April 13, 1993

Ms. Juliet Shin
Alameda County Department Of
Environmental Protection
80 Swan Way, Room 200
Oakland, CA 94621

SUBJECT: QUARTERLY GROUNDWATER MONITORING LETTER REPORT
Site: 1127 Lincoln Avenue
Alameda, California

Dear Ms. Shin:

Enclosed is a copy of the Quarterly Groundwater Monitoring Report dated March 26, 1993, for the above subject site. In addition to the report, I am enclosing the vapor extraction and groundwater treatment workplan for this site. This plan also requires the approval of the property owner, Mr. Leo Pagan. By copy of this letter I ask that Mr. Pagan approve this workplan so that Texaco can proceed.

Please contact me at 818 505 2476 as soon as you complete your review of the workplan.

Very truly yours,
Texaco Refining And Marketing Inc

Bob Robles

RR:rr

pr—

Enclosure

cc: Mr.Leo Pagan
1127 Lincoln Avenue
Alameda, California

Mr. Lester Feldman
California Regional Water Quality Control Board
San Francisco Bay Region
2201 Webster Street, Suite 500
Oakland, California 94612

RRZielinski-Richmond

RESNA
Working To Restore Nature

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

LETTER REPORT
QUARTERLY GROUNDWATER MONITORING
Fourth Quarter 1992
at
Former Texaco Station
1127 Lincoln Avenue
Alameda, California

62074.01

Mary E. Rysdale
Geologic Technician

Philip J. Mayberry
Project Geologist

REGISTERED GEOLOGIST
JAMES LEWIS NELSON
STATE OF CALIFORNIA

James L. Nelson
Certified Engineering
Geologist No. 1463

March 26, 1993

RESNA
Working To Restore Nature

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

March 26, 1993
0106RROB
62074.01

Mr. Robert Robles
Texaco Environmental Services
10 Universal City Plaza, 7th Floor
Universal City, California 91608

Subject: Results of Groundwater Monitoring and Sampling for the Fourth Quarter 1992 at Former Texaco Station located at 1127 Lincoln Avenue in Alameda, California.

Mr. Robles:

At the request of Texaco Environmental Services (TES), RESNA Industries Inc. (RESNA) has prepared this letter which summarizes the results of quarterly groundwater monitoring at the former Texaco Service Station located at 1127 Lincoln Avenue in Alameda, California (Plate 1, Site Vicinity Map) for the fourth quarter 1992 (October through December 1992). On November 17, 1992, 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 the 7 monitoring wells (MW-1 through MW-6, and MW-8) sampled at this site. MW-7 was inaccessible this quarter due to a car parked over the well and was therefore not monitored. RESNA's groundwater sampling protocol and well purge data sheets are included in Appendix A. Laboratory analyses with chain of custody documentation are included in Appendix B.

WORK PERFORMED

GROUNDWATER MONITORING

Groundwater elevations at the site have decreased an average of about 0.23 feet from the elevations reported the previous quarter. The groundwater gradient map shows the groundwater beneath the site to be flowing towards the north-northwest with a hydraulic

gradient of approximately 0.01 (Plate 2, Groundwater Gradient Map). Historical and recent monitoring data are summarized in Table 1, Cumulative Groundwater Monitoring Data.

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 (BTEX), and total petroleum hydrocarbons as gasoline (TPHg) using modified Environmental Protection Agency (EPA) Methods 5030/602. The Chain of Custody Record and Laboratory Analysis reports are included in Appendix B.

GROUNDWATER ANALYTICAL RESULTS

Concentrations of TPHg in groundwater samples ranged from less than 50 parts per billion (ppb) to 14,000 ppb (MW-5). Dissolved benzene concentrations ranged from <0.5 ppb to 1,700 ppb (MW-8). TPHg and benzene concentrations are shown on Plate 3, TPHg/Benzene Concentrations in Groundwater. Neither floating product nor hydrocarbon sheen was observed in the wells. Historical and recent analytical data are summarized in Table 2, Cumulative Results of Laboratory Analyses of Groundwater Samples. Copies of the laboratory analyses reports and the Chain of Custody manifest for the groundwater samples are included in Appendix B.

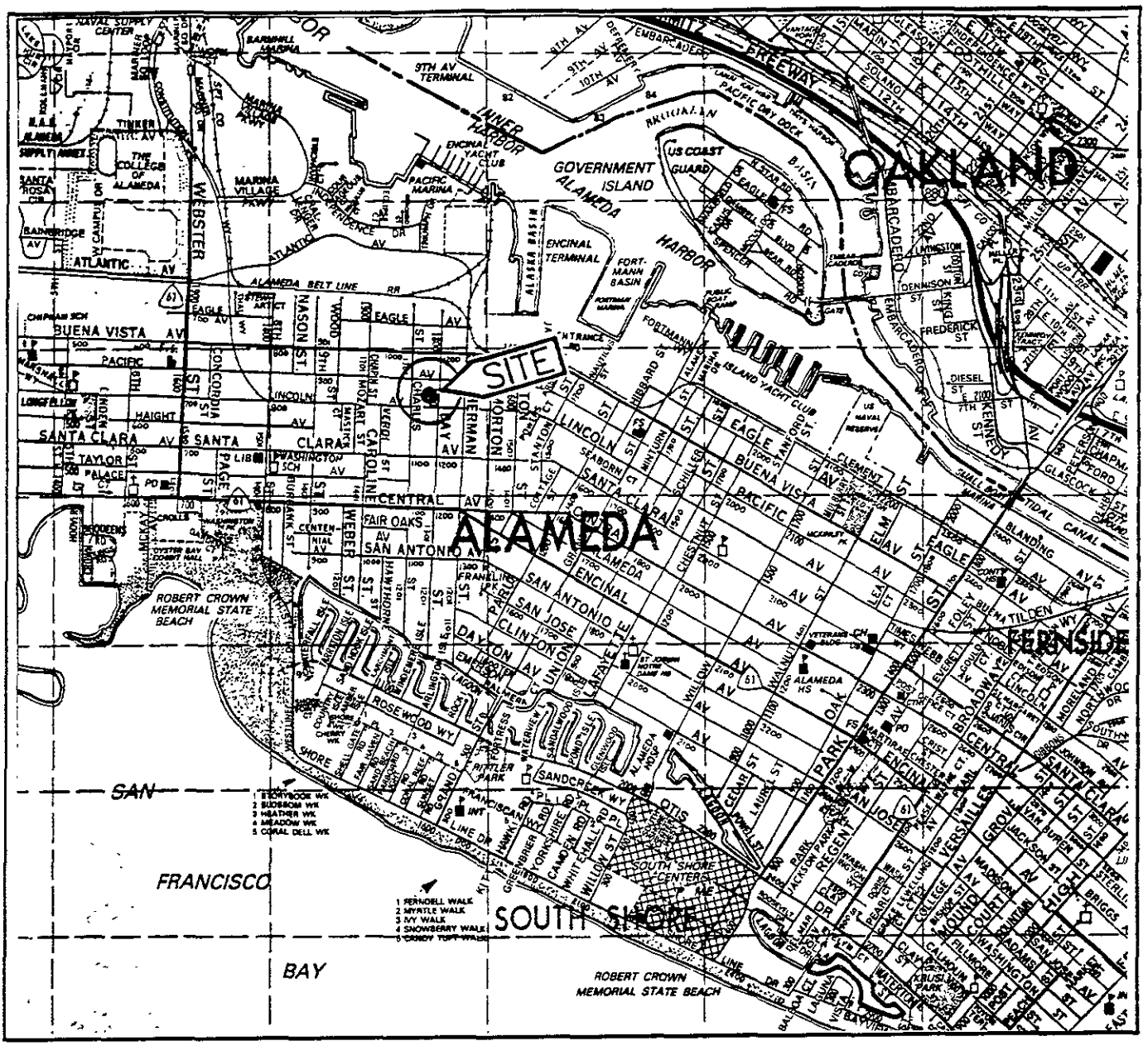
PURGE WATER RECYCLING

On November 16, 1992, and January 6, 1993, approximately 200 gallons and 170 gallons respectively, of purge water generated during purging and sampling of the wells during third and fourth quarters of 1992 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.

Enclosures:

Plate 1,	Site Vicinity Map
Plate 2,	Groundwater Gradient Map
Plate 3,	TPHg/Benzene Concentrations 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: Thomas Guide – Alameda County Ca.

LEGEND

● = Site Location

Approximate Scale

2000 1000 0 2000 4000

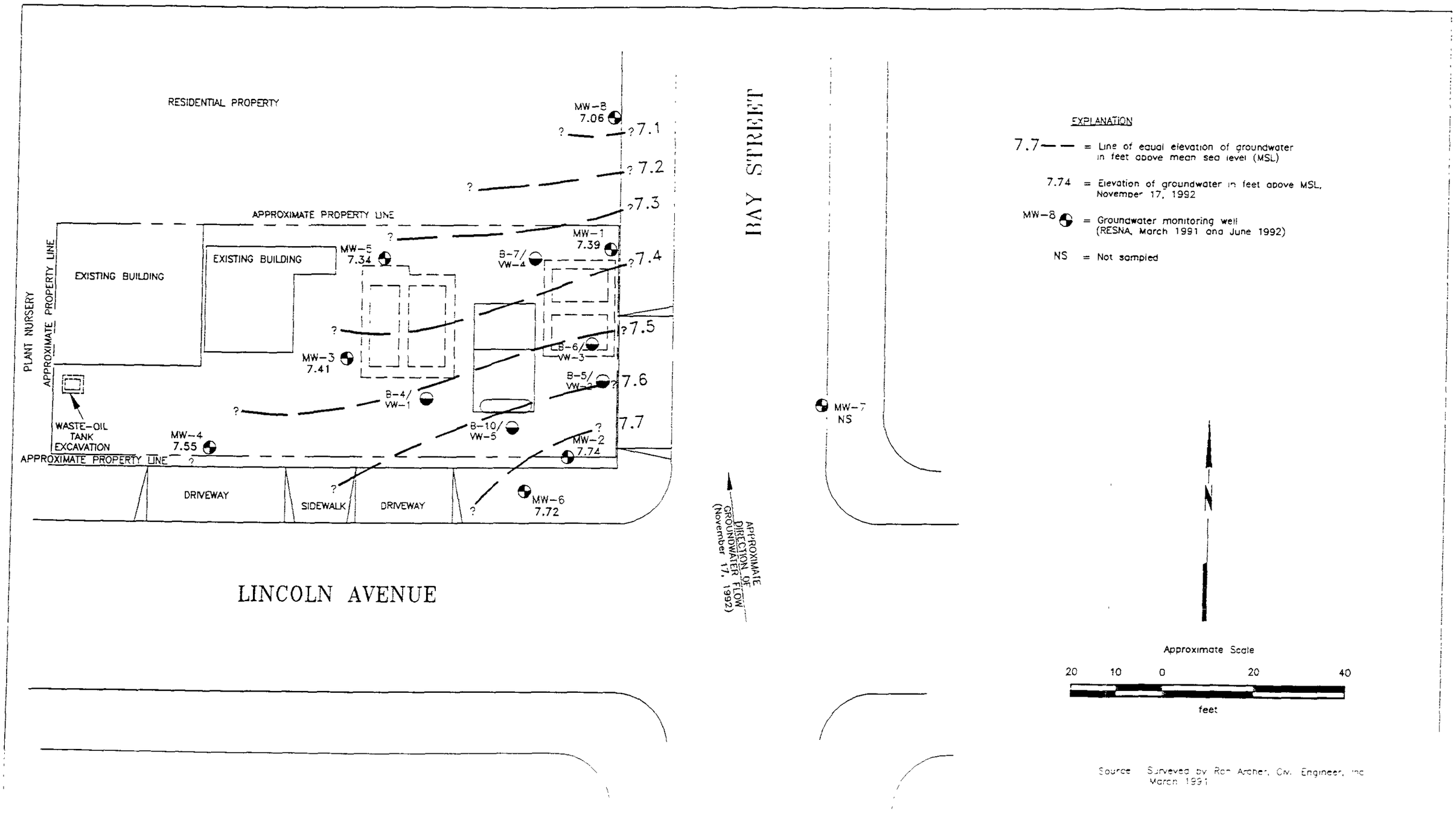
feet

RESNA
Working to Restore Nature

PROJECT 62074.01

SITE VICINITY MAP
Former Texaco Station
1127 Lincoln Ave.
Alameda, California

PLATE
1



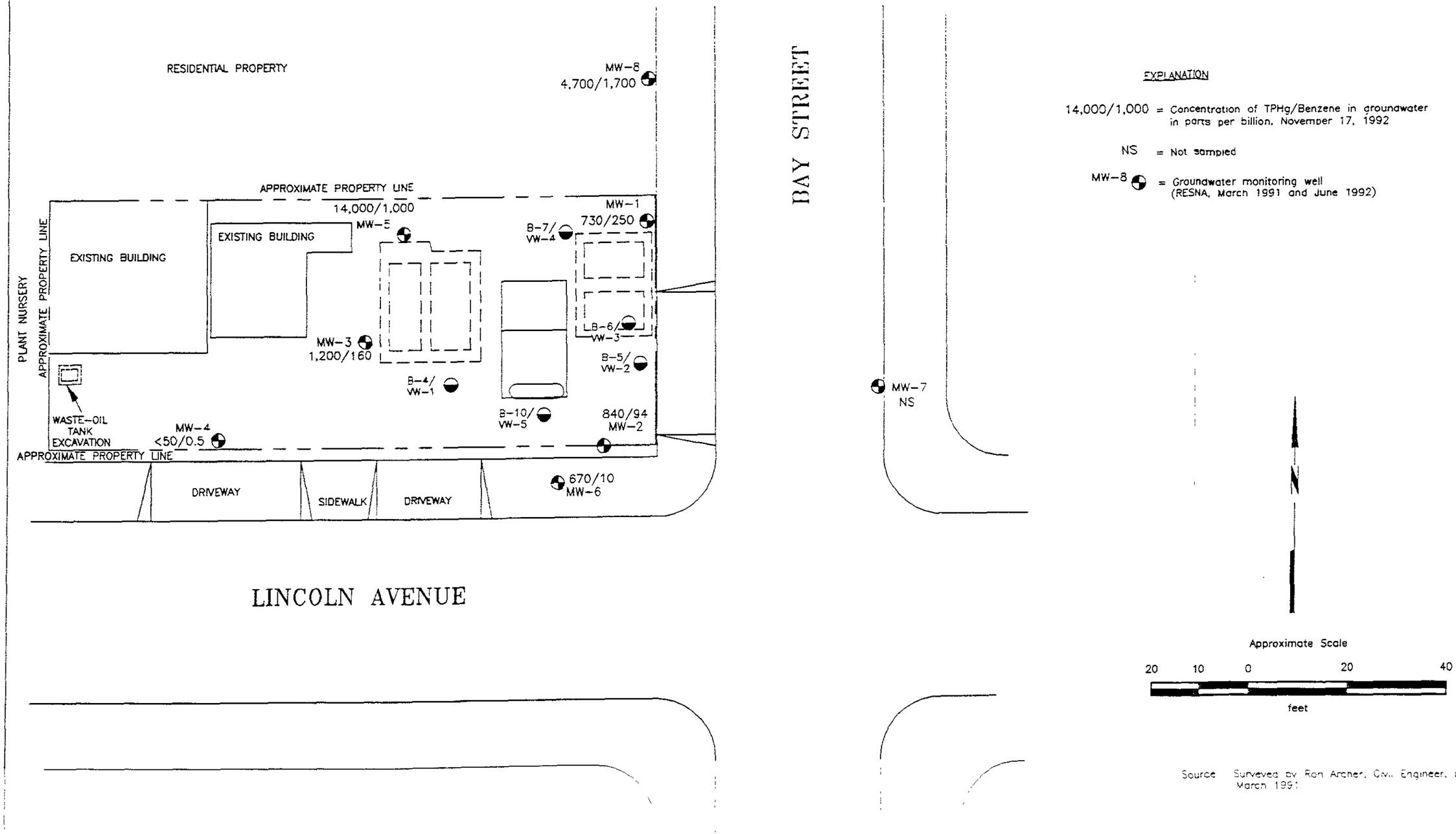
Source Surveyed by Ron Archer, Civ. Engineer, Inc March 1991

RESNA
Working to Restore Nature

PROJECT 62074.01

GROUNDWATER GRADIENT MAP
Former Bay Street Texaco Station
1127 Lincoln Avenue
Alameda, California

PLATE
2



Source: Surveyed by Ron Archer, Civil Engineer, Inc March 1991

RESNA
Working to Restore Nature

PROJECT 62074.01

TPHg/BENZENE CONCENTRATIONS IN GROUNDWATER
Former Bay Street Texaco Station
1127 Lincoln Avenue
Alameda, California

PLATE
3

Fourth Quarter 1992 Quarterly Report
1127 Lincoln Avenue, Alameda, California

March 26, 1993
62074.01

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Former Bay Street Texaco Station
Alameda, California
(Page 1 of 3)

Well / Date	Elevation of Wellhead	Depth to-Water	Elevation of Groundwater	Floating Product/ Sheen
MW-1				
03/22/91	16.49	7.23	9.26	NONE
04/04/91		6.68	9.81	NONE
08/13/91		8.59	7.90	NONE
11/14/91		9.38	7.11	NONE
02/19/92		6.34	10.15	NONE
06/25/92		7.60	8.89	NONE
09/16/92		8.95	7.54	NONE
11/17/92		9.10	7.39	NONE
MW-2				
03/22/91	17.14	7.60	9.54	NONE
04/04/91		7.07	10.07	NONE
08/13/91		8.85	8.29	NONE
11/14/91		9.60	7.54	NONE
02/19/92		6.96	10.18	NONE
06/25/92		7.95	9.19	NONE
09/16/92		9.16	7.98	NONE
11/17/92		9.40	7.74	NONE
MW-3				
03/22/91	16.91	7.43	9.48	NONE
04/04/91		6.80	10.11	NONE
08/13/91		8.88	8.03	NONE
11/14/91		9.68	7.23	NONE
02/19/92		6.69	10.22	NONE
06/25/92		7.78	9.13	NONE
09/16/92		9.24	7.67	NONE
11/17/92		9.50	7.41	NONE
MW-4				
06/25/92	17.18	7.92	9.26	NONE
09/16/92		9.40	7.78	NONE
11/17/92		9.63	7.55	NONE
MW-5				
06/25/92	16.37	7.35	9.02	NONE
09/16/92		8.85	7.52	NONE
11/17/92		9.03	7.34	NONE

See notes on page 3 of 3

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Former Bay Street Texaco Station
Alameda, California
(Page 2 of 3)

Well Date	Elevation of Wellhead	Depth to-Water	Elevation of Groundwater	Floating Product/ Sheen
MW-6				
06/25/92	17.12	7.86	9.26	NONE
09/16/92		9.12	8.00	NONE
11/17/92		9.40	7.72	NONE
MW-7				
06/25/92	16.71	7.61	9.10	NONE
09/16/92		8.78	7.93	NONE
11/17/92		NOT	MONITORED	
MW-8				
06/25/92	15.91	7.20	8.71	NONE
09/16/92		8.60	7.31	NONE
11/17/92		8.85	7.06	NONE
VW-1				
03/22/91	16.83	DRY	DRY	NONE
04/04/91		6.89	9.92	NONE
08/13/91		DRY	DRY	NONE
11/14/91		DRY	DRY	NONE
02/19/92		DRY	DRY	NONE
06/25/92		7.36	9.47	NONE
09/16/92		NOT	MONITORED	
11/17/92		NOT	MONITORED	
VW-2				
03/22/91	17.00	7.59	9.41	NONE
04/04/91		7.04	9.96	NONE
08/13/91		DRY	DRY	NONE
11/14/91		DRY	DRY	NONE
02/19/92		6.94	10.06	NONE
06/25/92		8.10	8.90	NONE
09/16/92		NOT	MONITORED	
11/17/92		NOT	MONITORED	

See notes on page 3 of 3

TABLE 1
CUMULATIVE GROUNDWATER MONITORING DATA
Former Bay Street Texaco Station
Alameda, California
(Page 3 of 3)

Well / Date	Elevation of Wellhead	Depth to-Water	Elevation of Groundwater	Floating Product/ Sheen
VW-3				
03/22/91	16.94	7.71	9.23	NONE
04/04/91		6.92	10.02	NONE
08/13/91		8.45	8.49	NONE
11/14/91		DRY	DRY	NONE
02/19/92		7.40	9.54	NONE
06/25/92		7.16	9.78	NONE
09/16/92		NOT	MONITORED	
11/17/92		NOT	MONITORED	
VW-4				
03/22/91	16.81	7.66	9.15	SHEEN
04/04/91		INACCESSIBLE		
08/13/91		8.40	8.41	NONE
11/14/91		DRY	DRY	NONE
02/19/92		5.76	11.05	NONE
06/25/92		7.23	9.58	NONE
09/16/92		NOT	MONITORED	
11/17/92		NOT	MONITORED	
VW-5				
03/22/91	17.20	7.67	9.53	SHEEN
04/04/91		INACCESSIBLE		
08/13/91		DRY	DRY	NONE
11/14/91		DRY	DRY	NONE
02/19/92		7.04	10.16	NONE
06/25/92		8.09	9.11	NONE
09/16/92		NOT	MONITORED	
11/17/92		NOT	MONITORED	

All measurements in feet.
Elevations above mean sea level.
Depth to water measured in feet below top of casing.

TABLE 2
CUMULATIVE RESULTS OF LABORATORY ANALYSES
OF GROUNDWATER SAMPLES
Former Bay Street Texaco Station
Alameda, California
(Page 1 of 2)

Well Number / Date	TPHg	B	T	E	X	TPHd*	VOCs & Semi-VOCs	DO	EG
MW-1									
03/22/91	4,500	1,300	670	180	770	1,100	ND	NA	NA
08/13/91	850	260	51	13	48	NA	NA	NA	NA
11/14/91	<30	<0.30	<0.30	<0.30	<0.30	NA	NA	NA	NA
02/19/92	440	14	14	2.1	9.9	NA	NA	4.0	<10
06/25/92	4,000	680	110	73	140	NA	NA	NA	NA
09/16/92	3,400	880	28	41	53	NA	NA	NA	NA
11/17/92	730	250	22	12	27	NA	NA	NA	NA
MW-2									
03/22/91	1,100	100	20	63	220	140	ND	NA	NA
08/13/91	1,100	270	4.7	16	49	NA	NA	NA	NA
11/14/91	870	56	8.9	21	46	NA	NA	NA	NA
02/19/92	2,100	57	5.6	9.1	75	NA	NA	3.2	NA
06/25/92	4,700	590	24	290	160	NA	NA	NA	NA
09/16/92	5,700	740	8	370	77	NA	NA	NA	NA
11/17/92	840	94	<0.5	93	14	NA	NA	NA	NA
MW-3									
03/22/91	2,500	390	27	240	780	770	ND	NA	NA
08/13/91	1,300	180	3.8	79	200	NA	NA	NA	NA
11/14/91	870	89	9	30	82	NA	NA	NA	NA
02/19/92	990	<0.5	<0.5	2.0	72	NA	NA	3.4	NA
06/25/92	4,900	350	11	330	570	NA	NA	NA	NA
09/17/92	7,300	690	10	450	780	NA	NA	NA	NA
11/17/92	1,200	160	2.1	83	160	NA	NA	NA	NA
MW-4									
06/25/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
09/17/92	98	0.6	<0.5	1.2	7.7	NA	NA	NA	NA
11/17/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
MW-5									
06/25/92	18,000	310	1,200	750	2,400	NA	NA	NA	NA
09/17/92	24 000	700	2,200	900	2,400	NA	NA	NA	NA
11/17/92	14 000	1,000	1,500	730	1,900	NA	NA	NA	NA
MW-6									
06/25/92	990	10	240	55	310	NA	NA	NA	NA
09/17/92	1,200	26	4.7	6.5	140	NA	NA	NA	NA
11/17/92	670	10	3.5	28	94	NA	NA	NA	NA

See notes on page 2 of 2

TABLE 2
CUMULATIVE RESULTS OF LABORATORY ANALYSES
OF GROUNDWATER SAMPLES
Former Bay Street Texaco Station
Alameda, California
(Page 2 of 2)

Well Number / Date	TPHg	B	T	E	X	TPHd*	VOCs & Semi-VOCs	DO	EG
MW-7									
06/25/92	<50	<0.5	<0.5	<0.5	<0.5	NA	NA	NA	NA
09/16/92	<50	1.3	<0.5	<0.5	0.9	NA	NA	NA	NA
11/17/92			NOT	SAMPLED					
MW-8									
06/25/92	11,000	1,100	29	150	190	NA	NA	NA	NA
09/16/92	14,000	3,500	47	25	85	NA	NA	NA	NA
11/17/92	4,700	1,700	12	8.0	22	NA	NA	NA	NA
MCLs	—	1.0	—	680	1,750	—	—	—	—
DWAL	—	—	100	—	—	—	—	—	—

Results in parts per billion (ppb)

TPHg : Total petroleum hydrocarbons as gasoline (analyzed by EPA Method 5030).
TPHd : Total petroleum hydrocarbons as diesel (analyzed by EPA Method 3510).
BTEX : Measured by EPA Method 602/(624).
B: benzene, T: toluene, E: ethylbenzene, X: total xylene isomers.
— : Not Applicable
MCLs : Adopted Maximum Contaminant Levels in Drinking Water, DHS (October 1990)
DWAL : Recommended Drinking Water Action Levels, DHS (October 1990)
ND : Below laboratory detection limit.
NA : Not Analyzed
* : Anametrix states: "The concentrations reported as diesel for samples W-9-MW1, W-9-MW2, and W-9-MW3 are primarily due to the presence of a lighter petroleum product, possibly gasoline."
VOCs : Volatile organic compounds (analyzed by EPA Method 624/8240).
Semi-VOCs : Semi-volatile organic compounds (analyzed by EPA Method 8270).
DO : Dissolved oxygen in parts per million (ppm).
EG : *Ethylene glycol in ppm.*

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 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 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
Working To Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco--1127 Lincoln Avenue Job No. 62074.01

Date: 11/17/92 Page 1 of 1

Well No. MW-1 Time Started 11:20

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
11:20	Start purging MW-1				
11:20	0	65.7	8.01	660	NM
11:27	6.7	65.9	7.92	700	NM
11:34	13.4	65.9	7.91	590	NM
11:41	20.1	66.1	7.92	620	NM
11:48	26.8	65.7	7.93	590	NM
11:49	Stop purging MW-1				

Notes:

NM = Not Measured
Well Diameter (inches) : 4
Depth to Bottom (feet) : 19.25
Depth to Water - initial (feet) : 9.10
Depth to Water - final (feet) : 9.30
% recovery : 98
Time Sampled : 13:00
Gallons per Well Casing Volume : 6.73
Gallons Purged : 26.8
Well Casing Volume Purged : 4.02
Approximate Pumping Rate (gpm) : 1.0

RESNA
Working To Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco--1127 Lincoln Avenue Job No. 62074.01

Date: 11/17/92 Page 1 of 1

Well No. MW-2 Time Started 12:30

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
12:30	Start purging MW-2				
12:30	0	67.0	7.94	780	NM
12:37	6.5	67.6	7.90	780	NM
12:44	13.0	66.8	7.90	720	NM
12:44	WELL	DRY	RECHARGE	30 MIN.	
13:15	19.5	66.2	7.95	660	NM
13:27	26.0	66.1	7.93	640	NM
13:27	Stop purging MW-2				

Notes:

NM = Not Measured
Well Diameter (inches) : 4
Depth to Bottom (feet) : 19.30
Depth to Water - initial (feet) : 9.40
Depth to Water - final (feet) : 9.75
% recovery : 97
Time Sampled : 15:10
Gallons per Well Casing Volume : 6.46
Gallons Purged : 26.0
Well Casing Volume Purged : 4.03
Approximate Pumping Rate (gpm) : 0.46

RESNA
Working To Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco--1127 Lincoln Avenue Job No. 62074.01

Date: 11/17/92 Page 1 of 1

Well No. MW-3 Time Started 14:25

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
14:25	Start purging MW-3				
14:25	0	66.5	8.09	670	NM
14:32	6.6	67.2	8.09	740	NM
14:39	13.2	66.6	8.07	600	NM
14:46	19.8	65.2	8.01	560	NM
14:46	WELL	DRY	RECHARGE	30 MIN	
15:15	26.4	65.8	7.89	530	NM
15:15	Stop purging MW-3				

Notes:

NM = Not Measured
Well Diameter (inches) : 4
Depth to Bottom (feet) : 19.56
Depth to Water - initial (feet) : 9.50
Depth to Water - final (feet) : 9.50
% recovery : 100
Time Sampled : 16:00
Gallons per Well Casing Volume : 6.57
Gallons Purged : 26.4
Well Casing Volume Purged : 4.02
Approximate Pumping Rate (gpm) : 0.53

RESNA
Working To Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco--1127 Lincoln Avenue Job No. 62074.01

Date: 11/17/92 Page 1 of 1

Well No. MW-4 Time Started 10:20

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
10:20	Start purging MW-4				
10:20	0	67.3	8.24	470	NM
10:27	7	68.1	8.20	460	NM
10:34	14	67.1	8.13	470	NM
10:41	21	67.6	8.12	460	NM
10:49	28	66.7	8.10	450	NM
10:49	Stop purging MW-4				

Notes:

NM = Not Measured
Well Diameter (inches) : 4
Depth to Bottom (feet) : 20.20
Depth to Water - initial (feet) : 9.63
Depth to Water - final (feet) : 9.63
% recovery : 100
Time Sampled : 12:50
Gallons per Well Casing Volume : 6.90
Gallons Purged : 28.0
Well Casing Volume Purged : 4.06
Approximate Pumping Rate (gpm) : 1.0

RESNA
Working To Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco--1127 Lincoln Avenue Job No. 62074.01

Date: 11/17/92 Page 1 of 1

Well No. MW-5 Time Started 9:30

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
9:30	Start purging MW-5				
9:30	0	66.5	7.97	870	NM
9:37	7.1	66.7	7.92	920	NM
9:44	14.2	67.0	7.86	1020	NM
9:51	21.3	66.4	7.83	1030	NM
9:58	28.4	66.7	7.82	1040	NM
9:58	Stop purging MW-5				

Notes:

NM = Not Measured
Well Diameter (inches) : 4
Depth to Bottom (feet) : 19.82
Depth to Water - initial (feet) : 9.03
Depth to Water - final (feet) : 9.15
% recovery : 99
Time Sampled : 11:05
Gallons per Well Casing Volume : 7.15
Gallons Purged : 28.4
Well Casing Volume Purged : 4.01
Approximate Pumping Rate (gpm) : 1.0

RESNA
Working To Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco--1127 Lincoln Avenue Job No. 62074.01

Date: 11/17/92 Page 1 of 1

Well No. MW-6 Time Started 15:30

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
15:30	Start purging MW-6				
15:30	0	64.6	7.94	610	NM
15:34	1.8	65.6	7.90	630	NM
15:38	3.6	65.8	7.90	610	NM
15:42	5.4	66.4	7.89	610	NM
15:46	7.2	66.5	7.87	610	NM
15:46	Stop purging MW-6				

Notes:

NM = Not Measured
Well Diameter (inches) : 2
Depth to Bottom (feet) : 19.90
Depth to Water - initial (feet) : 9.40
Depth to Water - final (feet) : 9.60
% recovery : 98
Time Sampled : 16:15
Gallons per Well Casing Volume : 1.71
Gallons Purged : 7.2
Well Casing Volume Purged : 4.21
Approximate Pumping Rate (gpm) : 0.50

RESNA
Working To Restore Nature

WELL PURGE DATA SHEET

Project Name: Texaco--1127 Lincoln Avenue Job No. 62074.01

Date: 11/17/92 Page 1 of 1

Well No. MW-8 Time Started 13:30

TIME (hr)	GALLONS (cum.)	TEMP. (F)	pH	CONDUCT. (micromho)	TURBIDITY (NTU)
13:30	Start purging MW-8				
13:30	0	64.4	7.96	810	NM
13:37	7.1	65.0	7.91	880	NM
13:44	14.2	65.1	7.86	810	NM
13:51	21.3	64.6	7.92	800	NM
13:58	8	70.7	7.83	4.7	NM
13:59	Stop purging MW-8				

Notes:

NM = Not Measured
Well Diameter (inches) : 4
Depth to Bottom (feet) : 19.70
Depth to Water - initial (feet) : 8.85
Depth to Water - final (feet) : 8.85
% recovery : 100
Time Sampled : 15:20
Gallons per Well Casing Volume : 7.08
Gallons Purged : 28.4
Well Casing Volume Purged : 4.01
Approximate Pumping Rate (gpm) : 1.0

APPENDIX B

LABORATORY ANALYSIS REPORTS AND CHAIN OF CUSTODY DOCUMENTATION

MOBILE CHEM LABS INC.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

62074.01\1718\012264

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

Date Sampled: 11-17-92
Date Received: 11-19-92
Date Analyzed: 11-24-92

Sample Number	Sample Description
112293	Project # 62074.01 Texaco - Alameda 1127 Lincoln Avenue BB1 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: Sample blank is none detected

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.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

62074.01\1718\012264

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

Date Sampled: 11-17-92
Date Received: 11-19-92
Date Analyzed: 11-24-92

Sample Number	Sample Description
112294	Project # 62074.01 Texaco - Alameda 1127 Lincoln Avenue MW1 WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	730
Benzene	0.5	250
Toluene	0.5	22
Xylenes	0.5	27
Ethylbenzene	0.5	12

QA/QC: Sample blank is none detected

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.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

62074.01\1718\012264

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

Date Sampled: 11-17-92
Date Received: 11-19-92
Date Analyzed: 11-24-92

Sample Number	Sample Description
112295	Project # 62074.01 Texaco - Alameda 1127 Lincoln Avenue MW2 WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	840
Benzene	0.5	94
Toluene	0.5	<0.5
Xylenes	0.5	14
Ethylbenzene	0.5	93

QA/QC: Sample blank is none detected

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.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

62074.01\1718\012264

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

Date Sampled: 11-17-92
Date Received: 11-19-92
Date Analyzed: 11-24-92

Sample Number	Sample Description
112296	Project # 62074.01 Texaco - Alameda 1127 Lincoln Avenue MW3 WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	1,200
Benzene	0.5	160
Toluene	0.5	2.1
Xylenes	0.5	160
Ethylbenzene	0.5	83

QA/QC: Sample blank is none detected
Duplicate Deviation is 2.2%

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.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

62074.01\1718\012264

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

Date Sampled: 11-17-92
Date Received: 11-19-92
Date Analyzed: 11-24-92

Sample Number	Sample Description
112297	Project # 62074.01 Texaco - Alameda 1127 Lincoln Avenue MW4 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: Sample blank is none detected

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.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

62074.01\1718\012264

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

Date Sampled: 11-17-92
Date Received: 11-19-92
Date Analyzed: 11-24-92

Sample Number	Sample Description
112298	Project # 62074.01 Texaco - Alameda 1127 Lincoln Avenue MW5 WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	14,000
Benzene	0.5	1,000
Toluene	0.5	1,500
Xylenes	0.5	1,900
Ethylbenzene	0.5	730

QA/QC: Sample blank is none detected

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.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

62074.01\1718\012264

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

Date Sampled: 11-17-92
Date Received: 11-19-92
Date Analyzed: 11-24-92

Sample Number	Sample Description
112299	Project # 62074.01 Texaco - Alameda 1127 Lincoln Avenue MW6 WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	670
Benzene	0.5	10
Toluene	0.5	3.5
Xylenes	0.5	94
Ethylbenzene	0.5	28

QA/QC: Sample blank is none detected
Spike Recovery is 104.7%

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.

5021 Blum Road, Suite 3 • Martinez, CA 94553
Phone (415) 372-3700 • Fax (415) 372-6955

62074.01\1718\012264

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

Date Sampled: 11-17-92
Date Received: 11-19-92
Date Analyzed: 11-24-92

Sample Number	Sample Description
112300	Project # 62074.01 Texaco - Alameda 1127 Lincoln Avenue MW8 WATER

ANALYSIS

	Detection Limit	Sample Results
	ppb	ppb
Total Petroleum Hydrocarbons as Gasoline	50	4,700
Benzene	0.5	1,700
Toluene	0.5	12
Xylenes	0.5	22
Ethylbenzene	0.5	8.0

QA/QC: Sample blank is none detected

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: [illegible]

PROJECT NAME/SITE: [illegible] (Former) 11[illegible] Lincoln Ave. Alameda

SAMPLERS (SIGN): [illegible signature] / (PRINT) Robin A. Adair

PO #:

ANALYSIS REQUESTED

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
[illegible]	11/17/92	11:00			HCL	Y	2		X	X										
AMW 1	↓	1:00			↓	↓	2	↓	X	X										
AMW 2		2:10					2		X	X										
AMW 3		4:00					2		X	X										
AMW 4		12:05					2	H2O	X	X										
AMW [illegible]		11:05					2		X	X										
AMW [illegible]		4:15					2		X	X										
AMW [illegible]	↓	3:20			↓	↓	2	↓	X	X										

RELINQUISHED BY	DATE	TIME	RECEIVED BY	
[signature]	11/18/92	7:00 AM		LABORATORY: Mobile Chem. Labs
				PLEASE SEND RESULTS TO: Phil Mayberry
				REQUESTED TURNAROUND TIME: NORMAL
[signature]	11/19/92	1:15 p	RECEIVED BY LABORATORY: [signature]	RECEIPT CONDITION:

PROJECT MANAGER: Dave Higgins