TRC Alton Geoscience

5052 Commercial Circle Concord, California 94520 Telephone 925-688-1200 上台VE (1411) 187 点上 Facsimile 925-688-0388

PROTLOTION

January 15, 2000

Mr. Barney Chan Alameda County Health Services 1131 Harbor Bay Parkway Alameda, California 94502-6700 1683

00 JAN 19 PM 3: LA

1-24-03

Still waiting for installation of replacement bod.

Still waiting for installation of rew bld.

Well for mw-4. + boring i wide new bld.

RE:

FORMER MOBIL STATION 99-105

6301 SAN PABLO AVENUE OAKLAND, CALIFORNIA

Dear Mr. Chan:

Please find enclosed the Fourth Quarter 1999 Progress Report for the subject location prepared for Mobil Business Resources Corporation by Alton Geoscience. The contents of this report include:

Ouarterly Progress Report Summary Sheet

Exhibit 1: Sampling Schedule

Summary of Groundwater Levels and Chemical Analysis Exhibit 2:

Figures 1 through 3 (Vicinity Map, Groundwater Elevations, Exhibit 3:

Dissolved-Phase Hydrocarbon Concentrations)

Benzene vs. Groundwater Elevation Graphs Exhibit 4:

Well Purging and Groundwater Sampling Protocol Exhibit 5:

Exhibit 6: Monitoring Well Sampling Forms

Analytical Laboratory Data Sheets Exhibit 7:

Waste Disposal Manifest Exhibit 8:

If you have any questions regarding this report, please call Cherine Foutch, ExxonMobil Remediation Services Engineer, at (925) 625-1173, or Tom Seeliger, Alton Geoscience Associate, at (925) 688-2474.

Sincerely,

Sarah Larese

Senior Staff Scientist

Ms. Cherine Foutch, ExxonMobil Remediation Services cc:

Mr. Chuck Headlee, Regional Water Quality Control Board, San Francisco Bay Region

Ms. Connie Lam, Property Owner

TRC / ALTON GEOSCIENCE

Quarterly Progress Report Summary Sheet Fourth Quarter 1999

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

LOP: Alameda County Health Services

	1	This Page	1
TELD ACTIVITY:		Date Sampled:	8-Dec-99
Number of groundwater wells on-site:	2 *	Groundwater wells monitored:	2
Number of groundwater wells off-site:	0	Groundwater wells sampled:	2
		Groundwater wells with free product:	0
Phase of Investigation: Vadose Zone:	N/A	Groundwater phase:	Monitor & Sample
HTE HYDROGEOLOGY:			
Approximate depth to ground water below ground surface:			10.31 ft
Approximate elevation of potentiometric surface above Mean S	ea Level:		22.50 ft
Average Increase/Decrease in ground water elevations since las	t sampling episode:	Decreas	se: 3.57 ft
Approximate flow direction and hydraulic gradient:			NA
GROUND WATER CONTAMINATION (BENZENE MCL=1.0	ppb):		· · · · · · · · · · · · · · · · · · ·
GROUND WATER CONTAMINATION (BENZENE MCL=1.0 Wells containing free product:	ppb): 0	Range in Thickness of Free Product:	NA
		Range in Thickness of Free Product: Volume of Free Product Recovered This Period	
Wells containing free product:	0		: 0 gals
Wells containing free product: Number of wells with concentrations below MCL:	0	Volume of Free Product Recovered This Period	: 0 gals 2.65 gals
Number of wells with concentrations below MCL:	0	Volume of Free Product Recovered This Period Volume of Free Product Recovered To Date:	: 0 gals 2.65 gals Benzene: 1.2 to 94 ppb
Wells containing free product: Number of wells with concentrations below MCL: Number of wells with concentrations at or above MCL: Nature of contamination:	0 0 2	Volume of Free Product Recovered This Period Volume of Free Product Recovered To Date:	
Wells containing free product: Number of wells with concentrations below MCL: Number of wells with concentrations at or above MCL: Nature of contamination: ADDITIONAL INFORMATION:	0 0 2 Gasoline	Volume of Free Product Recovered This Period Volume of Free Product Recovered To Date: Range in Concentrations:	: 0 gals 2.65 gals Benzene: 1.2 to 94 ppb
Wells containing free product: Number of wells with concentrations below MCL: Number of wells with concentrations at or above MCL:	0 0 2 Gasoline s on the site in April	Volume of Free Product Recovered This Period Volume of Free Product Recovered To Date: Range in Concentrations:	: 0 gak 2.65 gal: Benzene: 1.2 to 94 ppl

Prepared by:

Sarah Larese
Senior Staff Scientist

Approved by:

California RG #6808

Sarah Larese
Senior Staff Scientist

Tracy L. Walker, RG
Associate

Alton Project No: 41-0123

Submittal Date: 1/15/00



EXHIBIT 1 SAMPLING SCHEDULE

MONITORING WELL SAMPLING SCHEDULE 1999 Former Mobil Station 99-105

	Well Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
destroyed	MW-1	X			
X	MW-2	X		X	X
	MW-3	X		X	X
Legtwork	MW-4	X			
besfr	NOTES: X	= well sc	heduled for sampling	;	•

EXHIBIT 2

SUMMARY OF GROUNDWATER LEVELS AND CHEMICAL ANALYSIS

Summary of Groundwater Levels and Chemical Analysis Former Mobil Station 99-105

						Former	Mobil Station	99-103		Calcul	Tabal	MTBE	MTBE			Dissolved
		Top of Casing	Depth to	Groundwater	Product	TOUG	TPH-D	Bannana	Toluene	Ethyl-	Totai Xylenes	8020	8240 or 8260	TOG	Lead	Oxygen
144 11 (15)	D-4-	Elevation	Water	Elevation	Thickness	TPH-G		Benzene (npb)	(ppb)	benzene (ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(mg/L)
Well ID	Date	(feet)	(feet)	(feet)	(feet)	(ppb)	(ppb)	(ppb)	(ppu)	(ppo)	(ppo)	· (ppp)	(ppb)	(bbb)	(PPD)	(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	·
MVV-1	05/21/96	32.79	5.64	27.15	0.00	ND	ND	ND	ND	ND	NĎ		_		_	_
MW-1	08/13/96	32.79	9.76	23.03	0.00	ND	ND	ND	ND	ND	ND		_	_	_	_
MVV-1	11/08/96	32.79	10.24	22.55	0.00	ND	ND	ND	0.92	ND	2.1	ND		_	_	_
MVV-1	01/31/97	32.79	3.83	28.96	0.00	ND	NO	ND	0.85	ND	ND	2.6	ND	_	_	_
MVV-1	04/22/97	32.79	9.14	23.65	0.00	ND	ND	ND	NĎ	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	NĎ	NO	_	_	_	_
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	ND	ND	ND	ND	ND	_		_	1.25
MW-1	07/21/98	32.79	9,17	23.62	0.00	NĎ	_	ND	ND	ND	ND	ND	_	_	_	4.34
MW-1	10/20/98	32.79	10.41	22.38	0.00	ND	_	ND	ND	ND	ND	ND		_	_	2.49
MVV-1	01/27/99	32.79	5.51	27.28	0.00	ND		ND	ND	ND	ND	ND	_	-	_	5.25
MVV-1	Destroyed dur	ing construction activit	ties in April 199	9												
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	ИD	ND	_		_	_
MW-2	04/22/97	32.80	9.61	23.19	0.00	260	430	2.7	NĎ	2,5	ND	МD	_	_	_	_
MW-2†	07/29/97	32.80	10.53	22.27	0.00	320	150****	28	1.2	10	ND	СМ		_	_	_
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	32.60	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	МĎ	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-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	_	. —	_	-	- -
MVV-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	NÐ	_		_
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	_	- .	_	_
MVV-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
MVV-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

Summary of Groundwater Levels and Chemical Analysis

Former Mobil Station 99-105

111. II IE	5 -4-	Top of Casing Elevation	Depth to Water	Groundwater Elevation	Product Thickness	TPH-G	TPH-D	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)
Well ID	Date	(feet)	(feet)	(feet)	(feet)	(ppb)	(ppb)	(ppp)	(Phn)	(hhn)	(bbo)	(bbo)	(PPD)	(PPD)	(PPU)	(mg/=)
MW-3	12/08/99	32.80	10.63	22.17	0.00	4,800	_	94	13	170	210	ND	_	_	_	1.12
MW-4	03/14/96	31.50	4.92	26.58	0.00	12,000	3,500	2,200	140	880	2,000	_	_	_	NĎ	_
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		<u> </u>	_	_	_		_	_	_	_	_
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	_	_	_		-	<u>-</u>	_	_	_	_	
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	0.20 0.17 0.07	_	_	_		-	_	_	- .	_	_	_
MW-4	Destroyed duri	ng construction activit	ties in April 199	9												
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	NĎ	_	_	_	_
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	8.0	10	15	ND	_	-	-	_

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>C25

*** = diesel and unidentified hydrocarbons <C20

**** = unidentified hydrocarbons >C18

***** = diesel and unidentified hydrocarbons >C20

t = well sampled using no-purge method



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

SCALE 1: 24,000

Ν

SOURCE:

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

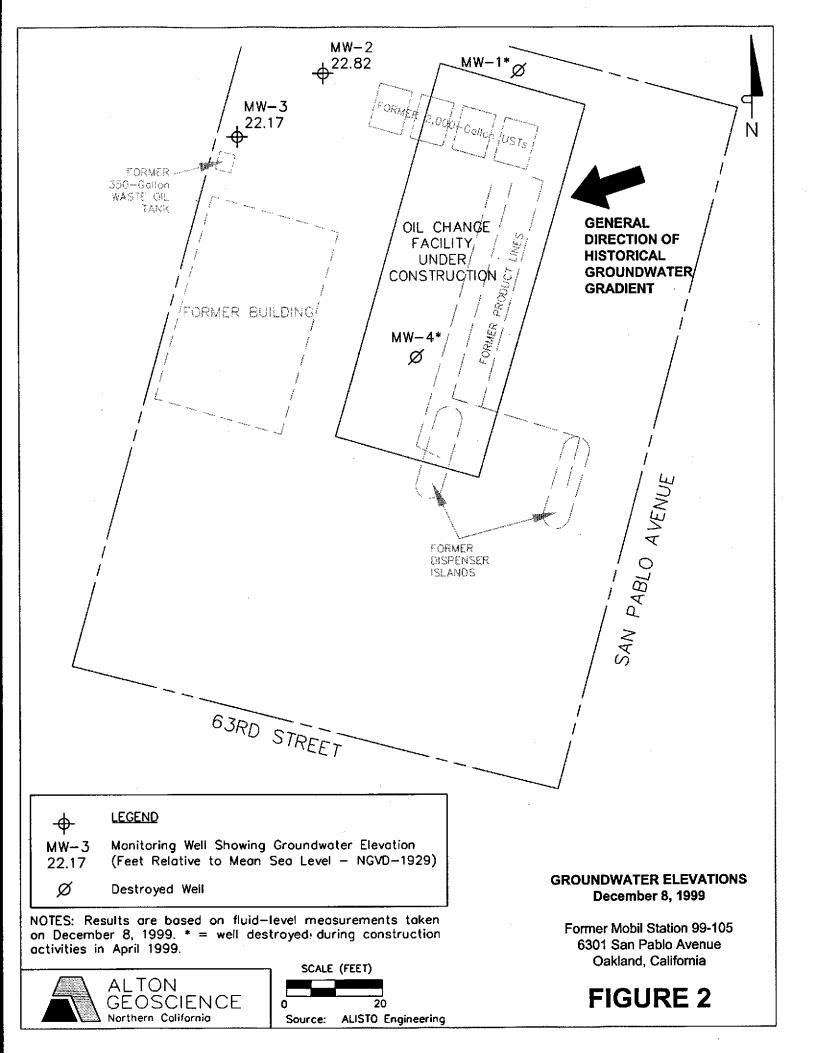




VICINITY MAP

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

FIGURE 1



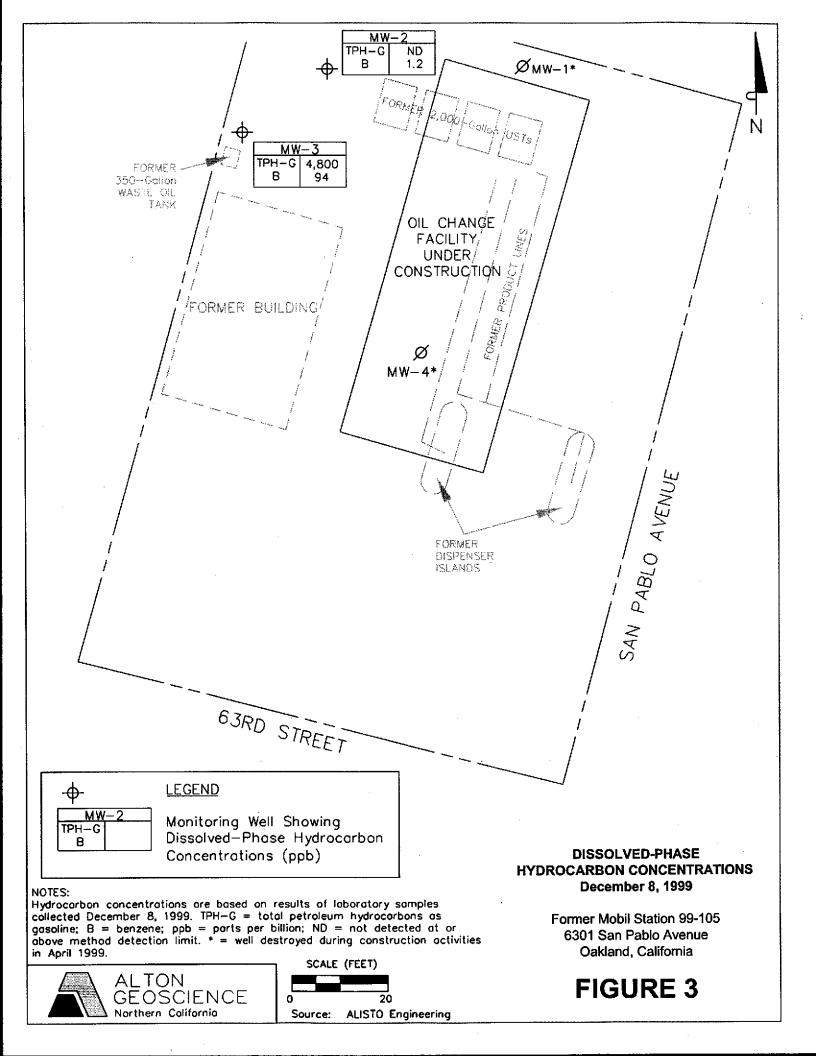
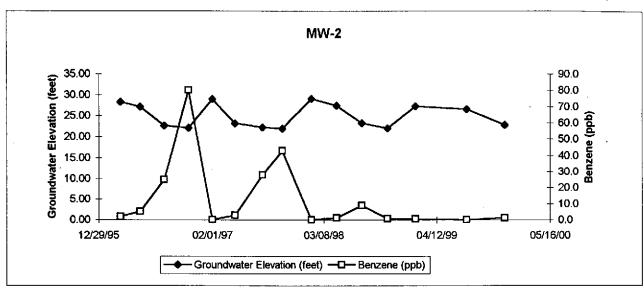
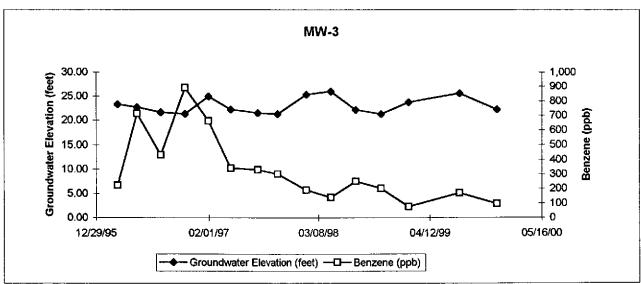


EXHIBIT 4 BENZENE VS. GROUNDWATER ELEVATION GRAPHS

Benzene vs. Groundwater Elevation Graphs





NOTE: ND values are plotted as zero.

EXHIBIT 5

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 bench mark.

GROUNDWATER SAMPLING

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

NON-PURGE METHOD:

Alton Geoscience 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.

- 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 <u>final</u> 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.

EXHIBIT 7 ANALYTICAL LABORATORY DATA SHEETS



LLI Sample No. WW 3288736 Collected: 12/08/99 at 15:35 by JH

Submitted: 12/10/99 Reported: 12/23/99

Discard: 01/23/00

MW-2 Water Sample LOC# 99-105 WBS# 56 Mobil: 6301 San Pablo Avenue Oakland, CA

Account No: 09728

Mobil Business Resources Corp.

2063 Main Street

Suite 501

Oakley CA 94561

P.O. 4500100232-0509

Rel. 00010

AS RECEIVED

CAT		W INTEL	REPORTING		
NO.	ANALYSIS NAME	RESULTS	LIMIT	UNITS	
8209	BTEX, MTBE (8020)				
0776 0777 0778 0779 0780	Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether	1.2 0.43 N.D. N.D. N.D.	0.30 0.30 0.30 0.60 10.	ug/1 ug/1 ug/1 ug/1 ug/1	######################################
8268	8015 Mod. for Gasoline		·		=.=.#.=.=.E.#.F.=.=.F.=.=.#.
5554	TPH-GRO (CA LUFT)	N.D.	50.	ug/l	
⊭,#.₩.₩.	. 2. 2. p. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2. 2.	QUALITY	CONTROL REPO	RT	

		40.122.1		••							
SAMPLE SAMPLE RPT LIM UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS Dup	LCS RPD	LCS I	LIMITS HIGH	
8209 BTEX, MTBE (8020)	Batch: 99347A16										
0776 Benzene 0.30 ug/1	N.D.		106	104	1	95	96	1	79	119	
0777 Toluene 0.30 ug/l	N.D.		105	105	1	95	96	1	81	124	
0778 Ethylbenzene 0.30 ug/l	N.D.		107	106	1	95	96	1	80	118	
0779 Total Xylenes 0.60 ug/l	N.D.		109	108	1	97	98	1	81	118	
0780 Methyl tert-Butyl Ether 10. ug/l	N.D.		100	102	1	95	95	0	77	123	
8268 8015 Mod. for Gasoline	Batch: 99347A16										
5554 TPH-GRO (CA LUFT) 50. ug/l	N.D.		106	106	0	90	94	5	75	121	_

#-Laboratory Method Detection Limit exceeded target detection limit N.D.=Not detected at or above the Reporting Limit

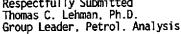
1 COPY TO TRC/Alton Geoscience

ATTN: Tom Seeliger

Questions? Contact your Client Services Representative Jedidiah E. Turzi at (717) 656-2300 04:36:54 0 0001 2 134751 695052

0.00 00004500 ASR000

Kale Whoder for Respectfully Submitted







LLI Sample No. WW 3288736 Collected: 12/08/99 at 15:35 by JH

Submitted: 12/10/99 Reported: 12/23/99

Discard: 01/23/00

MW-2 Water Sample

LOC# 99-105 WBS# 56 Mobil: 6301 San Pablo Avenue Oakland, CA

SAMPLE SAMPLE RPT LIM UNITS

BLANK

Suite 501 Oakley CA 94561

Mobil Business Resources Corp.

ANALYSIS

SURROGATE LIMITS

Rel. 00010

P.O. 4500100232-0509

LOW

LCS LIMITS HIGH

RPD SURROGATE SUMMARY

LABORATORY CHRONICLE

DUP

Account No: 09728

2063 Main Street

TRIAL ID

SURROGATE TFT-P

RECOVERY # 94

MSD

LOW 69 58 HIGH 132 142

8268 8015 Mod. for Gasoline

TFT-F

85

=-=-=

ANALYST

CAT

8268

NO ANALYSIS NAME 8209

8209 BTEX, MTBE (8020)

BTEX, MTBE (8020) 8015 Mod. for Gasoline

METHOD SW-846 8020A CA LUFT Gasoline Method

DATE AND TIME 12/14/99 0525 TRIAL ID Darvin L. Martin 12/14/99 0525 Darvin L. Martin

State of California Lab Certification No. 2116

#-Laboratory Method Detection Limit exceeded target detection limit N.D.=Not detected at or above the Reporting Limit

Questions? Contact your Client Services Representative Jedidiah E. Turzi at (717) 656-2300

Respectfully Submitted Thomas C. Lehman, Ph.D. Group Leader, Petrol. Analysis

Kale whole for

MEMBER

Lancaster Laboratories 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425

Lancaster Laboratories is a subsidiary of Thermo TerraTech Inc., a Thermo Electron Company. 717-656-2300 Fax: 717-656-2681 Sée reverse side for explanation of symbols and abbreviations.



LLI Sample No. WW 3288737 Collected: 12/08/99 at 15:45 by JH

Submitted: 12/10/99 Reported: 12/23/99

01/23/00 Discard:

MW-3 Water Sample LOC# 99-105 WBS# 56

Mobil: 6301 San Pablo Avenue Oakland, CA

Account No: 09728

Mobil Business Resources Corp.

2063 Main Street

Suite 501

Oakley CA 94561

P.O. 4500100232-0509

Rel. 00010

AS RECEIVED

REPORTING

LIMIT UNITS RESULTS

8209 BTEX, MTBE (8020)

ANALYSIS NAME

CAT

NO.

=-=-= ug/1 94. 0.30 0776 Benzene 0.30 ug/1 13. 0777 Toluene 0.30 ug/1 170. 0778 Ethylbenzene ug/1 0.60 0779 210.

Total Xylenes Methyl tert-Butyl Ether N.D. 10. ug/1 0780 Due to the nature of the sample matrix, the surrogate standard recovery is

above the range of specifications.

8015 Mod. for Gasoline 8268

4,800. 100. ug/1 5554 TPH-GRO (CA LUFT) Due to the nature of the sample matrix, the surrogate standard recovery is

above the range of specifications.

QUALITY CONTROL REPORT

SAMPLE SAMPLE RPT LIM UNITS	BLANK	DUP RPD	MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS L	LIMITS HIGH	
8209 BTEX, MTBE (8020)	Batch: 99347A16										
0776 Benzene 0.30 ug/1	N.D.		106	104	1	95	96	1	79	119	
0777 Toluene 0.30 ug/l	N.D.		105	105	1	95	96	1	81	124	
0778 Ethylbenzene 0,30 ug/l	N.D.		107	106	1	95	96	1	80	118	
0779 Total Xylenes 0.60 ug/l	N.D.		109	108	1	97	98	1	81	118	
0780 Methyl tert-Butyl Ether 10. ug/l	N.D.		100	102	1	95	95	0	77	123	
•											

8268 8015 Mod. for Gasoline

Batch: 99347A16

#-Laboratory Method Detection Limit exceeded target detection limit N.D.=Not detected at or above the Reporting Limit

1 COPY TO TRC/Alton Geoscience

ATTN: Tom Seeliger

Questions? Contact your Client Services Representative Jedidiah E. Turzi at (717) 656-2300 04:37:16 D 0001 2 134751 695052

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Kale Whoder for Respectfully Submitted Thomas C. Lehman, Ph.D. Group Leader, Petrol. Analysis



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MW-3 Water Sample LOC# 99-105 WBS# 56

Mobil: 6301 San Pablo Avenue Oakland, CA

SAMPLE RPT LIM SAMPLE UNITS

BLANK

DUP RPD

Account No: 09728

2063 Main Street

Oakley CA 94561

Suite 501

MS

Mobil Business Resources Corp.

MSD

Rel. 00010

P.O. 4500100232-0509

LCS LIMITS LOW HIGH

5554 TPH-GRO (CA LUFT)

100. ug/1 N.D.

106 106

90

SURROGATE LIMITS

1Ž1 75

SURROGATE SUMMARY

TRIAL ID

SURROGATE TFT-P TFT-F

RECOVERY * 161 149

LOW 69 58 HIGH 132 142

5

LABORATORY CHRONICLE

CAT NO

ANALYSIS NAME 8209 BTEX, MTBE (8020) 8268 8015 Mod. for Gasoline

8209 BTEX, MTBE (8020)

8268 8015 Mod. for Gasoline

METHOD

SW-846 8020A CA LUFT Gasoline Method **ANALYSIS**

TRIAL ID DATE AND TIME ANALYST
1 12/14/99 0553 Michael C. Wehn

12/14/99 2346 Darvin L. Martin

State of California Lab Certification No. 2116

#Laboratory Method Detection Limit exceeded target detection limit N.D.=Not detected at or above the Reporting Limit

Questions? Contact your Client Services Representative Jedidiah E. Turzi at (717) 656-2300

Respectfully Submitted Thomas C. Lehman, Ph.D.

Group Leader, Petrol, Analysis



Lancaster Laboratories 2425 New Holland Pike PO Box 12425 Lancaster, PA 17605-2425

Lancaster Laboratories
Where quality is a science.

, Fo	r Lancaster Labora	atories use only	
Acct. #: 9728	Sample #:	3288736	,37
		<u> </u>	

				Pleas	se p	rint.		•								30	R#: _				
						2015												Prese	vatív	ve Codes	
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EXHIBIT 6 MONITORING WELL SAMPLING FORMS

FLUID MEASUREMENT FIELD FORM

Project No.:	TRC Alton Personnel:	Jeff	Н
Station No.: 99-105	Date:	12/8/99	

Well Number	Screen Interval	1		Free Product Thickness (ft)			Dissolved O₂ (mg/L)	Commence	r
/h W-2		9.98				19.48	1.83	when are D.O. measure) falon?	loveou
MW-2 MW-3		10.63				20.08	1,12) fallen?	
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g:\general\forms\fluidfrm.xls

10/12/99

TRC Alton Geoscience, Northern California Operations

GROUND WATER SAMPLING FIELD NOTES

	Site: 99-105 Project	t No.: <u>41 - 01</u> 23-60	led By: Jeff H,	Date: 12/8/99 Hand bail Purge Method: electric 2
	ANIAN ALA AA lar = 7	Hand bail.	Manual AA M/ - 3	Hand ball
	Total Depth (feet) 17.48	Depth to Product (feet):		Depth to Product (feet):
	Depth to Water (feet): 7. 78	Product Recovered (gallons):	· · · · · · · · · · · · · · · · · · ·	Product Recovered (gallons):
	Water Column (feet): 9.95	Casing Diameter (Inches): 4	Water Column (feet): 9.45	Casing Diameter (Inches):
	80% Recharge Depth (feet):	1 Well Volume (gallons): 8.3		1 Well Volume (gallons): 6.33
	Time Time Depth Volume	Conduc-Temper-	Time Time Depth Volume	Conduc-Temper-
	Start Stop To Water Purged	livity ature pH	Start Stop To Water Purged	tivity ature pH
		(uS/cm) (F,C)		(uS/cm) (F, C)
13:18	13:00	0.42 83.2 7.35	14:33	0.95 57.8 6.26
•		0.38 60.5 7.14		2.33 56 9 6.22
	14:30	0.37 81.3 7.08	15:10	0. 88 57.5 6.47
•				
	12	Time Sampled 153 5	159	
	Total Purged	**************************************		Time Sampled 15:4-5
	Turbidity= Clandy H. hrow		Turbidity= Clear sheen	on susface, very strong
	Well No	Purge Method:_	Well No.	Purge Method:
	Total Depth (feet)	Depth to Product (feet):		Depth to Product (feet):
	Depth to Water (feet):	Product Recovered (gallons):	Depth to Water (feet):	Product Recovered (gallons):
	Water Column (feet):	Casing Diameter (Inches):	Water Column (feet):	Casing Diameter (Inches):
	80% Recharge Depth (feet):	1 Well Volume (gallons):	80% Recharge Depth (feet):	1 Well Volume (gallons):
•	Time Time Depth Volume	Conduc-Temper-	Time Time Depth Volume	Conduc-Temper-
	Start Stop To Water Purged	tivity ature pH	Start Stop To Water Purged	
	(feet) gallons	(uS/cm) (F,C)	(feet) gallons	(uS/cm) (F,C)
				· · · · · · · · · · · · · · · · · · ·
	Total Purged	Time Sampled	Total Purged	Time Sampled
	Comments: Turbidity=		Comments: Turbidity=	<u> </u>
, *				
•	Well No	Purge Method:	Well No	Purge Method: Depth to Product (feet):
	Total Depth (feet) Depth to Water (feet):	Depth to Product (feet): Product Recovered (gallons):		Product Recovered (gallons):
	Water Column (feet):	Casing Diameter (Inches):		Casing Diameter (Inches):
	" -	1 Well Volume (gallons):	80% Recharge Depth (feet):	1 Well Volume (gallons):
		Conduc Temper-		Conduc- Temper-
	Start Stop To Water Purged	n la ladocida de como una contra de califeria de la fracción de calife	Start Stop To Water Purged	disconnections of the comment of the
	**************************************	(uS/cm) (F,C)	C10000700000000000000000000000000000000	(uS/cm) (F,C)
	,			
•	Total Purged	Time Sampled	Total Purged	Time Sampled
	Comments:	• • • • • • • • • • • • • • • • • • • •	Comments:	
	Turbldity=		Turbidity=	

EXHIBIT 8 WASTE DISPOSAL MANIFEST

Monitoring Well Purge Water Transport Form

This must be for other estes in 21 adden to this one -!

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Name: Mobil Oil Corporation												
Add	ress:	3700 Wes	t 190th Stree	et, TPT-2								
	, State, Zip:	Torrance,	CA 90509-29									
Description of Water: Monitoring well purge water												
The	generator certifie	s that this we	ater	for Mobil Oil Jan A. Paak								
as described is non-hazardous.				for Mobil Oil		1/	1/4/00 (Date)					
							(Date)					
SI		લાં (ભારા										
	Date	Site	Amount	Sampler's		Date	Site	Amount	Sampler's			
ŀ	Generated	Number	Generated	Initials		Generated	Number	Generated	Initials			
- 1	12/7/99	64-EXA	230	7H	16							
2	12/8/99	99-105	40	714	17							
3	12/10/19	04-FGN	130	ゴ H	18			,				
4	-12/1191	04 394		SPA	19							
5	12/14/99	99-HLH	400	3H	20							
6	12/20/99	10-KSE	60	24/SP	21							
7	10/01/11	04 - NNH	90	JH 3H	22							
8	12/21///	- PWI			23							
9				1	24							
10		 		<u> </u>	25							
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City, State, Zip:		Fremont,	CA 94555			(800) 499-36	300) 499-3676					
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1,12	The state of the s	7										
Name: McKittrick Waste Treatment Site Address: 56533 Highway 58 West												
	dress:						Phone: (805) 762-7607					
City, State, Zip:		MCKITTHE	k, CA 93251					1000/102/				
Δn	proval No.:	199-057-PS										
Approvativo				(Typed or prin		(Date)						

1. Generator's US EPA ID No.		Page 1 of	3. Documen		01
4. Generator's Name and Mailing Address Mobil Oil LOTRICIALIEN 3700 WEST 190# STREET: TPT-2 TOTRANCE (A. 90509-2929 Generator's Phone (310) 212-1977			<i>‡ 199</i>	-057-1	
5. Transporter Company Name 6. US EPA ID Numb CLEAR UNTER ENVIRONMENTAL CAR DOUDD		Transporter (1740	
8. Designated Facility Name and Site Address ML KITHRIZK WASTE TREAMENT SHE 56533 Hivy, 38 West MC KITHRIZK, CA. 93251 CAD 98063		805)		-7607	
11. Waste Shipping Name and Description		12. Go No.	ntainers Type	13. Total Quantity	14. Unit Wt/Vol
*(Monitoring Well purge Water), Non Hazaricus Waste Liquid		00	177	950	G
· b.				<u> </u>	
15. Special Handling Instructions and Additional information	Н	landling Code 11a.	s for Wastes	Listed Above 11b.	- etser
		•			
	<u></u>	:			
WEAR PPE Emergeney Contact: (510) 998-8311 Athe: Ktok Hayward ERG#			iy 2	1301 # 2	1629
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