

# 1683

April 15, 1999

Ms. Susan Hugo

Alton Project No. 41-0123

Alameda County Health Services 1131 Harbor Bay Parkway Alameda, California 94502-6700

RÉ:

FORMER MOBIL STATION 99-105 6301 SAN PABLO AVENUE

OAKLAND, CALIFORNIA

Dear Ms. Hugo:

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

Quarterly Progress Report Summary Sheet

Exhibit 1: Sampling Schedule

Exhibit 2: Groundwater Levels and Chemical Analysis Table

Exhibit 3: Figures 1 through 3 (Vicinity Map, Groundwater Elevation Contour Map,

Dissolved-Phase Benzene Concentrations)

Exhibit 4: Benzene vs. Groundwater Elevation Graphs

Exhibit 5: Well Purging and Groundwater Sampling Protocol

Exhibit 6: Monitoring Well Sampling Forms
Exhibit 7: Analytical Laboratory Data Sheets

Exhibit 8: Waste Disposal Manifest

If you have any questions regarding this report, please call Cherine Foutch, Mobil Engineer, at (925) 625-1173, or Chris Dennis, Alton Geoscience Project Geologist, at (925) 606-9150, ext. 104.

Sincerely,

cc:

Tom Seeliger Project Geologist noradiris of influence from MW #3,

26# H.C. from May

Ms. Cherine Foutch, Mobil Business Resources Corporation

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

### ALTON GEOSCIENCE

Quarterly Progress Report Summary Sheet First Quarter 1999

### 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:	<u> </u>	Date Sampled:	27-Jan-99
Number of groundwater wells on-site:	4	Groundwater wells monitored:	4
Number of groundwater wells off-site:	0	Groundwater wells sampled:	3
·		Groundwater wells with free product:	1
Phase of Investigation: Vadose Zone:	N/A	Groundwater phase:	Monitor & Sample
SITE HYDROGEOLOGY:	*** · · · · · · · · · · · · · · · · · ·		
Approximate depth to ground water below ground surface:			6.38 ft
Approximate elevation of potentiometric surface above Mean S		<b>T</b>	26,11 ft 4.04 ft
Average Increase/Decrease in ground water elevations since las	t sampling episod	e: Increase: Southwest at:	
Approximate flow direction and hydraulic gradient:		Southwest at:	0.00 10
Wells containing free product:  Number of wells with concentrations below MCL:  Number of wells with concentrations at or above MCL:	1 2 1	Range in Thickness of Free Product: Volume of Free Product Recovered This Period: Volume of Free Product Recovered To Date: Range in Concentrations:	ND to 0.07 ft 0.15 gs 2.65 gs Benzene: ND<0.3 to 74 pp
Nature of contamination:	Gasoline	-	TPH-G: ND<50 to 3,100 pp
ADDITIONAL INFORMATION:  Monitoring Well MW-4 contained 0.07 feet of free product on 1/2 was removed and is currently stored onsite in a 55-gallon drum p	ending proper di	sposal.	ximately 0.15 gallon)  Alton Project No: 41-0123
	Sta	ff Scientist	

# EXHIBIT 1 SAMPLING SCHEDULE

### MONITORING WELL SAMPLING SCHEDULE 1999 Former Mobil Station 99-105

Well Number	First Quarter	Second Quarter	Third Quarter	Fourth Quarter
MW-1	X	X	X	X
MW-2	X	X	X	X
MW-3	X	X	X	X
MW-4	X	X	X	X

NOTES:

X

=

well scheduled for sampling

# EXHIBIT 2 GROUNDWATER LEVELS AND CHEMICAL ANALYSIS TABLE

### **Groundwater Levels and Chemical Analysis**

Former Mobil Station 99-105

	···	Top of Casing	Depth to	Groundwater	Product	r Office i	VIODII Statio	1100 100		Ethyl-	Total	MTBE	MTBE			Dissolved
		Elevation	Water	Elevation	Thickness	TPH-G	TPH-D	Benzene	Toluene	benzene	Xylenes	8020	8240 or 8260	TOG	Lead	
Well ID	Date	(feet)	(feet)	(feet)	(feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)		(mg/L)
- weil ID	Date	(leet)	(IEEL)	(icet)	(1661)	(bbp)	(PPD)	(bbp)	(PP-2)	\PP=/	(PF-/	(PP-7	(PP-7	(F F-7	<u> </u>	
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	ND	ND	ND	ND	ND	<del>-</del> .	_	_	1.25
MW-1	07/21/98	32.79	9.17	23.62	0.00	ND	_	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
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		_	_	<del></del>
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-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		_			_

### **Groundwater Levels and Chemical Analysis**

Former Mobil Station 99-105

	· · ·	Top of Casing	Depth to	Groundwater	Product	TOITIOT	VIODII Statio	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		Ethyl-	Total	MTBE	MTBE			Dissolved
		Elevation	Water	Elevation	Thickness	TPH-G	TPH-D	Benzene	Toluene	benzene	Xylenes	8020	8240 or 8260	TOG	Lead	Oxygen
Well ID	Date	(feet)	(feet)	(feet)	(feet)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(ppb)	(mg/L)
				1												
MVV-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	_	_		_
MVV-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	<del></del>	_		<del></del>
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	_	_	_	<del></del>
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
MW-3	01/27/99	32.80	9.11	23.69	0.00	3,100	_	74	4	94	39	13	_		_	1.20
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	_	_	_	_	_	_	-	_	_	_	<del></del>
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	_		_	<del>-</del>
MW-4	07/29/97	31.50	9.85	21.74	0.12					_		_	<del>_</del>	_		
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	_			_	_	_	_	_		_	<del></del>
MW-4	07/21/98 1	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						-	_	_			
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	_			
								244	400	4 500	0.000	000				
AB-3	03/05/98					6,800	_	680	100	1,500	2,300	230	_	_		_
						0.500		240	ND	260	720	ND				_
AB-4	03/05/98		_	<del>-</del>	<del>-</del>	8,500	_	240	ND	200	720	ND	_	_	_	
45.5	55.05.05					12,000		350	ND	310	100	ND	_	_		
AB-6	03/05/98	_	_	_	_	12,000	_	330	ND	310	100	140		•		
AD 0	03/05/98	_	_	_	_	1,000		57	12	44	93	ND		_		_
AB-9	บงเบอเสอ	_	_	_	<del></del>	1,000		₹.		• •						

### **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)		
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	_	_	<del></del>	_	210	_	11	8.0	10	15	ND			_	_

NOTES:

ppb = parts per billion

mg/L = miltigrams 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

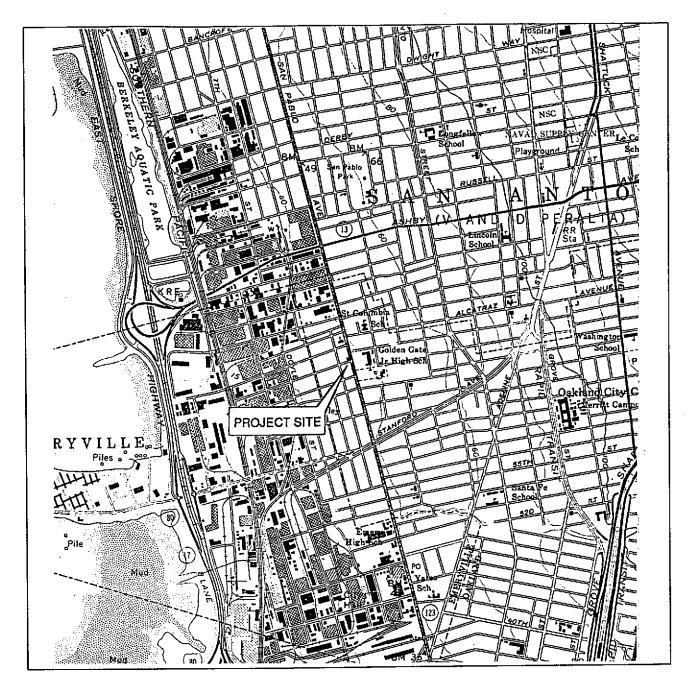
\*\* = diesel and unidentified hydrocarbons <C15>C25

\*\*\* = diesel and unidentified hydrocarbons <C20

\*\*\*\* = unidentified hydrocarbons >C18

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

† = well sampled using no-purge method



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

SCALE 1: 24,000

Ň

#### SOURCE:

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



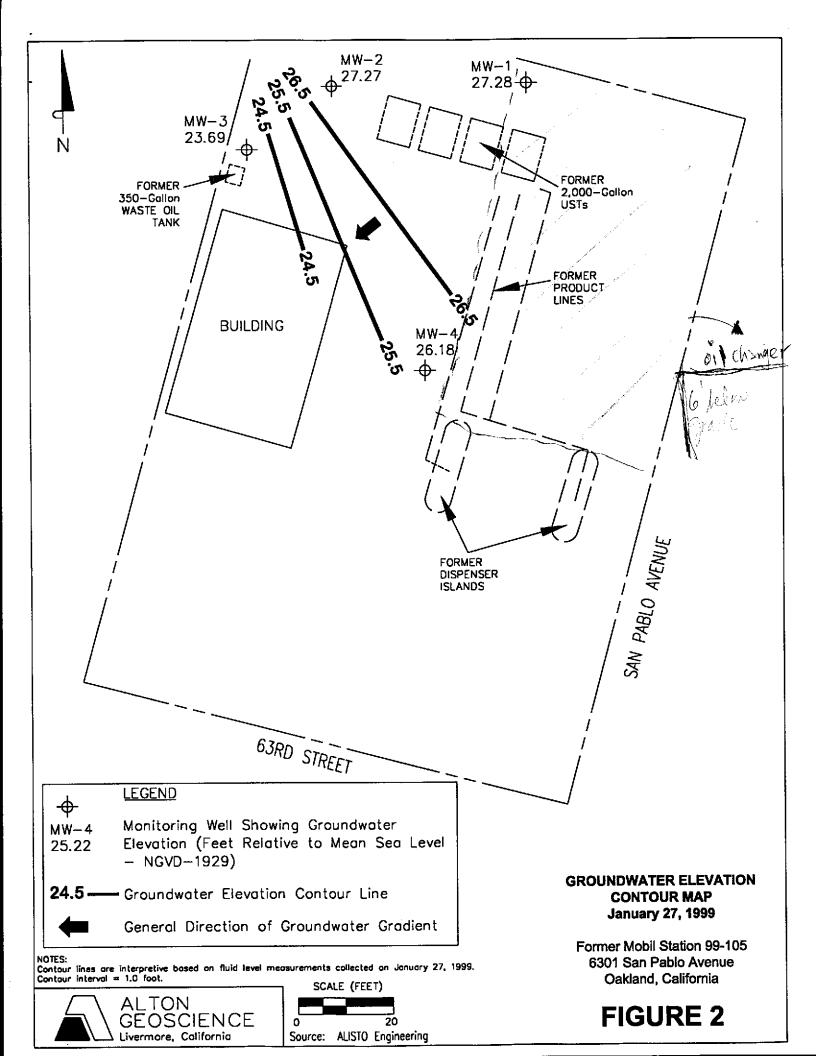


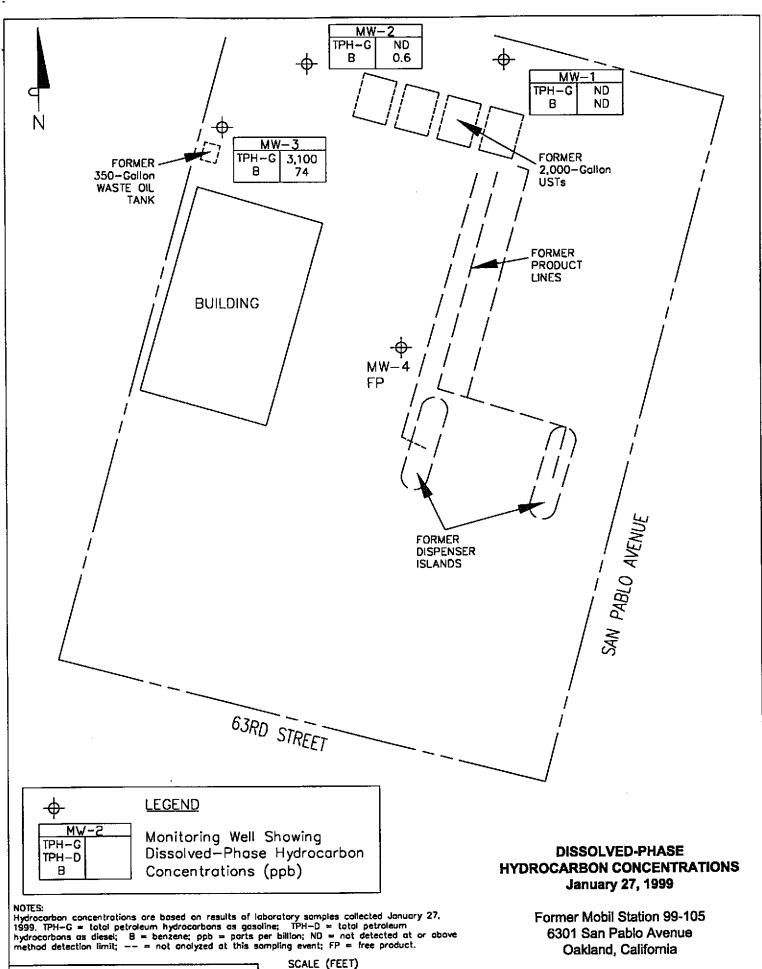
### **VICINITY MAP**

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

### FIGURE 1

p: \projects\cad-draw\99-105\99105vic.dwg





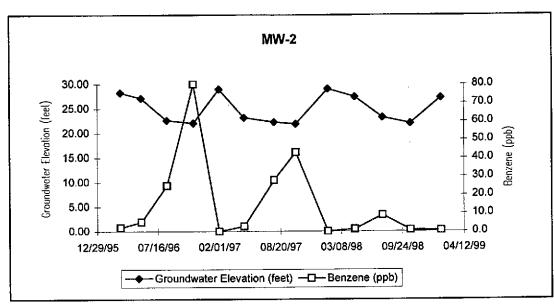
ALTON GEOSCIENCE

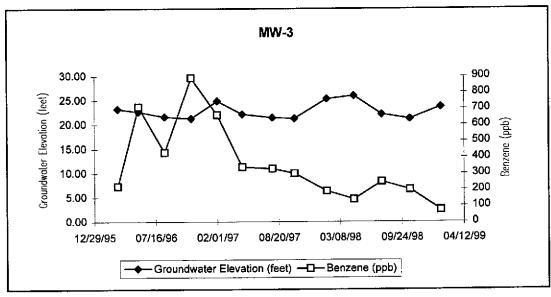
Source: ALISTO Engineering

FIGURE 3

# EXHIBIT 4 BENZENE VS. GROUNDWATER ELEVATION GRAPHS

### Benzene vs. Groundwater Elevation Graphs





# 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.
- 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 <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 6 MONITORING WELL SAMPLING FORMS

## FLUID MEASUREMENT FIELD FORM

Project No.: 99-0123-60 Alton Personnel: Fevin Dalay

Station No.: 99-105

Date: 1/27/99

Well	Screen	Depth to	Depth to	Free Product	Free Product	1	DO-mg/L
Number	Interval	Water	Product	Thickness (ft)	Recovery	Depth	Comments
Mw-1		5,51					5.25
MW-1 MW-2 MW-3 MW-4	***	5.53				1	.99
MW-3		9.11				20.04	1.20 No DO taken
mw-4		5.37	5.30	.07			
						ļ	
						_	
		· · · · · · · · · · · · · · · · · · ·					·
						-	
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					<u> </u>		
	1		1				

## Alton Geoscience, Northern California Operations

GROUND WATER SA	MPLING FIELD NO	TES 1/72/a
Site: 99-105 Project No.: 41-0123-60 Sampl	ed By: FD	Date: Dia
Well No. MW-1  Total Depth (feet) 19.84  Depth to Product (feet):	Total Dapth (feet) 19.47	Purge Method: Dr 27
Depth to Water (feet): 5:51 Product Recovered (gallons):		Product Recovered (gallons): Casing Diameter (Inchas):
Water Column (feet): 14.33 Casing Diameter (Inches): W	112101 00101111 (	1 Well Volume (gallons): 9
80% Recharge Depth (feet): 8.32-1 Well Volume (gallons): 9.3	Time Time Dapth Volume	Conduc- Temper-
Start Stop To Water Purged tivity ature pH 29,9 (feet) (gallons) (uS/cm) (F,C)		tivity ature pH (us/cm) (F.C)
1:57 164 59.86.55	2:39	.69 62.17.49
2:08 :53 629 6.92		74 62.77,04
	Total Purged 28	Time Sempled 2/50
Total Purged 10 Time Sampled 2120	Comments: 39pm	
Comments: 3 (2 PM) Turbidity=	Turbidity =	
Well No. MW-3 Purge Method: Dia		Purge Method: DM
Total Depth (feet) 70.0 \ Depth to Product (feet):	Total Depth (feet)	Depth to Product (feet):
Depth to Water (feet): 17.11 Product Recovered (gallons):		Product Recovered (gallons):
Water Column (feet): 10-93 Casing Diameter (Inches):	Water Column (feet):	Casing Diameter (Inches):  1 Wall Volume (gallons):
80% Recharge Depth (feet): 11.29 1 Well Volume (gellons): 7.10	80% Recharge Depth (feet):	
Time Time Depth Volume Conduct Temper-	Time Time Depth Volume	Conduc- Temper- tivity sture pH
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)	(1861) Iganono	
3:00 317 59.7 6.97		
3.08 1.17 61.3 6.07		
Total Purged 22 Time Sampled 3:20	Total Purged Add Add Add Add Add Add Add Add Add A	Time Sampled 300
Comments: 39pm	Comments: Diled Product	from Mw-4
Turbidity=	Turbidity =	·
Well No. Purge Method:	Well No	Purge Method:
Total Depth (feet) Depth to Product (feet):	Total Depth (feet)	Depth to Product (feet):
Depth to Water (feet): Product Recovered (gallons):	Depth to Water (feet):	Product Recovered (gallons) Casing Diameter (inches):
Water Column (feet): Casing Diameter (Inches):	Water Column (feet):	1 Well Volume (gallons):
80% Recharge Depth (feet): 1 Well Volume (gellons):	7 10 10 10 10 10 10 10 10 10 10 10 10 10	
Time Time Depth Volume Conduc-Temper-Start Stop To Water Purged tivity ature pH	Start Stop To Water Purged	tivity sture pH
([est] (gellons) (uS/cm) (F,C)	(faet) (gallons)	(20,000)
Total Purged Time Sampled	Total Purged	Time Sampled
Comments:	Comments:	
Turbidity =	Turbidity =	

Turbidity ==

# EXHIBIT 7 ANALYTICAL LABORATORY DATA SHEETS

LLI Sample No. WW 3082841 Collected: 1/27/99 at 14:20 by KD

Submitted: 2/ 1/99 Reported: 2/ 6/99 Discard: 3/ 9/99

MW-1 Grab Water Sample

LOC# 99-105 PRCA# 980044 PHC# 1L MOBIL: 6301 San Pablo Ave., Oakland, CA

Account No: 09728

Mobil Business Resources Corp.

2063 Main Street

Suite 501

Oakley CA 94561

P.O. 99-105

Rel.

AS RECEIVED

CAT		AS RECE	REPORTING						
NO.	ANALYSIS NAME	RESULTS	LIMIT	UNITS					
8209	BTEX, MTBE (8020)	=.=.=. <b>=.</b> =. <b>=</b> .	g.=.=. <b>::</b> . <b>::</b> .=.=	.,e.=.=.=.#.	=.=.=.=.	<b></b>	=.=.=.	<b>=.=.</b> =.=.=	= - =
0776 0777 0778 0779 0780	Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether	N.D. N.D. N.D. N.D. N.D.	0.3 0.3 0.3 0.6 10.	ug/1 ug/1 ug/1 ug/1 ug/1		=.=. <b>=</b> .=.	≅.₽.≡.	p.=.=.=.	= -:
8268	8015 Mod. for Gasoline		=-=-= <del>-=-</del>			<b>#.#.=</b> .=.=.	z.z.=.	.=.=.=.=.	<b>2</b> - 1
5554	TPH-GRO (CA LUFT)	N.D.	50.	ug/1			g.=.#-	.=.=.=.=.=	= -:
=.=.=.=	-=	QUALITY	CONTROL REPO	RT					
						1.50		LCC LIMITC	

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: 99033A56									
0776 Benzene			104	105	n	101			81	124

0203 BIEN, MIDE (0020)	Daten. Josepho						
0776 Benzene 0,3 ug/1	N.D.	104	105	0	101	81	124
0.3 ug/1 0777 Toluene 0.3 ug/1	N.D.	103	101	2	98	84	119
0778 Ethylbenzene 0.3 ug/l	N.D.	106	105	2	100	82	118
0779 Total Xylenes 0.6 ug/l	N.D.	108	107	1	104	81	120
0780 Methyl tert-Butyl Ether 10. ug/l	N.D.	91	92	1	100	79	125
8268 8015 Mod. for Gasoline	Batch: 99033A56						
5554 TPH-GRO (CA LUFT) 50. ug/1	Ń.D.	111	110	1	104	72	124

#=Laboratory Method Detection Limit exceeded State Regulatory Limit N.D.=Not detected at or above the Reporting Limit

1 COPY TO Alton Geoscience

ATTN: Kathleen Racke

Questions? Contact your Client Services Representative Jedidiah E. Turzi at (717) 656-2300 at (717) 656-2300 134750 650846 03:43:35 D 0001

0.00 00004500 ASR000

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



Lancaster Laboratories 2425 New Holland Pike PO Box 12425 Lancaster, PA 17505-2425 717-656-2300 Fax 717-636-2661

# Lancaster Laboratories A division of Thermo Analytical Inc.

LLI Sample No. WW 3082841 Collected: 1/27/99 at 14:20 by KD

Submitted: 2/1/99 Reported: 2/6/99

3/ 9/99 Discard:

MW-1 Grab Water Sample LOC# 99-105 PRCA# 980044 PHC# 1L

MOBIL: 6301 San Pablo Ave., Oakland, CA

RPT LIM

SAMPLE UNITS

BLANK

RPD

Suite 501

Account No: 09728

2063 Main Street

Oakley CA 94561

MS

Mobil Business Resources Corp.

LCS LCS LIMITS RPD LOW HIGH

SURROGATE SUMMARY

TRIAL ID

SURROGATE TFT

RECOVERY % 88 81

MSD

LOW

SURROGATE LIMITS

P.O. 99-105

Rel.

HIGH 125

61

133

LABORATORY CHRONICLE

CAT

ANALYSIS NAME NO 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 02/03/99 1851 Courtney M. Kutchi
1 02/03/99 1851 Courtney M. Kutchi

State of California Lab Certification No. 2116

#-Laboratory Method Detection Limit exceeded State Regulatory 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

Donald I Shely for



Lancaster Laboratories 2425 New Holland Pike PO Box 12425 Lancaster PA 17605-2425 717-656-2300 Fait 717-656-2681

# Lancaster Laboratories A division of Thermo Analytical Inc.

LLI Sample No. WW 3082842 Collected: 1/27/99 at 14:50 by KD

Submitted: 2/ 1/99 Reported: 2/ 6/99 Discard: 3/ 9/99

MW-2 Grab Water Sample

LOC# 99-105 PRCA# 980044 PHC# 1L MOBIL: 6301 San Pablo Ave., Oakland, CA

Account No: 09728

Mobil Business Resources Corp.

2063 Main Street Suite 501

Oakley CA 94561

P.O. 99-105

Rel.

AS RECEIVED

CAT					REPORT	ING								
CAT NO.	ANALYS1	is name		RESULTS	LIMI		UNITS							
8209	BTEX, N	TBE (8020)	=.=.=.=.=.	=. =. =. =. =. =. =. =.			=.=.=.#.=.	=.=. <b>=.</b> :	<b></b> .	z.=.=.	=.=.=.	<b>=.=</b> .=	.=.= <b>.</b> =.=	
0776 0777 0778 0779 0780	Benzene Toluene Ethylbe Total 1 Methyl	enzene		0.6 N.D. N.D. N.D. N.D.	0.3 0.3 0.3 0.6 10.	. <b>.</b>	ug/] ug/] ug/] ug/] ug/]	=.= <b>.</b> =. <b>2</b> .=		2,2.5.	=.=.#.	. <b>=.</b> =.	.=. #.=.	s . ±
8268	8015 M	od. for Gasoline	<b></b>					<b>5.=.</b> 5.≡.∓		=.=.=	=.=.=	<b></b> .=	.=.=.	a.=
5554	TPH-GR	O (CA LUFT)	#. <b>#.#.#.</b>	N.D.	50.		ug/1	=.=.=.=	. <b>.</b> =.=.=.			.=.=.	.=.=.=.	z.=
#.E.E.=.E	.=.0,=.=	<del></del>	=.=.=.=.	QUALIT	Y CONTROL	REPOR	RT							
	MPLE T LIM	SAMPLE UNITS	BLANK		DUP RPD	MS	MSD	MS RPD	LCS.	LCS DUP	LCS RPD	LCS	LIMITS HIGH	
8209 BTEX	, mtbe (	8020)	Batch: 99033A56										•	
0776 B		g/1	N.D.			104	105	0	101			81	124	

	•							
0776 Benzene 0.3 ug/l	N.D.	104	105	0	101	i	81	124
0777 Toluene 0.3 ug/l	N.D.	103	101	2	98		84	119
0778 Ethylbenzene 0.3 ug/l	N.D.	106	105	2	100		82	118
0779 Total Xylenes 0.6 ug/l	N.D.	108	107	1	104		81	120
0780 Methyl tert-Butyl Ether 10. ug/l	N.D.	91	92	1	100		79	125
8268 8015 Mod. for Gasoline	Batch: 99033A56							
5554 TPH-GRO (CA LUFT) 50. ug/l	N.D.	111	110	1	104		72	124

#-Laboratory Method Detection Limit exceeded State Regulatory Limit N.D.=Not detected at or above the Reporting Limit

1 COPY TO Alton Geoscience

ATTN: Kathleen Racke

Questions? Contact your Client Services Representative Jedidiah E. Turzi at (717) 656-2300 03:44:27 D 0001 3 134750 650846 0.00 00004500 ASR000

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

mel I Shely f.



Lançaster Laboratories 2425 New Holland Pike PO Box 12425 Lancaster, PA 17505-2425 717-656-2300 Fax 717-656-2681



LLI Sample No. WW 3082842 Collected: 1/27/99 at 14:50 by KD

Submitted: 2/ 1/99 Reported: 2/ 6/99 Discard: 3/ 9/99

Discard:

MW-2 Grab Water Sample LOC# 99-105 PRCA# 980044 PHC# 1L

MOBIL: 6301 San Pablo Ave., Oakland, CA

SAMPLE RPT LIM

UNITS

BLANK

Suite 501

Account No: 09728

2063 Main Street

Oakley CA 94561

Mobil Business Resources Corp.

MSD

RPD

SURROGATE LIMITS

P.O. 99-105 Rel.

> LCS LIMITS LOW HIGH

SURROGATE SUMMARY

TRIAL ID

SURROGATE TFT

RECOVERY \*

88 84

LOW 77 61 HIGH 125 133

LABORATORY CHRONICLE

CAT

NO ANALYSIS NAME 8209 BTEX, MTBE (8020)

8209 BTEX, MTBE (8020)

8268 8015 Mod. for Gasoline

METHOD

SW-846 8020A CA LUFT Gasoline Method 1

**ANALYSIS** TRIAL ID DATE AND TIME

analyst 02/03/99 1925 Courtney M. Kutchi 02/03/99 1925 Courtney M. Kutchi

8268 8015 Mod. for Gasoline

State of California Lab Certification No. 2116

#-Laboratory Method Detection Limit exceeded State Regulatory Limit N.D.=Not detected at or above the Reporting Limit

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

Tonseld I Study of

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



Lancaster Laporatories 2425 New Holland Fixe PQ Box 12429 Lancaster, 94-17505-2425 717-656-2510 Fax: 717-656-2631

# Lancaster Laboratories A division of Thermo Analytical Inc.

LLI Sample No. WW 3082843 Collected: 1/27/99 at 15:20 by KD

Submitted: 2/ 1/99 Reported: 2/ 6/99 Discard: 3/ 9/99

MW-3 Grab Water Sample

LOC# 99-105 PRCA# 980044 PHC# 1L

MOBIL: 6301 San Pablo Ave., Oakland, CA

Account No: 09728

Mobil Business Resources Corp.

2063 Main Street

Suite 501

Oakley CA 94561

P.O. 99-105

Rel.

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AS RECEIVED

CAT			REPORTING		
CAT NO.	ANALYSIS NAME	RESULTS	LIMIT	UNITS	
8209	BTEX, MTBE (8020)		.e.e.e.e.e.e.e.	.=.=.=.=.=.#.=.#.=.#.=.=.=.=.	=-=-=
0776 0777 0778 0779 0780	Benzene Toluene Ethylbenzene Total Xylenes Methyl tert-Butyl Ether	74. 4. 94. 39. 13.	1. 1. 1. 3. 10.	ug/l ug/l ug/l ug/l ug/l ====================================	2.2.2
0260	2015 Med for Cacalina				

8268 8015 Mod. for Gasoline

ug/l 3,100. 100. 5554 TPH-GRO (CA LUFT) 

OHAL TTY	CONTROL	REPORT

		QUITEET COMMISSE							
SAMPLE SAMPLE RPT LIM UNITS	BLANK	DUP RPD MS	MSD	MS RPD	LCS	LCS DUP	LCS RPD	LCS I	IMITS HIGH
8209 BTEX, MTBE (8020)	Batch: 99033A56								
0776 Benzene 1. ug/l	N.D.	104	105	0	101			81	124
0777 Toluene 1. ug/l	N.D.	103	101	2	98			84	119
0778 Ethylbenzene 1. ug/l	N.D.	106	105	2	100			82	118
0779 Total Xylenes 3. ug/l	N.D.	108	107	1	104			81	120
0780 Methyl tert-Butyl Ether 10. ug/l	N.D.	91	92	1	100	-		79	125
8268 8015 Mod. for Gasoline	Batch: 99033A56								
5554 TPH-GRO (CA LUFT) 100. ug/l	N.D.	111	110	1	104			72	124

#-Laboratory Method Detection Limit exceeded State Regulatory Limit N.D.=Not detected at or above the Reporting Limit

1 COPY TO Alton Geoscience

ATTN: Kathleen Racke

Questions? Contact your Client Services Representative Jedidiah E. Turzi at (717) 656-2300 03:45:15 D 0001 3 134750 650846

0.00 00004500 ASR000

Toneld I Shelp f.

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



Lancaster Laboratories 2425 New Holland Pike PO 304 12425 Lancaster, PA 17605-2425 mi7-656-2300 Fax 717-656-2631

# Lancaster Laboratories A division of Thermo Analytical Inc.

LLI Sample No. WW 3082843 Collected: 1/27/99 at 15:20 by KD

Submitted: 2/1/99 Reported: 2/6/99

3/ 9/99 Discard:

MW-3 Grab Water Sample LOC# 99-105 PRCA# 980044 PHC# 1L MOBIL: 6301 San Pablo Ave., Oakland, CA

SAMPLE RPT LIM SAMPLE UNITS

BLANK

Suite 501

Account No: 09728

2063 Main Street

Oakley CA 94561

Mobil Business Resources Corp.

MSD

RPD

LCS LCS

SURROGATE LIMITS

P.O. 99-105

Rel.

LCS LIMITS LOW

SURROGATE SUMMARY

TRIAL ID

SURROGATE

RECOVERY %

LOW

HIGH 125

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

TFT TFT

95

61

133

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CAT

NO ANALYSIS NAME

8209 BTEX, MTBE (8020) 8268 8015 Mod. for Gasoline METHOD SW-846 8020A

CA LUFT Gasoline Method

1

ANALYSIS TRIAL ID DATE AND TIME

ANALYST 02/04/99 0110 Courtney M. Kutchi 02/04/99 0110 Courtney M. Kutchi

State of California Lab Certification No. 2116

#-Laboratory Method Detection Limit exceeded State Regulatory 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

Tonsed I Shely f.



Lancaster Laboratories 2425 New Holland Pike PO 85x 12425 Lancaster, PA 17605-2425 717-656-2300 Fax: 717-656-2681

## Woollwesenkegion/Andlysis Reques/Grein'o'. Qusiosy



	For Lancaster	Laboratorio	es use only	y
Acct.#:_	9728	Sample #:	30820	841-43

	Plea	se print.			•	SCR#:
Mobil Consultant/Office: ALTON GROSCIENCE	Matrix	Analyses Re	quested	List total nu box under e	mber of containers in the	
Consultant Pri. Mgr: KATY PACKE Pri. #: 41-0173-60		MTBEFF				
Consultant Phone # (975) 000 9150 Fax #: 925 \ 100 9260	2   188	+ MTBE		-   .		The state of the s
Location Code #:	Potable NPDES	+				
PRCA/AFE/Release #: 980041 Phase Code: 1L	* \$\\\\\	8021口 GRO位 Dx口	7421			in properties and the foregreen and
Site Address: 6301 SHN Pado Ave, Oakland State: Cot		्राळा । ।	12.			
Sampler: Levin Dolan		S MOI	1월   다			
Mobil Engineer Cherive Fourton	posite er	8 8 F	Title 22 Metals Lead 7420□			
Sample Identification Collected Collected	S Sell S	BTEX 81 TPH 801	Title. Lead			Remarks
99-105 MW-1 1/27 12/20 X	1 1/	1/1/		- 1		30
MW-2 2:50						
MW-3 V 3.70 V		7/4				+
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1 Tempora tuve balle						
Turnaround Time Requested (TAT) (please circle): Relinquished  MOBIL STD. TAT 72 hour 48 hour		an,	Pate 1/29	Time つろのが	Received by:	Date Time
24 hour other day Relinquished Surgaco	FEDLX W	Custaly Stals	Date	Time	Received by:	Date Time
Data Package Options (please drcle if requested) SDG Complete?  QC Summary GLP Yes No Relinquished	by:		Date	Time	Received by:	Date Time
1 TABLE IN THE DESCRIPTION 1 AND ALTON INVITATE DECEMBER 1	ed by Commercial Carrier.  FedEx Other				Received by:	Date Time
1 2	nperature Upon I	rature Upon Receipt 30_0C			Custody Seals In	

**Monitoring Well Purge Water Transport Form** 

	141011	1001111	g Wen							
<b>***********</b>	rerator li					Profile #1	1297-13	35-PS		
Name	∍:	Mobil Oil (	Corporation					<del></del>		
Addre		3700 West 190th Street, TPT-2								
City,	State, Zip:	Torrance,	Phone:	: (310) 212-1877						
	ription of Wa	ater:	Monitoring w	ell purge wat	er			<del></del>		
The ge	nerator certifies	that this wat	er	George Mor			1-0	(A, B, C)	1 co o o o	
as des	cribed is non-hi	zardous.		for Mobil Oil	2	Jeers You	Day 101	14/c/2	-79-99	
						- O ,	<u> </u>		(Date)	
Site	e Informa	ation							[Samplero]	
T	Date	Site	Amount	Sampler's		Date	Site	Amount	Sampler's	
- 10	Generated	Number	Generated	Initials	l L	Generated	Number	Generated	<u>Initials</u>	
T-41	1-12-99	99-319	115	5L	16					
	-26-99	991188	95	GM/KD	17					
آادرب		99.272	180	KD	18					
- ^L	1-27-99		75	KD	19					
-5	1-79-49	04-354	250	GM/kD	20					
6	L. L. F. C.	0.1.314	000	9. 7.50	21				1	
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***********					***					
Tra	insporte	rintorr	nation							
Nam			er Environme	ental Manage	mer	nt				
	ress:	P.O. Box								
	State, Zip:						Phone:	(800) 499-30	676	
City,	, State, Zip.	T Telliont,	OA 34330	<del></del>		·	-		<del></del> -	
	L ID No.									
Truc	k ID No.:		-	(Typed or print	ad fu	II name & signatu	re)		(Date)	
				(Typed of pilin	eu iu		_,			
62	ceiving .									
A	********	asility								
	Name: McKittrick Waste Treatment Site									
	ress:	56533 Highway 58 West Phone: (805) 762-7607								
City	, State, Zip:	: McKittrick, CA 93251 Phone: (805) 762-7607								
ααA	roval No.:	1297-133	35-PS						(D-4s)	
				(Typed or prin	ted fu	il name & signatu	re)		(Date)	

GOLDENROD -GENERATOR'S COPY

¥	) · ·								
	NON-HAZARDOUS WASTE MANIFEST	1. Generator's US EPA ID	No.	2. Page 1 of	3. Docume	ent Number V2 462	251		
<b></b>	4. Generator's Name and Mailing Address  Hobi) Oil Corporat  3700 hest 190th St  Torrence CA 90509-8  Generator's Phone (310) 212-18		199-057-PS						
	5. Transporter Company Name  CLEARWATER ENVIRONMENTAL	6.		7. Transporter Phone (510) 797-8511					
		Anak west	US EPA ID Number  Tractment 5,70	10 Eacility's	· · · · · · · · · · · · · · · · · · ·	<u></u>			
G	8. Designated Facility Name and Site Address  1 CKI ALVISO INDEPENDENT OIL 5653 5002 ARCHER STREET ALVISO, CA 95002	3 Hay 58 h	est ead98063683 caloudio1743	/ (	දිල්) 7 <del>510) 797 8</del>	92-7366 1511	,		
ENER	11. Waste Shipping Name and Description				Containers lo. Type	13. Total Quantity	14. Unit Wt/Vol		
A T O R	a. Non-Hazardous waste, liquid			0	01 TT	715	G		
Î	b.								
	15. Special Handling Instructions and Additional In Wear PPE	nformation		_	odes for Waste	es Listed Above	ı. <u></u>		
	Emergency Contact (510) 797-8511 Attn: Kirk Hayward								
	16. GENERATOR'S CERTIFICATION: I certify the Printed/Typed Name	materials described above on the	his manifest are not subject to state or Signature	federal regulations t	for reporting pro	oper disposal of Haz	ardous Waste.		
T A			Matthat			Month Î	Day Year 21 97		
THANSHOFFEE	17. Transporter Acknowledgement of Receipt of M Printed/Typed Name  Chas Ricken	Aaterials	Signature Chins In	ld_		Month	Day Year 29 99		
\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$	18. Discrepancy Indication Space	ceipt of waste materials cove	ered by this manifest except as not		12.5				
	Image Do f	) VP c	May	Donk	he	Magth	12 60		

YELLOW —TSDE (Retain Copy) PINK —TRANSPORTER COPY