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

62079.01

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3315 Almaden Expressway, Suite 34
San Jose, CA 95118
Phone: (408) 264-7723
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August 6, 1993
62079.01

Mr. Ron R. Zielinski
Texaco Environmental Services
108 Cutting Boulevard
Richmond, California 94804

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

Mr. Zielinski:

At the request of Texaco Environmental Services, RESNA Industries Inc. (RESNA) has prepared this letter 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 second quarter 1993 (April through June 1993). On May 18 and 19, 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 of the monitoring wells (MW-9A, MW-9B, MW-9C, MW-9D, MW-9F, MW-9G, MW-9H, and MW-9I) at this site. RESNA's groundwater sampling protocol and well purge data sheets are included in Appendix A.

GROUNDWATER MONITORING

Groundwater elevations at the site in wells MW-9C through MW-9I have decreased, ranging from 0.31 foot to 0.97 foot with an average decrease of 0.61 foot from the elevations reported last quarter. However, in wells, MW-9A and MW-9B groundwater elevation increased 0.90 foot and 0.08 foot, respectively. The Groundwater Gradient Map (Plate 2) shows the groundwater beneath the site to be flowing towards the west-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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Second Quarter 1993 Quarterly Report — August 6, 1993
2200 East 12th Street, Oakland, California. — 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/TPH LUFT/602. The Chain of Custody Record and Laboratory Analysis reports are included in Appendix B.

GROUNDWATER ANALYTICAL RESULTS

Concentrations of TPHg in groundwater samples were less than 50 parts per billion (ppb) (below the method detection limit [MDL]) in all wells sampled except in MW-9I (79 ppb) and MW-9B (180 ppb). Dissolved benzene concentrations were less than 0.5 ppb (below the MDL) in all wells sampled except in MW-9A (0.8 ppb) and MW-9B (1.1 ppb). Historical and recent analytical data are summarized in Table 2, Cumulative Results of Laboratory Analyses of Groundwater Samples.

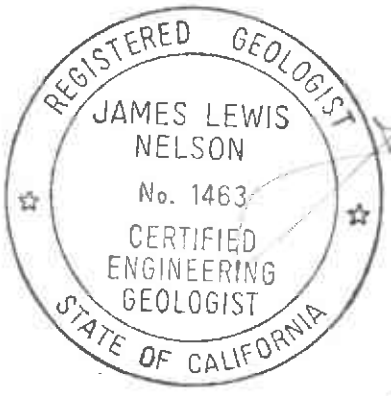
PURGE WATER RECYCLING

On May 19, 1993, approximately 125 gallons of purge water generated during purging and sampling of the 8 monitoring wells were transported to Gibson Environmental in Redwood City, California for recycling.

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

Sincerely,
RESNA Industries Inc.

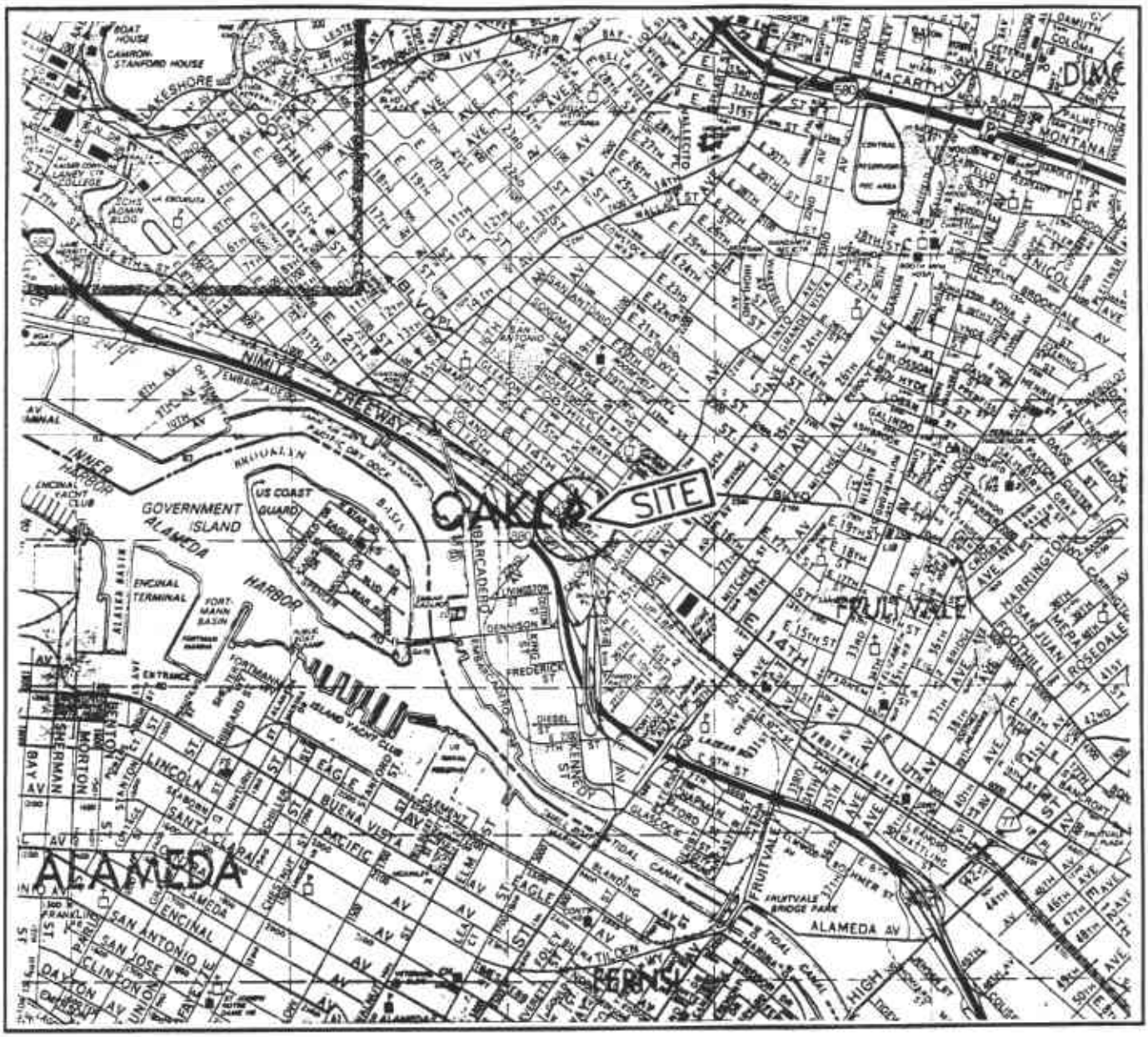
Philip J, Mayberry
Project Geologist



James L. Nelson
Certified Engineering
Geologist No. 1463

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



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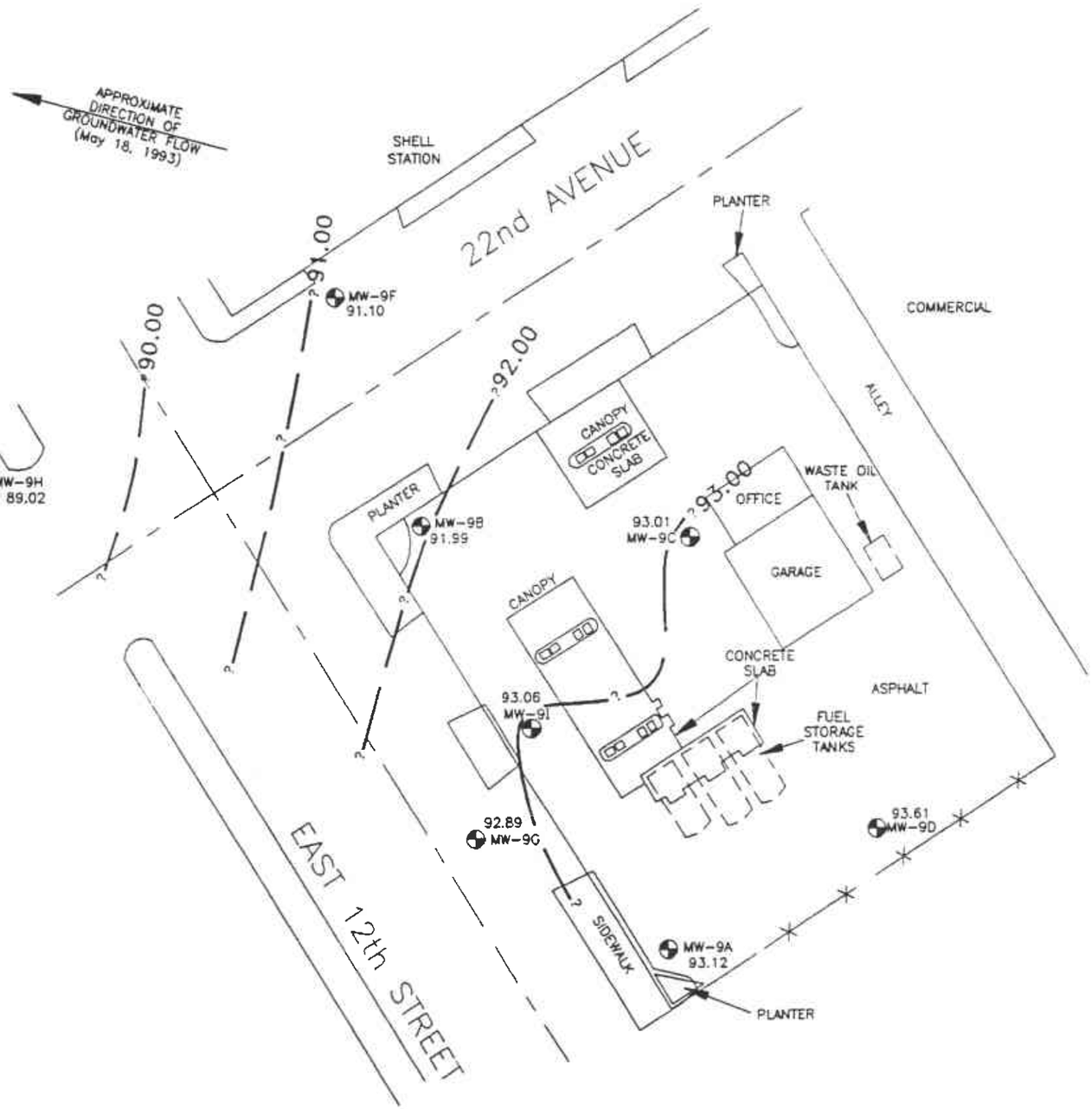
SITE VICINITY MAP
Former Texaco Station
2200 East 12th Street
Oakland, California

PLATE
1

6207902



EXPLANATION

MW-91 = Monitoring well (1988)

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

93.61 = Elevation of groundwater in feet relative to an arbitrary benchmark, May 18, 1993

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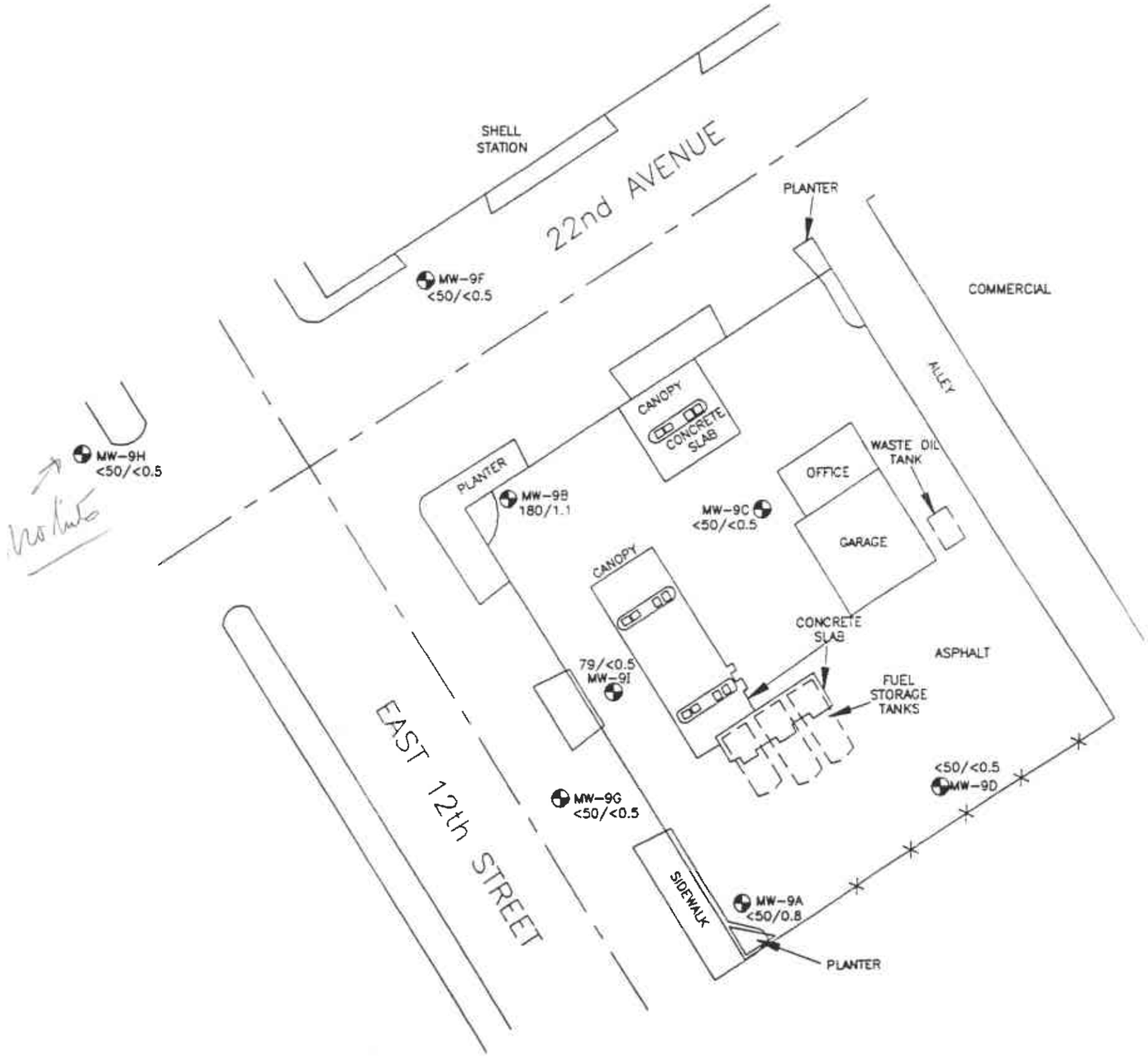
GROUNDWATER GRADIENT MAP
Former Texaco Station
2200 East 12th Street
Oakland, California

PLATE 2



EXPLANATION

MW-9i ⊕ = Monitoring well (1988)

180/1.1 = Concentration of TPHg/benzene in groundwater in parts per billion, May 18 and 19, 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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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 3)

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
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
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
	11/16/92		6.72	93.01
	02/03/93		5.75	93.98

See notes on page 3 of 3.

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Former Texaco Station
2200 East 12th Street
Oakland, California
(Page 2 of 3)

Well	Date	Wellhead Elevation*	Depth to Water	Groundwater Elevation*
MW-9C Cont'd				
	05/18/93		6.72	93.01
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
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
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

See notes on page 3 of 3.

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

Well	Date	Wellhead Elevation*	Depth to Water	Groundwater Elevation*
MW-9G Cont'd				
	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
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
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
	02/03/93		4.92	93.74
	05/18/93		5.60	93.06

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
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
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
	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

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'd)						
	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
OW	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
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
OW	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
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
OW	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
	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

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-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
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
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

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
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.

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WELL PURGE DATA SHEET

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

Date: May 18, 1993 Page 1 of 1

Well No. MW-9A Time Started 2:20

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
2:20	Start purging MW-9A			
2:20	0	70.2	7.62	670
2:24	1.8	69.0	7.58	620
2:28	3.6	68.0	7.56	740
2:37	5.4	69.4	7.59	770
2:41	7.2	68.1	7.56	740
2:42	Stop purging MW-9A			

Notes:

Well Diameter (inches) :	2
Depth to Bottom (feet) :	17.52
Depth to Water - initial (feet) :	6.95
Depth to Water - final (feet) :	6.95
% recovery :	100%
Time Sampled :	3:55
Gallons per Well Casing Volume :	1.8
Gallons Purged :	7.2
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: May 18, 1993 Page 1 of 1

Well No. MW-9B Time Started 3:15

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
3:15	Start purging MW-9B			
3:15	0	72.5	7.55	930
3:19	2.0	71.5	7.50	940
3:23	4.0	70.8	7.46	920
3:32	6.0	70.3	7.44	920
3:36	8.0	70.2	7.43	930
3:37	Stop purging MW-9B			

Notes:

(22)

Well Diameter (inches)	:	2
Depth to Bottom (feet)	:	17.55
Depth to Water - initial (feet)	:	6.42
Depth to Water - final (feet)	:	6.42
% recovery	:	100%
Time Sampled	:	4:30
Gallons per Well Casing Volume	:	1.89
Gallons Purged	:	8.0
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: May 18, 1993 Page 1 of 1

Well No. MW-9C Time Started 1:30

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
1:30	Start purging MW-9C			
1:30	0	74.7	7.63	780
1:33	1.6	72.9	7.60	780
1:36	3.2	71.8	7.58	770
1:44	4.8	71.0	7.56	760
1:47	6.4	71.8	7.56	770
1:47	Stop purging MW-9C			

Notes:

(17)

Well Diameter (inches) :	2
Depth to Bottom (feet) :	16.15
Depth to Water - initial (feet) :	6.72
Depth to Water - final (feet) :	6.72
% recovery :	100%
Time Sampled :	2:55
Gallons per Well Casing Volume :	1.60
Gallons Purged :	6.4
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: May 18, 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	70.6	7.86	510
11:05	4.5	68.6	7.88	500
11:10	9.0	69.9	7.84	570
11:20	13.5	71.2	7.76	590
11:25	18.8	71.3	7.82	580
11:26	Stop purging MW-9D			

Notes:

(26)

Well Diameter (inches) :	4
Depth to Bottom (feet) :	14.70
Depth to Water - initial (feet) :	7.85
Depth to Water - final (feet) :	7.85
% recovery :	100%
Time Sampled :	1:15
Gallons per Well Casing Volume :	4.52
Gallons Purged :	18.8
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: May 19, 1993 Page 1 of 1

Well No. MW-9F Time Started 10:50

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
10:50	Start purging MW-9F			
10:50	0	71.5	7.72	640
10:55	5.2	71.1	7.70	660
11:00	10.4	70.2	7.67	650
11:10	15.6	70.9	7.67	660
11:15	20.8	70.1	7.66	650
11:16	Stop purging MW-9F			

Notes:

(2b)

Well Diameter (inches) :	4
Depth to Bottom (feet) :	13.75
Depth to Water - initial (feet) 05/18/93 :	5.86
Depth to Water - final (feet) :	5.86
% recovery :	100%
Time Sampled :	12:45
Gallons per Well Casing Volume :	5.20
Gallons Purged :	20.8
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: May 19, 1993 Page 1 of 1

Well No. MW-9G Time Started 10:00

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
10:00	Start purging MW-9G			
10:00	0	70.2	7.66	540
10:05	5.5	68.6	7.71	540
10:10	11.0	67.4	7.73	540
10:20	16.5	67.5	7.74	550
10:25	22.0	66.8	7.74	540
10:26	Stop purging MW-9G			

Notes:

(26)

Well Diameter (inches) : 4
Depth to Bottom (feet) : 13.95
Depth to Water - initial (feet) 05/18/93 : 5.62
Depth to Water - final (feet) : 5.62
% recovery : 100%
Time Sampled : 11:35
Gallons per Well Casing Volume : 5.50
Gallons Purged : 22.0
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: May 19, 1993 Page 1 of 1

Well No. MW-9H Time Started 11:55

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
11:55	Start purging MW-9I			
11:55	0	69.9	7.77	540
11:59	4.0	68.9	7.69	580
12:03	8.0	68.2	7.64	610
12:33	12.0	69.3	7.71	550
12:37	16.0	68.6	7.66	600
12:38	Stop purging MW-9H			

Notes:

(43)

Well Diameter (inches) :	4
Depth to Bottom (feet) :	14.00
Depth to Water - initial (feet) 05/18/93 :	8.12
Depth to Water - final (feet) :	8.12
% recovery :	100%
Time Sampled :	1:15
Gallons per Well Casing Volume :	3.88
Gallons Purged :	16.0
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: May 18, 1993 Page 1 of 1

Well No. MW-9I Time Started 12:00

TIME (hr)	GALLONS (cum.)	TEMP. (°F)	pH	CONDUCT. (micromho)
12:00	Start purging MW-9I			
12:00	0	73.2	7.46	1240
12:05	5.5	73.1	7.45	1290
12:10	11.0	74.6	7.60	1300
12:20	16.5	73.2	6.49	1270
12:22	22.0	73.9	6.58	1280
12:23	Stop purging MW-9I			

Notes:

(22)

Well Diameter (inches)	:	4
Depth to Bottom (feet)	:	13.90
Depth to Water - initial (feet)	:	5.60
Depth to Water - final (feet)	:	5.60
% recovery	:	100%
Time Sampled	:	2:05
Gallons per Well Casing Volume	:	5.48
Gallons Purged	:	22.0
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\1342\012695

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

Date Sampled: 05-18-93
Date Received: 05-21-93
Date Analyzed: 05-25-93

Sample Number	Sample Description
053231	Project # 62079.01 Texaco - Oakland 2200 E. 12th Street MW-9A 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	7.0
Ethylbenzene	0.5	1.3

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: 05-18-93
Date Received: 05-21-93
Date Analyzed: 05-25-93

Sample Number	Sample Description
053232	Project # 62079.01 Texaco - Oakland 2200 E. 12th Street MW-9B WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	180
Benzene	0.5	1.1
Toluene	0.5	<0.5
Xylenes	0.5	5.9
Ethylbenzene	0.5	2.6

QA/QC: Duplicate Deviation is 9%

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

MOBILE CHEM LABS

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Lab Director

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

Date Sampled: 05-19-93
Date Received: 05-21-93
Date Analyzed: 05-25-93

Sample Number	Sample Description
053233	Project # 62079.01 Texaco - Oakland 2200 E. 12th Street 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	6.8
Ethylbenzene	0.5	1.2

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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Lab Director

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62079.01\1342\012695

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

Date Sampled: 05-19-93
Date Received: 05-21-93
Date Analyzed: 05-25-93

Sample Number	Sample Description
053234	Project # 62079.01 Texaco - Oakland 2200 E. 12th Street MW-9H 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	6.4
Ethylbenzene	0.5	1.1

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.	PROJECT NAME/SITE	PO #:
620791	Texaco 3300 E 12th Oakland, CA	

SAMPLERS (SIGN) Robin A Adair (PRINT) Robin A Adair

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
Rinsate Blank	5-18-93				HCl	Y		H2O	X	X						
Site Blank									X	X						
9D		1:15							X	X						
9C		2:55							X	X						
9I		2:05							X	X						
9E	5-19-93	11:35							X	X						
9A	5-18-93	3:55							X	X						
9B	5-18-93	4:30							X	X						
9F	5-19-93	12:45							X	X						
9H	5-19-93	1:15							X	X						

RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
Robin A. Adair	5-19-93	6:30pm	
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE	TIME	RECEIVED BY:
RELINQUISHED BY:	DATE 5-21-93	TIME 11:10am	RECEIVED BY LABORATORY: Oakhevine,

LABORATORY: Rosebe Chem Labs

REQUESTED TURNAROUND TIME: NORMAL

RECEIPT CONDITION: 6 w ICE no head space.

PLEASE SEND RESULTS TO: Phil Mayberry Reno, San Jose

PROJECT MANAGER: