

DOULOS ENVIRONMENTAL, INC.  
1537 PINE VALLEY CIRCLE  
ROSEVILLE, CA 95661  
(916) 782-9054

- Any AMR/SAM since 1/00? Sampling  
should have occurred in/around 5/01  
- when will off site MWs be installed

November 28, 2000

OCT 01 2001

Mr. Joe Aldridge  
Ultramar, Inc.  
525 West Third Street  
Hanford, CA 93230

Subject: **Third Quarter 2000 Ground Water Monitoring Report  
Beacon Station #604**  
1619 First Street Livermore, California

Dear Mr. Aldridge:

Doulos Environmental, Inc. (Doulos) has prepared this report documenting the results of quarterly ground water monitoring conducted on November 10, 2000, at the subject site (Figure 1). The monitoring, conducted by Doulos, included measurements of depth to ground water, subjective analysis for the presence or absence of free product, ground water purging and collection of ground water samples. All field activities were conducted in accordance with the Ultramar Field Procedures described in Attachment A.

### GROUND WATER ELEVATIONS

Prior to purging, Doulos collected depth to groundwater measurements. Copies of field data sheets are contained in Attachment B. Ground water level data collected since June 1993 are summarized in Table 1. On the basis of the current measurements, groundwater flows toward the northwest (Figure 2) at a gradient of 0.02 foot per foot. Groundwater levels have decreased an average of 2.55 feet compared to the last monitoring event.

### GROUNDWATER SAMPLING ANALYSES

Groundwater samples were collected from five monitoring wells. All samples were analyzed for concentrations of:

- TPH, as gasoline, by modified EPA Method 8260B.
- BTEX by EPA Method 8260B.
- MTBE by EPA Method 8260B.

TPHg and BTEX analytical results collected since June 1993 are summarized in Table 2. Figure 3 illustrates the inferred distribution of benzene in groundwater based on the current data. The laboratory report and chain-of-custody form for the current sampling event are contained in Attachment C. Benzene was not present at detectable concentrations in the groundwater sample collected from monitoring well MW-1. The concentration of benzene in groundwater samples ranged from 5100 ppb to 3.9 ppb in monitoring well MW-2 and MW-7 respectively.

The interpretations and/or conclusions that may be contained within this report represent our professional opinions. These opinions are based on currently available information. Other than this, no warranty is implied or intended. This report has been prepared solely for the use of Ultramar, Inc. Any reliance on this report by third parties will be at such parties' sole risk.

If you have any questions or comments, please contact us at (916) 782-9054.

Sincerely,

**DOULOS ENVIRONMENTAL, INC.**



Hal Hansen, R.G.  
Geologist

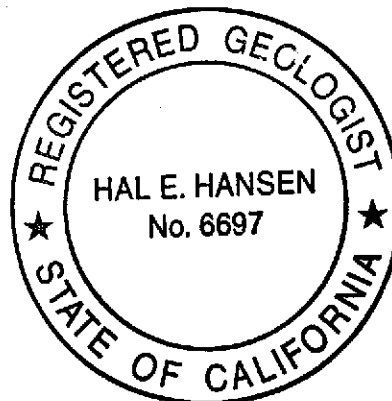
HEH/ph

Attachments

cc:

Mr. Cecil Fox  
California Regional Water Quality Control Board  
San Francisco Bay Region  
2101 Webster Street, Room 500  
Oakland, CA 94612

Ms. Eva Chu  
Department of Environmental Health  
Alameda County Health Care Services  
80 Swan Way, Room 20  
Oakland, CA 94612



**FIGURES:**

FIGURE 1 ..... SITE LOCATION MAP

FIGURE 2 ..... GROUNDWATER CONTOUR MAP  
NOVEMBER 10, 2000

FIGURE 3 ..... DISSOLVED BENZENE DISTRIBUTION MAP  
NOVEMBER 10, 2000

**TABLES**

TABLE 1 ..... GROUNDWATER ELEVATION DATA

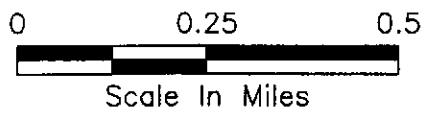
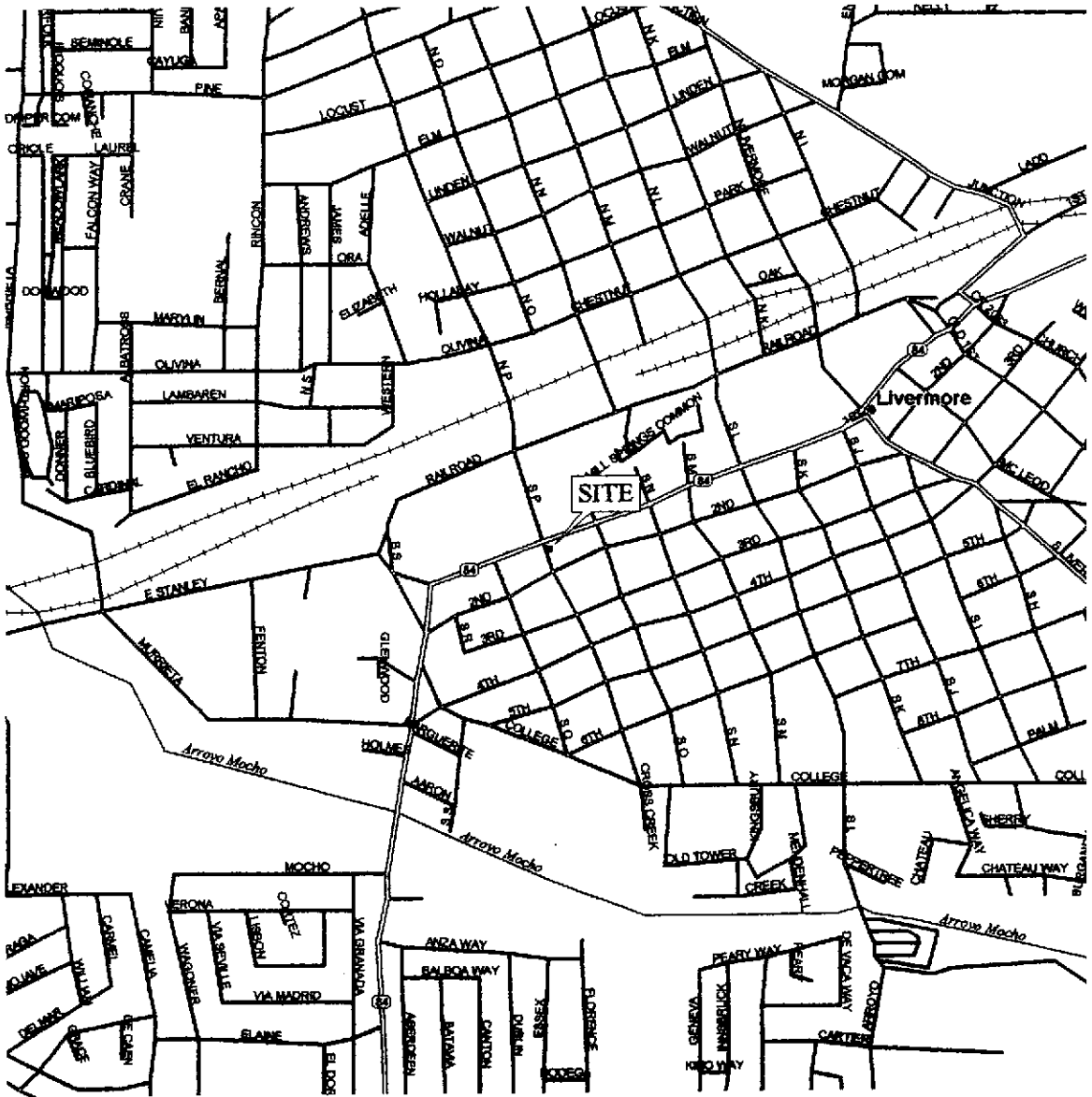
TABLE 2 ..... GROUNDWATER ANALYTICAL RESULTS

**ATTACHMENTS:**

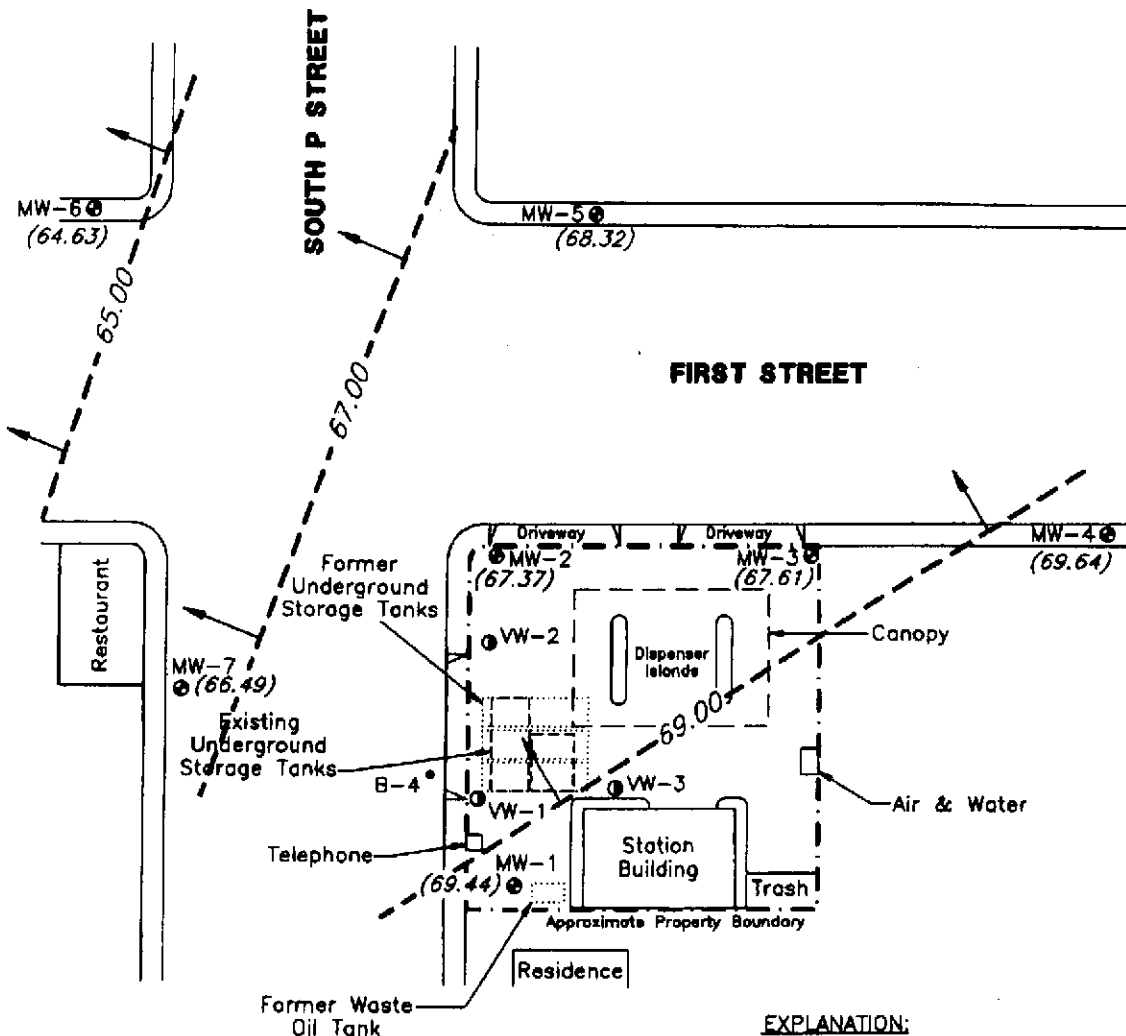
A ..... ULTRAMAR FIELD PROCEDURES

B ..... DOULOS ENVIRONMENTAL, INC.  
FIELD DATA SHEETS

C ..... LABORATORY REPORT AND  
CHAIN-OF-CUSTODY FORM

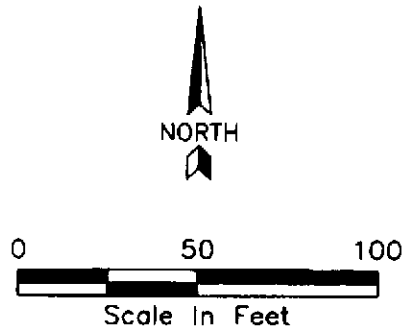


<b>FIGURE 1</b> <b>SITE VICINITY MAP</b> <b>BEACON STATION NO. 604</b> <b>1619 WEST FIRST STREET</b> <b>LIVERMORE, CALIFORNIA</b>		
PROJECT NO. 99-604-01	PREPARED BY: DA 02/00	<b>DOULOS</b> <b>ENVIRONMENTAL</b> <b>COMPANY</b>
DRAWING NO. FIG 1	REVIEWED BY:	



**EXPLANATION:**

- B-4 • Soil Boring Location
- MW-7 • Monitoring Well Location
- VW-3 • Vapor Extraction Well Location
- (69.64) Elevation Of Ground Water Measured In Feet; Datum Is Mean Sea Level
- - - 69.00 - - - Line Of Equal Elevation Of Ground Water Measured In Feet; Datum Is Mean Sea Level
- Inferred Direction Of Ground Water Flow



**FIGURE 2  
GROUND WATER CONTOUR MAP  
(NOVEMBER 10, 2000)  
BEACON STATION NO. 604  
1610 WEST FIRST STREET  
LIVERMORE, CALIFORNIA**

PROJECT NO. 99-604-01	PREPARED BY: DA 01/01	
DRAWING NO. FIG 2	REVIEWED BY:	

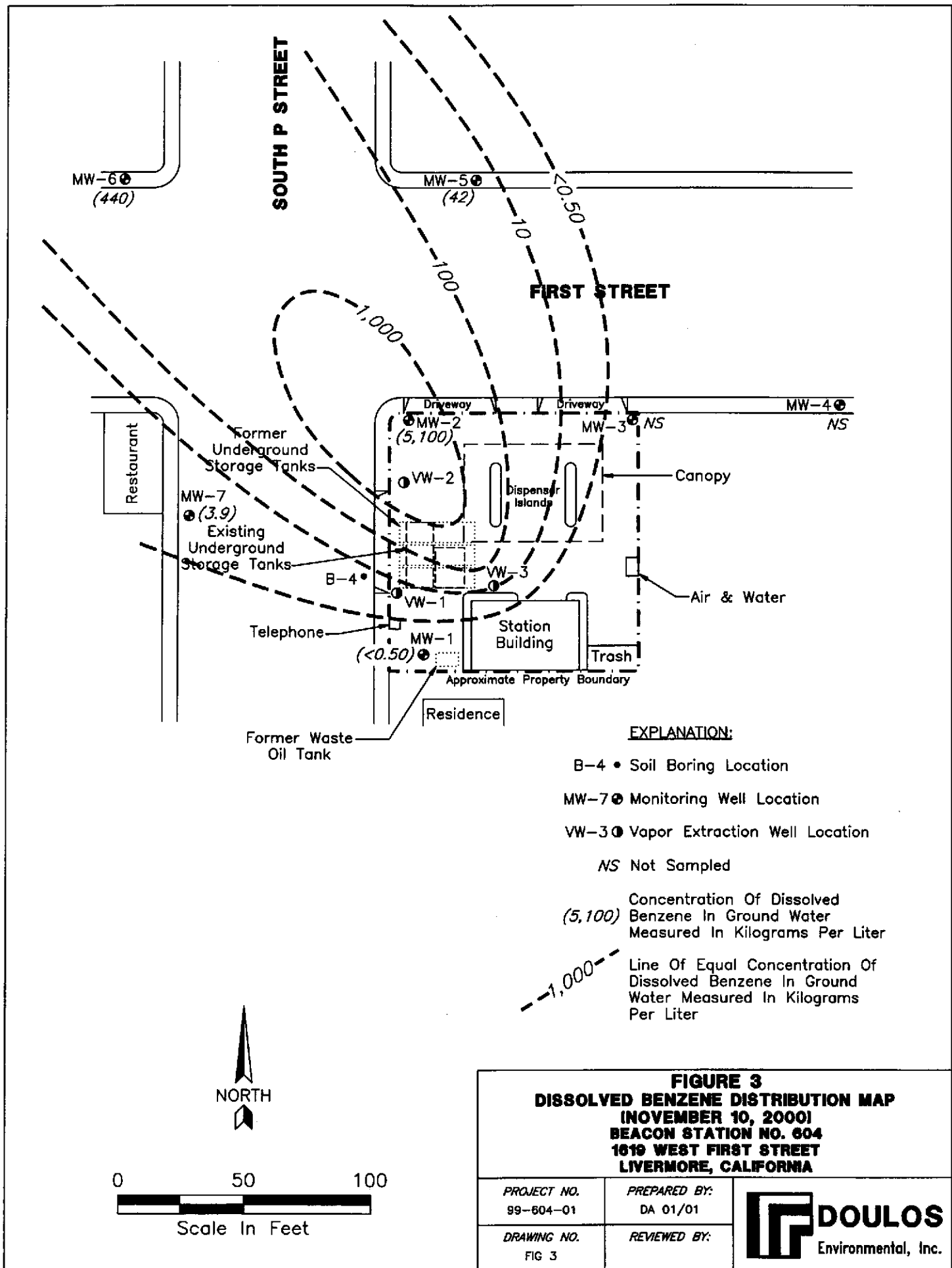


TABLE 1  
GROUNDWATER ELEVATION DATA  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing) <sup>1</sup>	Depth to Ground Water <sup>1</sup>	Groundwater Elevation <sup>2</sup>	Depth to Top/Bottom of Screened Interval (feet)	Comments
MW-1	06/01/93	100.00	37.50	62.50	34/54	
	06/22/93		38.46	61.54		
	10/06/93		42.22	57.78		
	01/13/94		34.52	65.48		
	03/30/94		31.93	68.07		
	04/25/94		33.49	66.51		
	08/12/94		41.03	58.97		
	12/14/94		38.63	61.37		
	02/10/95		30.80	69.20		
	06/15/95		25.46	74.54		
	09/26/95		31.05	68.95		
	12/15/95		28.11	71.89		
	03/21/96		17.67	82.33		
	06/13/96		22.86	77.14		
	09/16/96		30.04	69.96		
	12/02/96		26.74	73.26		
	03/07/97		20.84	79.16		
	06/12/97		28.71	71.29		
	09/29/97		33.91	66.09		
	12/01/97		34.88	65.12		
	03/19/98		19.83	80.17		
	05/29/98		21.57	78.43		
	09/15/98		31.68	68.32		
	11/30/98		36.80	63.20		
	01/17/99		30.02	69.98		
	06/10/99		29.30	70.70		
09/07/99	31.41	68.59				
12/13/99	32.95	67.05				
03/13/00	25.74	74.26				
06/12/00	28.24	71.76				
11/10/00	30.56	69.44				
MW-2	06/01/93	98.68	38.02	60.66	34/54	
	06/22/93		39.07	59.61		
	10/06/93		43.72	54.96		
	01/13/94		35.85	62.83		
	03/30/94		32.82	65.86		
	04/25/94		34.76	63.92		
	08/12/94		44.33	54.35		
	12/14/94		40.00	58.68		
	02/10/95		32.16	66.52		
	06/15/95		25.93	72.75		
	09/26/95		32.42	66.26		
	12/15/95		29.41	69.27		
	03/21/96		17.47	81.21		
	06/13/96		23.69	74.99		
	09/16/96		31.24	67.44		
	12/02/96		26.90	71.78		
03/07/97	21.33	77.35				

TABLE 1  
GROUNDWATER ELEVATION DATA  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing) <sup>1</sup>	Depth to Ground Water <sup>1</sup>	Groundwater Elevation <sup>2</sup>	Depth to Top/Bottom of Screened Interval (feet)	Comments
MW-2 (continued)	06/12/97		29.94	68.74		
	09/29/97		34.22	64.46		
	12/01/97		35.94	62.74		
	03/19/98		20.34	78.34		
	05/29/98		22.63	76.05		
	09/15/98		32.30	66.38		
	11/30/98		36.90	61.78		
	01/17/99		30.17	68.51		
	06/10/99		29.98	68.70		
	09/07/99		31.85	66.83		
	12/13/99		33.72	64.96		
	03/13/00		26.54	72.14		
	06/12/00		28.44	70.24		
11/10/00		31.31	67.37			
MW-3	06/01/93	97.08	36.18	60.90	33/53	
	06/22/93		37.11	59.97		
	10/06/93		41.15	55.93		
	01/13/94		33.95	63.13		
	03/30/94		30.97	66.11		
	04/25/94		32.46	64.62		
	08/12/94		41.72	55.36		
	12/14/94		37.62	59.46		
	02/10/95		29.96	67.12		
	06/15/95		23.66	73.42		
	09/26/95		29.62	67.46		
	12/15/95		27.10	69.98		
	03/21/96		15.85	81.23		
	06/13/96		21.31	75.77		
	09/16/96		28.62	68.46		
	12/02/96		25.55	71.53		
	03/07/97		19.77	77.31		
	06/12/97		27.67	69.41		
	09/29/97		29.60	67.48		
	12/01/97		33.37	63.71		
	03/19/98		18.76	78.32		
	05/29/98		20.64	76.44		
	09/15/98		30.70	66.38		
11/30/98		34.96	62.12			
01/17/99		28.81	68.27			
06/10/99		28.10	68.98			
09/07/99		30.38	66.60			
12/13/99		31.46	65.62			
03/13/00		24.28	72.80			
06/12/00		26.80	70.28			
11/10/00		29.47	67.61			
MW-4	03/30/94	99.35	31.56	67.79	27/47	
	04/25/94		32.73	66.62		
	08/12/94		41.61	57.74		



TABLE 1  
GROUNDWATER ELEVATION DATA  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing) <sup>1</sup>	Depth to Ground Water <sup>1</sup>	Groundwater Elevation <sup>2</sup>	Depth to Top/Bottom of Screened Interval (feet)	Comments
MW-4 (continued)	12/14/94		38.11	61.24		
	02/10/95		30.50	68.85		
	06/15/95		23.63	75.72		
	09/26/95		29.70	69.65		
	12/15/95		27.56	71.79		
	03/21/96		15.63	83.72		
	06/13/96		21.07	78.28		
	09/16/96		28.99	70.36		
	12/02/96		26.04	73.31		
	03/07/97		19.69	79.66		
	06/12/97		28.04	71.31		
	09/29/97		29.91	69.44		
	12/01/97		33.88	65.47		
	03/19/98		18.67	80.68		
	05/29/98		20.16	79.19		
	09/15/98		30.46	68.89		
	11/30/98		34.50	64.85		
	01/17/99		28.30	71.05		
	06/10/99		27.60	71.75		
	09/07/99		30.79	68.56		
12/13/99		31.60	67.75			
03/13/00		24.35	75.00			
06/12/00		26.91	72.44			
11/10/00		29.71	69.64			
MW-5	03/30/94	98.37	32.07	66.30	27/47	
	04/25/94		33.65	64.72		
	08/12/94		42.73	55.64		
	12/14/94		38.89	59.48		
	02/10/95		31.44	66.93		
	06/15/95		24.99	73.38		
	09/26/95		30.20	68.17		
	12/15/95		28.56	69.81		
	03/21/96		16.82	81.55		
	06/13/96		22.61	75.76		
	09/16/96		29.78	68.59		
	12/02/96		26.51	71.86		
	03/07/97		21.91	76.46		
	09/29/97		31.74	66.63		
	12/01/97		34.05	64.32		
	03/19/98		20.93	77.44		
	05/29/98		21.30	77.07		
	09/15/98		31.32	67.05		
	11/30/98		35.44	62.93		
	01/17/99		29.59	68.78		
06/10/99		28.05	70.32			
09/07/99		31.11	67.26			
12/13/99		32.66	65.71			
03/13/00		25.87	72.50			

TABLE 1  
GROUNDWATER ELEVATION DATA  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing) <sup>1</sup>	Depth to Ground Water <sup>1</sup>	Groundwater Elevation <sup>2</sup>	Depth to Top/Bottom of Screened Interval (feet)	Comments
MW-5 (continued)	06/12/00		28.15	70.22		
	11/10/00		30.05	68.32		
MW-6	03/30/94	97.62	33.38	64.24	28/48	
	04/25/94		35.49	62.13		
	08/12/94		45.14	52.48		
	12/14/94		40.99	56.63		
	02/10/95		33.34	64.28		
	06/15/95		26.88	70.74		
	09/26/95		33.55	64.07		
	12/15/95		30.32	67.30		
	03/21/96		18.89	78.73		
	06/13/96		24.62	73.00		
	09/16/96		32.64	64.98		
	12/02/96		27.42	70.20		
	03/07/97		22.13	75.49		
	06/12/97		31.02	66.60		
	09/29/97		35.77	61.85		
	12/01/97		37.14	60.48		
	03/19/98		21.10	76.52		
	05/29/98		23.26	74.36		
	09/15/98		33.50	64.12		
	11/30/98		38.73	58.89		
01/17/99	32.05	65.57				
06/10/99	31.44	66.18				
09/07/99	33.94	63.68				
12/13/99	35.84	61.78				
03/13/00	28.45	69.17				
06/12/00	30.52	67.10				
11/10/00	32.99	64.63				
MW-7	03/30/94	98.03	31.98	66.05	27/47	
	04/25/94	98.03	33.56	64.47	27/47	
	08/12/94		43.35	54.68		
	12/14/94		39.34	58.69		
	02/10/95		32.11	65.92		
	06/15/95		25.51	72.52		
	09/26/95		31.43	66.60		
	12/15/95		28.97	69.06		
	03/21/96		17.36	80.67		
	06/13/96		23.47	74.56		
	09/16/96		31.35	66.68		
	12/02/96		27.11	70.92		
	03/07/97		21.33	76.70		
	06/12/97		29.90	68.13		
	09/29/97		34.37	63.66		
	12/01/97		36.46	61.57		
	03/19/98		20.33	77.70		
05/29/98		22.30	75.73			
09/15/98		32.54	65.49			

TABLE 1  
GROUNDWATER ELEVATION DATA  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing) <sup>1</sup>	Depth to Ground Water <sup>1</sup>	Groundwater Elevation <sup>2</sup>	Depth to Top/Bottom of Screened Interval (feet)	Comments
MW-7 (continued)	11/30/98		37.96	60.07		
	01/17/99		31.04	66.99		
	06/10/99		29.89	68.14		
	09/07/99		32.38	65.65		
	12/13/99		33.98	64.05		
	03/13/00		27.09	70.94		
	06/12/00		28.76	69.27		
	11/10/00		31.54	66.49		
MW-A	01/17/99	NS	30.13	NS	NS	
	06/10/99		NM-A			
MW-B	01/17/99	NS	30.29	NS	NS	
	06/10/99		NM-A			
MW-C	01/17/99	NS	30.60	NS	NS	
	06/10/99		NM-A			
MW-D	01/17/99	NS	31.32	NS	NS	
	06/10/99		NM-A			
MW-E	01/17/99	NS	31.36	NS	NS	
	06/10/99		NM-A			
MW-W	01/17/99	NS	30.91	NS	NS	
	06/10/99		NM-A			

Notes: 1 = Measurement and reference elevation taken from notch/mark on top of well casing.  
2 = Elevation referenced to mean sea level.  
NS = Not surveyed.  
NM = Well not measured on this date.  
NM-A = Well not measured, abandoned after this date.

TABLE 2  
GROUNDWATER ANALYTICAL RESULTS  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(All results in micrograms per Liter)

Monitoring Well	Date Collected	TPH <sup>1</sup> as Gasoline	Aromatic Volatile Organics					
			MTBE <sup>2</sup>	Benzene	Toluene	Ethyl-benzene	Xylenes	
MW-1	06/01/93	27000		2200	400	<0.50	4900	
	06/22/93	87000		8000	10000	260	10000	
	10/06/93	40000		4700	6500	740	5300	
	01/13/94	9400		1300	9500	110	850	
	04/25/94	11000		1500	1800	290	1700	
	08/12/94	11000		550	330	260	1400	
	12/14/94	11000		1000	1200	320	1500	
	02/10/95	9300		1200	1500	280	1500	
	06/15/95	140		5.6	<0.50	<0.50	<0.50	
	09/26/95	410		140	<0.50	<0.50	43	
	12/15/95	740		250	<1.3	<1.3	87	
	03/21/96	<50		0.52	<0.50	<0.50	0.51	
	06/13/96	240 <sup>3</sup>		<0.50	<0.50	<0.50	<0.50	
	09/16/96	720		<5.0	70	<0.50	1.0	5.1
	12/02/96	<50		<5.0	<0.50	<0.50	<0.50	<0.50
	03/07/97	600		<5.0	6.7	<0.50	1.2	1.8
	06/12/97	18000		<5.0	180	800	410	1800
	09/29/97	350		<50	120	1.5	<0.50	12
	12/01/97	<50		<5.0	7.0	<0.50	<0.50	<0.50
	03/19/98	<50		<5.0	<0.50	<0.50	<0.50	<0.50
	05/29/98	<50		<5.0	<0.50	<0.50	<0.50	<0.50
	09/15/98	<50		<5.0	<0.50	<0.50	<0.50	<0.50
	11/30/98	<50		<5.0	<0.50	<0.50	<0.50	<0.50
	01/17/99	<50		<5.0	<0.50	<0.50	<0.50	<0.50
	06/10/99	<50		<5.0	<0.50	<0.50	<0.50	<0.50
09/07/99	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
12/13/99	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
03/13/00	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
06/12/00	<50		<5.0	<0.50	<0.50	<0.50	<0.50	
11/10/00	<50		<0.50	<0.50	<0.50	<0.50	<0.50	
MW-2	06/01/93	170000		20000	21000	3300	18000	
	06/22/93	160000		19000	22000	3500	18000	
	10/06/93	110000		17000	17000	3000	15000	
	01/13/94	93000		20000	19000	2300	14000	
	04/25/94	41000		9600	7300	840	7800	
	08/12/94	59000		11000	11000	2300	11000	
	12/14/94	63000		13000	13000	2200	12000	
	02/10/95	63000		12000	12000	2200	11000	
	06/15/95	61000		11000	12000	1900	11000	
	09/26/95	61000		9400	11000	2300	12000	
	12/15/95	48000		8000	8300	2200	12000	
	03/21/96	48000		8000	7700	2400	12000	
	06/13/96	33000		<250	7300	8800	1900	12000
	09/16/96	8600		<250	510	640	180	1300
	12/02/96	29000		<130	4400	4000	1300	6100
	03/07/97	13000		<250	1800	1100	270	2000
	06/12/97	68000		<500	7800	6600	2300	11000
	09/29/97	15000		<250	1500	97	740	1800
	12/01/97	13000		<250	900	37	860	2400
	03/19/98	42000		<250	5000	3600	2000	8300

TABLE 2  
GROUNDWATER ANALYTICAL RESULTS  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(All results in micrograms per Liter)

Monitoring Well	Date Collected	TPH <sup>1</sup> as Gasoline	Aromatic Volatile Organics				
			MTBE <sup>2</sup>	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-2 (continued)	05/29/98	68000	<250	5600	4700	2400	11000
	09/15/98	36000	<250	3900	1200	1400	7800
	11/30/98	16000	<250	2200	59	1200	1500
	01/17/99	30000	<250	4000	2200	2100	9500
	06/10/99	70000	<500	6300	1800	3600	14000
	09/07/99	42000	150	3800	840	1900	8000
	12/13/99	14000	34	1400	87	690	110
	03/13/00	38,000	2,400	2400	2300	1600	6400
	06/12/00	56,000	<50	4000	950	2300	7200
	11/10/00	35,000	230	5100	850	1500	3200
MW-3	06/01/93	270		4.6	<0.50	<0.50	1.9
	06/22/93	160		8.2	<0.50	<0.50	0.72
	10/06/93	740		57	110	24	120
	01/13/94	83		2.6	0.67	0.78	4.2
	04/25/94	60		0.75	3.2	0.50	3.6
	08/12/94	310		7.3	14	2.6	13
	12/14/94	75		<0.50	<0.50	<0.50	<0.50
	02/10/95	96		1.4	<0.50	<0.50	1.8
	06/15/95	<50		<0.50	<0.50	<0.50	<0.50
	09/26/95	<50		<0.50	<0.50	<0.50	<0.50
	12/15/95	<50		<0.50	<0.50	<0.50	<0.50
	03/21/96	NS		NS	NS	NS	NS
	06/13/96	NS	NS	NS	NS	NS	NS
	09/16/96	NS	NS	NS	NS	NS	NS
	12/02/96	NS	NS	NS	NS	NS	NS
	03/07/97	NS	NS	NS	NS	NS	NS
	06/12/97	NS	NS	NS	NS	NS	NS
	09/29/97	NS	NS	NS	NS	NS	NS
	12/01/97	NS	NS	NS	NS	NS	NS
	03/19/98	NS	NS	NS	NS	NS	NS
	05/29/98	NS	NS	NS	NS	NS	NS
09/15/98	NS	NS	NS	NS	NS	NS	
11/30/98	NS	NS	NS	NS	NS	NS	
01/17/99	NS	NS	NS	NS	NS	NS	
06/10/99	NS	NS	NS	NS	NS	NS	
09/07/99	NS	NS	NS	NS	NS	NS	
12/13/99	NS-A	NS-A	NS-A	NS-A	NS-A	NS-A	
MW-4	03/30/94	120		4.2	15	2.5	26
	04/25/94	65		<0.50	1.8	<0.50	2.1
	08/12/94	<50		<0.50	<0.50	<0.50	<0.50
	12/14/94	<50		<0.50	<0.50	<0.50	<0.50
	02/10/95	<50		<0.50	<0.50	<0.50	<0.50
	06/15/95	<50		<0.50	<0.50	<0.50	<0.50
	09/26/95	<50		<0.50	<0.50	<0.50	<0.50
	12/15/95	<50		<0.50	<0.50	<0.50	<0.50
	03/21/96	NS		NS	NS	NS	NS
	06/13/96	NS	NS	NS	NS	NS	NS
	09/16/96	NS	NS	NS	NS	NS	NS
	12/02/96	NS	NS	NS	NS	NS	NS
	03/07/97	NS	NS	NS	NS	NS	NS

TABLE 2  
GROUNDWATER ANALYTICAL RESULTS  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(All results in micrograms per Liter)

Monitoring Well	Date Collected	TPH <sup>1</sup> as Gasoline	Aromatic Volatile Organics				
			MTBE <sup>2</sup>	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-4 (continued)	06/12/97	NS	NS	NS	NS	NS	NS
	09/29/97	NS	NS	NS	NS	NS	NS
	12/01/97	NS	NS	NS	NS	NS	NS
	03/19/98	NS	NS	NS	NS	NS	NS
	05/29/98	NS	NS	NS	NS	NS	NS
	09/15/98	NS	NS	NS	NS	NS	NS
	11/30/98	NS	NS	NS	NS	NS	NS
	01/17/99	NS	NS	NS	NS	NS	NS
	06/10/99	NS	NS	NS	NS	NS	NS
	09/07/99	NS	NS	NS	NS	NS	NS
	12/13/99	NS	NS	NS	NS	NS	NS
03/13/00-A	NS-A	NS-A	NS-A	NS-A	NS-A	NS-A	
MW-5	03/30/94	7500		1300	20	<13	160
	04/25/94	6500		1100	41	130	740
	08/12/94	4000		420	2.9	41	98
	12/14/94	4800		660	<2.5	33	13
	02/10/95	5200		490	<13	23	19
	06/15/95	460		<0.50	<0.50	<0.50	<0.50
	09/26/95	1400		61	<0.50	3.1	<0.50
	12/15/95	2100		77	1.5	10	1.5
	03/21/96	930		35	2.0	2.0	18.00
	06/13/96	610	<5.0	38	0.72	1.9	2.0
	09/16/96	380	<5.0	29	<0.50	0.95	<0.50
	12/02/96	200	<5.0	1.1	0.64	<0.50	<0.50
	03/07/97	520	<5.0	74	<0.50	0.58	1.50
	06/12/97	140	<5.0	5.3	<0.50	<0.50	<0.50
	09/29/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	12/01/97	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	03/19/98	<50	<5.0	<0.50	<0.50	<0.50	<0.50
	05/29/98	540	<5.0	4.1	<0.50	<0.50	0.52
	09/15/98	67	<5.0	<0.50	<0.50	<0.50	<0.50
	11/30/98	430	<5.0	<0.50	<0.50	<0.50	<0.50
	01/17/99	500	<5.0	<0.50	<0.50	<0.50	<0.50
06/10/99	66	<5.0	<0.50	<0.50	<0.50	<0.50	
09/07/99	820	<5.0	46	1.7	10	21	
12/13/99	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
03/13/00	270	<5.0	<0.50	<0.50	<0.50	<0.50	
06/12/00	<50	<5.0	<0.50	<0.50	<0.50	<0.50	
11/10/00	2200	8.6	42	1.1	25	30	
MW-6	03/30/94	63000		21000	8600	1700	12000
	04/25/94	77000		22000	12000	2300	16000
	08/12/94	65000		12000	8100	2200	16000
	12/14/94	65000		18000	9500	2200	14000
	02/10/95	63000		21000	8400	2000	14000
	06/15/95	75000		20000	11000	2100	15000
	09/26/95	62000		15000	9600	1700	12000
	12/15/95	61000		15000	9000	2300	15000
	03/21/96	65000		18000	9800	2400	16000
	06/13/96	29000	<250	8600	3300	2200	12000
09/16/96	42000	<250	6400	1800	2100	11000	

TABLE 2  
GROUNDWATER ANALYTICAL RESULTS  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(All results in micrograms per Liter)

Monitoring Well	Date Collected	TPH <sup>1</sup> as Gasoline	Aromatic Volatile Organics				
			MTBE <sup>2</sup>	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-6 (continued)	12/02/96	28000	<500	3000	1100	970	8300
	03/07/97	12000	<250	2000	190	520	2300
	06/12/97	37000	<100	3900	470	1600	6200
	09/29/97	34000	<100	3500	370	1600	5200
	12/01/97	20000	<100	2100	<10	1200	2200
	03/19/98	24000	<100	2900	460	1100	3400
	05/29/98	38000	<100	3500	700	1800	5200
	09/15/98	22000	<100	1900	110	1400	3000
	11/30/98	9900	<100	770	16	820	710
	01/17/99	14000	<100	2200	160	1700	3600
	06/10/99	22000	5.5	1600	160	1400	2900
	09/07/99	17000	<50	1400	33	1300	1800
	12/13/99	16000	<25	790	9.2	840	780
	03/13/00	16000	<25	790	85	780	1600
06/12/00	24000	5600	1100	150	1300	2300	
11/10/00	13000	1000	440	6.6	760	350	
MW-7	03/30/94	43000		7200	2400	1600	11000
	04/25/94	30000		3900	1000	940	6900
	08/12/94	30000		3800	1400	1300	7500
	12/14/94	31000		3600	1200	900	6400
	02/10/95	27000		4000	900	890	5100
	06/15/95	17000		920	680	740	4100
	09/26/95	7000		200	150	170	810
	12/15/95	11000		350	170	540	1900
	03/21/96	12000		320	100	730	2500
	06/13/96	5900	<50	98	19	370	620
	09/16/96	7800	<25	140	43	440	590
	12/02/96	6300	<50	87	29	290	430
	03/07/97	4500	<25	35	19	360	470
	06/12/97	3900	<5.0	29	5.2	170	48
	09/29/97	6100	<25	56	9	340	190
	12/01/97	6500	<25	24	<2.5	400	250
	03/19/98	2000	<25	20	<2.5	73	79
	05/29/98	5700	<25	22	7.3	290	350
	09/15/98	1700	<25	15	<2.5	44	5.1
	11/30/98	4800	<25	42	12	270	640
	01/17/99	3400	<50	33	<5.0	200	190
06/10/99	1700	<5.0	7.8	1.5	23	4.1	
09/07/99	1900	<5.0	9.7	2.1	70	2.9	
12/13/99	1900	<5.0	8.0	1.1	10	1.1	
03/13/00	1500	<5.0	7.5	<0.50	6.7	2.9	
06/12/00	1200	<5.0	5.4	<0.50	5.2	1.0	
11/10/00	1000	<0.50	3.9	<0.50	<0.50	<0.50	
MW-A	01/17/99	5800	<5.0	1700	85	65	320
	06/10/99	NS	NS	NS	NS	NS	NS
MW-B	01/17/99	4400	<5.0	240	30	21	39
	06/10/99	NS-A	NS-A	NS-A	NS-A	NS-A	NS-A
MW-D	01/17/99	5600	<5.0	1600	130	66	220
	06/10/99	NS-A	NS-A	NS-A	NS-A	NS-A	NS-A
MW-E	01/17/99	5700	<50	1600	180	180	310

TABLE 2  
GROUNDWATER ANALYTICAL RESULTS  
BEACON STATION #604  
1619 West First Street, Livermore, CA  
(All results in micrograms per Liter)

Monitoring Well	Date Collected	TPH <sup>1</sup> as Gasoline	Aromatic Volatile Organics				
			MTBE <sup>2</sup>	Benzene	Toluene	Ethyl-benzene	Xylenes
MW-E continued	06/10/99	5000	<25	1300	130	320	450
	09/07/99	NS-A	NS-A	NS-A	NS-A	NS-A	NS-A
MW-W	01/17/99	23000	<50	7600.00	760.00	1400	5000
	06/10/99	16000	<50	4100	420	1300	4000
	09/07/99	NS-A	NS-A	NS-A	NS-A	NS-A	NS-A

- Notes:
- 1 Total Petroleum Hydrocarbons
  - 2 Methyl-tertiary-butyl ether
  - 3 Product is not typical gasoline
  - NS Not sampled (see Table 1)
  - < Below indicated detection limit.
  - NS-A Not Sampled, abandoned after this date



## FIELD PROCEDURE

The following section describes procedures used by Ultramar field personnel in the performance of ground-water sampling.

### Ground-Water Level and Total Depth Determination

A water-level indicator is lowered down the well and a measurement of the depth to water from an established reference point on the casing is taken. The indicator probed is used to sound the bottom of the well and a measurement of the total depth of the well is taken. Both the water-level and total depth measurements are taken to the nearest 0.01-foot.

### Visual Analysis of Ground Water

Prior to purging and sampling ground water monitoring wells, a water sample is collected from each well for subjective analysis. The visual analysis involves gently lowering a clean, disposable, polyethylene bailer to approximately one-half the bailer length past the water table interface. The bailer is then retrieved, and the sample contained within the bailer is examined for floating product or the appearance of a petroleum product sheen. If measurable free product is noted in the bailer, a water/product interface probe is used to determine the thickness of the free product to the nearest 0.01-foot. The thickness of free product is determined by subtracting the depth to product from the depth to water.

### Monitoring Well Purging, and Sampling

Monitoring wells are purged by removing approximately four casing volumes of water from the well using a clean disposable bailer or electrical submersible purge pump. Purge volumes are calculated prior to purging. During purging the temperature, pH, and electric conductivity are monitored. The well is sufficiently purged when: the four casing volumes have been removed; the temperature, pH, and conductivity have stabilized to within 10% of the initial readings; and the ground water being removed is relatively free of suspended solids. After purging, ground water levels are allowed to stabilize to within 80% of the initial water level reading. A water sample is then collected from each well with a clean, disposable polyethylene bailer. If the well is bailed dry prior to removing the minimum volume of water, the ground water is allowed to recharge. If the well has recharged to within 80% of the initial reading within two hours, the well will continue to be purged until the minimum volume of water has been removed. If the well has not recharged to at least 80% of the initial reading within two hours, the well is considered to contain formation water and a ground water sample is collected. Ground water removed from the well is stored in 55-gallon drums at the site and labelled pending disposal.

In wells where free product is detected, the wells will be bailed to remove the free product. An estimate of the volume of product and water will be recorded. If the free product thickness is reduced to the point where a measurable thickness is no longer present in the well, a ground-water sample will be collected. If free product persists throughout bailing, a final free product thickness measurement will be taken and a ground-water sample will not be collected.

Samples are stored in 40-milliliter vials so that air passage through the sample is minimized (to prevent volatilizing the sample). The vial is tilted and filled slowly until an upward convex meniscus forms over the mouth of the vial. The teflon side of the septum (in cap) is then placed against the meniscus, and the cap is screwed on tightly. The sample is then inverted and the bottle is tapped lightly to check for air bubbles. If an air bubble is present in the vial the cap is removed and more sample is transferred from the bailer. The vial is then resealed and rechecked for air bubbles. The sample is then appropriately labeled and stored on ice from the time of collection through the time of delivery to the laboratory. A Chain-of-Custody form is completed to ensure sample integrity. Ground-water samples are transported to a state-certified laboratory and analyzed within the EPA-specified holding times for the requested analyses.

**DOULOS ENVIRONMENTAL COMPANY  
GROUNDWATER/LIQUID LEVEL DATA  
(measurements in feet)**

Project Address: Beacon #604, 1619 West First Street

Date: 11-10-00

Livermore, CA

Project No.: 94-604-01

Recorded by:

Hal Hansen

Well No	Time	Well Elev. TOC	Depth to Gr. Water	Measured Total Depth	Gr. Water Elevation	Depth to Product	Product Thickness	Comments
S MW-1	1120	100.00	30.56	54.11	69.44			
S MW-2	1124	98.68	31.31	53.75	67.37			
MW-3	1130	97.08	29.47	52.54	67.61			
MW-4	1134	99.35	29.71	46.60	69.64			
S MW-5	1110	98.37	30.05	46.33	68.32			
S MW-6	1113	97.62	32.99	47.52	64.63			
S MW-7	1117	98.03	31.54	46.63	66.49			

Notes:

Client: Ultramar  
 Site: Beacon #604  
1619 West First Street  
Livermore, CA

Sampling Date: 11-10-00  
 Project No.: 95-604-01  
 Well Designation: MW- 1

Is setup of traffic control devices required?  NO YES time: \_\_\_\_\_ hours  
 Is there standing water in well box?  NO YES Above TOC Below TOC  
 Is top of casing cut level? NO  YES If no, see remarks  
 Is well cap sealed and locked? NO  YES If no, see remarks  
 Height of well casing riser (in inches): 4"  
 Well cover type: 8" UV \_\_\_\_\_ 12" UV \_\_\_\_\_ 12" EMCO \_\_\_\_\_ 8" BK \_\_\_\_\_  
 12" BK \_\_\_\_\_ 12" DWP \_\_\_\_\_ 12" CNI  36" CNI \_\_\_\_\_ Other \_\_\_\_\_  
 General condition of wellhead assembly: Excellent  Good Fair Poor

Purging Equipment: \_\_\_\_\_ 2" disposable bailer \_\_\_\_\_ Submersible pump  
 \_\_\_\_\_ 2" PVC bailer \_\_\_\_\_ Dedicated bailer  
 \_\_\_\_\_ 4" PVC bailer \_\_\_\_\_ Centrifugal pump

Sampled with: Disposable bailer:  Teflon bailer: \_\_\_\_\_

Well Diameter: 2" \_\_\_\_\_ 4"  6" \_\_\_\_\_ 8" \_\_\_\_\_

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.  
Initial Measurement Recharge Measurement  
 Time: 1120 Time: N/A Calculated purge: N/A  
 Depth of well: 54.11 Depth to water: N/A Actual purge: \_\_\_\_\_  
 Depth to water: 30.56

Start purge: N/A Sampling time: 1200

Time	Temp.	E.C.	pH	Turbidity	Volume

Sample appearance: Clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item  
 2" Locking Cap: \_\_\_\_\_ Lock #3753: \_\_\_\_\_ 7/32 Allenhead: \_\_\_\_\_  
 4" Locking Cap: \_\_\_\_\_ Lock-Dolphin: \_\_\_\_\_ 9/16 Bolt: \_\_\_\_\_  
 6" Locking Cap: \_\_\_\_\_ Pinned Allenhead (DWP): \_\_\_\_\_

Remarks: \_\_\_\_\_

Signature: \_\_\_\_\_

Client: Ultramar

Sampling Date: 11-10-00

Site: Beacon #604

Project No.: 95-604-01

1619 West First Street

Well Designation: MW-2

Livermore, CA

Is setup of traffic control devices required?  NO  YES time: \_\_\_\_\_ hours  
 Is there standing water in well box?  NO  YES Above TOC Below TOC  
 Is top of casing cut level?  NO  YES If no, see remarks  
 Is well cap sealed and locked?  NO  YES If no, see remarks  
 Height of well casing riser (in inches): 4  
 Well cover type: 8" UV \_\_\_\_\_ 12" UV \_\_\_\_\_ 12" EMCO \_\_\_\_\_ 8" BK \_\_\_\_\_  
 12" BK \_\_\_\_\_ 12" DWP \_\_\_\_\_ 12" CNI \_\_\_\_\_ 36" CNI \_\_\_\_\_ Other \_\_\_\_\_  
 General condition of wellhead assembly: Excellent  Good  Fair  Poor

Purging Equipment: \_\_\_\_\_ 2" disposable bailer \_\_\_\_\_ Submersible pump  
 \_\_\_\_\_ 2" PVC bailer \_\_\_\_\_ Dedicated bailer  
 \_\_\_\_\_ 4" PVC bailer \_\_\_\_\_ Centrifugal pump

Sampled with: Disposable bailer:  Teflon bailer: \_\_\_\_\_

Well Diameter: 2" \_\_\_\_\_ 4"  6" \_\_\_\_\_ 8" \_\_\_\_\_

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.  
Initial Measurement Recharge Measurement  
 Time: 11:4 Time: N/A Calculated purge: N/A  
 Depth of well: 53.75 Depth to water: N/A Actual purge: N/A  
 Depth to water: 31.31

Start purge: N/A Sampling time: 12:12

Time	Temp.	E.C.	pH	Turbidity	Volume

Sample appearance: clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item  
 2" Locking Cap: \_\_\_\_\_ Lock #3753: \_\_\_\_\_ 7/32 Allenhead: \_\_\_\_\_  
 4" Locking Cap: \_\_\_\_\_ Lock-Dolphin: \_\_\_\_\_ 9/16 Bolt: \_\_\_\_\_  
 6" Locking Cap: \_\_\_\_\_ Pinned Allenhead (DWP): \_\_\_\_\_

Remarks: \_\_\_\_\_

Signature: \_\_\_\_\_

Client: Ultramar

Sampling Date: 11-10-06

Site: Beacon #604

Project No.: 95-604-01

1619 West First Street

Well Designation: MW- S

Livermore, CA

Is setup of traffic control devices required?  NO YES time: \_\_\_\_\_ hours  
 Is there standing water in well box?  NO YES Above TOC Below TOC  
 Is top of casing cut level?  NO  YES If no, see remarks  
 Is well cap sealed and locked?  NO  YES If no, see remarks  
 Height of well casing riser (in inches): \_\_\_\_\_  
 Well cover type: 8" UV  12" UV \_\_\_\_\_ 12" EMCO \_\_\_\_\_ 8" BK \_\_\_\_\_  
 12" BK \_\_\_\_\_ 12" DWP \_\_\_\_\_ 12" CNI \_\_\_\_\_ 36" CNI \_\_\_\_\_ Other \_\_\_\_\_  
 General condition of wellhead assembly: Excellent  Good Fair Poor

Purging Equipment: \_\_\_\_\_ 2" disposable bailer \_\_\_\_\_ Submersible pump  
 \_\_\_\_\_ 2" PVC bailer \_\_\_\_\_ Dedicated bailer  
 \_\_\_\_\_ 4" PVC bailer \_\_\_\_\_ Centrifugal pump

Sampled with: Disposable bailer: 8 Teflon bailer: \_\_\_\_\_

Well Diameter: 2" 8 4" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.  
Initial Measurement Recharge Measurement  
 Time: 1110 Time: N/A Calculated purge: N/A  
 Depth of well: 46.33 Depth to water: N/A Actual purge: \_\_\_\_\_  
 Depth to water: 30.05

Start purge: N/A Sampling time: 1230

Time	Temp.	E.C.	pH	Turbidity	Volume
		<u>N</u>	<u>A</u>		

Sample appearance: Clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item  
 2" Locking Cap: \_\_\_\_\_ Lock #3753: \_\_\_\_\_ 7/32 Allenhead: \_\_\_\_\_  
 4" Locking Cap: \_\_\_\_\_ Lock-Dolphin: \_\_\_\_\_ 9/16 Bolt: \_\_\_\_\_  
 6" Locking Cap: \_\_\_\_\_ Pinned Allenhead (DWP): \_\_\_\_\_

Remarks: \_\_\_\_\_

Signature: \_\_\_\_\_

Client: Ultramar

Sampling Date: 11-10-00

Site: Beacon #604

Project No.: 95-604-01

1619 West First Street

Well Designation: MW-6

Livermore, CA

Is setup of traffic control devices required?  NO YES time: \_\_\_\_\_ hours  
 Is there standing water in well box?  NO YES Above TOC Below TOC  
 Is top of casing cut level? NO  YES If no, see remarks  
 Is well cap sealed and locked? NO  YES If no, see remarks  
 Height of well casing riser (in inches): 4  
 Well cover type: 8" UV 8 12" UV \_\_\_\_\_ 12" EMCO \_\_\_\_\_ 8" BK \_\_\_\_\_  
 12" BK \_\_\_\_\_ 12" DWP \_\_\_\_\_ 12" CNI \_\_\_\_\_ 36" CNI \_\_\_\_\_ Other \_\_\_\_\_  
 General condition of wellhead assembly: Excellent  Good Fair Poor

Purging Equipment: \_\_\_\_\_ 2" disposable bailer \_\_\_\_\_ Submersible pump  
 \_\_\_\_\_ 2" PVC bailer \_\_\_\_\_ Dedicated bailer  
 \_\_\_\_\_ 4" PVC bailer \_\_\_\_\_ Centrifugal pump

Sampled with: Disposable bailer:  Teflon bailer: \_\_\_\_\_

Well Diameter: 2"  4" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.  
Initial Measurement Recharge Measurement  
 Time: 1113 Time: N/A Calculated purge: N/A  
 Depth of well: 47.52 Depth to water: N/A Actual purge: \_\_\_\_\_  
 Depth to water: 32.99

Start purge: N/A Sampling time: 1240

Time	Temp.	E.C.	pH	Turbidity	Volume
		N	A		

Sample appearance: Clear Lock: Dolphi

Equipment replaced: (Check all that apply) Note condition of replaced item  
 2" Locking Cap: \_\_\_\_\_ Lock #3753: \_\_\_\_\_ 7/32 Allenhead: \_\_\_\_\_  
 4" Locking Cap: \_\_\_\_\_ Lock-Dolphin: \_\_\_\_\_ 9/16 Bolt: \_\_\_\_\_  
 6" Locking Cap: \_\_\_\_\_ Pinned Allenhead (DWP): \_\_\_\_\_

Remarks: \_\_\_\_\_

Signature: \_\_\_\_\_

Client: Ultramar

Sampling Date: 11-10-00

Site: Beacon #604

Project No.: 95-604-01

1619 West First Street

Well Designation: MW-7

Livermore, CA

Is setup of traffic control devices required?  NO YES time: \_\_\_\_\_ hours  
 Is there standing water in well box?  NO YES Above TOC Below TOC  
 Is top of casing cut level? NO  YES If no, see remarks  
 Is well cap sealed and locked? NO  YES If no, see remarks  
 Height of well casing riser (in inches): 4"  
 Well cover type: 8" UV  12" UV \_\_\_\_\_ 12" EMCO \_\_\_\_\_ 8" BK \_\_\_\_\_  
 12" BK \_\_\_\_\_ 12" DWP \_\_\_\_\_ 12" CNI \_\_\_\_\_ 36" CNI \_\_\_\_\_ Other \_\_\_\_\_  
 General condition of wellhead assembly: Excellent  Good Fair Poor

Purging Equipment: \_\_\_\_\_ 2" disposable bailer \_\_\_\_\_ Submersible pump  
 \_\_\_\_\_ 2" PVC bailer \_\_\_\_\_ Dedicated bailer  
 \_\_\_\_\_ 4" PVC bailer \_\_\_\_\_ Centrifugal pump

Sampled with: Disposable bailer:  Teflon bailer: \_\_\_\_\_

Well Diameter: 2"  4" \_\_\_\_\_ 6" \_\_\_\_\_ 8" \_\_\_\_\_

Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.  
Initial Measurement Recharge Measurement  
 Time: 11.17 Time: N/A Calculated purge: N/A  
 Depth of well: 46.63 Depth to water: N/A Actual purge: \_\_\_\_\_  
 Depth to water: 31.54

Start purge: N/A Sampling time: 1255

Time	Temp.	E.C.	pH	Turbidity	Volume

Sample appearance: clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced item  
 2" Locking Cap: \_\_\_\_\_ Lock #3753: \_\_\_\_\_ 7/32 Allenhead: \_\_\_\_\_  
 4" Locking Cap: \_\_\_\_\_ Lock-Dolphin: \_\_\_\_\_ 9/16 Bolt: \_\_\_\_\_  
 6" Locking Cap: \_\_\_\_\_ Pinned Allenhead (DWP): \_\_\_\_\_

Remarks: \_\_\_\_\_

Signature: \_\_\_\_\_





Report Number : 18355

Date : 11/22/2000

Hal Hansen  
Doulos Environmental  
1537 Pine Valley Circle  
Roseville, CA 95661

Subject : 5 Water Samples  
Project Name : 3604 Livermore  
Project Number : 3604-57

Dear Mr. Hansen,

Chemical analysis of the samples referenced above has been completed. Summaries of the data are contained on the following pages. Sample(s) were received under documented chain-of-custody. US EPA protocols for sample storage and preservation were followed.

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink that reads "Joel Kiff". The signature is fluid and cursive.

Joel Kiff



Report Number : 18355

Date : 11/22/2000

Project Name : 3604 Livermore

Project Number : 3604-57

Sample : MW-1

Matrix : Water

Lab Number : 18355-01

Sample Date : 11/10/2000

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2000
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2000
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2000
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/19/2000
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2000
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	11/19/2000
Toluene - d8 (Surr)	98.8		% Recovery	EPA 8260B	11/19/2000
4-Bromofluorobenzene (Surr)	95.2		% Recovery	EPA 8260B	11/19/2000


Sample : MW-2

Matrix : Water

Lab Number : 18355-02

Sample Date : 11/10/2000

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	5100	50	ug/L	EPA 8260B	11/21/2000
Toluene	850	5.0	ug/L	EPA 8260B	11/19/2000
Ethylbenzene	1500	5.0	ug/L	EPA 8260B	11/19/2000
Total Xylenes	3200	5.0	ug/L	EPA 8260B	11/19/2000
Methyl-t-butyl ether (MTBE)	230	5.0	ug/L	EPA 8260B	11/19/2000
TPH as Gasoline	35000	500	ug/L	EPA 8260B	11/19/2000
Toluene - d8 (Surr)	96.1		% Recovery	EPA 8260B	11/19/2000
4-Bromofluorobenzene (Surr)	98.4		% Recovery	EPA 8260B	11/19/2000

  
 Approved By: Joel Kiff



Report Number : 18355

Date : 11/22/2000

Project Name : 3604 Livermore

Project Number : 3604-57

Sample : MW-5

Matrix : Water

Lab Number : 18355-03

Sample Date :11/10/2000

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>42</b>	0.50	ug/L	EPA 8260B	11/19/2000
<b>Toluene</b>	<b>1.1</b>	0.50	ug/L	EPA 8260B	11/19/2000
<b>Ethylbenzene</b>	<b>25</b>	0.50	ug/L	EPA 8260B	11/19/2000
<b>Total Xylenes</b>	<b>30</b>	0.50	ug/L	EPA 8260B	11/19/2000
<b>Methyl-t-butyl ether (MTBE)</b>	<b>8.6</b>	0.50	ug/L	EPA 8260B	11/19/2000
<b>TPH as Gasoline</b>	<b>2200</b>	200	ug/L	EPA 8260B	11/20/2000
Toluene - d8 (Surr)	103		% Recovery	EPA 8260B	11/19/2000
4-Bromofluorobenzene (Surr)	97.5		% Recovery	EPA 8260B	11/19/2000

Sample : MW-6

Matrix : Water

Lab Number : 18355-04

Sample Date :11/10/2000

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
<b>Benzene</b>	<b>440</b>	5.0	ug/L	EPA 8260B	11/19/2000
<b>Toluene</b>	<b>6.6</b>	5.0	ug/L	EPA 8260B	11/19/2000
<b>Ethylbenzene</b>	<b>760</b>	5.0	ug/L	EPA 8260B	11/19/2000
<b>Total Xylenes</b>	<b>350</b>	5.0	ug/L	EPA 8260B	11/19/2000
<b>Methyl-t-butyl ether (MTBE)</b>	<b>1000</b>	5.0	ug/L	EPA 8260B	11/19/2000
<b>TPH as Gasoline</b>	<b>13000</b>	500	ug/L	EPA 8260B	11/19/2000
Toluene - d8 (Surr)	98.4		% Recovery	EPA 8260B	11/19/2000
4-Bromofluorobenzene (Surr)	96.5		% Recovery	EPA 8260B	11/19/2000

Approved By:  Joel Kiff



Report Number : 18355

Date : 11/22/2000

Project Name : 3604 Livermore

Project Number : 3604-57

Sample : MW-7

Matrix : Water

Lab Number : 18355-05

Sample Date :11/10/2000

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	3.9	0.50	ug/L	EPA 8260B	11/19/2000
Toluene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2000
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	11/19/2000
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	11/19/2000
Methyl-t-butyl ether (MTBE)	< 0.50	0.50	ug/L	EPA 8260B	11/19/2000
TPH as Gasoline	1000	50	ug/L	EPA 8260B	11/19/2000
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	11/19/2000
4-Bromofluorobenzene (Surr)	95.7		% Recovery	EPA 8260B	11/19/2000

Approved By: Joel Kiff