



1050 Melody Lane, Suite 160 Roseville, California 95678 Tel: (916) 782-2110 FAX: (916) 786-7830

December 1, 1994

Mr. Terrence Fox
Environmental Specialist
Ultramar Inc.
525 West Third Street
Hanford, California 93232-0466

Subject:

Third Quarter 1994 Groundwater Monitoring Report

Beacon Station #546

Andrew Mayward, California

Dear Mr. Fox:

This report documents the results of quarterly groundwater monitoring conducted on September 15, 1994 at the subject site (Figure 1). The monitoring, conducted by Doulos Environmental, included measurements of depth to groundwater, subjective analysis for free product, groundwater purging and collection of groundwater samples. All field activities pertaining to events in this report were conducted according to the Ultramar Field Procedures included in the Attachments.

GROUNDWATER ELEVATIONS

Prior to purging, Doulos Environmental personnel collected depth to groundwater measurements. Groundwater level data from April 1992 to date are summarized in Table 1. Historic groundwater levels are presented as an Attachment. On the basis of the current measurements, groundwater flows to the southwest (Figure 2) at a gradient of <0.01 ft/ft. Groundwater levels have decreased an average of 1.08 feet compared to the last monitoring event.

94-548-3.QMR



GROUNDWATER SAMPLING AND ANALYSES

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

- TPH, as gasoline, by modified EPA Method 8015.
- BTEX by EPA Method 602.

Analytical results from April 1992 to date are summarized in Table 2. Historic analytical data is presented as an Attachment. Figure 3 is a distribution map of benzene in groundwater based on the current data. The laboratory report and chain-of-custody form for the current sampling event are attached. Benzene concentrations remain nondetectable in wells MW-3, MW-6, and MW-8. Concentrations decreased in wells MW-1, MW-2, MW-4, MW-5, MW-7, and MW-8; and increased in well MW-9 compared to prior sampling.

A copy of this quarterly monitoring report should be forwarded to the following parties:

Mr. Scott Hugenberger San Francisco Bay Regional Water Quality Control Board 2101 Webster Street, Suite 500 Oakland, California 94612

Mr. Hugh Murphy Hayward Fire Department 22300 Foothill Boulevard Hayward, California 94541

94-546-3.QMR - 2 -



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 shall be at such parties' sole risk. This report was prepared under the review and supervision of the professional geologist, registered with the State of California, whose signature appears below.

If you have any questions or comments, please contact us at (916) 782-2110.

Sincerely,

FUGRO WEST, INC.

Sheila R. Richgels Report Coordinator

Owen M. Kritre

Registered CRG No. 5

Date

SRR/OMK/srr

Attachments

FIGURE 1 SITE LOCATION MAP

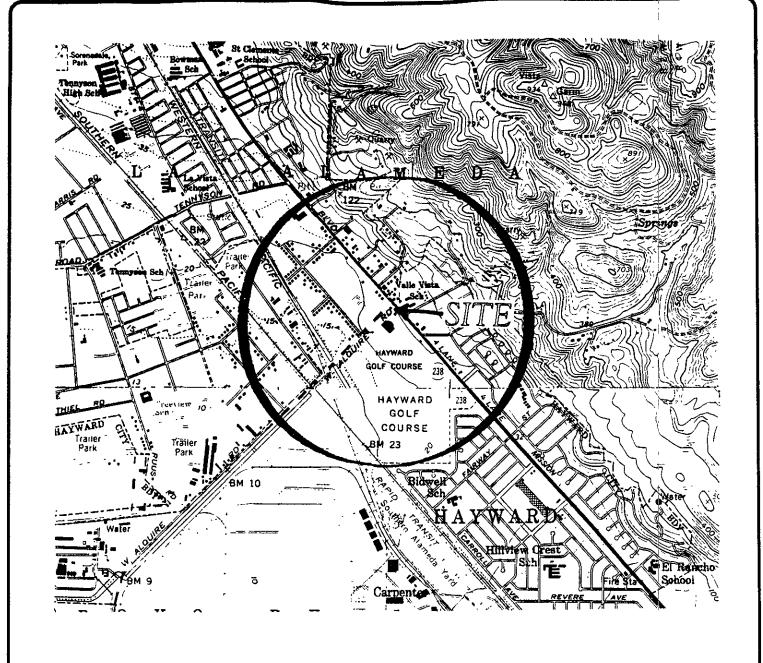
FIGURE 2 POTENTIOMETRIC SURFACE MAP
(SEPTEMBER 15, 1994)

FIGURE 3 DISTRIBUTION MAP OF BENZENE
IN GROUNDWATER (SEPTEMBER 15, 1994)

TABLES: TABLE 1 WATER LEVEL DATA
TABLE 2 ANALYTICAL RESULTS: GROUNDWATER

ATTACHMENTS: ULTRAMAR FIELD PROCEDURES
HISTORICAL DATA
LABORATORY REPORT AND
CHAIN-OF-CUSTODY FORM

DOULOS ENVIRONMENTAL FIELD DATA SHEETS

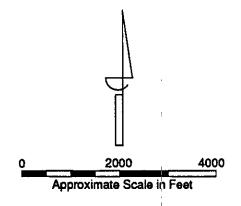


GENERAL NOTES:



BASE MAP FROM USGS 7.5 MINUTE TOPOGRAPHIC HAYWARD & NEWARK, CA. 1959, PHOTOREVISED 1980.

WEST ALQUIRE ROAD HAS BEEN CHANGED TO WEST INDUSTRIAL PARKWAY





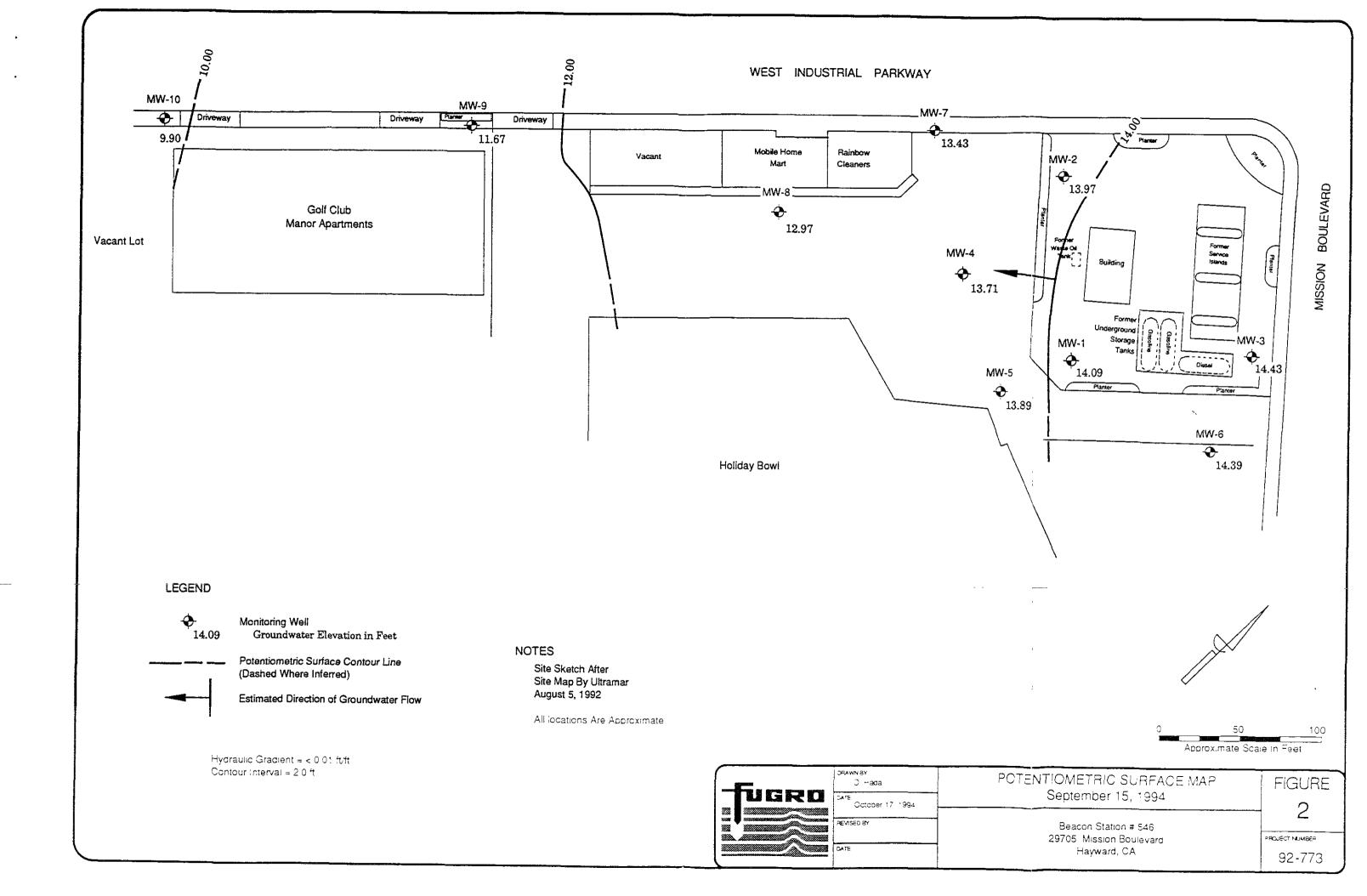
	Ed Bernard
	DATE: September 29, 1992
	neveepey: Ed Bernard
!	DATE: February 11, 1993

SITE LOCATION MAP

Beacon Station # 546 29705 Mission Boulevard Hayward, CA

FIGURE

PROJECT NUMBER: 93-47-2067



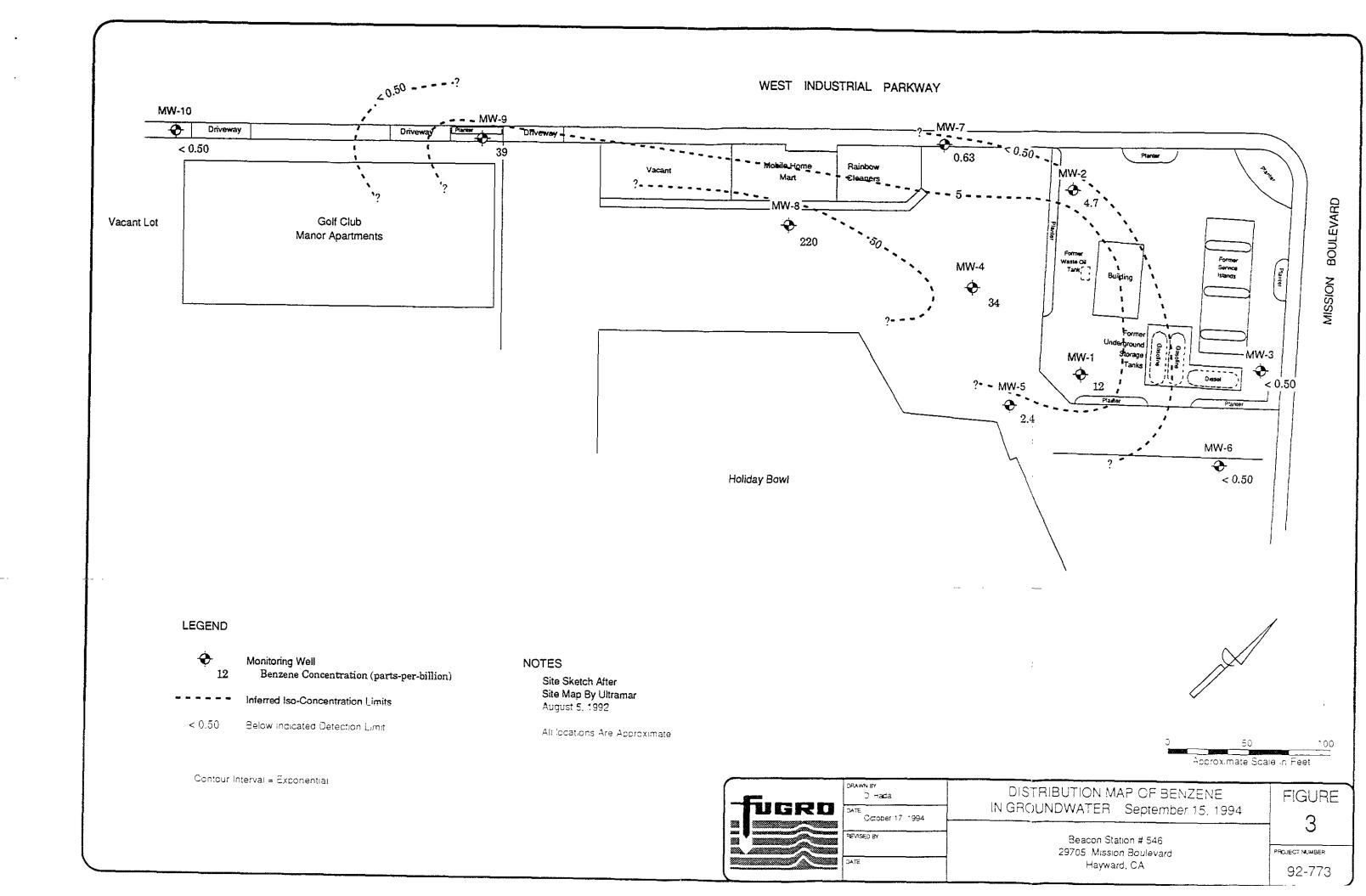


TABLE 1 WATER LEVEL DATA **BEACON STATION #546** 29705 MISSION BOULEVARD, HAYWARD, CALIFORNIA

(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing) ^t	Depth to Groundwater ¹	Groundwater Elevation ²	Well Depth	Comments
MW-1	04/15/92	37.46	22.10	15.36		
	07/07/92		23.40	14.06		
	09/23/92		24.61	12.85		,
	11/12/92		24.87	12.59	J	Heavy sheen
	02/03/93		21.23	16.23	38.08	,
	05/10/93		19.59	17.87	37.95	
	08/18/93		20.22	17.24	37.95	
	11/18/93		22.72	14.74	37.93	
	03/10/94		21.73	15.73	37.95	
	06/13/94		22.15	15.31		
	06/15/94		22.17	15.29	37.99	
	09/15/94		23.37	14.09	38.00	
	07/10/7			7 1100		
MW-2	04/15/93	35.95	20.88	15.07		
	07/07/92		21.95	14.00	\	
	09/23/92		23.15	12.80	***	
	11/12/92		23.43	12.52		
	02/03/93		19.93	16.02	38.90	
	05/10/93		18.57	17.38	38.98	
	08/18/93		19.96	15.99	39.00	
	11/18/93		21.38	14.57	39.00	
	03/10/94		20.47	15.48	39.07	
	06/13/94		20.87	15.08		
	06/15/94		20.91	15.04	39.16	
	09/15/94		21.98	13.97	39.17	
·····					 	
MW-3	04/15/92	40.28	24.59	15.69		
	07/07/92		25.90	14.38		
	09/23/92		27.09	13.19		
'	11/12/92		27.43	12.85	33.94	
	02/03/93		23.67	16.61	37.86	
	05/10/93		21.90	18.38	37.82	
	08/18/93		23.56	16.72	37.80	
	11/18/93		24.98	15.30	37.81	
	03/10/94		24,21	16.07	37.86	
	06/13/94		24.63	15.65		
	06/15/94		24.64	15.64	38.00	•
	09/15/94		25.85	14.43	38.00	
MW-4	04/15/92	34.94		•••		,
	11/18/93		20.60	14.34	39.02	
	03/10/94		19.63	15.31	39.11	
	06/13/94		20.06	14.88		
	06/15/94		20.10	14.84	39.12	
	09/15/94		21.23	13.71	39.14	

NOTES:

Measurement and reference elevation taken from notch/mark on top north side of well casing.

Elevation referenced to mean sea level.

Not measured/not observed,

No measurements collected since pnor to April 1992

Well Depth

Measurement from top of casing to bottom of well.

Fugro 94-546/September 1994

TABLE 1 WATER LEVEL DATA BEACON STATION #546

29705 MISSION BOULEVARD, HAYWARD, CALIFORNIA

(Measurements in feet)

Monitoring Well	Date	Reference Elevation (top of casing) ^I	Depth to Groundwater ¹	Groundwater Elevation ²	Well Depth	Comments
MW-5	04/15/92	36.37	***			
	11/18/93		21.80	14.57	34.52	
	03/10/94		20.82	15.55	34.71	
	06/13/94		21.25	15.12		
	06/15/94		21.28	15.09	34.71	
	09/15/94		22.48	13.89	34.70	,
MW-6	04/15/92 **	37.43				
	11/18/93		22.35	15.08	39.17	
	03/10/94		21.33	16.10	39.22	
	06/13/94		21.75	15.68		
	06/15/94		21.80	15.63	39.24	
	09/15/94		23.04	14.39	39.22	
MW-7	04/15/92	30.50	16.00	14.50		
	07/07/92		17.10	13.40		
	09/23/92		18.21	12.29		
	11/12/92		18.37	12.13	33.94	
	02/03/93		15.20	15.30	34.02	
	05/10/93		14.01	16.49	34.05	
	08/18/93		15.51	14.99	34.01	
	11/18/93		16.58	13.92	34.01	
	03/10/94		15.68	14.82	33.94	
	06/13/94			***		
	06/15/94 09/15/94		16.12 17.07	14.38 13.43	33.96 33.97	
MW-8		28.48	14.70			1
M M -8	04/15/92 07/07/92	28.46	14.30 15.60	14.18 12.88		
'	09/23/92		16.66	11.82		
	11/12/92		16.86	11.62	39.20	
	02/03/93		13.49	14.99	39.19	
	05/10/93		12.51	15.97	39.21	
	08/18/93		13.97	14.51	39.25	
	11/18/93		15.00	13.48	39.25	
	03/10/94		13.98	14.50	39.27	
	06/13/94		14.44	14.04		
	06/15/94		14.48	14.00	39.27	
	09/15/94		15.51	12.97	39.27	
MW-9	02/03/93	21.99	8.95	13.04	23.52	
-	05/10/93		8.18	13.81	23.52	
	08/18/93		9.50	12.49	23.17	
	11/18/93		9.85	12.14	23.16	
	03/10/94	•	9.14	12.85	23.21	
	06/13/94		9.57	12.42		
	06/15/94		9.60	12.39	23.23	
	09/15/94		10.32	11.67	23.23	
MW-10	06/13/94	17.41	6.61	10.80		
	09/15/94		7.51	9.90	21.46	

NOTES 1

1

Measurement and reference elevation taken from notch/mark on top north side of well casing.

-

Elevation referenced to mean sea level.

Not measured/not observed

Well Depth

No measurements collected since prior to April 1992

Measurement from top of casing to bottom of well

Fugro 94-546/September 1994

TABLE 2 ANALYTICAL RESULTS: GROUNDWATER BEACON STATION #546 29705 MISSION BOULEVARD, HAYWARD, CALIFORNIA

(All results in parts-per-billion)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons	Aromatic Volatile Organics			
		Gasoline	Benzene	Toluene	Ethyl- benzene	Total Xylenes
MW-1	04/15/92	8,900	710	il	150	440
	07/07/92	<50	<0.5	<0.5	<0.5	<0.\$
	09/23/92	<50	<0.5	<0.5	<0.5	<0.\$
	11/12/92					***
	02/03/93	950	72	<0.5	0.6	6.6
	05/10/93	1,000	210	2.9	42	67
	08/18/93	1,600	220	<5.0	110	150
	11/18/93	51	<0.5	<0.5	<0.5	<0.5
	03/10/94	310	37	<0.5	22	26
	06/15/94	420	53	<0.5	40	38
	09/15/94	78	12	<0.5	12	5.8
MW-2	04/15/92	1,200	21	4.8	56	26
	07/07/92	<50	< 0.5	<0.5	<0.5	<0.5
	09/23/92	<50	<0.5	<0.5	<0.5	<0.5
	11/12/92	<50	<0.5	<0.5	1.7	0.9
	02/03/93	310	2.9	0.8	15	6.0
	05/10/93	190	17	<0.5	23	5.2
	08/18/93	820	53	<1.3	71	16
	11/18/93	89	3.0	<0.5	9.3	0.73
	03/10/94	2,000	45	<2.5	390	281
	06/15/94	1,300	54	2.0	270	15
	09/15/94	370	4,7	<0.5	80	13
MW-3	04/15/92	69	2.8	<0.5	<0.5	<0.5
	07/07/92	<50	<0.5	<0.5	<0.5	<0.5
	09/23/92	<50	<0.5	<0.5	<0.5	<0.5
	11/12/92	<50	<0.5	<0.5	<0.5	<0.5
	02/03/93	<50	1.0	1.3	0.6	2.7
	05/10/93	53	1.6	<0.5	2.0	<1.5
	08/18/93	<50	1.0	<0.5	1.5	<0.5
	11/18/93	<50	<0.5	<0.5	<0.5	<0.5
	03/10/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/15/94	<50	<0.5	<0.5	<0.5	<0.5
MW-4	04/15/92	NS	NS	NS	NS	NS
	11/18/93	1,500	110	6.4	88	240
	03/10/94	4,000	460	5.1	370	450
	06/15/94	1,300	97	1.9	130	150
	09/15/94	1,100	34	1.6	70	110
MW-5	04/15/92	NS	NS	NS	NS	NS,
	11/18/93	2,800	23	<0.5	72	6.1
	03/10/94	2,900	26	<0.5	<0.5	98
	06/15/94	2,100	14	<0.5	29	18
	09/15/94	200	2.4	<0.5	<0.5	4.9

NOTES. < = Below indicated detection limit.

NS = Not sampled.

** = No samples collected since prior to April 1992.

Fugro

94-548/September 1994

TABLE 2

ANALYTICAL RESULTS: GROUNDWATER **BEACON STATION #546**

29705 MISSION BOULEVARD, HAYWARD, CALIFORNIA (All results in parts-per-billion)

Monitoring Well	Date Collected	Total Petroleum Hydrocarbons		Aromatic Vo	olatile Organics	
		Gasoline	Benzene	Toluene	Ethyl- benzene	Total Xylenes
MW-6	04/15/92	NS	NS	NS	NS	NS
	11/18/93	<50	<0.5	<0.5	<0.5	1.5
	03/10/94	<50	<0.5	<0.5	<0.5	<0.5
	06/15/94	<50	<0.5	<0.5	<0.5	<0.5
	09/15/94	<50	<0.5	<0.5	<0.5	<0.5
MW-7	04/15/92	1,600	21	1.2	2.0	1.2
	07/07/92	320	<0.5	<0.5	<0.5	<0.5
	09/23/92	90	<0.5	<0.5	<0.5	<0.5
	11/12/92	<50	<0.5	<0.5	<0.5	<0.5
	02/03/93	<50	<0.5	<0.5	<0.5	<0.5
	05/10/93	1,800	190	3.2	45	<1.5
	08/18/93	1,600	53	<2.5	<2.5	37
	11/18/93	730	<0.5	<0.5	<0.5	7.4
	03/10/94	1,000	0.90	<0.5	<0.5	2.8
	06/15/94	760	3.6	<0.5	<0.5	1.8
	09/15/94	900	0.63	<0.5	<0.5	<0.5
MW-8	04/15/92	40,000	1,900	34	1,200	1,800
	07/07/92	19,000	560	14	32	630
	09/23/92	4,200	370	<5.0	<5.0	150
	11/12/92	5,100	75	<2.5	<2.5	110
	02/03/93	29,000	800	1.1	660	720
	05/10/93	8,900	540	9.9	770	550
	08/18/93	10,000	790	<25	1,100	720
	11/18/93	8,700	420	<5.0	690	290
	03/10/94	9,500	650	<2.5	930	320
	06/15/94	6,600	360	<2.5	650	190
	09/15/94	7,000	220	<2.5	470	120
MW-9	02/03/92	28,000	64	9.6	70	510
	05/10/93	5,000	180	12	88	110
	08/18/93	4,900	290	<2.5	210	180
	11/18/93	8,800	340	6.0	240	200
	03/10/94	4,100	26	<1.3	23	16
	06/15/94	4,100	17	<1.3	18	8.4
	09/15/94	5,900	39	<2.5	45	16
MW-10	06/13/94	22,000	210	330	1,200	5,400
	09/15/94	1,500	< 0.5	<0.5	2.8	7.1

NOTES Below indicated detection limit.

Not sampled.

No samples collected since prior to April 1992.

Fugro 94-546/September 1994

ULTRAMAR FIELD PROCEDURES

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 probe 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 formational water and a ground water sample is collected. Ground water removed from the well is stored in 55-gailon drums at the site and labeled 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.

TABLE 1 GROUND-WATER ELEVATION DATA				
Well No.	Relative Casing Elevation	DTW	CWE	CHANGE FROM LAST QUARTER
APRIL 15,	1992			
MW-1	37.46	22.10	15.36	+ 1.67
MW-2	35.95	20.88	15.07	
MW-3	40.28	24.59	15.69	+ 1.70
MW-4	34.94	NA		
MW-5	36.37	NA		
MW-6	37.43	NA		₩ ₩ ₩
MW-7	30.50	16.00	14.50	+ 1.60
8-WM	28.48	14.30	14.18	+ 1.57
JULY 7, 19	92			
MW-1	37.46	23.40	14.06	
MW-2	35.95	21.95	14.00	
MW-3	40.28	25.90	14.38	- 1.31
MW-4	34.94	NA	~ - -	
MW-5	36.37	NA		
MW-6	37.43	NA		
MW-7	30.50	17.10	13.40	- 1.10
MW-8	28.48	15.60	12.88	- 1.30

Elevation of top of casing measured in feet relative to arbitrary datum (100 ft); Depth-to-water measured in feet below top of casting DTW = Depth-to-water CWE = Calculated water elevations

- Not Accessible NM

	ANALYT	TAE ICAL RESULTS	ILE 2 ON GROUND V	NATER SAMPLI	ES	
Well No.	Date	В	T	E	X	TPH-g
METT WM-1	4/15/92	710	11	150	440	8900
	7/7/92	<0.5	<0.5	<0.5	<0.5	∢ 50
WELL MW-2	4/15/92	21	<0.5	56	26	1200
	7/7/92	<0.5	<0.5	<0.5	<0.5	<50
WELL MW-3	4/15/92	1.8	< 0.5	< 0.5	< 0.5	69
	7/7/92	<0.5	<0.5	<0.5	<0.5	≮ 50
WELL MW-4	4/15/92 7/7/92	NA NA				
WELL MW-5	4/15/92 7/7/92	NA NA				
WELL MW-6	4/15/92 7/7/92	NA NA	,			
WELL MW-7	4/15/92	21	1.2	2.0	1.2	1600
	7/7/92	<0.5	<0.5	<0.5	<0.5	320
WELL MW-8	4/15/92	1900	34	1200	1800	40000
	7/7/92	560	14	32	630	19000

All results shown in parts per billion (ppb)

TPHg = Total petroleum hydrocarbons as gasoline

B,T,E,X = Benzene, Tuluene, Ethylbenzene, and Total Xylenes

Less than detection limit shown

NA = Not Analyzed

LABICANICA Y

September 27, 199 Sample Log 10230

Decetabe SEP 29 1994

Sample: 300-1

Parameter

Benzene TGluene Ethylbansene Total Hylenee TPH as Gasoline

Surrogate Recovery

From : Project # 94-846-01 (Former Beacon 546) Sampled : 09/15/94 Dilution: 1:1 QC Betch : 2104I Matrix : Mater

(MRL) were

(.50) (.50) (.50) (.50) (50)

Subject: Analytical Results for 10 Water Samples Identified as: Project # 94-946-01 (Pormer Season 546) Received: 09/16/94

Dear Mr. Richgeles

Sheile Richgels Fugro West, Inc.- Roseville 1050 Melody Eane, Buite 160 Roseville, CA 93678

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on September 27, 1994 and describes procedures used to analyze the samples.

Sample(s) were received in 40-millilitar glass vials smaled with TFE lined septes and plantic sorse-caps. Each sample was transported and received under documented chain of custody and atored at 4 degrees C until analysis was performed.

Sample(s) were enalyzed using the following method(s):

"STEX" (EPA Method 602/Furge-and-Trap)
"TPM as Gasoline" (Modified EPA Method 6016/Furge-and-Trap)

Please refer to the following table(e) for summarized analytical results and contact us at 916-753-9500 if you have questions regarding procedures or results. The chain-of-custody document is emplosed.

Approved by:

56 Sure Analyses Company of Column 1 Colum

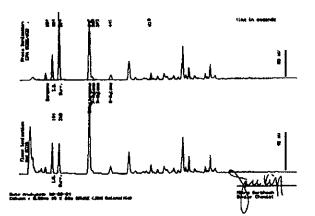
- INGURATURY

dample Log 10230

Sample: 189-2

From : Project # 94-546-01 (Former Seacon 546) Sampled : 09/15/94 Dilution : 1:12 QC Satch : 41035 Matrix : Water

Parameter	(MRL) upra	Measured Value — s
Senzena	(.50)	4.7
Toluene	(.50)	<.50
Sthylbenzane	(.50)	80
Total Tylenes	(.50)	13
TPH as Gaucline	(50)	370
Surrogate Recover	Y	102



Sample Log 10230

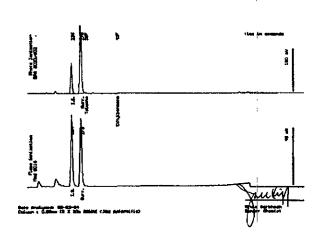
Sample Log 10230

12 4.50 12 5.8 78

Sample: 188-1

From: Project # 94-846-01 (Former Beacon 546) Sampled: 09/15/94 Dilution: 1:1 QC Batch: 21041 Matrix: Water

Parameter	(MRL) was	Velue wa
Benzene	(.50)	₹.50
Toluene	(.50)	₹.50
Sthylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	₹50
Surrogate Recover	y	99 1



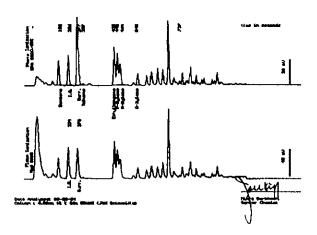
LABORANOAY

Sample Log 10230

Sample: 188-4

From : Project # 94-846-01 (Former Beacon 546) Bampled : 09/15/84 Dilution : 113 QC Batch : 2104E Watrix : Water

Parameter	(ML) 1974	Hendured Value/-
Benzene	(1.3)	34
Toluene	(1.1)	1.6
Ethylbensene	(1.3)	70
Total Xylenes	(1.3)	110
TPH as Gasoline	(130)	1100
Surrogate Recover	y	99 1



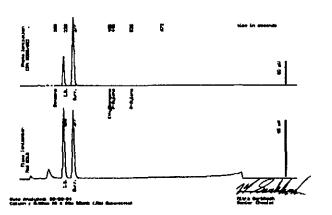
IN MASONATORY

Sample Log 10230

Sample: 100-6

From : Project # 94-546-01 (Former Beacon 546) Sampled : 09/15/94 Dilution : 111. QC Betch : 2104G Hatrix : Water

Parameter	(HRL) -ar-	Nessured Value apa
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.80
Total Xylenes	(.50)	<.80
TPH as Gasoline	(50)	<50
Aurrogate Recovery	,	99 t



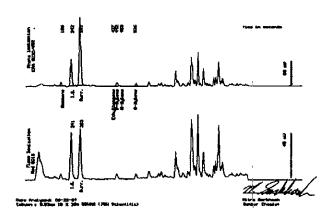
LABORATIONS

Sample Log 10230

Sample: 187-5

From : Project # 94-546-01 (Former Rescon 546) Sampled : 09/15/94 Dilution : 1:1 QC Batch : 21046 Natrix : Mater

Parameter	(HRL) ways	Measured Value wa
Banzane	(.50)	2.4
Toluene	(.50)	<.89
Ethylbensene	(.50)	<.50
Total Xvienes	(.60)	4.9
Total Xylenem TPH as Gasoline	(50)	200
Surrogate Recovery	•	103



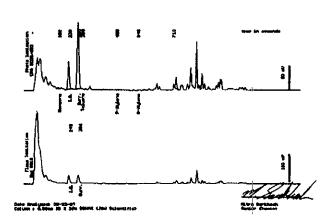
TUNSOKATIOS Y

Sample Log 10230

Sample: 186-7

From : Project # 94-546-01 (Pormar Sescon 545) Sampled : 09/15/94 Dilution : 1:1 QC Satch : 2104H Matrix : Mater

Parameter	(MRL) was	Measured Value
_		
Benzene	(.50)	.63
Toluene	(.50)	<.50
Ethylbensene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPE as Gasoline	(50)	> 00
durmante Pennyari	•	101 \$

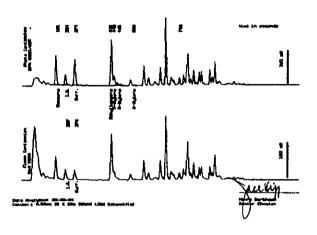


Sample Log 10230

Sample: 189-8

From : Project # 94-546-01 (Former Bescon 546) Sampled : 09/15/94 Bilution : 1:5 QC Satch : 2104I Natrix : Weter

Parameter	(POL) wa	Keasured Value un
Benzane	(2.5)	220
Toluene	(2.5)	₹2.5
Ethylbensens	(ä.s)	470
Total Xylenes	(2.5)	120
TPM am Gamoline	(250)	7000
Surrogate Recovery	,	95 %



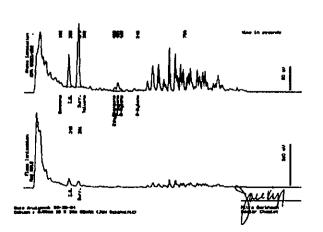
TLASICENTICTY

Sample Log 10230

Sample: MM-10

From : Project # 94-546-01 (Former Beacon 546) Respled t 09/15/94 Dilution : 1:1 QC Batch : 2104J Natrix : Water

Parameter	(100L) sare	Xeasured Value 10/6
Benzene	(.50)	<.30
Toluene	(.50)	<.50
Ethylbensene	(.50)	2.0
Total Xylenes	(.50)	7.1
TPH as Gaspline	(50)	1500
Surrounte Recovers	,	91 4



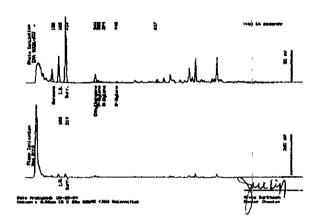
T LANGUANTURY

Sample: MM-9

From : Project # 94-546-01 (Former Beacon 546) Sampled : 09/15/94 Dilution : 1:5 QC Batch : 4103J Ratrix: Water

sample Log 10230

Perameter	(HRL) was	Hessured Volue — A
Bensene	(2.5)	139
Toluene	(2.5)	<2.5
Bthylbensene	(2.5)	48
Total Xylenes	(2.5)	.16
TPE as Gasoline	(250)	5900
Surrogate Recover	•	192 1



Report to For Search Children

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CHAIN OF CUSTODY REPORT

BEACON

100000 Station No. Former Beams 546 Voject No.		er (Print				L	W	ALYS	ES	Ι	7-/6-70	Form N	•
roject No. 94-546-01 roject Location 29 705 Arrestin shi God argument Car	Samp	Haller (Bigner 92 ion	HI BURN HALL	Lan Jan	54.		(deset)			Containen			
and No Admittagles		de	1		Lab He.		Ē			9	PEW	KS	
14W-9	4-15	-94	120			V.	\prod	П		3			
MW-10			12-50	>			ı	П		V			
						П	П	П					
						П	П	П					
						П	П	П		Ţ			
-						П	П	П					
						\top	П	П	П				
<u> </u>					7	Π	Ħ	Ħ	7	₫.			
Enquirosci by: (Signature/Hillation)		000			14 F	-	72	Z	Z,	#		Day	Time
da Il me hertat	}	74 H	لإلايا	≨ /		Á	7	1	ŲŽ	T		24.6	1/2
ANCO HIT	/	J.G.	بإمرا	_	no ng pagaman	//	_	7		<u>'</u>			1 Proc
			Time	Receiv	of by (Sty	7	Hilo	•	$\overline{}$			Cpri	Time
				<u> </u>	-777	M	11	_	_	0	VEST	1/2/1	153
Jelipagi /				Sell 10°	CETRAMA S25 West T Hanked, C Attention:_	hiet S	troet	en				7	

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

Former Beacon 546 29705 Mussian Hud Date: 9-15-94

Playword, Ca. Project No.: 94-546-01 Project Address:

Recorded by:

Well No	Time	Well Elev. TOC		Measured Total Depth	Gr. Water Elevation	Depth to Product	Product Thickness	Comments
MW-1	1051		2337	3 8 .00				no odor no shar
MW-2	1053		21.98	39.17				no odor no sheer
MW-3	1048		25.85	38.00				no odo- no ahen
MW-4			21.23	39.14				alight oder noshon
MW-5	/05.5		22.48	3 4.70				olishtodo noshea
MW-6	ハル		23.04	3922				no odor no sheer
MW-7	1038		17.07	33.97				alestrader no aton
MW-8			15.51	39.27				slight adornacho
MW-9	1078		10.32	7373				eleghiade maskoo
MW-10	1022		251	21.46				slight adornation elighteder makes
	!							

Notes:

							والمناقب المساور المساور	والمراجع المراجع المرا
	Client:_	Ultramar		s	ampling [Date: 9	-15-94	
	Site:_	Beacon #	546		Projec	et No.:9	4-546-01	
		29705 Mi	ssion Blvd	. We	ll Design	nation:_	<u>mw-</u>	
		Hayward,	CA	······				
Is the	ere stand	ing water	trol device in well be vel? locked? iser (in i limited	ox?	MO MO	YES Above To	ove TOC	Below TOO
-			2" dispo 2" PVC b 4" PVC b	ailer	-	Subr Ded: X Cent	icated bacrifugal	ailer
			posal bail		· · · · · · · · · · · · · · · · · · ·			
	Well I	Diameter:	2"	4" <u>X</u>	6"	_ 8"		
Initia Time:_ Depth Depth	of well:	1600 : 23.17	Time: <u>/2-/3</u> Depth to	0.65 harge Mea water: 2	3.40	Calculate Actua		
Start	purge:	1150	Sam	pling time	e: <u>1215</u>			
	Time	Temp.	E.C.	рН	Turbi	.dity	Volume	
	1184	76.8	1788	7.60			1	
	1158	72.8	1540	8.67			2	
	1203	72.7	1278	7.57			3	
	1208	72.7	1235	7.61			4	
s	ample ap	pearance:	clean		Lock:	3763		
2" L 4" L 6" L	ocking (ocking (ocking (aced: (Ch Cap: Cap:	_ Lock-	nat apply) k #3753: Dolphin:		7/32 A	llenhead /16 Bolt	:
Rema	····	2/1	<i>a</i> /					
Signat	ure:	Hal	Dansa			·	'	

C	lient:_	Ultramar		s	ampling	Date: 9	-15-94	
	Site:_	Beacon #	546	<u>-</u>	Projec	ct No.: <u>9</u>	4-546-01	
		29705 Mi	ssion Blvd	We	ll Design	nation:_	MW-2	
		Hayward,						
Is the Is top	re stan of cas	raffic con ding water ing cut leee aled and l casing r pe: 8" UV 12" DWP X tion of we	in well b vel? locked?	ox?	NO NO	VES I	f no, se	hours Below TOC e remarks e remarks K
-	g Equip		2" dispo 2" PVC b 4" PVC b			Ded: XCent	mersible icated b trifugal	ailer pump
s	ampled	with: Dis	posal bail	er: <u>\</u>	Teflor	bailer	·	
		Diameter:						
Initia Time: Depth Depth	l Measu 'Q5/ of well to wate	1tiplier: rement : 3600 r: 21.48	Rec Time: 12 Depth to		surement	2.0 Calculate Actua	61 gal ed purge al purge	/ft. : <u>41.9 a</u> d : <u>41.9 /</u>
	Time	T	E.C.	Ţ	Υ	dity	Volume	
			18420	 			1	
	12.29	77.3	1219	7.53			7	
	1232	73,5	1077	7.23			<u>ک</u> ۲	
	1233	72.7	1028	720			4_	
c	ample a	opearance:	clear		Lock:	3753		
Equipme 2" Le 4" Le	ent replocking (laced: (Ch Cap: Cap:	eck all th Lock	at apply) k #3753: Dolphin:	Note co	ondition 7/32 A	of repla	aced item
Remai	rks:							
Signati	ıre: _	Hal	Wanson				:	

c:	lient:	Ultramar		S	Sampling D	Date: 9-	15-94	
	Site:	Beacon #!	546		Projec	t No.:94	4-546-01	<u>-</u>
		29705 Mi	ssion Blvd	We	ell Design	nation:	мw-3	<u></u>
		Hayward,		····				
Is top	of casi	ing cut le	trol device in well be vel? locked? iser (in i: 12 12" CN		NO NO	VES I	t no, se f no, se	e remarks e remarks
			2" dispo 2" PVC b 4" PVC b posal bail			Ded: X Cent	mersible icated batrifugal	ailer
50			2"					
Initia Time: Depth of Depth	l Measur 1047 of well: to water	tiplier: cement 38,00 c: 25.85	Rec Time: //: Depth to	harge Mea 34 water:	1.47 asurement 25.94 ne: <u>//</u> 35	2.0 Calculate Actua	61 gal	/ft. : <u>31.6gal</u> : <u>31.6 //</u>
Start	Time	Temp.	E.C.	,		ldity	Volume	\neg
	Time				1415.		, vorume	
	1115	72.9	1285	810			<u> </u>	
	1120	73,2	1267	805			2	
	1125	72.8	1323	7.88			3	
	1131	73.1	7378	7.60				
S	ample ap	ppearance:	clear		Lock:	3753	3	
2" L 4" L 6" L	ocking (ocking (ocking (Laced: (Cl Cap: Cap:	Lock-	nat apply k #3753:_ Dolphin:_		7/32	Allenhead	aced item d: t:):
Remai		2/109	Yanser				;;;;	
Signat	are: —	- Bull	mi will	<u> </u>	····			

c	lient:_	Ultramar	•		Sampling Date:	1-15-94	.
	Site:_	Beacon #	546	·····	Project No.:	94-546-01	<u>-</u>
		29705 Mi	ssion Blvd	We	ell Designation:		_
		Hayward,	CA				
Is the	re stan	ding water	trol device in well be vel? locked? iser (in iser 12 CN llhead ass	ox?		time:Above TOC Bellif no, see root If no, see root BK	low TOO
			2" dispo 2" PVC b 4" PVC b	ailer ailer		bmersible pu dicated bail ntrifugal pu	mp .er .mp
s	ampled w	with: Dis	posal bail	er: <u>X</u>	Teflon baile	r:	
	Well	Diameter:	2"	4"	6" 8"		
Initia Time:_ Depth Depth	l Measu: /03 4 of well to water	ltiplier: rement :_ 39/4 r:_21.23	Rec Time: 30 Depth to	harge Mea 1 water:	1.47 2 surement Calcula 2141 Act		
	Time	Temp.	E.C.	рн	Turbidity	Volume	
	263	<i>1</i> 9. 4	1475	7.17		, .	
	157	78,7	A09	7.09		2	
	302	78.7	1262	7.02		3	
	306	78.0	1155	6.98		4	
S	ample ap	pearance:	clear		Lock:37	53	
2" L	ocking (ocking (ocking (Cap:	_ Lock-I	c #3753:	7/32	Allenhead:9/16 Bolt:_	
			····				
Signati	ure:	Ha	12 Jan				

C	:lient:_	Ultramar		S	ampling	Date: <u>9</u>	-15-94		
	Site:_	Beacon #		Proje	ct No.: <u>9</u>	<u>4-546-01</u>	·		
		29705 Mi	ssion Blvd	<u>l.</u> We	ll Design	nation:_	mw- 5		
	****	Hayward,	CA						
Is the Is top Is wel Height Well c 12" BK Genera	re stand of casi l cap se of well over typ		in well by vel? locked? iser (in i locked lo	nches): 2" UV	NO NO 12" E 6" CNI xcellent	YES Ab YES I YES I MCOOthSub	er	Below TOO e remarks e remarks Poor pump	
s	ampled w	vith: Dis	posal bail	er: <u>/</u>	Teflor	n bailer	<u>:</u>		
	Well D	iameter:	2" <u>X</u>	4"	6"	_ 8"			
Initia Time: Depth Depth	Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft. Initial Measurement Time: 1055 Depth of well: 34.70 Depth to water: 2148 Depth to water: 2148								
Start	purge:	238	Sam	pling time	e: <u>245</u>			<u> </u>	
	Time	Temp.	E.C.	рН	Turbi	dity	Volume	<u> </u>	
	134	78.4	1387	6.81			1		
	40	17.0	1393	6.92	2				
	241	77.0	1420	6.92	<u> </u>		3		
	24)	76.7	1437	6.94			4		
S	ample ap	pearance:	dear		Lock:	3753			
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: 9/16 Bolt: Pinned Allenhead (DWP): Remarks:									
		<u> </u>							
Signatu	re:	Wal W	ansa						

Client: <u>Ultramar</u>					Sampling Date:	7-15-94				
	Site: Beacon #546				Project No.: <u>94-546-01</u>					
29705 Mission Blvd.					ell Designation:	<u>mw- 6</u>				
		Hayward,	CA			i				
Is the Is top Is well Height	ere stand of casi l cap se of well	ling water ing cut le ealed and L casing r	locked?	nches):	NO YES A NO YES NO YES	time:hours bove TOC Below TOC If no, see remarks If no, see remarks8" BK herFair Poor				
	Purging Equipment: 2" disposable bailer 2" PVC bailer 4" PVC bailer Submersible pump Dedicated bailer Centrifugal pump Sampled with: Disposal bailer: Teflon bailer:									
					6" 8"					
Initia Time:_ Depth Depth	1 Measur 1042 of well: to water	39.22	Rec Time: 14 Depth to	<u>harge Mea</u>	Calculate Acti	ed purge: 10.4 suct pur				
	Time	Temp.	E.C.	рН	Turbidity	Volume				
	141	79.1	13 76	7.47		1				
	142	78.7	1377	732		2				
	143	78.1	1366	7.19		3				
	144	77.0	1328	7.14		4				
S	ample ap	pearance:	<u> Claar</u>		Lock:37	<u>'53</u>				
2" L	ocking C ocking C	aced: (Chap: ap: ap:	_ Lock-	nat apply) k #3753:_ Dolphin:_	7/32	n of replaced item Allenhead: 9/16 Bolt: mead (DWP):				
Remai	rks:									

Signature: Wal Mansen

С	lient:_	Ultramar		s	ampling	Date: 9	-15-94	
	Site:_	Beacon #	546		Proje	ct No.:9	4-546-01	ļ -
	29705 Mission Blvd.			l We	ll Desig	nation:_	mw-7	
-		Hayward,	CA	-				!
Is the Is top Is well Height Well con 12" BK General	re stand of cas: l cap se of well over typ	ding water ing cut le ealed and casing role: 8" UV L2" DWP X cion of we	trol device in well by vel? locked? iser (in i label l	nches): 2" UV	NO NO 12" I 6" CNI xcellent	YES ALL YES I YES I EMCOOth Good Sub	ove TOC f no, se f no, se _ 8" BI er	Below TOO e remarks e remarks Poor pump
S	ampled w	vith: Dis	posal bail	er: <u>\(\(\) \</u>	Teflo	n bailer	:	1.
			2"					
Initia Time: Depth of	l Measur ///// of well: to water	33.47 :: 17.07	Rec Time: Depth to	0.65 harge Mea 134 water:_/	<u>741</u>			
Start P	Г		Sam	pling time	e: <u>~3</u>)		<u> </u>	,
	Time	Temp.		рН	Turb:	idity	Volume	·
	215		1196	7.13	_		1	
	220	74.1	1133	7.16			2	
	2.25	72	1409	7.03			3	
	230	71,5	1157	6.94			4	
			- / -		71		<i>tr</i> 1	
			clear		Lock:		753	
2" Lo 4" Lo	ocking Cocking C	ap:	eck all th Lock-I Lock-I	<pre>#3753:</pre>	<u></u>	7/32	of repla Allenhead 0/16 Bolt ead (DWP)	<u> </u>
Remar	ks:							
Signatu	ıre:	2/1/2	lansa					

Client: <u>Ultramar</u>				S	ampling	Date: <u>9</u>	-15-94		
Site: Beacon #546					Project No.: 94-546-01				
	29705 Mission Blvd.					nation:_	MW-8		
	****	Hayward,		<u> </u>					
Is the Is top	re stand	raffic con ding water ing cut le ealed and casing re: 8" UV 12" DWP X tion of we	in well b vel? locked?	ox?	NO NO	YES AL	f no, se	hours Below TOO e remarks e remarks K	
·	g Equip		2" dispo 2" PVC b 4" PVC b	ailer ailer	-	Ded Cen	mersible icated b trifugal	ailer	
s		with: Dis						-	
	Well i	Diameter:	2"	4"	6"	_ 8"_			
Initia Time: Depth Depth	l Measum [03] of well: to water	392/	Rec Time: 3 Depth to	0.65 harge Mea bb water: /	<u>5.7/</u>				
Start					1			 	
	Time	Temp.	E.C.	pH	Turbi	dity	Volume		
	3/8		_	7.20		· · · · · · · · · · · · · · · · · · ·		-	
	323	75. 7	1151	720			2.		
	318	74,5	1155	7.21	<u> </u>		3	_	
	337	74.0	1167	7.18			4		
Sa	ample ap	pearance:	Clean		Lock:	3753			
2" Lo 4" Lo	ocking Cocking Cocking C	aced: (Ch lap: lap:	Loci	at apply) c #3753: Dolphin:		7/32 A	Allenhead	ced item	
	· · · · · · · · · · · · · · · · · · ·					······································		<u>,</u>	
Signatu	ıre:	Idal	Hanse						

DOULOS ENVIRONMENTAL COL

Client: <u>Ultramar</u>				s	ampling	Date: <u>1</u>	15-94	
	Site: <u>Beacon #546</u>				Proje	ct No.: <u>9</u>	4-546-01	:
	29705 Mission Blvd.				ll Desig	nation:_	MW- 9	
		Hayward,	CA					
Is the Is top	re stand of casi	raffic contains water ing cut leveled and casing ripe: 8" UV DWP_cion of well	in well b vel? locked?	ox?	NO NO	YES Ab	ove TOC f no, se f no, se	hours Below TOC e remarks e remarks x Poor
-	g Equipm	-	2" dispo 2" PVC b 4" PVC b	ailer ailer		Ded X_Cen	mersible icated ba trifugal	ailer
s		vith: Disp						+
	Well D)iameter:	2" <u>X</u>	4"	6"	_ 8"_		
Initia Time: Depth	1 Measur	_2123	Rec	0.65 harge Mea /26 water: <u>/</u> (surement			
Start	purge:	120	Sam	pling time	e: <u>/}</u> D_			1
	Time	Temp.	E.C.	рн	Turb	idity	Volume	
	ايدا	81.1	1259	715			1	
	112	71.3	1330	6.98			2.	,
	122	15.4	1296	6.62			9	
	/13	76.2	13-31	6 .73			4	
S	ample ap	pearance:	dear		Lock:	dolp	hin	<u> </u>
2" L	ocking C ocking C	aced: (Ch cap: cap:	Loc	at apply) k #3753: Dolphin:		7/32		ced item
Rema	rks:							· ·
Signati	ure:	2/1/9/	ansa.					I

Client: <u>Ultramar</u>				S	ampling	Date: 9	-15-94	
Site: Beacon #546					Proje	ct No.:9	4-546-01	
	29705 Mission Blvd.				ll Desig	nation:_	MW-10	
		Hayward,	CA		_		1	
Is the Is top Is wel Height Well c 12" BK Genera Purgin	re stand of cas look of well over ty	raffic confiding water ing cut level ealed and ing cut level ealed and ing right in the cut of the	trol device in well by vel? locked? locked? locked? locked? locked? locked? locked? locked? locked! lo	nches): " UV 3 embly: E sable bai ailer ailer er:	NO NO 12" F 6" CNI xcellent ler Teflo	EMCOOth GoodSub Cen n bailer	ove TOC f no, se f no, se 8" B er Fair mersible icated b trifugal	Poor pump ailer
Initia Time: Depth Depth	Vol. Mui l <u>Measur</u> /ひよ上 of well to water	21.46	0.16 Rec Time: / Depth to	0.65 harge Mea 149 water: pling time	1.47 surement 7.00	2.		Λ
	Time	Temp.	E.C.	рH	Turb	idity	Volume	
	1245	80.2	1358	7.22			1	
	1245	72.5	13 49	720			2	
	1246	74.4	1298	714			3	
	1246	73. <i>7</i>	1213	7.13			4	
S	ample ap	pearance:	clau		Lock:	dol	ahen	
2" Lo 4" Lo	ocking (ocking (Cap: Cap:		at apply) k #3753: Dolphin:		7/32 1	of repla Allenhead 9/16 Bolt ead (DWP)	
		2/1/0	Wansh					
Signatu	π.e:		My (A) I want	١		<u>-</u>		