

**ExxonMobil**  
**Refining & Supply Company**  
Global Remediation  
2300 Clayton Road, Suite 1250  
Concord, CA. 94520  
(925) 246-8747 Telephone  
(925) 246-8798 Facsimile  
gene.n.ortega@exxonmobil.com

**Gene N. Ortega**  
Territory Manager  
Global Remediation – U.S. Retail

September 4, 2002

**ExxonMobil**  
*Refining & Supply*

Mr. Barney Chan  
Alameda County Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502-

**Alameda County**  
SEP 16 2002  
**Environmental Health**

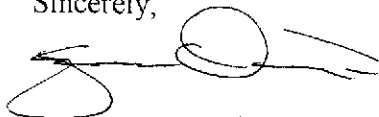
Subject: Former Mobil Station 99-105, 6301 San Pablo Avenue, Oakland, California

Dear Mr. Chan:

Attached for your review and comment is a copy of the Third Quarter 2002 Progress Report for the above-referenced site. The report, prepared by TRC of Concord, California, details the results of the July 12, 2002 sampling event.

If you have any questions or comments, please call me at (925) 246-8747.

Sincerely,



Gene Ortega  
Territory Manager

Attachment: Third Quarter 2002 Progress Report

cc: Mr. Chuck Headlee, Regional Water Quality Control Board, San Francisco Bay Region  
Ms. Connie Lamb, Property Owner

# TRC

Customer-Focused Solutions

September 04, 2002

Project No. 41-0123

Mr. Barney Chan  
Alameda County Health Services  
1131 Harbor Bay Parkway  
Alameda, California 94502-6700

RE: FORMER MOBIL STATION 99-105  
6301 SAN PABLO AVENUE  
OAKLAND, CALIFORNIA

Alameda County  
SEP 16 2002  
Environmental Health

Dear Mr. Chan:

Please find enclosed the Third Quarter 2002 Progress Report for the subject location prepared by TRC for ExxonMobil Oil Company. The contents of this report include:

Quarterly Progress Report Summary Sheet

- Exhibit 1: Sampling Schedule
- Exhibit 2: Summary of Groundwater Levels and Chemical Analysis
- Exhibit 3: Figures 1 through 3 (Vicinity Map, Groundwater Elevations, Dissolved-Phase Hydrocarbon Concentrations)
- Exhibit 4: Well Purging and Groundwater Sampling Protocol
- Exhibit 5: Monitoring Well Sampling Forms
- Exhibit 6: Analytical Laboratory Data Sheets
- Exhibit 7: Waste Disposal Manifest

If you have any questions regarding this report, please call me at (925) 688-2473. You may also call Mr. Gene Ortega, ExxonMobil Senior Engineer, at (925) 246-8747.

Sincerely,



Jonathan Scheiner  
Associate

cc: Mr. Gene Ortega, ExxonMobil Refining and Supply Company, Global Remediation—U.S. Retail Projects  
Mr. Chuck Headlee, Regional Water Quality Control Board, San Francisco Bay Region  
Ms. Connie Lamb, Property Owner

ALTON GEOSCIENCE

Quarterly Progress Report Summary Sheet  
Third Quarter 2002

Former Mobil Station 99-105  
6301 San Pablo Avenue  
Oakland, California

LOP: Alameda County Health Services

Number of water zones:	1	This Page	1
FIELD ACTIVITY:		Date Sampled:	12-Jul-02
Number of groundwater wells on-site:	3	Groundwater wells monitored:	3
Number of groundwater wells off-site:	0	Groundwater wells sampled:	3
Phase of Investigation: Vadose Zone:	N/A	Groundwater wells with free product:	0
		Groundwater phase:	Monitor & Sample
SITE HYDROGEOLOGY:			
Approximate depth to ground water below ground surface:			10.21 ft
Approximate elevation of potentiometric surface above Mean Sea Level:			31.56 ft
Average Increase/Decrease in ground water elevations since last sampling episode:		decrease:	-3.26 ft
Approximate flow direction and hydraulic gradient:		Southwest at:	0.09 ft/ft
GROUND WATER CONTAMINATION (BENZENE MCL=1.0 ppb):			
Wells containing free product:	0	Range in Thickness of Free Product:	NA ft
Number of wells with concentrations below MCL:	1	Volume of Free Product Recovered This Period:	0 gals
Number of wells with concentrations at or above MCL:	2	Volume of Free Product Recovered To Date:	2.65 gals
Nature of contamination:	Gasoline	Range in Concentrations:	Benzene: ND<0.3 to 350 ppb TPH-G: ND<50 to 3,940 ppb
ADDITIONAL INFORMATION:			
Purged water was transferred to McKittrick Waste Water Treatment Facility			

Prepared by: Jonathan Scheiner

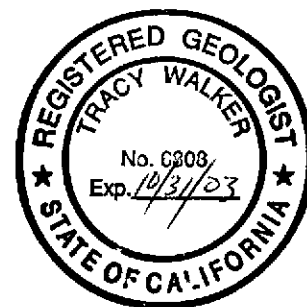
Jonathan Scheiner  
Associate

Alton Project No: 41-0123

Approved by: Tracy L. Walker  
California RG #6808

Tracy L. Walker, RG  
Associate

Submittal Date: 8/21/02



MONITORING WELL SAMPLING SCHEDULE 2002  
Former Mobil Station 99-105

Well Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
MW-2	X	X	X	X
MW-3	X	X	X	X
MW-5	X	X	X	X

NOTES: X = well scheduled for sampling

EXHIBIT 2  
SUMMARY OF GROUNDWATER LEVELS AND CHEMICAL ANALYSIS

### Summary of Groundwater Levels and Chemical Analysis

Former Mobil Station 99-105

Well ID	Date	Top of Casing	Depth to	Groundwater	Product						Ethyl-	Total	MTBE	MTBE			Dissolved
		Elevation (feet)	Water (feet)	Elevation (feet)	Thickness (feet)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)		benzene (ppb)	Xylenes (ppb)	8020 (ppb)	8240 or 8260 (ppb)	TOG (ppb)	Lead (ppb)	Oxygen (mg/L)
TW-1	01/04/96	—	6.00	—	0.00	ND	700	ND	ND	ND	ND	—	—	—	—	—	—
WW-1	01/04/96	—	3.00	—	0.00	ND	—	ND	ND	ND	ND	—	—	ND	—	—	—
MW-1	03/14/96	32.79	4.50	28.29	0.00	610	450	0.75	0.54	1.5	59	—	—	—	ND	—	—
MW-1	05/21/96	32.79	5.64	27.15	0.00	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—
MW-1	08/13/96	32.79	9.76	23.03	0.00	ND	ND	ND	ND	ND	ND	—	—	—	—	—	—
MW-1	11/08/96	32.79	10.24	22.55	0.00	ND	ND	ND	0.92	ND	2.1	ND	—	—	—	—	—
MW-1	01/31/97	32.79	3.83	28.96	0.00	ND	ND	ND	0.85	ND	ND	2.6	ND	—	—	—	—
MW-1	04/22/97	32.79	9.14	23.65	0.00	ND	ND	ND	ND	ND	ND	ND	—	—	—	—	—
MW-1†	07/29/97	32.79	10.18	22.61	0.00	ND	60****	0.84	0.95	ND	1.6	36	—	—	—	—	—
MW-1†	10/09/97	32.79	10.46	22.33	0.00	ND	56****	ND	ND	ND	ND	ND	—	—	—	—	—
MW-1†	01/23/98	32.79	3.95	28.84	0.00	ND	33	ND	ND	ND	ND	ND	—	—	—	—	—
MW-1	04/22/98	32.79	5.33	27.46	0.00	ND	ND	27.46	ND	ND	ND	ND	—	—	—	—	—
MW-1	07/21/98	32.79	9.17	23.62	0.00	ND	—	ND	ND	ND	ND	ND	—	—	—	—	1.25
MW-1	10/20/98	32.79	10.41	22.38	0.00	ND	—	ND	ND	ND	ND	ND	—	—	—	—	4.34
MW-1	01/27/99	32.79	5.51	27.28	0.00	ND	—	ND	ND	ND	ND	ND	—	—	—	—	2.49
MW-1	Destroyed during construction activities in April 1999																
MW-2	03/14/96	32.80	4.51	28.29	0.00	560	250	2.0	0.96	4.3	11	—	—	—	ND	—	—
MW-2	05/21/96	32.80	5.65	27.15	0.00	730	560	5.1	1.4	6.7	5.9	—	—	—	—	—	—
MW-2	08/13/96	32.80	10.14	22.66	0.00	490	380*	25	3.5	7.2	13	—	—	—	—	—	—
MW-2	11/08/96	32.80	10.70	22.10	0.00	520	160***	80	2.7	14	66	6.1	—	—	—	—	—
MW-2	01/31/97	32.80	3.84	28.96	0.00	74	130*	ND	ND	ND	ND	ND	—	—	—	—	—
MW-2	04/22/97	32.80	9.61	23.19	0.00	260	430	2.7	ND	2.5	ND	ND	—	—	—	—	—
MW-2†	07/29/97	32.80	10.53	22.27	0.00	320	150***	28	1.2	10	ND	ND	—	—	—	—	—
MW-2†	10/09/97	32.80	10.87	21.93	0.00	460	160*	43	2.8	2.0	2.6	2.6	—	—	—	—	—
MW-2†	01/23/98	32.80	3.75	29.05	0.00	ND	54	ND	ND	ND	ND	ND	—	—	—	—	—
MW-2	04/22/98	32.80	5.36	27.44	0.00	180	540	1.2	0.3	0.4	ND	ND	—	—	—	—	0.85
MW-2	07/21/98	32.80	9.55	23.25	0.00	80	—	8.9	2.1	0.6	2.5	ND	—	—	—	—	1.04
MW-2	10/20/98	32.80	10.75	22.05	0.00	50	—	0.8	0.7	ND	0.8	ND	—	—	—	—	1.12
MW-2	01/27/99	32.80	5.53	27.27	0.00	ND	—	0.6	ND	ND	ND	ND	—	—	—	—	0.99
MW-2	07/27/99	32.80	6.20	26.60	0.00	ND	—	ND	0.6	ND	ND	ND	—	—	—	—	0.30
MW-2	12/08/99	32.80	9.98	22.82	0.00	ND	—	1.2	0.43	ND	ND	ND	—	—	—	—	1.83
MW-2	Sep-00	39.34	Well resurveyed after repair by Alisto Engineering														
MW-2	10/25/00	39.34	11.30	28.04	0.00	<20	—	2.0	0.59	0.46	1.3	<0.30	—	—	—	—	0.35
MW-2	01/15/01	39.34	9.41	29.93	0.00	<20	—	<0.20	0.46	<0.20	<0.60	<0.30	—	—	—	—	—
MW-2	04/10/01	39.34	6.16	33.18	0.00	23	—	0.28	<0.20	<0.20	<0.60	<1.0	—	—	—	—	1.72
MW-2	07/24/01	39.34	10.70	28.64	0.00	<50	—	<0.20	0.93	<0.20	0.82	<0.30	—	—	—	—	3.39
MW-2	11/27/01	39.34	10.15	29.19	0.00	<50	—	1.2	0.22	<0.20	<0.60	<0.30	—	—	—	—	—
MW-2	11/27/01	41.99	Well resurveyed														
MW-2	01/18/02	41.99	5.46	36.53	0.00	<50.0	—	<0.50	<0.50	<0.50	<0.50	1.40	—	—	—	—	—
MW-2	04/10/02	41.99	6.48	35.51	0.00	<50.0	—	<0.50	<0.50	<0.50	<0.50	1.80	—	—	—	—	—
MW-2	07/12/02	41.99	10.45	31.54	0.00	<50.0	—	<0.50	<0.50	<0.50	<0.50	<0.50	—	—	—	—	—

### Summary of Groundwater Levels and Chemical Analysis

Former Mobil Station 99-105

Well ID	Date	Top of Casing	Depth to	Groundwater	Product	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl- benzene (ppb)	Total Xylenes (ppb)	MTBE 8020 (ppb)	MTBE 8240 or 8260 (ppb)	TOG (ppb)	Lead (ppb)	Dissolved Oxygen (mg/L)	
		Elevation (feet)	Water (feet)	Elevation (feet)	Thickness (feet)												
MW-3	03/14/96	32.80	9.55	23.25	0.00	4,200	1,200	220	30	140	520	—	—	ND	ND	—	
MW-3	05/21/96	32.80	10.16	22.64	0.00	8,500	2,800	710	110	440	1,700	—	—	—	—	—	
MW-3	08/13/96	32.80	11.18	21.62	0.00	5,000	2,300**	430	ND	200	360	—	—	—	—	—	
MW-3	11/08/96	32.80	11.51	21.29	0.00	8,400	2,900*	890	82	790	1,700	73	ND	—	—	—	
MW-3	01/31/97	32.80	7.90	24.90	0.00	16,000	7,500*	660	85	960	1,800	ND	—	—	—	—	
MW-3	04/22/97	32.80	10.64	22.16	0.00	8,000	2,700	340	33	400	490	200	ND	—	—	—	
MW-3†	07/29/97	32.80	11.36	21.44	0.00	9,800	2,300*	330	ND	530	530	ND	—	—	—	—	
MW-3†	10/09/97	32.80	11.52	21.28	0.00	7,300	2,600*	300	ND	430	460	270	ND	—	—	—	
MW-3†	01/23/98	32.80	7.50	25.30	0.00	6,100	2,300	190	23	330	320	ND	—	—	—	—	
MW-3	04/22/98	32.80	6.81	25.99	0.00	4,900	2,600	140	12	250	230	ND	ND	—	—	0.45	
MW-3	07/21/98	32.80	10.65	22.15	0.00	7,400	—	250	16	400	370	74	ND	—	—	0.78	
MW-3	10/20/98	32.80	11.57	21.23	0.00	6,700	—	200	18	350	350	ND	ND	—	—	0.69	
MW-3	01/27/99	32.80	9.11	23.69	0.00	3,100	—	74	4	94	39	13	—	—	—	1.20	
MW-3	07/27/99	32.80	7.27	25.53	0.00	8,900	—	170	21	360	440	ND	—	—	—	0.33	
MW-3	12/08/99	32.80	10.63	22.17	0.00	4,800	—	94	13	170	210	ND	—	—	—	1.12	
MW-3	Sep-00	39.27	Well resurveyed after repair by Alisto Engineering														
MW-3	10/25/00	39.27	12.08	27.19	0.00	3,800	—	63	2.9	100	65	<50	<5	—	—	0.96	
MW-3	01/15/01	39.27	10.29	28.98	0.00	4,300	—	76	9.5	47	76	<5.0	—	—	—	0.60	
MW-3	04/10/01	39.27	10.11	29.16	0.00	2,700	—	55	4.4	100	37	<20	—	—	—	1.63	
MW-3	07/24/01	39.27	11.57	27.70	0.00	3,100	—	110	6.9	110	81	<1.0	—	—	—	4.25	
MW-3	11/27/01	39.27	10.93	28.34	0.00	2,400	—	47	8.9	25	35	<0.30	—	—	—	—	
MW-3	11/27/01	41.71	Well resurveyed														
MW-3	01/18/02	41.71	9.47	32.24	0.00	1,130	—	15.3	2.30	42.0	24.6	13.6	—	—	—	—	
MW-3	04/10/02	41.71	10.14	31.57	0.00	916	—	35.1	3.00	22.5	13.8	11.2	—	—	—	—	
MW-3	07/12/02	41.71	11.34	30.37	0.00	2,330	—	60.5	2.90	39.8	50.9	15.4	—	—	—	—	
MW-4	03/14/96	31.50	4.92	26.58	0.00	12,000	3,500	2,200	140	880	2,000	—	—	—	ND	—	
MW-4	05/21/96	31.50	8.60	22.90	0.00	11,000	4,200	1,700	ND	930	470	—	—	—	—	—	
MW-4	08/13/96	31.50	10.02	21.50	0.02	—	—	—	—	—	—	—	—	—	—	—	
MW-4	11/08/96	31.50	10.28	21.33	0.15	—	—	—	—	—	—	—	—	—	—	—	
MW-4	01/31/97	31.50	7.88	23.62	0.00	23,000	8,200*	980	68	1,100	1,400	ND	—	—	—	—	
MW-4	04/22/97	31.50	7.40	24.10	0.00	8,800	4,500	950	ND	610	130	ND	—	—	—	—	
MW-4	07/29/97	31.50	9.85	21.74	0.12	—	—	—	—	—	—	—	—	—	—	—	
MW-4	10/09/97	31.50	10.35	21.38	0.30	—	—	—	—	—	—	—	—	—	—	—	
MW-4	01/23/98	31.50	4.68	27.51	0.92	—	—	—	—	—	—	—	—	—	—	—	
MW-4	04/22/98	31.50	6.39	25.22	0.14	—	—	—	—	—	—	—	—	—	—	—	
MW-4	07/21/98	31.50	7.10	24.55	0.20	—	—	—	—	—	—	—	—	—	—	—	
MW-4	10/20/98	31.50	9.03	22.60	0.17	—	—	—	—	—	—	—	—	—	—	—	
MW-4	01/27/99	31.50	5.37	26.18	0.07	—	—	—	—	—	—	—	—	—	—	—	
MW-4	Destroyed during construction activities in April 1999																
MW-5	Sep-00	39.18	Well surveyed after installation by Alisto Engineering														
MW-5	10/25/00	39.18	10.92	28.26	0.00	2,500	—	79	3.8	66	<20	<20	—	—	—	0.50	
MW-5	01/15/01	39.18	8.32	30.86	0.00	3,900	—	120	7.9	280	52	<5.0	—	—	—	0.69	
MW-5	04/10/01	39.18	7.21	31.97	0.00	8,000	—	280	4.4	410	100	<50	<5	—	—	1.90	

### Summary of Groundwater Levels and Chemical Analysis

Former Mobil Station 99-105

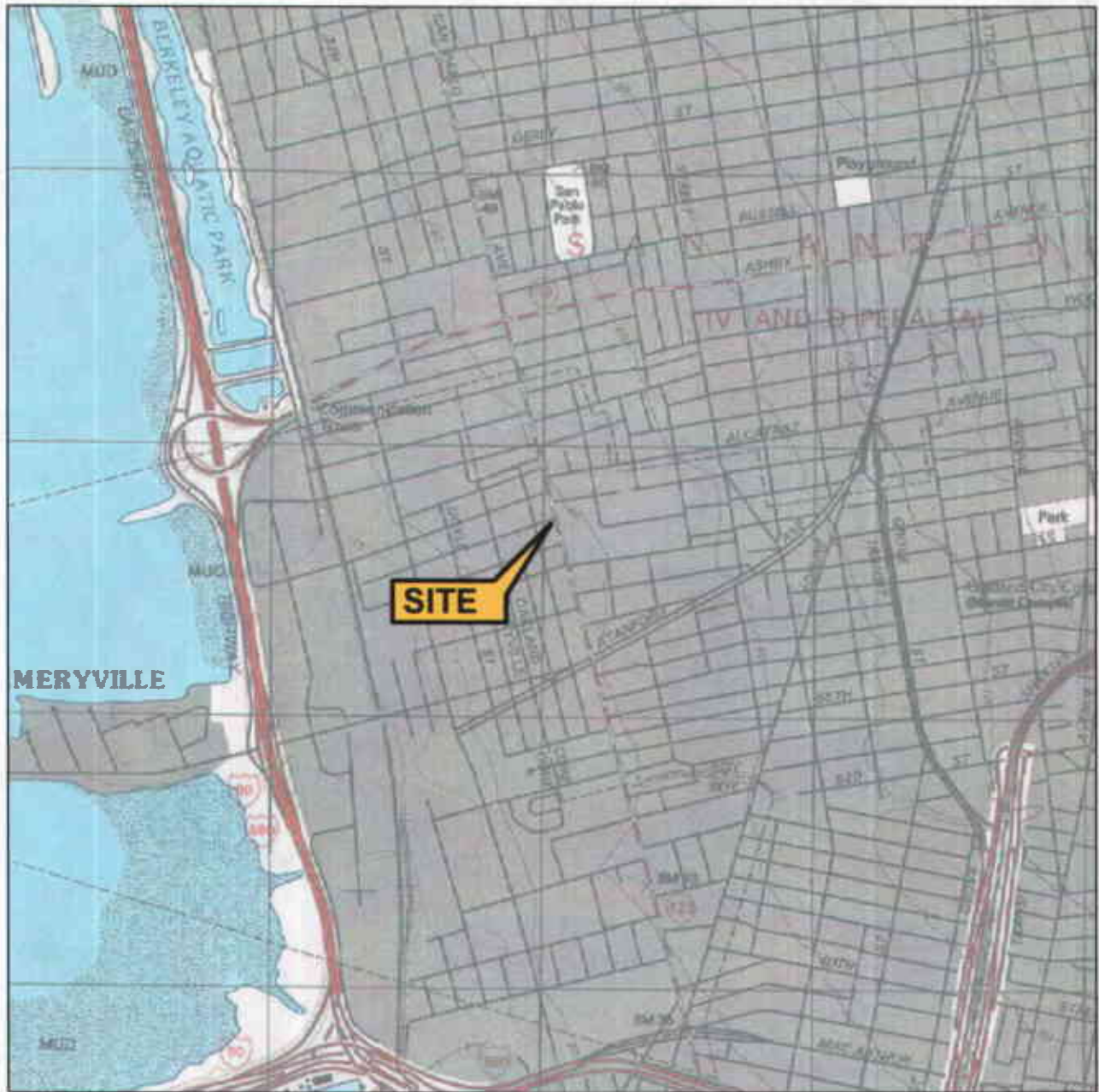
Well ID	Date	Top of Casing Elevation (feet)	Depth to Water (feet)	Groundwater Elevation (feet)	Product Thickness (feet)	TPH-G (ppb)	TPH-D (ppb)	Benzene (ppb)	Toluene (ppb)	Ethyl-benzene (ppb)	Total Xylenes (ppb)	MTBE 8020 (ppb)	MTBE 8240 or 8260 (ppb)	TOG (ppb)	Lead (ppb)	Dissolved Oxygen (mg/L)
MW-5	07/24/01	39.18	9.54	29.64	0.00	7,000	—	360	7.4	380	67	<1.0	—	—	—	5.91
MW-5	11/27/01	39.18	8.84	30.34	0.00	5,000	—	64	11	340	52	8.9	<2	—	—	—
MW-5	11/27/01	41.59	Well resurveyed													
MW-5	01/18/02	41.59	6.52	35.07	0.00	6,330	—	99.1	2.30	103	19.6	21.8	—	—	—	—
MW-5	04/10/02	41.59	7.20	34.39	0.00	2,140	—	275	8.00	183	24.5	<2.50	—	—	—	—
MW-5	07/12/02	41.59	8.83	32.76	0.00	3,940	—	350	<0.50	268	14	20	<0.50	—	—	—
AB-1	03/05/98	—	—	—	—	1,600	—	31	5.3	79	130	ND	—	—	—	—
AB-2	03/05/98	—	—	—	—	ND	—	ND	2.9	0.9	5.7	ND	—	—	—	—
AB-3	03/05/98	—	—	—	—	6,800	—	680	100	1,500	2,300	230	—	—	—	—
AB-4	03/05/98	—	—	—	—	8,500	—	240	ND	260	720	ND	—	—	—	—
AB-6	03/05/98	—	—	—	—	12,000	—	350	ND	310	100	ND	—	—	—	—
AB-9	03/05/98	—	—	—	—	1,000	—	57	12	44	93	ND	—	—	—	—
AB-10	03/05/98	—	—	—	—	200	—	3.0	1.2	3.2	2.8	ND	—	—	—	—
AB-11	03/05/98	—	—	—	—	ND	—	ND	ND	ND	ND	ND	—	—	—	—
AB-12	03/05/98	—	—	—	—	8,800	—	660	50	630	940	37	—	—	—	—
AB-13	03/05/98	—	—	—	—	210	—	11	0.8	10	15	ND	—	—	—	—
HA-1	01/25/00	—	—	—	—	ND<500	—	ND<0.3	ND<0.3	ND<0.3	ND<0.6	ND<5.0	—	—	—	—

NOTES: ppb = parts per billion  
 mg/L = milligrams per liter  
 TPH-G = total petroleum hydrocarbons as gasoline  
 TPH-D = total petroleum hydrocarbons as diesel  
 TOG = total oil and grease  
 MTBE = methyl tert-butyl ether

— = not measured/not analyzed  
 ND = not detected at or above method detection limit  
 \* = diesel and unidentified hydrocarbons <C15  
 \*\* = diesel and unidentified hydrocarbons <C15>C25  
 \*\*\* = diesel and unidentified hydrocarbons >C20  
 \*\*\*\* = unidentified hydrocarbons >C18

† = well sampled using no-purge method





1 MILE    3/4    1/2    1/4    0    1 MILE



SCALE 1 : 24,000

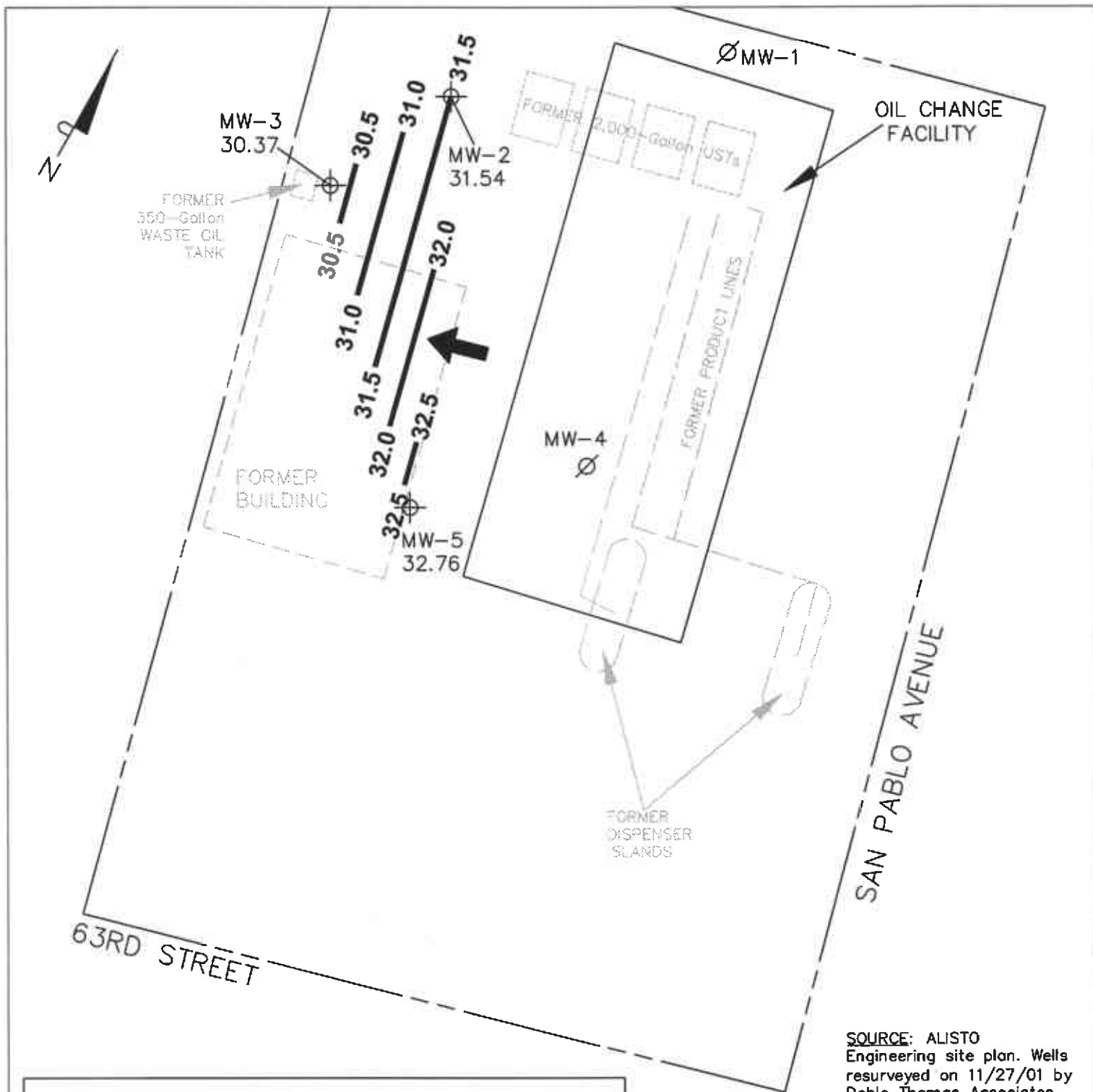


SOURCE:  
 United States Geological Survey  
 7.5 Minute Topographic Maps:  
 Oakland West Quadrangle

**VICINITY MAP**  
 Former Mobil Station 99-105  
 6301 San Pablo Avenue  
 Oakland, California



**FIGURE 1**



SOURCE: ALISTO Engineering site plan. Wells resurveyed on 11/27/01 by Doble Thomas Associates.

LEGEND	
	MW-2 Monitoring Well Showing Groundwater Elevation (Feet Relative to Mean Sea Level - NGVD-1929)
	Destroyed Well
	30.5 Groundwater Elevation Contour Line
	General Direction of Groundwater Gradient

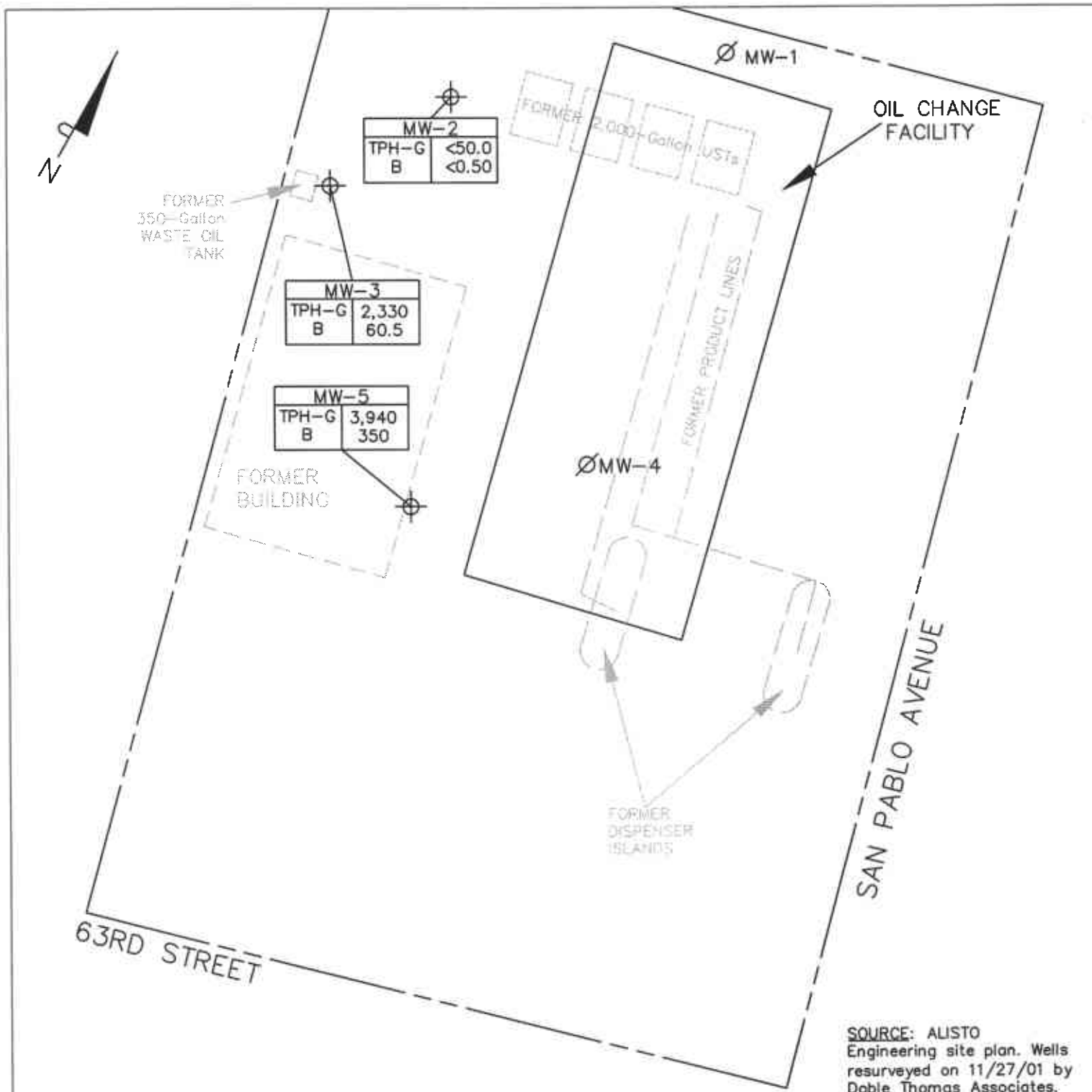
NOTES: Contour lines are interpretive based on fluid-level measurements taken on July 12, 2002. Contour interval = 0.5 foot.

**GROUNDWATER ELEVATION  
CONTOUR MAP  
July 12, 2002**

Former Mobil Station 99-105  
6301 San Pablo Avenue  
Oakland, California

**TRC**

**FIGURE 2**



SOURCE: ALISTO Engineering site plan. Wells resurveyed on 11/27/01 by Doble Thomas Associates.

SCALE (FEET)



<b>LEGEND</b>							
Monitoring Well Showing Dissolved-Phase Hydrocarbon Concentrations for TPH-G and Benzene (ppb)							
<table border="1"> <tr><td colspan="2">MW-3</td></tr> <tr><td>TPH-G</td><td></td></tr> <tr><td>B</td><td></td></tr> </table>		MW-3		TPH-G		B	
MW-3							
TPH-G							
B							

NOTES:  
Hydrocarbon concentrations are based on results of laboratory samples collected on July 12, 2002. TPH-G = total petroleum hydrocarbons as gasoline; B = benzene; ppb = parts per billion; < = not detected at or above the stated method detection limit.

**DISSOLVED-PHASE HYDROCARBON CONCENTRATIONS**  
**July 12, 2002**

Former Mobil Station 99-105  
6301 San Pablo Avenue  
Oakland, California

**TRC**

**FIGURE 3**

EXHIBIT 4  
WELL PURGING AND GROUNDWATER SAMPLING PROTOCOL

## WELL PURGING AND GROUNDWATER SAMPLING PROTOCOL

### FLUID-LEVEL MONITORING

Fluid levels are monitored in the wells using an electronic interface probe with conductance sensors. The presence of liquid-phase hydrocarbons is verified using a hydrocarbon-reactive paste. The depth to liquid-phase hydrocarbons and water is measured to the nearest 0.01 foot relative to the well box top or top of casing. Well box or casing elevations are surveyed to within 0.02 foot relative to a county or city benchmark.

### GROUNDWATER SAMPLING

Currently, 'pre-purge' and 'non-purge' methods of sampling both comply with regulatory standards.

#### *NON-PURGE METHOD:*

TRC utilizes the 'non-purge' method of sampling for all qualifying groundwater monitoring wells. Groundwater samples are collected by lowering a 1.5-inch-diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the check-valve-equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials. Samples remain chilled at approximately 4°C prior to analysis by a state-certified laboratory.

The following criteria necessary for a well to qualify for 'non-purge' sampling are taken from a letter issued by San Francisco Bay Regional Water Quality Control Board on January 31, 1997:

1. The non-purging approach shall be used only for monitoring wells where groundwater has been impacted by petroleum hydrocarbons, BTEX, and MTBE.
2. Non-purge sampling shall be utilized for unconfined aquifers only.
3. The monitoring well shall be properly permitted, constructed (in this case, screened across the water table), and developed.
4. The well is presently in use for groundwater or soil vapor extraction.
5. The well does not contain free product.
6. For new wells or wells brought into monitoring for the first time, the first round of groundwater sampling performed at a site shall be with both non-purged and purged samples. The purging and sampling method used shall be documented. This shall include the rate of purge and sampling

details. For these wells we require measurements of dissolved oxygen, specific conductance, pH, and temperature whether purged or not purged. Also, if biodegradation is being tracked at the well, our requirements do not preclude the measurement of other parameters.

7. Existing wells which have already been routinely purged in previous sampling events immediate to being switched to a non-purging mode do not require an initial duplicate non-purged and purged sample.
8. Monitoring data frequency shall be as required by the appropriate regulatory oversight agency.
9. Should site closure be requested where the non-purged approach has been used, the final confirmation sampling event shall include both non-purged and purged samples from each well or as agreed upon with the appropriate regulatory oversight agency.

#### *PURGE METHOD:*

Groundwater monitoring wells that do not qualify for the 'non-purge' method are purged and sampled in accordance with standard regulatory protocol. Typically, monitoring wells that contain no liquid-phase hydrocarbons are purged of groundwater prior to sampling so that fluids sampled are representative of fluids within the formation. Temperature, pH, and specific conductance are typically measured after each well casing volume has been removed. Purging is considered complete when these parameters vary less than 10% from the previous readings, or when four casing volumes of fluid have been removed. Samples are collected without further purging if the well does not recharge within 2 hours to 80% of its volume before purging.

The purged water is either pumped directly into a licensed vacuum truck or temporarily stored in labeled drums prior to transport to an appropriate treatment or recycling facility. If an automatic recovery system (ARS) is operating at the site, purged water may be pumped into the ARS for treatment.

Groundwater samples are collected by lowering a 1.5-inch-diameter, bottom-fill, disposable polyethylene bailer just below the static water level in the well. The samples are carefully transferred from the check-valve-equipped bailer to 1-liter and 40-milliliter glass containers. The sample containers are filled to zero headspace and fitted with Teflon-sealed caps. Each sample is labeled with the project number, well number, sample date, and sampler's initials. Samples remain chilled at approximately 4°C prior to analysis by a state-certified laboratory.



# GROUND WATER SAMPLING FIELD NOTES

Site: 99-105 Project No.: 41012376 Sampled By: J. Chidester Date: 7/12/02

Well No. MW-2 Purge Method: 2" elec.  
 Total Depth (feet) 18.90 Depth to Product (feet): -  
 Depth to Water (feet): 10.45 Product Recovered (gallons): -  
 Water Column (feet): 8.45 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 12.14 1 Well Volume (gallons): 5.49

Well No. MW-3 Purge Method: 2" elec.  
 Total Depth (feet) 18.46 Depth to Product (feet): -  
 Depth to Water (feet): 11.34 Product Recovered (gallons): -  
 Water Column (feet): 7.12 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 12.76 1 Well Volume (gallons): 4.63

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
955				0.37	72.4	5.81
				0.34	69.3	5.77
	1005			0.34	67.4	6.01
			<u>13</u>			
Total Purged			<u>16.5</u>	Time Sampled		<u>1225</u>
Comments: <u>Ran Dry @ 13 gal.</u>						
Turbidity=						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1012				1.02	68.4	6.17
				0.94	68.5	6.21
	1019			1.03	68.2	6.30
			<u>9</u>			
Total Purged			<u>14</u>	Time Sampled		<u>1215</u>
Comments: <u>Ran Dry @ 9 gal.</u>						
Turbidity=						

Well No. MW-5 Purge Method: 2" elec.  
 Total Depth (feet) 20.53 Depth to Product (feet): -  
 Depth to Water (feet): 8.83 Product Recovered (gallons): -  
 Water Column (feet): 11.70 Casing Diameter (Inches): 4"  
 80% Recharge Depth (feet): 11.17 1 Well Volume (gallons): 7.60

Well No. \_\_\_\_\_ Purge Method: \_\_\_\_\_  
 Total Depth (feet) \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
1042				1.05	74.5	6.33
				1.00	70.4	6.45
	1053			0.99	64.5	6.44
Total Purged			<u>23</u>	Time Sampled		<u>360</u>
Comments:						
Turbidity=						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged						
Time Sampled						
Comments:						
Turbidity=						

Well No. \_\_\_\_\_ Purge Method: \_\_\_\_\_  
 Total Depth (feet) \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Well No. \_\_\_\_\_ Purge Method: \_\_\_\_\_  
 Total Depth (feet) \_\_\_\_\_ Depth to Product (feet): \_\_\_\_\_  
 Depth to Water (feet): \_\_\_\_\_ Product Recovered (gallons): \_\_\_\_\_  
 Water Column (feet): \_\_\_\_\_ Casing Diameter (Inches): \_\_\_\_\_  
 80% Recharge Depth (feet): \_\_\_\_\_ 1 Well Volume (gallons): \_\_\_\_\_

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged						
Time Sampled						
Comments:						
Turbidity=						

Time Start	Time Stop	Depth To Water (feet)	Volume Purged (gallons)	Conductivity (uS/cm)	Temperature (F, C)	pH
Total Purged						
Time Sampled						
Comments:						
Turbidity=						



EXHIBIT 6  
ANALYTICAL LABORATORY DATA SHEETS



# TESTAMERICA, INC. - NASHVILLE

## COOLER RECEIPT FORM

Client: TRC BC# 293343

Cooler Received On: 7/17/02 And Opened On: 7/17/02 By: Ben Wright

Ben Wright  
(Signature)

1. Temperature of Cooler when opened 4.0 Degrees Celsius
2. Were custody seals on outside of cooler?..... YES...NO  
a. If yes, how many, what kind and where: 2-TAPE-FRONT
3. Were custody seals on containers and intact?..... NO...YES
4. Were the seals intact, signed, and dated correctly?.....~~YES~~...~~NO~~ NA
5. Were custody papers inside cooler?..... YES...NO
6. Were custody papers properly filled out (ink, signed, etc)?..... YES...NO
7. Did you sign the custody papers in the appropriate place?..... YES...NO
8. What kind of packing material used?  Bubblewrap Peanuts Vermiculite Other None
9. Was sufficient ice used (if appropriate)?..... YES...NO
10. Did all bottles arrive in good condition (unbroken)?..... YES...NO
11. Were all bottle labels complete (#, date, signed, pres, etc)?..... YES...NO
12. Did all bottle labels and tags agree with custody papers?..... YES...NO
13. Were correct bottles used for the analysis requested?..... YES...NO
14. a. Were VOA vials received?..... YES...NO  
b. Was there any observable head space present in any VOA vial?..... NO...YES
15. Was sufficient amount of sample sent in each bottle?..... YES...NO
16. Were correct preservatives used?..... YES...NO
17. Was residual chlorine present?.....~~NO~~...~~YES~~ NA
18. Corrective action taken, if necessary:  

See attached for resolution

# TestAmerica

INCORPORATED

7/31/02

TRC ALTON 3879  
CHRIS BROWN  
5052 COMMERCIAL CIRCLE  
CONCORD, CA 94520

This report includes the analytical certificates of analysis for all samples listed below. These samples relate to your project 99-105 EXXONMOBIL 99-105. The Laboratory Project number is 293343. An executed copy of the chain of custody, the project quality control data, and the sample receipt form are also included as an addendum to this report.

Sample Identification	Lab Number	Collection Date
MW-2	02-A116990	7/12/02
MW-3	02-A116991	7/12/02
MW-5	02-A116992	7/12/02

These results relate only to the items tested.  
This report shall not be reproduced except in full and with permission of the laboratory.

Report Approved By: 

Report Date: 7/26/02

Paul E. Lane, Jr., Lab Director  
Michael H. Dunn, M.S., Technical Director  
Johnny A. Mitchell, Dir. Technical Serv.  
Eric S. Smith, Assistant Technical Director  
Roxanne L. Connor, Technical Services

Gail A. Lage, Technical Serv.  
Glenn L. Norton, Technical Serv.  
Kelly S. Comstock, Technical Serv.  
Pamela A. Langford, Technical Serv.

Laboratory Certification Number: 01168CA

## ANALYTICAL REPORT

TRC ALTON 3879  
 CHRIS BROWN  
 5052 COMMERCIAL CIRCLE  
 CONCORD, CA 94520

Lab Number: 02-A116990  
 Sample ID: MW-2  
 Sample Type: Water  
 Site ID: 99-105

Project: 99-105  
 Project Name: EXXONMOBIL 99-105  
 Sampler: JAMES CHIDESTER

Date Collected: 7/12/02  
 Time Collected: 12:25  
 Date Received: 7/17/02  
 Time Received: 9:00  
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
*ORGANIC PARAMETERS*									
Benzene	ND	ug/L	0.5	1.0	7/26/02	6:44	H. Wagner	8021B	8436
Ethylbenzene	ND	ug/L	0.5	1.0	7/26/02	6:44	H. Wagner	8021B	8436
Toluene	ND	ug/L	0.5	1.0	7/26/02	6:44	H. Wagner	8021B	8436
Xylenes (Total)	ND	ug/L	0.5	1.0	7/26/02	6:44	H. Wagner	8021B	8436
Methyl-t-butylether	ND	ug/L	0.5	1.0	7/26/02	6:44	H. Wagner	8021B	8436
TPH (Gasoline Range)	ND	ug/L	50.0	1.0	7/26/02	6:44	H. Wagner	8015B	8436

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	89.	69. - 132.

**LABORATORY COMMENTS:**

- ND - Not detected at the report limit.
- B - Analyte was detected in the method blank.
- J - Estimated Value below Report Limit.
- E - Estimated Value above the calibration limit of the instrument.
- # - Recovery outside Laboratory historical or method prescribed limits.

End of Sample Report.

## ANALYTICAL REPORT

TRC ALTON 3879  
 CHRIS BROWN  
 5052 COMMERCIAL CIRCLE  
 CONCORD, CA 94520

Lab Number: 02-A116991  
 Sample ID: MW-3  
 Sample Type: Water  
 Site ID: 99-105

Project: 99-105  
 Project Name: EXXONMOBIL 99-105  
 Sampler: JAMES CHIDESTER

Date Collected: 7/12/02  
 Time Collected: 12:45  
 Date Received: 7/17/02  
 Time Received: 9:00  
 Page: 1

Analyte	Result	Units	Report Limit	Dil Factor	Analysis Date	Analysis Time	Analyst	Method	Batch
*ORGANIC PARAMETERS*									
Benzene	60.5	ug/L	0.5	1.0	7/26/02	7:15	H. Wagner	8021B	8436
Ethylbenzene	39.8	ug/L	0.5	1.0	7/26/02	7:15	H. Wagner	8021B	8436
Toluene	2.9	ug/L	0.5	1.0	7/26/02	7:15	H. Wagner	8021B	8436
Xylenes (Total)	50.9	ug/L	0.5	1.0	7/26/02	7:15	H. Wagner	8021B	8436
Methyl-t-butylether	15.4	ug/L	0.5	1.0	7/26/02	7:15	H. Wagner	8021B	8436
TPH (Gasoline Range)	2330	ug/L	50.0	1.0	7/26/02	7:15	H. Wagner	8015B	8436

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	134. #	69. - 132.

**LABORATORY COMMENTS:**

ND - Not detected at the report limit.  
 B - Analyte was detected in the method blank.  
 J - Estimated Value below Report Limit.  
 E - Estimated Value above the calibration limit of the instrument.  
 # - Recovery outside Laboratory historical or method prescribed limits.  
 elevated btx surrogate due to sample matrix.  
 confirmed by repeat analysis.

End of Sample Report.

## ANALYTICAL REPORT

TRC ALTON 3879  
 CHRIS BROWN  
 5052 COMMERCIAL CIRCLE  
 CONCORD, CA 94520

Lab Number: 02-A116992  
 Sample ID: MW-5  
 Sample Type: Water  
 Site ID: 99-105

Project: 99-105  
 Project Name: EXXONMOBIL 99-105  
 Sampler: JAMES CHIDESTER

Date Collected: 7/12/02  
 Time Collected: 13:00  
 Date Received: 7/17/02  
 Time Received: 9:00  
 Page: 1

Analyte	Result	Units	Report	Dil	Analysis		Analyst	Method	Batch
			Limit		Factor	Date			
*ORGANIC PARAMETERS*									
Benzene	350.	ug/L	10.0	20.0	7/26/02	7:46	H. Wagner	8021B	8436
Ethylbenzene	268.	ug/L	10.0	20.0	7/26/02	7:46	H. Wagner	8021B	8436
Toluene	ND	ug/L	10.0	20.0	7/26/02	7:46	H. Wagner	8021B	8436
Xylenes (Total)	14.0	ug/L	10.0	20.0	7/26/02	7:46	H. Wagner	8021B	8436
Methyl-t-butylether	20.0	ug/L	10.0	20.0	7/26/02	7:46	H. Wagner	8021B	8436
TPH (Gasoline Range)	3940	ug/L	1000	20.0	7/26/02	7:46	H. Wagner	8015B	8436
*VOLATILE ORGANICS*									
Methyl-t-butyl ether	ND	ug/L	0.50	1.0	7/31/02	12:12	T. Johnson	8260B	6518

Surrogate	% Recovery	Target Range
BTEX/GRO Surr., a,a,a-TFT	95.	69. - 132.
VOA Surr 1,2-DCA-d4	97.	73. - 133.
VOA Surr Toluene-d8	98.	80. - 121.
VOA Surr, 4-BFB	94.	80. - 128.
VOA Surr, DBFM	97.	81. - 121.

Sample report continued . . .

## ANALYTICAL REPORT

Laboratory Number: 02-A116992  
Sample ID: MW-5  
Project: 99-105  
Page 2

### LABORATORY COMMENTS:

ND - Not detected at the report limit.  
B - Analyte was detected in the method blank.  
J - Estimated Value below Report Limit.  
E - Estimated Value above the calibration limit of the instrument.  
# - Recovery outside Laboratory historical or method prescribed limits.  
8260 MTBE analysis performed from a vial with headspace.

End of Sample Report.



**PROJECT QUALITY CONTROL DATA**  
**Project Number: 99-105**  
**Page: 1**

Matrix Spike Recovery

Analyte	units	Orig. Val.	MS Val	Spike Conc	Recovery	Target Range	Q.C. Batch	Spike Sample
**UST ANALYSIS**								
Benzene	mg/l	< 0.0005	0.0480	0.0500	96	74. - 129.	8436	BLANK
Toluene	mg/l	< 0.0005	0.0471	0.0500	94	74. - 128.	8436	BLANK
Ethylbenzene	mg/l	< 0.0005	0.0477	0.0500	95	75. - 128.	8436	BLANK
Xylenes (Total)	mg/l	< 0.0005	0.0934	0.100	93	72. - 126.	8436	BLANK
Methyl-t-butylether	mg/l	< 0.0005	0.0451	0.0500	90	64. - 133.	8436	BLANK
TPH (Gasoline Range)	mg/l	< 0.0500	0.948	1.00	95	59. - 128.	8436	BLANK
BTEX/GRO Surr., a,a,a-TFT	% Recovery				94	69. - 132.	8436	

Matrix Spike Duplicate

Analyte	units	Orig. Val.	Duplicate	RPD	Limit	Q.C. Batch
**UST PARAMETERS**						
Benzene	mg/l	0.0480	0.0477	0.63	15.	8436
Toluene	mg/l	0.0471	0.0470	0.21	15.	8436
Ethylbenzene	mg/l	0.0477	0.0475	0.42	15.	8436
Xylenes (Total)	mg/l	0.0934	0.0932	0.21	19.	8436
Methyl-t-butylether	mg/l	0.0451	0.0454	0.66	23.	8436
TPH (Gasoline Range)	mg/l	0.948	1.12	16.63	22.	8436
BTEX/GRO Surr., a,a,a-TFT	% Recovery		94.			8436

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
**UST PARAMETERS**						
Benzene	mg/l	0.100	0.0920	92	74 - 124	8436
Toluene	mg/l	0.100	0.0904	90	74 - 121	8436
Ethylbenzene	mg/l	0.100	0.0913	91	75 - 123	8436

Project QC continued . . .

**PROJECT QUALITY CONTROL DATA**  
**Project Number: 99-105**  
**Page: 2**

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
Xylenes (Total)	mg/l	0.200	0.179	90	72 - 120	8436
Methyl-t-butylether	mg/l	0.100	0.0918	92	64 - 128	8436
TPH (Gasoline Range)	mg/l	1.00	0.948	95	61 - 139	8436
BTEX/GRO Surr., a,a,a-TFT	% Recovery			96	69 - 132	8436

Laboratory Control Data

Analyte	units	Known Val.	Analyzed Val	% Recovery	Target Range	Q.C. Batch
**VOA PARAMETERS**						
Methyl-t-butyl ether	mg/l	0.0500	0.0436	87	66 - 137	6518

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
**UST PARAMETERS**					
Benzene	< 0.0005	mg/l	8436	7/25/02	19:21
Toluene	< 0.0005	mg/l	8436	7/25/02	19:21
Ethylbenzene	< 0.0005	mg/l	8436	7/25/02	19:21
Xylenes (Total)	< 0.0005	mg/l	8436	7/25/02	19:21
Methyl-t-butylether	< 0.0005	mg/l	8436	7/25/02	19:21
TPH (Gasoline Range)	< 0.0500	mg/l	8436	7/25/02	19:21

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
**UST PARAMETERS**					
BTEX/GRO Surr., a,a,a-TFT	103.	% Recovery	8436	7/25/02	19:21

Project QC continued . . .

PROJECT QUALITY CONTROL DATA  
Project Number: 99-105  
Page: 3

Blank Data

Analyte	Blank Value	Units	Q.C. Batch	Date Analyzed	Time Analyzed
-----					
**VOA PARAMETERS**					
Methyl-t-butyl ether	< 0.00050	mg/l	6518	7/31/02	9:51
VOA Surr 1,2-DCA-d4	98.	% Rec	6518	7/31/02	9:51
VOA Surr Toluene-d8	99.	% Rec	6518	7/31/02	9:51
VOA Surr, 4-BFB	109.	% Rec	6518	7/31/02	9:51
VOA Surr, DBFM	98.	% Rec	6518	7/31/02	9:51

# - Value outside Laboratory historical or method prescribed QC limits.

End of Report for Project 293343

PROJECT QUALITY CONTROL DATA  
Project Number: 99-105  
Page: 4

\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*  
\*\*\*\*\*

The previous group of samples has a request for additional testing based upon these results. See the chain of custody!

Do not destroy this sheet until login has requested the appropriate tests.

EXHIBIT 7  
WASTE DISPOSAL MANIFEST  
TO BE SUBMITTED UPON RECEIPT