/24/88	<0.5	<1.0	<2.0	<1.0	NA
	10/13/89	<0.5	<0.5	<0.5	<3.0	NA
	10/19/90	<0.5	<0.5	<0.5	<0.5	<50
	01/11/91	<0.5	<0.5	<0.5	<0.5	<50
	04/30/91	<0.5	<0.5	<0.5	<0.5	<50
	07/29/91	<0.5	<0.5	<0.5	<0.5	<50
	10/25/91	<0.5	<0.5	<0.5	<0.5	<50
	02/05/92	1.1	1.8	0.6	1.3	<50
	05/05/92	<0.5	<0.5	<0.5	<0.5	<50
RESNA	09/14/92	<0.5	<0.5	<0.5	<0.5	<50
	11/16/92	1.1	<0.5	<0.5	<0.5	<50
	02/03/93	17	19	1.6	20	140
	05/18/93	0.8	<0.5	1.3	7.0	<50
	08/26/93	<0.5	<0.5	<0.5	<0.5	<50
MW-9B						
HLA	06/13/88	350	7.8	66	160	NA
	10/24/88	84	<1.0	3.1	3.2	NA
	10/13/89	4.1	<0.5	<0.5	<3.0	NA
	10/19/90	27	<0.5	2.3	<0.5	62
	01/11/91	4.3	<0.5	1.1	1.0	100
	04/30/91	68	1.0	3.9	<0.5	170
	07/29/91	1.6	<0.5	<0.5	<0.5	100
	10/25/91	1.2	<0.5	<0.5	<0.5	<50
	02/05/92	14	<0.5	2.9	2.5	60
	05/05/92	180	2.4	8.4	2.2	620
RESNA	09/14/92	9.6	<0.5	<0.5	<0.5	110
	11/16/92	33	<0.5	4.2	1.4	200
	02/03/93	320	13	35	110	12000
	05/18/93	1.1	<0.5	2.6	5.9	180
	08/26/93	36	<0.5	3.0	1.7	180
MW-9C						
HLA	06/13/88	<0.5	<1.0	<2.0	<1.0	NA
	10/28/88	<0.5	<1.0	<2.0	<1.0	NA
	10/13/89	<0.5	<0.5	<0.5	<3.0	NA
	10/19/90	<0.5	<0.5	<0.5	<0.5	<50
	01/11/91	<0.5	<0.5	<0.5	<0.5	<50
	04/30/91	100	1.6	<0.5	<0.5	240

See notes on page 4 of 4.

TABLE 2
CUMULATIVE RESULTS OF LABORATORY ANALYSES
OF GROUNDWATER SAMPLES
Former Texaco Station
2200 East 12th Street
Oakland, California
(Page 2 of 4)

Well	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg
MW-9C (cont.)						
	07/29/91	<0.5	<0.5	<0.5	<0.5	<50
	10/25/91	<0.5	<0.5	<0.5	<0.5	<50
	02/05/92	<0.5	<0.5	<0.5	<0.5	<50
	05/05/92	<0.5	<0.5	<0.5	<0.5	<50
RESNA	09/14/92	<0.5	<0.5	<0.5	<0.5	<50
	11/16/92	<0.5	<0.5	<0.5	<0.5	<50
	02/03/93	<0.5	<0.5	<0.5	<0.5	<50
	05/18/93	<0.5	<0.5	<0.5	<0.5	<50
	08/26/93	<0.5	<0.5	<0.5	<0.5	<50
MW-9D						
HLA	10/24/88	<0.5	<1.0	<2.0	<1.0	NA
	10/13/89	<0.5	<0.5	<0.5	<3.0	NA
	10/19/90	<0.5	<0.5	<0.5	<0.5	<50
	01/11/91	<0.5	<0.5	<0.5	<0.5	<50
	04/30/91	<0.5	<0.5	<0.5	<0.5	<50
	07/29/91	<0.5	<0.5	<0.5	<0.5	<50
	10/25/91	<0.5	<0.5	<0.5	<0.5	<50
	02/05/92	<0.5	<0.5	<0.5	<0.5	<50
	05/05/92	<0.5	<0.5	<0.5	<0.5	<50
RESNA	09/14/92	<0.5	<0.5	<0.5	<0.5	<50
	11/16/92	<0.5	<0.5	<0.5	<0.5	<50
	02/03/93	<0.5	<0.5	<0.5	<0.5	<50
	05/18/93	<0.5	<0.5	<0.5	<0.5	<50
	08/26/93	<0.5	<0.5	<0.5	<0.5	<50
MW-9E						
HLA	10/24/88	1.3	<1.0	<2.0	<1.0	NA
	10/13/89	15	<0.5	2.1	<3.0	NA
	10/19/90	4.0	<0.5	0.9	<0.5	<50
	11/02/90	Well Abandoned				
MW-9F						
HLA	12/06/88	<0.5	<1.0	<2.0	<1.0	NA
	10/13/89	<0.5	<0.5	<0.5	<3.0	NA
	10/19/90	<0.5	<0.5	<0.5	<0.5	<50
	01/11/91	<0.5	<0.5	<0.5	<0.5	<50
	04/30/91	<0.5	<0.5	<0.5	<0.5	<50
	07/29/91	<0.5	<0.5	<0.5	<0.5	<50
	10/25/91	1.1	<0.5	<0.5	<0.5	<50
	02/05/92	<0.5	<0.5	<0.5	<0.5	<50

See notes on page 4 of 4.

TABLE 2
CUMULATIVE RESULTS OF LABORATORY ANALYSES
OF GROUNDWATER SAMPLES
Former Texaco Station
2200 East 12th Street
Oakland, California
(Page 3 of 4)

Well	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg
MW-9F (cont.)						
	05/05/92	<0.5	<0.5	<0.5	<0.5	<50
RESNA	09/14/92			Not Sampled		
	11/16/92	<0.5	<0.5	<0.5	<0.5	<50
	02/03/93	<0.5	<0.5	<0.5	<0.5	<50
	05/19/93	<0.5	<0.5	1.2	6.8	<50
	08/26/93	<0.5	<0.5	<0.5	<0.5	<50
MW-9G						
HLA	12/06/88	0.8	<1.0	<2.0	<1.0	NA
	10/13/89	<0.5	<0.5	<0.5	<3.0	NA
	10/19/90	<0.5	<0.5	<0.5	<0.5	<50
	01/11/91	<0.5	<0.5	<0.5	<0.5	<50
	04/30/91	<0.5	<0.5	<0.5	<0.5	<50
	07/29/91	<0.5	<0.5	<0.5	<0.5	<50
	10/25/91	<0.5	<0.5	<0.5	<0.5	<50
	02/05/92	<0.5	<0.5	<0.5	<0.5	<50
	05/05/92	1.5	3.8	1.0	4.7	<50
RESNA	09/14/92			Not Sampled		
	11/16/92	<0.5	<0.5	<0.5	<0.5	<50
	02/03/93	<0.5	<0.5	<0.5	<0.5	64
	05/19/93	<0.5	<0.5	<0.5	<0.5	<50
	08/26/93	<0.5	<0.5	<0.5	<0.5	<50
MW-9H						
HLA	12/06/88	<0.5	<1.0	<2.0	<1.0	NA
	10/13/89	<0.5	<0.5	<0.5	<3.0	NA
	10/19/90	<0.5	<0.5	<0.5	<0.5	<50
	01/11/91	<0.5	<0.5	<0.5	<0.5	<50
	04/30/91	<0.5	<0.5	<0.5	0.5	<50
	07/29/91	<0.5	<0.5	<0.5	<0.5	<50
	10/25/91	<0.5	<0.5	<0.5	<0.5	<50
	02/05/92	<0.5	<0.5	<0.5	<0.5	<50
	05/05/92	<0.5	<0.5	<0.5	<0.5	<50
RESNA	09/14/92			Not Sampled		
	11/16/92			Not Sampled		
	02/03/93	<0.5	<0.5	<0.5	<0.5	280
	05/19/93	<0.5	<0.5	1.1	6.4	<50
	08/26/93	0.8	<0.5	<0.5	<0.5	<50

See notes on page 4 of 4.

TABLE 2
CUMULATIVE RESULTS OF LABORATORY ANALYSES
OF GROUNDWATER SAMPLES
Former Texaco Station
2200 East 12th Street
Oakland, California
(Page 4 of 4)

Well	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPHg
MW-9I						
HLA	11/15/90	4.0	1.2	1.1	2.2	55
	01/11/91	6.1	<0.5	<0.5	<0.5	<50
	04/30/91	100	3.5	4.2	4.4	460
	07/29/91	<0.5	<0.5	<0.5	<0.5	150
	10/25/91	<0.5	<0.5	<0.5	<0.5	<50
	02/05/92	<0.5	<0.5	<0.5	<0.5	<50
	05/05/92	0.9	<0.5	<0.5	0.7	<50
RESNA	09/14/92	<0.5	<0.5	<0.5	<0.5	<50
	11/16/92	<0.5	<0.5	<0.5	<0.5	<50
	02/02/93	46	1.1	2.3	2.1	240
	05/18/93	<0.5	<0.5	<0.5	<0.5	79
	08/26/93	<0.5	<0.5	<0.5	<0.5	<50
MCLs		1.0	---	680	1,750	---
DWAL		---	100	---	---	---

Results in parts per billion (ppb).

TPHg	:	Total petroleum hydrocarbons analyzed as gasoline.
NA	:	Not Analyzed
<	:	This symbol means "less than"
MCLs	:	Adopted Maximum Contaminant Levels in Drinking Water, DHS (October 1990)
DWAL	:	Recommended Drinking Water Action Levels, DHS (October 1990)
HLA	:	Sampling by Harding Lawson Associates
RESNA	:	RESNA Industries Inc. began sampling.

APPENDIX A

GROUNDWATER SAMPLING PROTOCOL AND WELL PURGE DATA SHEETS

GROUNDWATER SAMPLING PROTOCOL

The static water level and floating product level, if present, in each well that contained water was measured with an ORS Interphase Probe Model No. 1068018, or Solonist Water Level Indicator; these instruments are accurate to the nearest 0.01 foot. These groundwater depths were subtracted from wellhead elevations, including corrections for product thickness, when necessary, for gradient evaluation by multiplying product thickness (PT) by a correction factor 0.8 and subtracting from the depth to water (DTW) (Adjusted DTW = DTW - [PT x 0.8]).

Water samples collected for subjective evaluation were collected by gently lowering approximately half the length of a new disposable or 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. All Teflon® bailers are triple washed with Alconox® and triple rinsed with distilled water prior to use.

Before water samples were collected from the groundwater monitoring wells, the wells were purged until stabilization of the temperature, Ph, and conductivity were obtained. Approximately three to four well casing volumes were purged before those characteristics stabilized. The quantity of water purged from each well 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 (depth to bottom - 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 at least 80% of the initial water level. Water samples were collected with a new disposable or Teflon® bailer, and carefully poured into 40-milliliter (ml) glass vials, which were filled so as to produce a positive meniscus. Each vial was preserved with hydrochloric acid, 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.

RESNA
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WELL PURGE DATA SHEET

Project Name: Texaco - 12th Street Job No. 62079.01

Date: August 26, 1993 Page 1 of 1

Well No. MW-9A Time Started 11:05

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
11:05	Start purging MW-9A			
11:05	0	74.8	7.41	810
11:10	1.7	73.7	7.37	790
11:15	3.4	73.9	7.34	800
11:25	5.1	74.5	7.28	870
11:35	6.8	73.6	7.27	820
11:35	Stop purging MW-9A			

Notes:

Well Diameter (inches)	:	2
Depth to Bottom (feet)	:	17.54
Depth to Water - initial (feet)	:	7.14
Depth to Water - final (feet)	:	7.15
% recovery	:	100%
Time Sampled	:	12:35
Gallons per Well Casing Volume	:	1.7
Gallons Purged	:	6.8
Well Casing Volume Purged	:	4
Approximate Pumping Rate (gpm)	:	0.5

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WELL PURGE DATA SHEET

Project Name: Texaco - 12th Street Job No. 62079.01

Date: August 26, 1993 Page 1 of 1

Well No. MW-9B Time Started 12:10

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
12:10	Start purging MW-9B			
12:10	0	77.8	7.19	1010
12:15	1.9	77.3	7.17	1000
12:20	3.8	75.8	7.15	980
12:35	5.7	78.4	7.25	1040
12:40	7.6	76.4	7.22	960
12:40	Stop purging MW-9B			

Notes:

Well Diameter (inches)	:	2
Depth to Bottom (feet)	:	17.65
Depth to Water - initial (feet)	:	6.28
Depth to Water - final (feet)	:	6.22
% recovery	:	100%
Time Sampled	:	2:45
Gallons per Well Casing Volume	:	1.85
Gallons Purged	:	7.6
Well Casing Volume Purged	:	4
Approximate Pumping Rate (gpm)	:	0.5

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WELL PURGE DATA SHEET

Project Name: Texaco - 12th Street Job No. 62079.01

Date: August 26, 1993 Page 1 of 1

Well No. MW-9C Time Started 10:35

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
10:35	Start purging MW-9C			
10:35	0	74.3	7.44	1010
10:38	1.5	74.2	7.43	950
10:41	3.0	73.4	7.44	920
10:49	4.5	73.4	7.46	940
10:52	6.0	73.3	7.43	910
10:52	Stop purging MW-9C			

Notes:

Well Diameter (inches) :	2
Depth to Bottom (feet) :	16.14
Depth to Water - initial (feet) :	6.84
Depth to Water - final (feet) :	6.92
% recovery :	99%
Time Sampled :	12:00
Gallons per Well Casing Volume :	1.52
Gallons Purged :	6.0
Well Casing Volume Purged :	4
Approximate Pumping Rate (gpm) :	0.5

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Working to Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco - 12th Street Job No. 62079.01

Date: August 26, 1993 Page 1 of 1

Well No. MW-9D Time Started 11:00

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
11:00	Start purging MW-9D			
11:00	0	73.1	7.53	640
11:04	4.2	71.8	7.47	810
11:08	9.0	70.9	7.47	780
11:22	12.6	72.4	7.42	840
11:26	16.8	71.4	7.44	770
11:26	Stop purging MW-9D			

Notes:

Well Diameter (inches) :	4
Depth to Bottom (feet) :	14.60
Depth to Water - initial (feet) :	8.30
Depth to Water - final (feet) :	8.30
% recovery :	100%
Time Sampled :	12:45
Gallons per Well Casing Volume :	4.16
Gallons Purged :	17.0
Well Casing Volume Purged :	4
Approximate Pumping Rate (gpm) :	1

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WELL PURGE DATA SHEET

Project Name: Texaco - 12th Street Job No. 62079.01

Date: August 26, 1993 Page 1 of 1

Well No. MW-9F Time Started 15:30

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
15:30	Start purging MW-9F			
15:30	0	79.8	7.59	830
15:35	5.2	77.4	7.56	810
15:40	10.4	77.1	7.53	800
15:45	15.6	77.2	7.52	800
15:50	20.8	77.5	7.47	770
15.51	Stop purging MW-9F			

Notes:

Well Diameter (inches) :	4
Depth to Bottom (feet) :	13.75
Depth to Water - initial (feet) :	5.86
Depth to Water - final (feet) :	6.25
% recovery :	98%
Time Sampled :	16:15
Gallons per Well Casing Volume :	5.2
Gallons Purged :	20.8
Well Casing Volume Purged :	4
Approximate Pumping Rate (gpm) :	1

RESNA
Working to Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco - 12th Street Job No. 62079.01

Date: August 26, 1993 Page 1 of 1

Well No. MW-9G Time Started 14:35

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
14:35	Start purging MW-9G			
14:35	0	80.7	7.58	770
14:40	5.4	76.5	7.58	720
14:46	10.8	74.6	7.57	710
15:01	16.2	75.4	7.59	730
15:06	21.6	73.4	7.56	700
15:07	Stop purging MW-9G			

Notes:

Well Diameter (inches)	:	4
Depth to Bottom (feet)	:	14.03
Depth to Water - initial (feet)	:	5.86
Depth to Water - final (feet)	:	6.03
% recovery	:	99%
Time Sampled	:	15:30
Gallons per Well Casing Volume	:	5.4
Gallons Purged	:	21.6
Well Casing Volume Purged	:	4
Approximate Pumping Rate (gpm)	:	1

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WELL PURGE DATA SHEET

Project Name: Texaco - 12th Street Job No. 62079.01

Date: August 26, 1993 Page 1 of 1

Well No. MW-9H Time Started 16:20

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
16:20	Start purging MW-9I			
16:20	0	76.2	7.59	720
16:24	4	75.9	7.55	690
16:28	8	75.9	7.47	700
16:38	12	76.4	7.45	720
	Stop purging MW-9H			

Notes:

Well Diameter (inches) :	4
Depth to Bottom (feet) :	14.15
Depth to Water - initial (feet) :	8.14
Depth to Water - final (feet) :	9.31
% recovery :	80%
Time Sampled :	16:45
Gallons per Well Casing Volume :	3.96
Gallons Purged :	12.0
Well Casing Volume Purged :	4
Approximate Pumping Rate (gpm) :	1

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Working to Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco - 12th Street Job No. 62079.01

Date: August 26, 1993 Page 1 of 1

Well No. MW-9I Time Started 11:45

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
11:45	Start purging MW-9I			
11:45	0	77.8	7.18	1410
11:50	5.3	77.4	7.14	1460
11:56	10.6	75.6	7.11	1470
12:11	15.9	77.4	7.19	1310
12:17	21.2	76.0	7.18	1280
12:17	Stop purging MW-9I			

Notes:

Well Diameter (inches) :	4
Depth to Bottom (feet) :	13.88
Depth to Water - initial (feet) :	5.91
Depth to Water - final (feet) :	6.16
% recovery :	97%
Time Sampled :	14:35
Gallons per Well Casing Volume :	5.26
Gallons Purged :	21.2
Well Casing Volume Purged :	4
Approximate Pumping Rate (gpm) :	1

APPENDIX B

LABORATORY ANALYSIS REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

MOBILE CHEM LABS INC.

5011 Blum Road, Suite 1 • Martinez, CA 94553
Phone (510) 372-3700 • Fax (510) 372-6955

62079.01\1718\012956

RESNA Industries
3315 Alamden Expressway, #34
San Jose, CA 95118
Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083714	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. MW-9A WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

MOBILE CHEM LABS INC.

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RESNA Industries
3315 Alamden Expressway, #34
San Jose, CA 95118
Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083716	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. MW-9B WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	180
Benzene	0.5	36
Toluene	0.5	<0.5
Xylenes	0.5	1.7
Ethylbenzene	0.5	3.0

QA/QC: Duplicate Deviation is 4.2%

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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RESNA Industries
3315 Alamden Expressway, #34
San Jose, CA 95118
Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083712	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. MW-9C WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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RESNA Industries
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San Jose, CA 95118
Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083715	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. MW-9D WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

QA/QC: Spike Recovery is 105%

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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RESNA Industries
3315 Alamden Expressway, #34
San Jose, CA 95118
Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083711	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. Rin Blank MW-9C WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	0.6
Toluene	0.5	0.9
Xylenes	0.5	1.4
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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RESNA Industries
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San Jose, CA 95118
Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083718	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. MW-9F WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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RESNA Industries
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Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083717	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. MW-9G WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

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RESNA Industries
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San Jose, CA 95118
Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083719	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. MW-9H WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	0.8
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

MOBILE CHEM LABS INC.

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RESNA Industries
3315 Alamden Expressway, #34
San Jose, CA 95118
Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083713	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. MW-9I WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	<0.5
Toluene	0.5	<0.5
Xylenes	0.5	<0.5
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

MOBILE CHEM LABS INC.

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Phone (510) 372-3700 • Fax (510) 372-6955

62079.01\1718\012956

RESNA Industries
3315 Alamden Expressway, #34
San Jose, CA 95118
Attn: Phillip Mayberry
Project Manager

Date Sampled: 08-26-93
Date Received: 08-27-93
Date Analyzed: 09-08-93

Sample Number	Sample Description
083710	Project # 62079.01 Texaco - Oakland 2200 E. 12th St. Trip Blank WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	<50
Benzene	0.5	0.6
Toluene	0.5	1.0
Xylenes	0.5	1.4
Ethylbenzene	0.5	<0.5

Note: Analysis was performed using EPA methods 5030 and TPH LUFT with method 602 used for BTX distinction.
(ppb) = (µg/L)

MOBILE CHEM LABS

Ronald G. Evans
Lab Director

RESNA

CHAIN OF CUSTODY RECORD AND ANALYSIS REQUEST

PROJECT NO.: 62079.01

PROJECT NAME/SITE: TEXACO - 2200 E 12th St Oakland

SAMPLERS (SIGN): Mary Rysdale / Robin A Adair

(PRINT): Mary Rysdale / Robin Adair

ANALYSIS REQUESTED | P.O. #

SAMPLE IDENTIFICATION	DATE	TIME	COMP	GRAB	PRES. USED	ICED	NO. CONTAINERS	SAMPLE TYPE	BTEX (602/8020)	TPHg (8015)	TPHd (8015)	TOG 418.1/5520	601/8010	624/8240	625/8270						REMARKS
TRIP BLANK	8/26/93	11:55			HCl	Yes	2	H2O	X	X											
RIN BLANK MW-9C	8/26/93	11:55			↓	↓	↓	↓	↓	↓											
MW-9C	8/26/93	12:00																			
MW-9I	8/26/93	2:35																			
MW-9A	8/26/93	12:35																			
MW-9D	8/26/93	12:45																			
MW-9B	8/26/93	2:45																			
MW-9G	8/26/93	3:30																			
MW-9F	8/26/93	4:15																			
MW-9H	8/26/93				↓	↓	↓	↓	↓	↓											

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
Robin A Adair	8/26/93	10:05	
	8-27-93	10:05	RECEIVED BY LABORATORY: Diane Lhevune

LABORATORY: Mobile Chem Labs

REQUESTED TURNAROUND TIME: NORMAL

RECEIPT CONDITION: In Ice No head space

PLEASE SEND RESULTS TO: Al Mayberry, Resna San Jose

PROJECT MANAGER:

APPENDIX C

NON-HAZARDOUS WASTE DATA FORM

Site # 62100.01

Gibson Environmental

02

Non-Hazardous Waste Data Form

TO BE COMPLETED BY THE GENERATOR

Name Texaco EPA ID No.
Mailing Address 108 Cutting Blvd. Richmond Phone
Generating Site 2200 E. 12th Oakland 62079.01 125
Waste: ☑ Liquid ☐ Soil
Estimated Volume 125 BBLS/GALS _____ TONS/YDS
Waste Description:

Components of the Waste	PPM	%	Components of the Waste	PPM	%
Groundwater			Possible HCs		

Special Handling Instructions ☑ Gloves ☐ Goggles ☐ Other

Generator certifies that the waste as described is 100% non-hazardous.

Robin A. Nolan
Signature of Authorized Agent Date

TRANSPORTER

Name Resna Ind EPA ID No.
Address 3315 Almaden Expy Phone 1-800 9260815
San Jose Truck Unit ID 249
Pick Up Date 8-26-93
Order No.

Robin A. Nolan
Signature

8-27-93
Date

GOR 3929

Facility

☐ CAD980883177
Gibson Environmental
End of Commercial Dr.
Bakersfield, CA 93308
(805) 327-0413

☐ CAD981458466
Gibson Environmental
401 Canal Avenue
Wilmington, CA 90748
(310) 549-9117

☒ CAD043260702
Gibson Environmental
475 Seaport Blvd
Redwood City, CA 94063
(415) 368-5511

Disposal Method: Recycle Release # 10629 Actual Tons/Gals 125

Robin A. Nolan
Signature

9/1/93
Date