El Dorado Environmental, Inc.

2221 Goldorado Trail, El Dorado, California 95623

(916) 626-3898
Fax (916) 626-3899

January 2, 1996

Mr. Terrence A. Fox
Environmental Specialist
Ultramar Inc.
525 West Third Street
Hanford, California 93230

Subject: **Third Quarter 1995 Ground Water Monitoring Report**
Beacon Station #604, 1619 West First Street, Livermore, California

Dear Mr. Fox:

El Dorado Environmental, Inc. (EDE) has prepared this report to document the results of quarterly ground water monitoring conducted on September 26, 1995 at the subject site (Figure 1). Field work, conducted by Doulos Environmental (Doulos), included measurements of depth to ground water, subjective analysis of ground water in wells for the presence or absence of free petroleum product, well purging, and collection of ground water samples. Doulos reports that all field activities were conducted in accordance with field procedures described in Attachment A.

GROUND WATER CONDITIONS

Prior to well purging, Doulos collected depth to ground water measurements in each well at the site. Ground water elevation data collected at the site since June 1993 are compiled in Table 1. Copies of Doulos' field data sheets are contained in Attachment B. Current depth to ground water measurements indicate a direction of ground water flow toward the northwest (Figure 2) at a gradient of approximately 0.02 foot per foot. Ground water elevation beneath the site has decreased an average of 5.99 feet since the previous monitoring event.

GROUND WATER SAMPLING AND ANALYSIS

Ground water samples were collected from seven monitoring wells at the site. Sampling field notes are contained in Attachment B. Each sample collected was analyzed for dissolved benzene, toluene, ethylbenzene, total xylenes (BTEX), and total petroleum hydrocarbons as gasoline (TPHg) using methods approved by the U.S. Environmental Protection Agency (EPA). Analytical results since June 1993 are compiled in Table 2; copies of certified analytical reports for ground water samples collected during the current monitoring event are contained in Attachment C.

Benzene was not present at detectable concentrations in samples collected from monitoring wells MW-3 and MW-4. Dissolved benzene concentrations decreased in ground water samples collected from monitoring wells MW-2, MW-6, and MW-7. Benzene concentrations increased in samples collected from monitoring wells MW-1 and MW-5. Figure 3 illustrates the current interpreted distribution of dissolved benzene in ground water underlying the site.

Sampling of a monitoring well installed by others as part of an off-site ground water investigation was conducted on August 29, 1995. The sample collected from monitoring well MW-23 (independent well numbering system), located approximately 259 feet north and 79 feet west of MW-6, contained TPHg at a concentration of 54 micrograms per Liter (μg/L). BTEX constituents were not present in this sample at detectable concentrations. A copy of the certified analytical report for this sample is included in Attachment C.

A copy of this quarterly monitoring report should be submitted to:

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

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

The interpretations and/or conclusions contained in this report represent our professional opinions. These opinions are based on currently available information. Other than this, no warranty is implied nor intended. This report has been prepared solely for the use of Ultramar Inc. Any reliance upon or use of this report by third parties will be at such parties' sole risk.

If you have any comments or questions, please contact the undersigned at (916) 626-3898.

Regards,

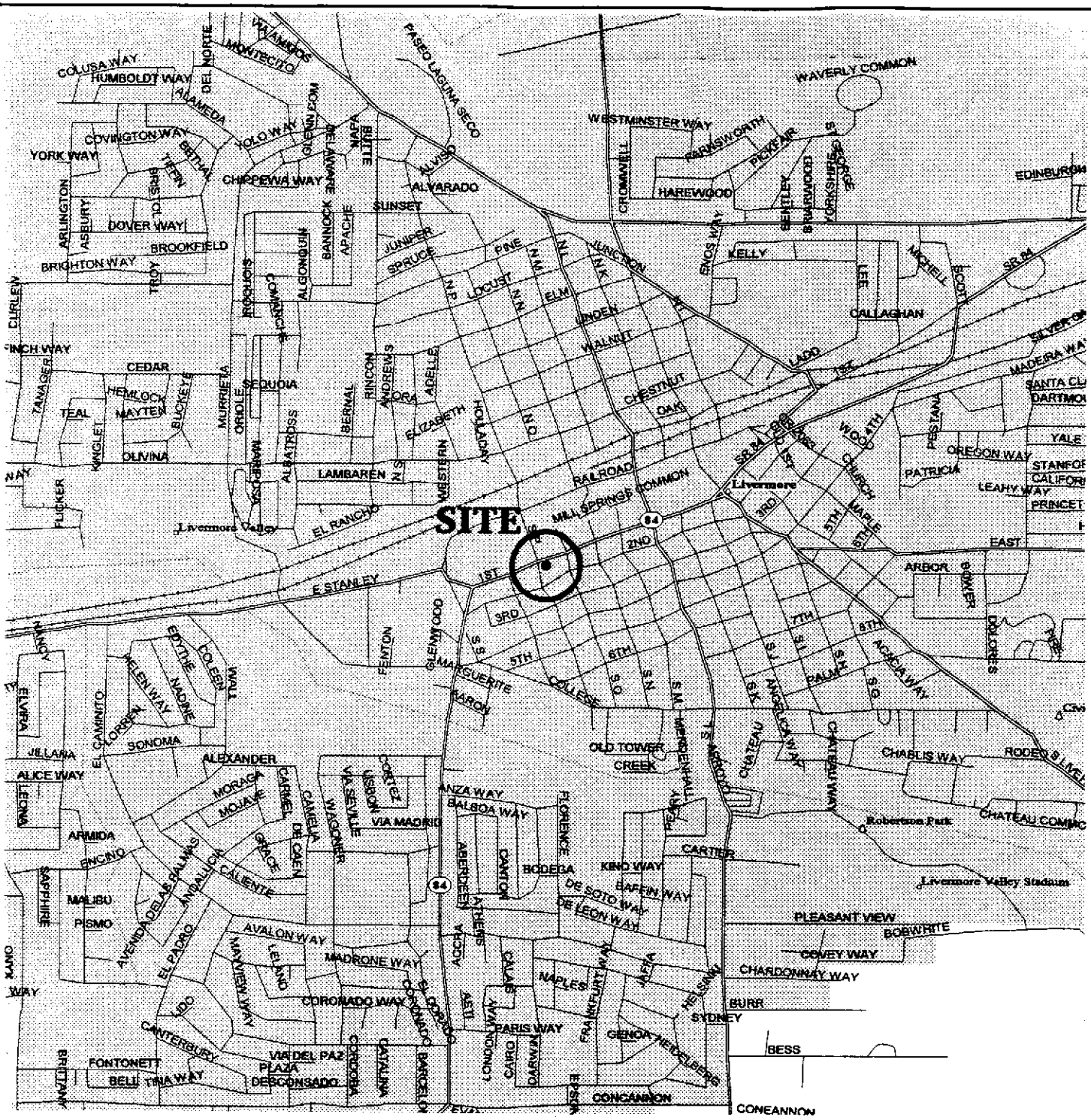
EL DORADO ENVIRONMENTAL, INC.

Dale A. van Dam

Dale A. van Dam, R.G.
Hydrogeologist

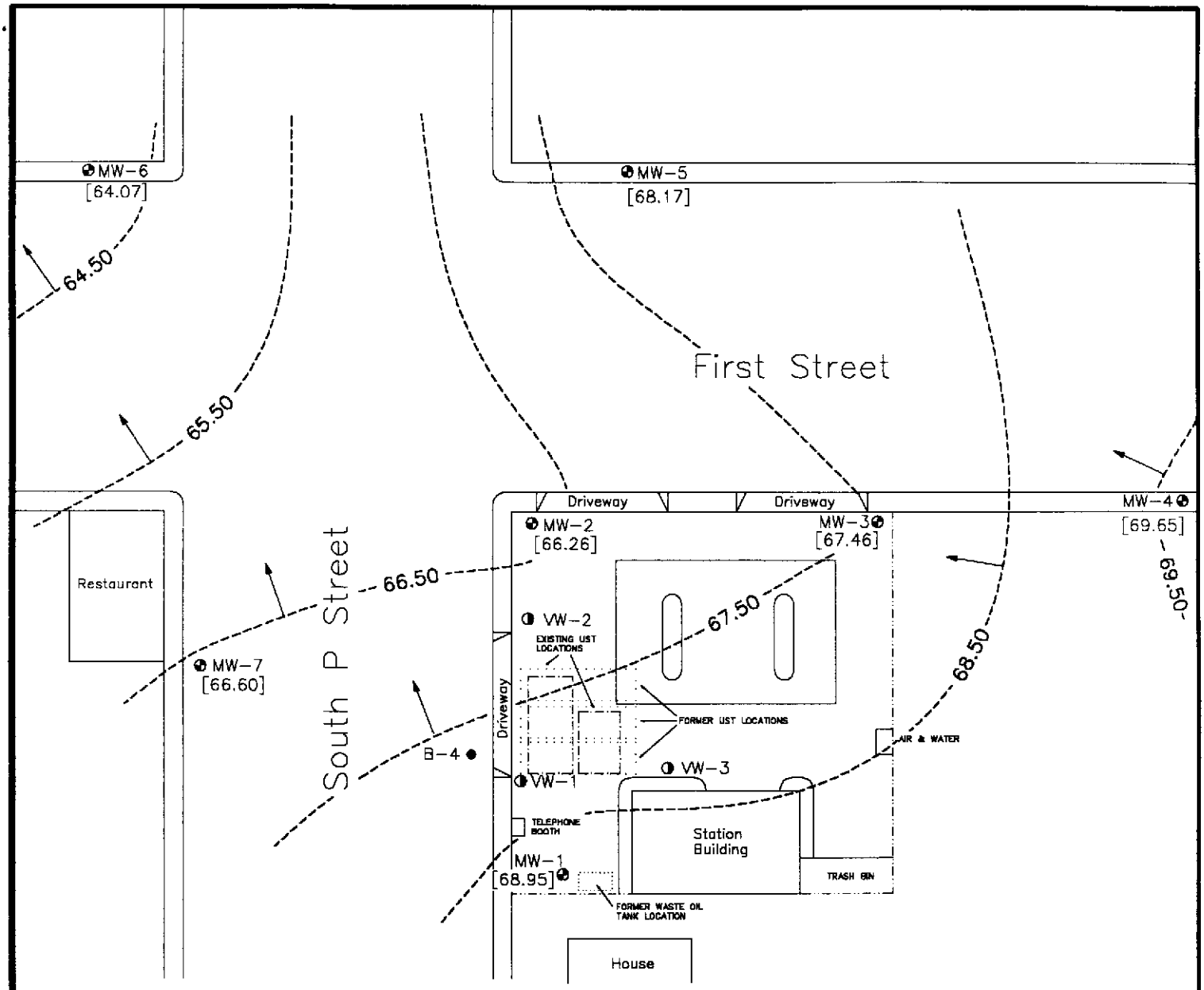
DAvD/davd

Attachments



SOURCE: STREET ATLAS U.S.A., DELORME MAPPING, 1994

SITE LOCATION MAP	FIGURE 1
BEACON STATION #604 1619 WEST FIRST STREET LIVERMORE, CALIFORNIA	PROJECT NUMBER: U013.01 DRAWN BY: D.A.V.D.
EL DORADO ENVIRONMENTAL, INC.	CHECKED BY: DVD



EXPLANATION

SB-4 ●	Soil Boring Location and Number
VW-3 ◑	Vadose Well Location and Number
MW-5 ⊕	Monitoring Well Location and Number
[67.46]	Ground Water Elevation in Feet
68.50	Line of Equal Elevation of Ground Water Measured in Feet
	Inferred Direction of Ground Water Flow

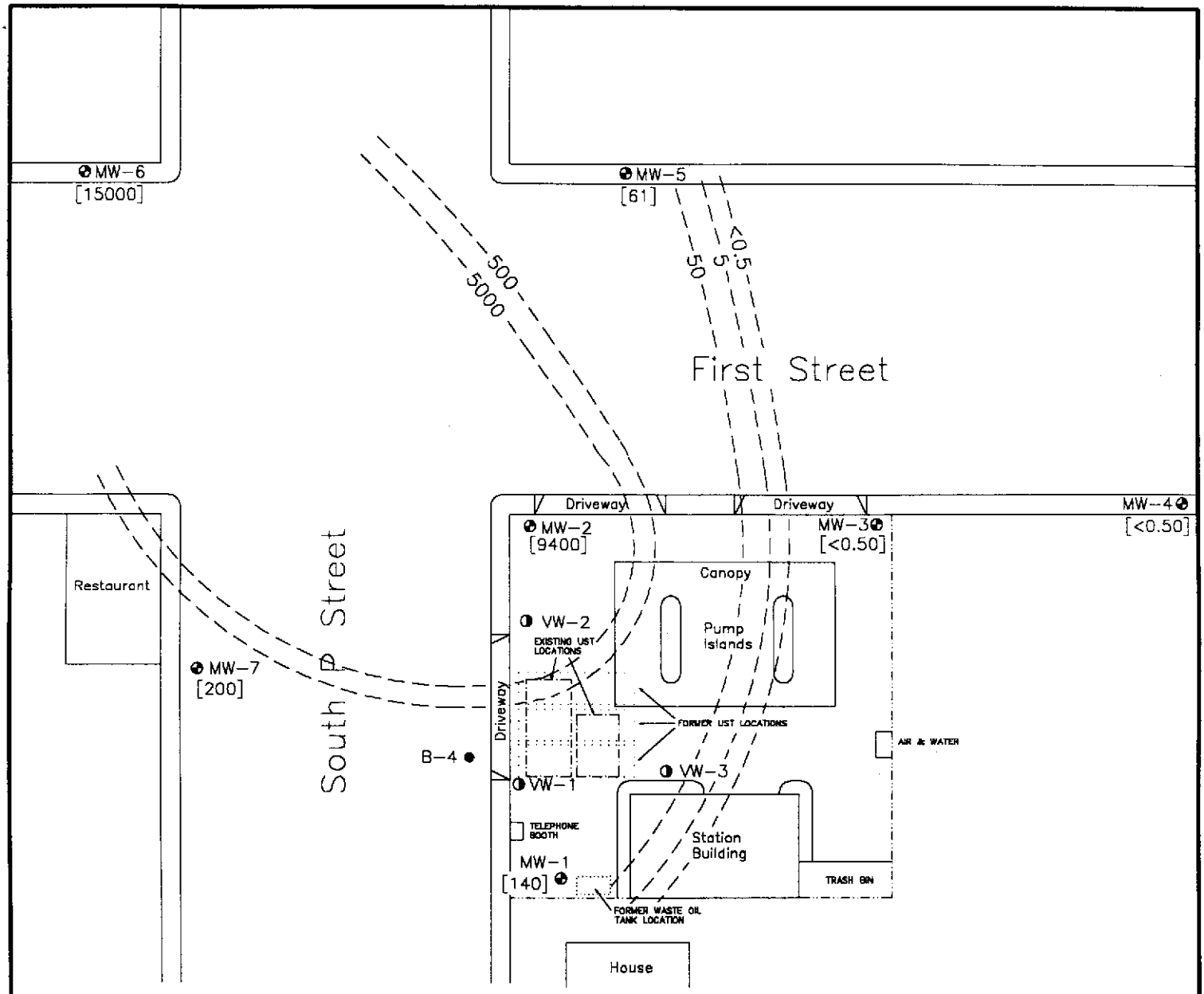
NORTH

0 40

SCALE IN FEET

GROUND WATER CONTOUR MAP, SEPTEMBER 26, 1995	FIGURE 2
BEACON STATION #604 1619 WEST FIRST STREET LIVERMORE, CALIFORNIA	PROJECT NUMBER: U013.01 DRAWN BY: D.A.V.D.
EL DORADO ENVIRONMENTAL, INC.	CHECKED BY: DVD

SOURCE: FIGURE MODIFIED FROM DRAWING PROVIDED BY ACTON*MICKELSON*ENVIRONMENTAL, INC.



EXPLANATION

- SB-4 ● Soil Boring Location and Number
- VW-3 ◑ Vadose Well Location and Number
- MW-5 ◕ Monitoring Well Location and Number
- [140] Benzene Concentration in Micrograms/Liter
- 50 Benzene Isoconcentration Line in Micrograms per Liter

NORTH

0 40

SCALE IN FEET

SOURCE: FIGURE MODIFIED FROM DRAWING PROVIDED BY ACTON*MICKELSON*ENVIRONMENTAL, INC.

DISSOLVED BENZENE DISTRIBUTION MAP, SEPTEMBER 26, 1995	FIGURE 3
BEACON STATION #604 1619 WEST FIRST STREET LIVERMORE, CALIFORNIA	PROJECT NUMBER: U013.01 DRAWN BY: D.A.v.D.
EL DORADO ENVIRONMENTAL, INC.	CHECKED BY: DvD

TABLE 1
GROUND WATER ELEVATION DATA

Beacon Station #604
1619 West First Street, Livermore, California

Monitoring Well	Top of Riser (feet)	Depth to Top/Bottom of Screened Interval (feet)	Monitoring Date	Depth to Water (feet)	Ground Water Elevation (feet)	Physical Observation
MW-1	100.00	34/54	06/01/93	37.50	62.50	No Product
			06/22/93	38.46	61.54	No Product
			10/06/93	42.22	57.78	No Product
			01/13/94	34.52	65.48	No Product
			03/30/94	31.93	68.07	No Product
			04/25/94	33.49	66.51	No Product
			08/12/94	41.03	58.97	No Product
			12/14/94	38.63	61.37	No Product
			02/10/95	30.80	69.20	No Product
			06/15/95	25.46	74.54	No Product
			09/26/95	31.05	68.95	No Product
MW-2	98.68	34/54	06/01/93	38.02	60.66	No Product
			06/22/93	39.07	59.61	No Product
			10/06/93	43.72	54.96	No Product
			01/13/94	35.85	62.83	No Product
			03/30/94	32.82	65.86	No Product
			04/25/94	34.76	63.92	No Product
			08/12/94	44.33	54.35	No Product
			12/14/94	40.00	58.68	No Product
			02/10/95	32.16	66.52	No Product
			06/15/95	25.93	72.75	No Product
			09/26/95	32.42	66.26	No Product
MW-3	97.08	33/53	06/01/93	36.18	60.90	No Product
			06/22/93	37.11	59.97	No Product
			10/06/93	41.15	55.93	No Product
			01/13/94	33.95	63.13	No Product
			03/30/94	30.97	66.11	No Product
			04/25/94	32.46	64.62	No Product
			08/12/94	41.72	55.36	No Product
			12/14/94	37.62	59.46	No Product
			02/10/95	29.96	67.12	No Product
			06/15/95	23.66	73.42	No Product
			09/26/95	29.62	67.46	No Product

See notes at end of table

TABLE 1
GROUND WATER ELEVATION DATA

Beacon Station #604
1619 West First Street, Livermore, California

Monitoring Well	Top of Riser (feet)	Depth to Top/Bottom of Screened Interval (feet)	Monitoring Date	Depth to Water (feet)	Ground Water Elevation (feet)	Physical Observation
MW-4	99.35	27/47	03/30/94	31.56	67.79	No Product
			04/25/94	32.73	66.62	No Product
			08/12/94	41.61	57.74	No Product
			12/14/94	38.11	61.24	No Product
			02/10/95	30.50	68.85	No Product
			06/15/95	23.63	75.72	No Product
			09/26/95	29.70	69.65	No Product
MW-5	98.37	27/47	03/30/94	32.07	66.30	No Product
			04/25/94	33.65	64.72	No Product
			08/12/94	42.73	55.64	No Product
			12/14/94	38.89	59.48	No Product
			02/10/95	31.44	66.93	No Product
			06/15/95	24.99	73.38	No Product
			09/26/95	30.20	68.17	No Product
MW-6	97.62	28/48	03/30/94	33.38	64.24	No Product
			04/25/94	35.49	62.13	No Product
			08/12/94	45.14	52.48	No Product
			12/14/94	40.99	56.63	No Product
			02/10/95	33.34	64.28	No Product
			06/15/95	26.88	70.74	No Product
			09/26/95	33.55	64.07	No Product
MW-7	98.03	27/47	03/30/94	31.98	66.05	No Product
			04/25/94	33.56	64.47	No Product
			08/12/94	43.35	54.68	No Product
			12/14/94	39.34	58.69	No Product
			02/10/95	32.11	65.92	No Product
			06/15/95	25.51	72.52	No Product
			09/26/95	31.43	66.60	No Product

Note: Monitoring well casing elevations were surveyed relative to an arbitrary bench mark at the top of the casing of monitoring well MW-1 with an assumed elevation of 100.00 feet.

TABLE 2
GROUND WATER ANALYTICAL RESULTS

Beacon Station #604
1619 West First Street, Livermore, California
Concentrations in micrograms per Liter

Monitoring Well	Monitoring Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total Petroleum Hydrocarbons as Gasoline
MW-1	06/01/93	2200	400	<50	4900	27000
	06/22/93	8000	10000	260	10000	87000
	10/06/93	4700	6500	740	5300	40000
	01/13/94	1300	950	110	850	9400
	04/25/94	1500	1800	290	1700	11000
	08/12/94	550	330	260	1400	11000
	12/14/94	1000	1200	320	1500	11000
	02/10/95	1200	1500	280	1500	9300
	06/15/95	5.6	<0.50	<0.50	<0.50	140
	09/26/95	140	<0.50	<0.50	43	410
MW-2	06/01/93	20000	21000	3300	18000	170000
	06/22/93	19000	22000	3500	18000	160000
	10/06/93	17000	17000	3000	15000	110000
	01/13/94	20000	19000	2300	14000	93000
	04/25/94	9600	7300	840	7800	41000
	08/12/94	11000	11000	2300	11000	59000
	12/14/94	13000	13000	2200	12000	63000
	02/10/95	12000	12000	2200	11000	63000
	06/15/95	11000	12000	1900	11000	61000
	09/26/95	9400	11000	2300	12000	61000
MW-3	06/01/93	4.6	<0.50	<0.50	1.9	270
	06/22/93	8.2	<0.50	<0.50	0.72	160
	10/06/93	57	110	24	120	740
	01/13/94	2.6	0.67	0.78	4.2	83
	04/25/94	0.75	3.2	0.50	3.6	60
	08/12/94	7.3	14	2.6	13	310
	12/14/94	<0.50	<0.50	<0.50	<0.50	75
	02/10/95	1.4	<0.50	<0.50	1.8	96
	06/15/95	<0.50	<0.50	<0.50	<0.50	<50
	09/26/95	<0.50	<0.50	<0.50	<0.50	<50

TABLE 2
GROUND WATER ANALYTICAL RESULTS

Beacon Station #604
1619 West First Street, Livermore, California
Concentrations in micrograms per Liter

Monitoring Well	Monitoring Date	Benzene	Toluene	Ethylbenzene	Xylenes	Total Petroleum Hydrocarbons as Gasoline
MW-4	03/30/94	4.2	15	2.5	26	120
	04/25/94	<0.50	1.8	<0.50	2.1	65
	08/12/94	<0.50	<0.50	<0.50	<0.50	<50
	12/14/94	<0.50	<0.50	<0.50	<0.50	<50
	02/10/95	<0.50	<0.50	<0.50	<0.50	<50
	06/15/95	<0.50	<0.50	<0.50	<0.50	<50
	09/26/95	<0.50	<0.50	<0.50	<0.50	<50
MW-5	03/30/94	1300	20	<13	160	7500
	04/25/94	1100	41	130	740	6500
	08/12/94	420	2.9	41	98	4000
	12/14/94	660	<2.5	33	13	4800
	02/10/95	490	<13	23	19	5200
	06/15/95	<0.50	<0.50	<0.50	<0.50	460
	09/26/95	61	<0.50	3.1	<0.50	1400
MW-6	03/30/94	21000	8600	1700	12000	63000
	04/25/94	22000	12000	2300	16000	77000
	08/12/94	12000	8100	2200	16000	65000
	12/14/94	18000	9500	2200	14000	65000
	02/10/95	21000	8400	2000	14000	63000
	06/15/95	20000	11000	2100	15000	75000
	09/26/95	15000	9600	1700	12000	62000
MW-7	03/30/94	7200	2400	1600	11000	43000
	04/25/94	3900	1000	940	6900	30000
	08/12/94	3800	1400	1300	7500	30000
	12/14/94	3600	1200	900	6400	31000
	02/10/95	4000	900	890	5100	27000
	06/15/95	920	680	740	4100	17000
	09/26/95	200	150	170	810	7000

ATTACHMENT A

ULTRAMAR FIELD PROCEDURES

ATTACHMENT A - ULTRAMAR FIELD PROCEDURES

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

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 fro 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 of the purge water are monitored. The well is considered to be sufficiently purged when: The four casing volumes have been removed; the temperature, pH, and conductivity values 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 or pumped 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 depth to water 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 depth to water 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-gallon 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 well 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 the purging process, a final free product thickness measurement will be taken and a ground water sample will not be collected.

Ground water samples are stored in 40-milliliter vials so that air passage through the sample is minimized (to prevent volatilization of 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. The Chain-of-Custody form is completed to ensure sample integrity. Ground water samples are transported to a state-certified laboratory and analyzed within the U.S. Environmental Protection Agency-specified hold times for the specified analytes.

ATTACHMENT B

DOULOS ENVIRONMENTAL FIELD DATA SHEETS

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

Project Address: Beacon #604, 1619 West First Street

Livermore, CA

Date: 9-26-95

Project No.: 95-604-01

Recorded by: Hal Hansen

Well No.	Time	Well Elev. TOC	Depth to Ground Water	Measured Total Depth	Ground Water Elevation	Depth to Product	Product Thickness	Comments
MW-1	5:01		31.05	54.01				SLIGHT ODOR NO SHEEN
MW-2	5:40		32.42	53.93				SLIGHT ODOR NO SHEEN
MW-3	5:05		29.62	52.60				NO ODOR NO SHEEN
MW-4	5:10		29.70	46.85				NO ODOR NO SHEEN
MW-5	5:16		30.20	46.27				NO ODOR NO SHEEN
MW-6	5:32		33.55	47.61				SLIGHT ODOR NO SHEEN
MW-7	5:24		31.43	46.70				SLIGHT ODOR NO SHEEN

NOTES:

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

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

Sampling Date: 9-26-95
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): 10
Well cover type: 8" UV _____ 12" UV _____ 12" EMCO _____ 8" BK _____
12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other 12" PAMECO
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
_____ 3" PVC bailer _____ Dedicated bailer
_____ 4" PVC bailer X Centrifugal pump
Sampled with: Disposable bailer: X Teflon bailer: _____

Well diameter: 2" _____ 4" X 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 5:01
Depth of well: 54.01
Depth to water: 31.05

Recharge Measurement
Time: 6:08
Depth to water: 32.19

Calculated purge: 59.7 gal
Actual purge: 59.7 gal

Start purge: 5:45 Sampling time: 6:10

Time	Temperature	E. C.	pH	Turbidity	Volume
5:47	69.0	1780	3.38	—	1
5:53	69.2	1741	3.27	—	2
5:59	69.4	1731	3.12	—	3
6:04	69.7	1730	3.10	—	4

Sample appearance: clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced items
2" locking cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: _____

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

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

Sampling Date: 9-26-95
Project No.: 95-604-01
Well Designation: MW- 9

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): 6
Well cover type: 8" UV _____ 12" UV _____ 12" EMCO _____ 8" BK _____
12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other 12" ROMECO
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
_____ 3" PVC bailer _____ Dedicated bailer
_____ 4" PVC bailer X Centrifugal pump
Sampled with: Disposable bailer: X Teflon bailer: _____

Well diameter: 2" _____ 4" X 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 5:40
Depth of well: 53.93
Depth to water: 32.42

Recharge Measurement
Time: 8:25
Depth to water: 34.07

Calculated purge: 55.9 gal
Actual purge: 55.9 gal

Start purge: 7:50 Sampling time: 8:28

Time	Temperature	E. C.	pH	Turbidity	Volume
7:57	66.4	1403	4.68	—	1
8:08	66.3	1349	4.61	—	2
8:14	66.1	1330	4.27	—	3
8:23	66.0	1397	4.20	—	4

Sample appearance: clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced items
2" locking cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: _____

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

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

Sampling Date: 9-26-95
Project No.: 95-604-01
Well Designation: MW- 3

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 X 12" EMCO _____ 8" BK _____
12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other _____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
_____ 3" PVC bailer _____ Dedicated bailer
_____ 4" PVC bailer X Centrifugal pump
Sampled with: Disposable bailer: X Teflon bailer: _____

Well diameter: 2" _____ 4" X 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 5:05
Depth of well: 52.60
Depth to water: 29.62

Recharge Measurement
Time: 6:40
Depth to water: 30.10

Calculated purge: 59.7 gal
Actual purge: 59.7 gal

Start purge: 6:12 Sampling time: 6:42

Time	Temperature	E. C.	pH	Turbidity	Volume
6:20	68.3	1757	3.31	—	1
6:25	68.4	1739	3.24	—	2
6:29	68.7	1740	3.10	—	3
6:34	68.9	1737	3.07	—	4

Sample appearance: Clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced items
2" locking cap _____ Lock #3753: _____ 7/32 Allenhead: _____
4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: [signature]

DOULOS ENVIRONMENTAL COMPANY — SAMPLING INFORMATION SHEET

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

Sampling Date: 9-26-95
Project No.: 95-604-01
Well Designation: MW- 4

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): 14
Well cover type: 8" UV X 12" UV _____ 12" EMCO _____ 8" BK _____
12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other _____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
_____ 3" PVC bailer _____ Dedicated bailer
_____ 4" PVC bailer X Centrifugal pump
Sampled with: Disposable bailer: X Teflon bailer: _____

Well diameter: 2" X 4" _____ 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 5:10
Depth of well: 46.85
Depth to water: 29.70

Recharge Measurement
Time: 6:54
Depth to water: 29.91

Calculated purge: 11.0 gal
Actual purge: 11.0 gal

Start purge: 6:45 Sampling time: 6:55

Time	Temperature	E. C.	pH	Turbidity	Volume
6:46	68.4	1991	4.47	—	1
6:47	68.7	1989	4.39	—	2
6:49	68.6	1974	4.30	—	3
6:51	68.5	1970	4.21	—	4

Sample appearance: Clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced items
2" locking cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: _____

DOULOS ENVIRONMENTAL COMPANY — **SAMPLING INFORMATION SHEET**

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

Sampling Date: 9-26-95
Project No.: 95-604-01
Well Designation: MW- 5

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 X 12" UV _____ 12" EMCO _____ 8" BK _____
12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other _____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
_____ 3" PVC bailer _____ Dedicated bailer
_____ 4" PVC bailer X Centrifugal pump
Sampled with: Disposable bailer: X Teflon bailer: _____

Well diameter: 2" X 4" _____ 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 5:16
Depth of well: 46.27
Depth to water: 30.20

Recharge Measurement
Time: 7:10
Depth to water: 30.91

Calculated purge: 10.3 gal
Actual purge: 10.3 gal

Start purge: 6:59 Sampling time: 7:12

Time	Temperature	E. C.	pH	Turbidity	Volume
7:00	68.1	1359	4.97	—	1
7:02	68.4	1347	4.83	—	2
7:04	68.5	1391	4.79	—	3
7:06	68.9	1317	4.71	—	4

Sample appearance: Clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced items
2" locking cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: _____

DOULOS ENVIRONMENTAL COMPANY — SAMPLING INFORMATION SHEET

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

Sampling Date: 9-26-95
Project No.: 95-604-01
Well Designation: MW- 6

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 X 12" UV _____ 12" EMCO _____ 8" BK _____
12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other _____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment:
_____ 2" disposable bailer
_____ 3" PVC bailer
_____ 4" PVC bailer
_____ Submersible pump
_____ Dedicated bailer
X Centrifugal pump
Sampled with: Disposable bailer: X Teflon bailer: _____

Well diameter: 2" X 4" _____ 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft.

Initial Measurement
Time: 5:32
Depth of well: 47.61
Depth to water: 33.55

Recharge Measurement
Time: 7:43
Depth to water: 34.10

Calculated purge: 9.0 gal
Actual purge: 9.0 gal

Start purge: 7:35
Sampling time: 7:45

Time	Temperature	E. C.	pH	Turbidity	Volume
7:36	67.3	1439	4.67	—	1
7:38	67.0	1327	4.37	—	2
7:39	66.8	1311	4.92	—	3
7:40	66.7	1301	4.21	—	4

Sample appearance: clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced items
2" locking cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: [signature]

DOULOS ENVIRONMENTAL COMPANY SAMPLING INFORMATION SHEET

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

Sampling Date: 9-26-95
Project No.: 95-604-01
Well Designation: MW- 7

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 X 12" UV _____ 12" EMCO _____ 8" BK _____
12" BK _____ 12" DPW _____ 12" CNI _____ 36" CNI _____ Other _____
General condition of wellhead assembly: Excellent (Good) Fair Poor

Purging Equipment: _____ 2" disposable bailer _____ Submersible pump
_____ 3" PVC bailer _____ Dedicated bailer
_____ 4" PVC bailer X Centrifugal pump
Sampled with: Disposable bailer: X Teflon bailer: _____

Well diameter: 2" X 4" _____ 6" _____ 8" _____
Purge Vol. Multiplier: 0.16 0.65 1.47 2.61 gal/ft

Initial Measurement
Time: 5:24
Depth of well: 46.70
Depth to water: 31.43

Recharge Measurement
Time: 7:30
Depth to water: 32.10

Calculated purge: 9.8 gal
Actual purge: 9.8 gal

Start purge: 7:15 Sampling time: 7:32

Time	Temperature	E. C.	pH	Turbidity	Volume
7:17	66.3	1497	3.98	—	1
7:18	66.4	1437	3.81	—	2
7:19	66.5	1420	3.69	—	3
7:21	66.7	1410	3.67	—	4

Sample appearance: clear Lock: Dolphin

Equipment replaced: (Check all that apply) Note condition of replaced items
2" locking cap: _____ Lock #3753: _____ 7/32 Allenhead: _____
4" locking cap: _____ Lock-Dolphin: _____ 9/16 bolt: _____
6" locking cap: _____ Pinned Allenhead (DPW): _____

Remarks: _____

Signature: _____

ATTACHMENT C

LABORATORY REPORT AND CHAIN-OF-CUSTODY FORM

WEST LABORATORY

October 6, 1995
Sample Log 12905

Dale van Dam
El Dorado Environmental
2221 Goldorado Trail
El Dorado, CA 95623

Subject: Analytical Results for 7 Water Samples
Identified as: Beacon 604 (Proj. # 95-604-01)
Received: 09/29/95

Dear Mr. van Dam:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on October 6, 1995 and describes procedures used to analyze the samples.

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

"BTEX" (EPA Method 602/Purge-and-Trap)
"TPH as Gasoline" (Modified EPA Method 8015/Purge-and-Trap)

Please refer to the following table(s) 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 enclosed.

Approved by:

Joel Kiff
Senior Chemist

WEST LABORATORY

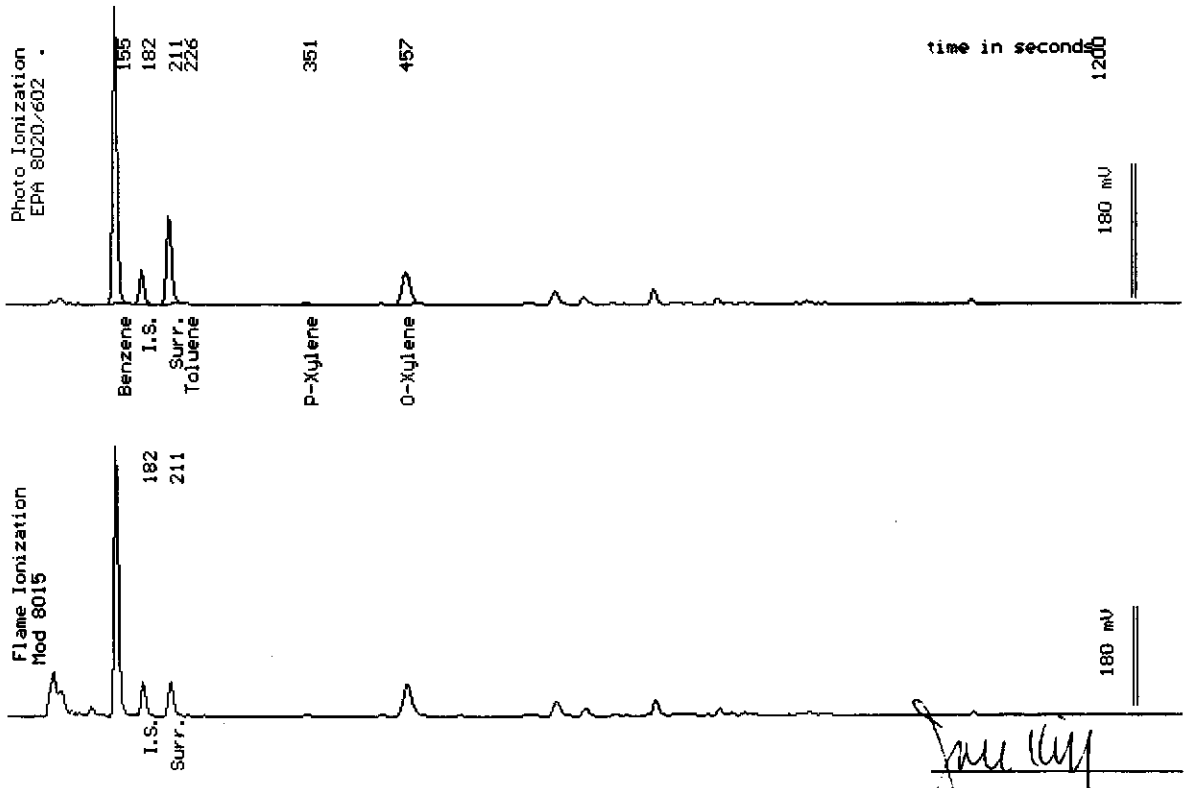
Sample Log 12905

12905-01

Sample: **MW-1**

From : Beacon 604 (Proj. # 95-604-01)
Sampled : 09/26/95
Dilution : 1:1 QC Batch : 4132V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L	
Benzene	(.50)	140	
Toluene	(.50)	<.50	
Ethylbenzene	(.50)	<.50	
Total Xylenes	(.50)	43	
TPH as Gasoline	(50)	410	
Surrogate Recovery		93	%



Date Analyzed: 10-04-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

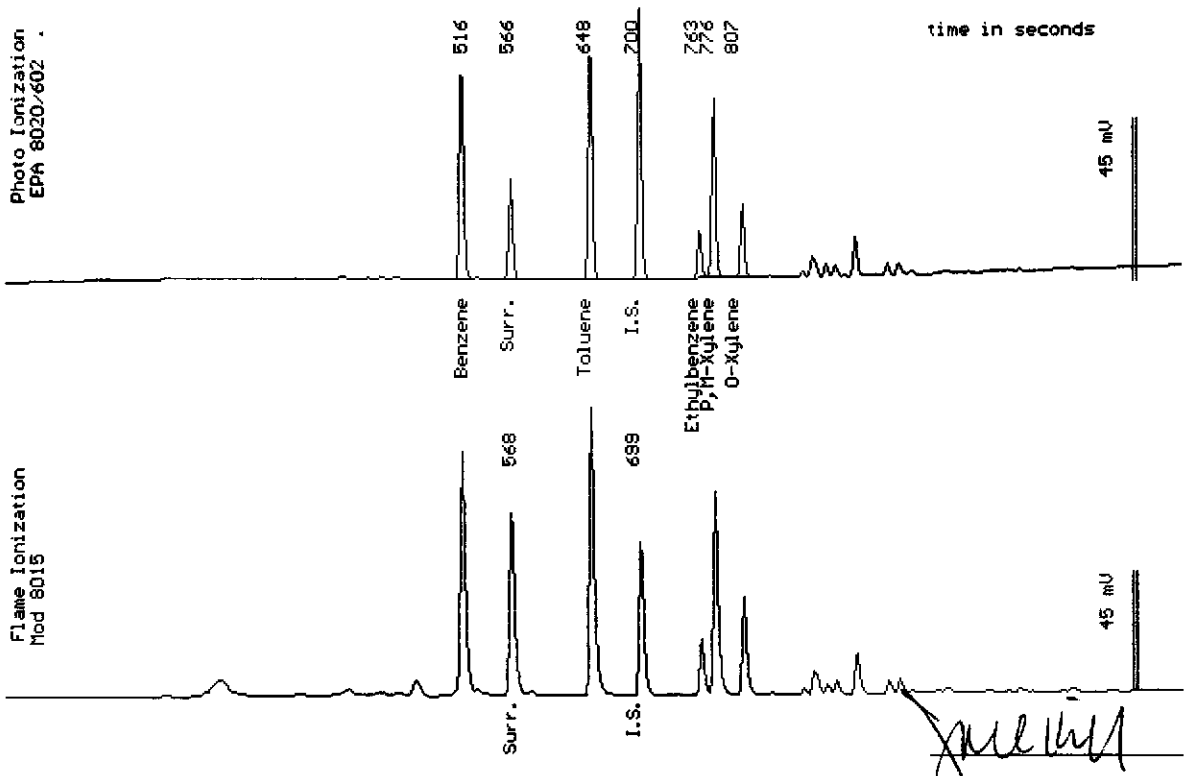
Sample Log 12905

12905-02

Sample: **MW-2**

From : Beacon 604 (Proj. # 95-604-01)
Sampled : 09/26/95
Dilution : 1:250 QC Batch : 6158X
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(130)	9400
Toluene	(130)	11000
Ethylbenzene	(130)	2300
Total Xylenes	(130)	12000
TPH as Gasoline	(13000)	61000
Surrogate Recovery		89 %



Date Analyzed: 10-05-95
Column : 0.45mm ID X 75m DBVRX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

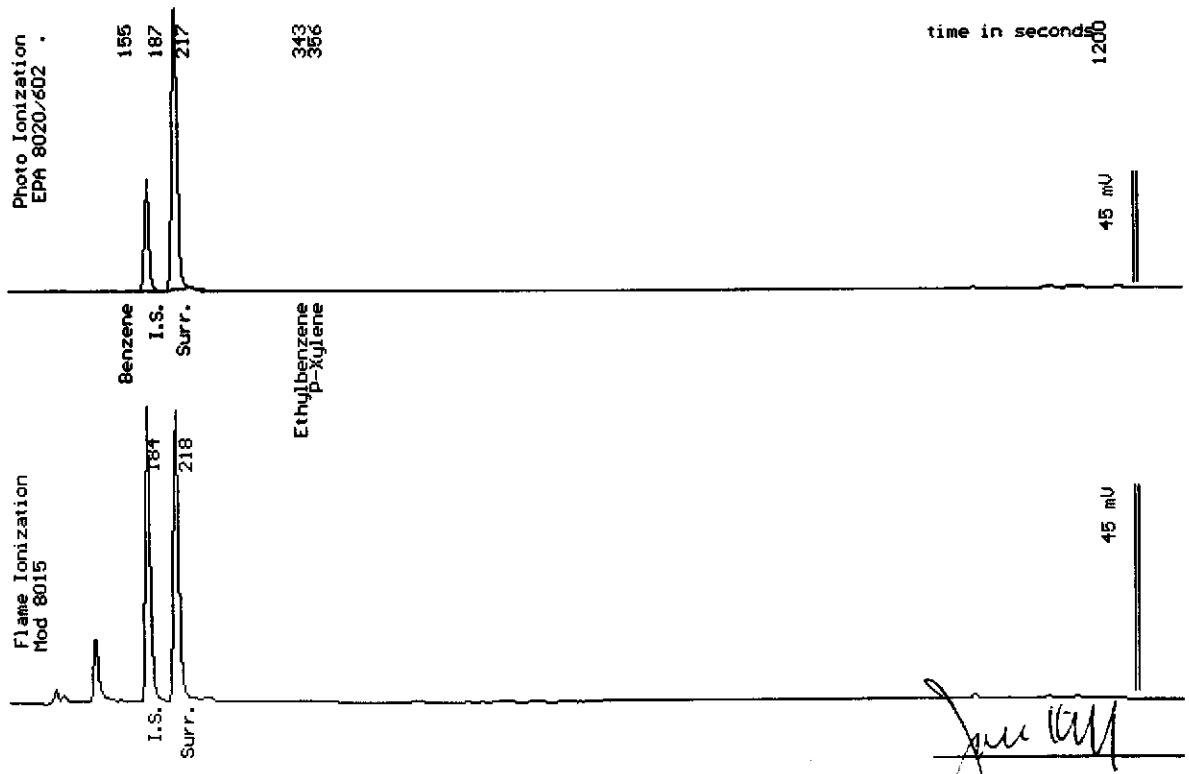
Sample Log 12905

12905-03

Sample: **MW-3**

From : Beacon 604 (Proj. # 95-604-01)
Sampled : 09/26/95
Dilution : 1:1 QC Batch : 4132V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		98 %



Date Analyzed: 10-04-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

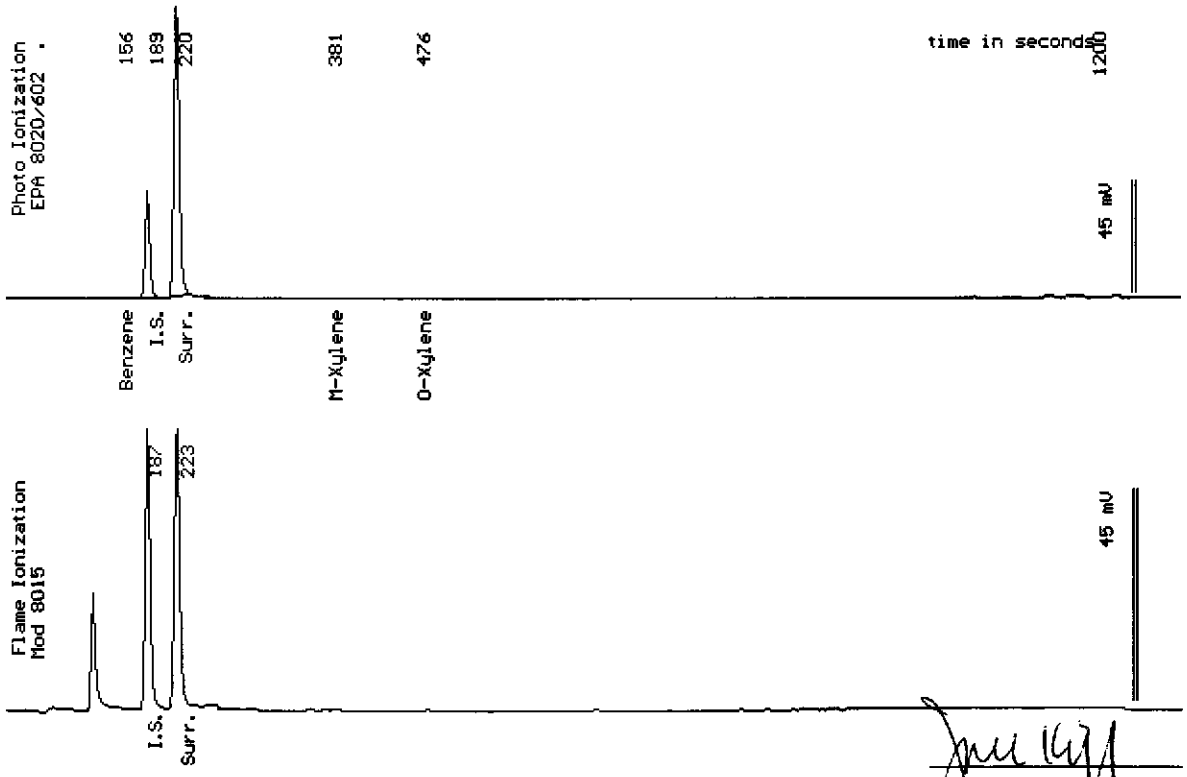
Sample Log 12905

12905-04

Sample: **MW-4**

From : Beacon 604 (Proj. # 95-604-01)
Sampled : 09/26/95
Dilution : 1:1 QC Batch : 4132V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		99 %



Date Analyzed: 10-04-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

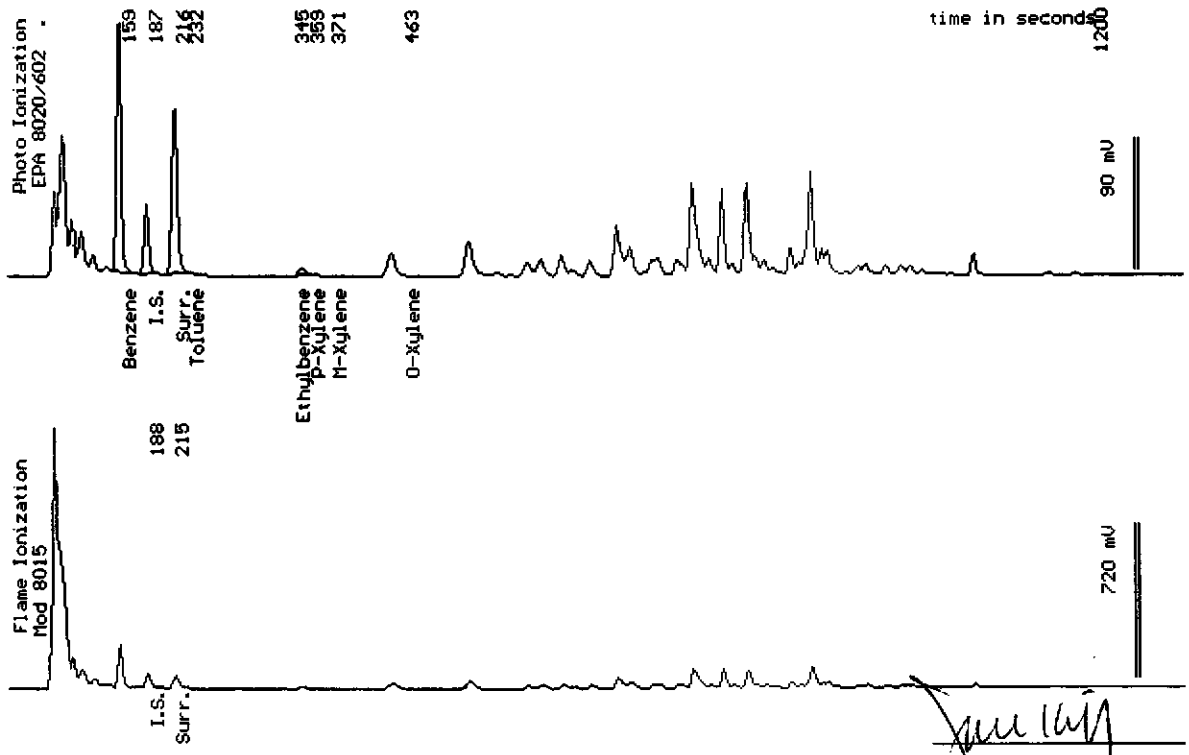
Sample Log 12905

12905-05

Sample: **MW-5**

From : Beacon 604 (Proj. # 95-604-01)
Sampled : 09/26/95
Dilution : 1:1 QC Batch : 4132V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L	
Benzene	(.50)	61	
Toluene	(.50)	<.50	
Ethylbenzene	(.50)	3.1	
Total Xylenes	(.50)	<.50	
TPH as Gasoline	(50)	1400	
Surrogate Recovery		89	%



Date Analyzed: 10-04-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

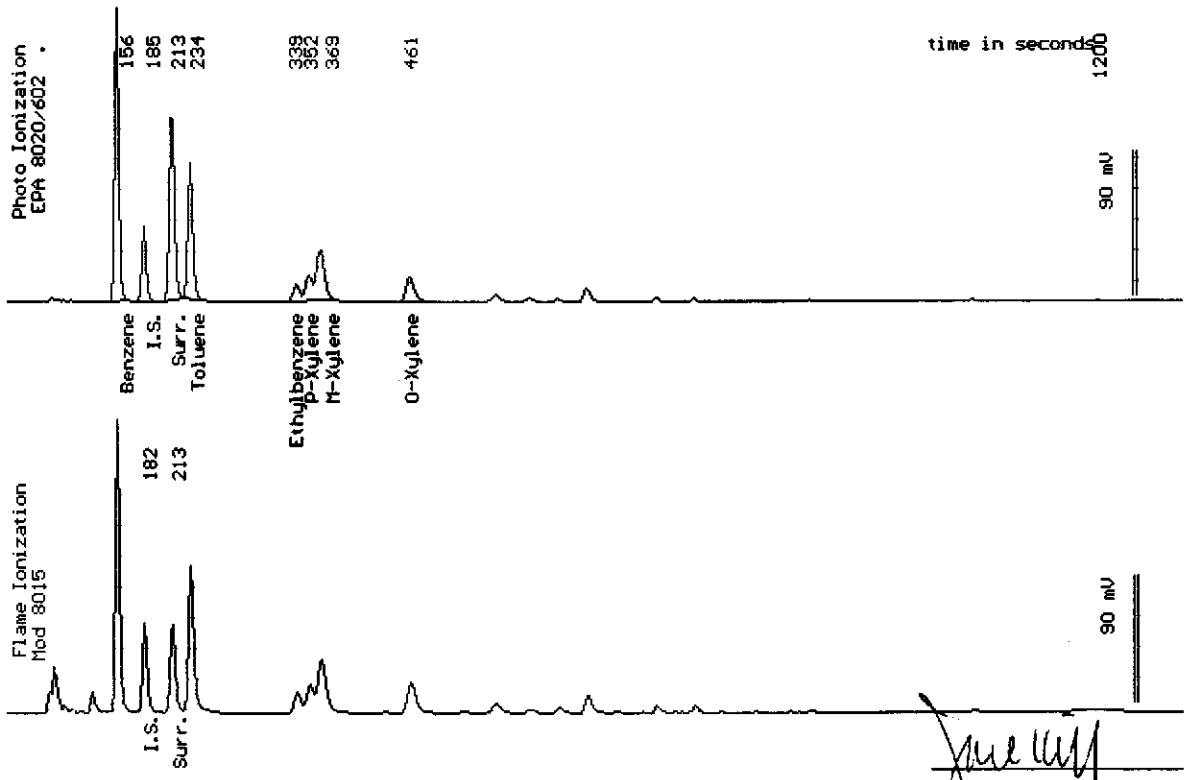
Sample Log 12905

12905-06

Sample: **MW-6**

From : Beacon 604 (Proj. # 95-604-01)
Sampled : 09/26/95
Dilution : 1:250 QC Batch : 4132V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(130)	15000
Toluene	(130)	9600
Ethylbenzene	(130)	1700
Total Xylenes	(130)	12000
TPH as Gasoline	(13000)	62000
Surrogate Recovery		93 %



Date Analyzed: 10-04-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

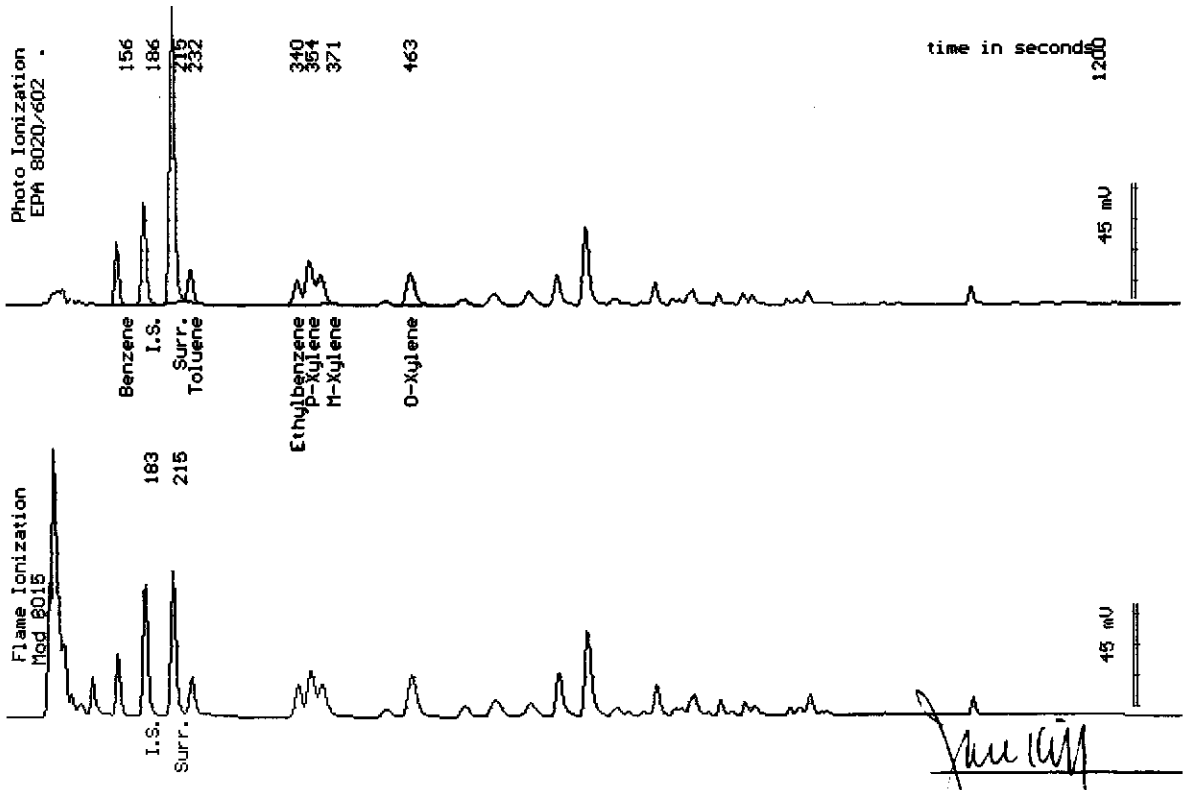
Sample Log 12905

12905-07

Sample: **MW-7**

From : Beacon 604 (Proj. # 95-604-01)
Sampled : 09/26/95
Dilution : 1:25 QC Batch : 4132V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(13)	200
Toluene	(13)	150
Ethylbenzene	(13)	170
Total Xylenes	(13)	810
TPH as Gasoline	(1300)	7000
Surrogate Recovery		95 %



Date Analyzed: 10-04-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

Ultramar Inc.

CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No. Beacon 604	Sampler (Print Name) Hal Hansen			ANALYSES									Date 9-26-95	Form No. 1 of ___
Project No. 95-604-01	Sampler (Signature) Hal Hansen												Standard TAT	
Project Location Livermore	Affiliation Doulos Environmental													
Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (Gasoline)	TPH (Diesel)							No. of Containers	REMARKS
MW-1	9-26-95	610	12905-01	X	X								2	
MW-2		828	12905-02											
MW-3		~~624~~ 642	12905-03											
MW-4		655	12905-04											
MW-5		712	12905-05											
MW-6		745	12905-06											
MW-7		732	12905-07											
			12905-											

Relinquished by:(Signature/Affiliation)	Date	Time	Received by:(Signature/Affiliation)	Date	Time
Hal Hansen Doulos Env.	9/29/95	1452	Sid Pademe	9/29/95	1452
Relinquished by:(Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Sid Pademe	9/29/95	1552			
Relinquished by:(Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
				9/29/95	1552

Report To: Dale van Dam
El Dorado Environmental
2221 Goldorado Trail
El Dorado, CA 95623

Bill To: Ultramar
525 W. 3rd Street
Hanford, CA 93230
Attention: Terry Fox

WEST LABORATORY

September 6, 1995
Sample Log 12812

RECEIVED
SEP 14 1995

Leon Crane
GCL- Environmental Science & Engineering
11501 Dublin Blvd., Suite 200
Dublin, CA 94568

Subject: Analytical Results for 1 Water Sample
Identified as: Beacon 604
Received: 08/29/95

Dear Mr. Crane:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on September 6, 1995 and describes procedures used to analyze the samples.

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

"BTEX" (EPA Method 602/Purge-and-Trap)
"TPH as Gasoline" (Modified EPA Method 8015/Purge-and-Trap)

Please refer to the following table(s) 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 enclosed.

Approved by:

Joel Kiff
Senior Chemist

WEST LABORATORY

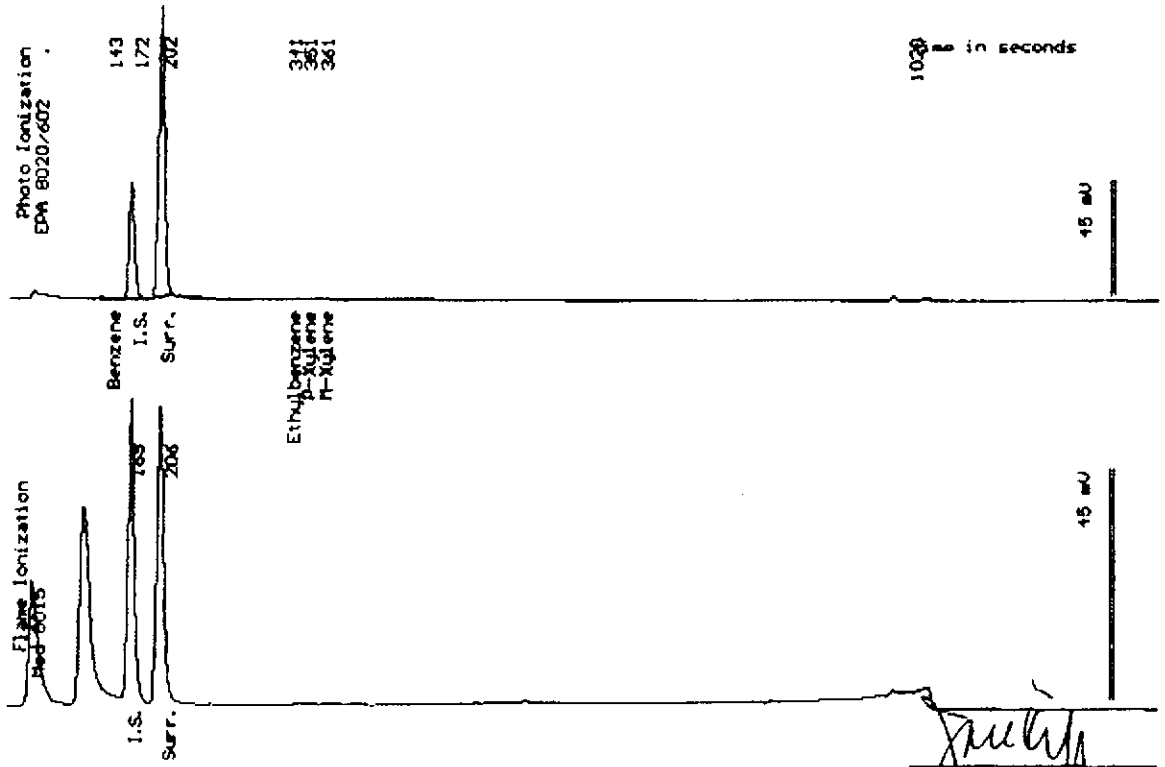
Sample Log 12812

12812-01

Sample: **MW-23**

From : Beacon 604
Sampled : 08/29/95
Dilution : 1:1 QC Batch : 2127U
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	54
Surrogate Recovery		97 %



Date Analyzed: 09-06-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

#12812

GCL
Environmental Science and Engineering
A BDM International Company

☐ Albuquerque
505 Marquette NW, Ste. 1100
Albuquerque, NM 87102
(505) 842-0001
FAX: (505) 842-0595

☐ Mid Atlantic Region
4221 Forbes Blvd., Ste. 240
Lanham, MD 20706-4325
(301) 459-9677
FAX: (301) 459-3064

☐ NASA-WSTF
PO Drawer MM
Las Cruces, NM 88004
(505) 524-5353
FAX: (505) 524-5315

№ 9670

Chain of Custody

Date Aug. 29 1995 Page 1 of 1

Lab Name West Envir Science
Address 1046 Olive Drive
Davis, CA
Telephone (916) 757-4650
Samplers (SIGNATURES)

Analysis Request

Sample Number	Matrix	Location	Halogenated Volatiles 601/8010	Aromatic Volatiles 602/8020	Phenols, Sub Phenols 604/8040	Pesticides/PCB 608/8080	Polynuclear Aromatic Hydrocarbons 610/8310	Volatile Compounds GC/MS 624/8240	Base/Neu/Acid Compounds GC/MS 625/8270	Total Organic Carbon (TOC) 415.1/9060	Total Organic Halides (TOX) 9020	Petroleum Hydrocarbons 418.1	BTEX/BTEX 8015 Modified	TPH (G)	TCLP - Vol., Semi Vol Herbicides, Pesticides	TCLP - Metals	RCRA Metals (8)	Priority Pollutant Metals (13)	CAM Metals (18) TTLC/STLC	Flash Point	Corrosivity	Reactivity	Oil & Grease	Cyanide Total/Amenable	Chemical Oxygen Demand (COD)	Number of Containers
9508290820	H_2O	MW-23											X													3

Project Information	Sample Receipt
Project Bacon - Livermore	Total No. of Containers
Project Director Teri Fox	Chain of Custody Seals
Charge Code No. —	Rec'd Good Condition/Cold
Shipping ID. No. Hand Carried	Conforms to Record
Via:	Lab No.

Special Instructions/Comments:

Relinquished By 1.	Relinquished By 2.	Relinquished By 3.
(Signature) 1700	(Signature) (Time)	(Signature) (Time)
(Printed Name) C. Lem Civin 08/29/95 (Date)	(Printed Name) (Date)	(Printed Name) (Date)
(Company) GCL	(Company)	(Company)
Received By 1.	**Received By 2.**	**Received By (Laboratory) 3.**
(Signature) (Time)	(Signature) (Time)	(Signature) (Time) 1700
(Printed Name) (Date)	(Printed Name) (Date)	(Printed Name) KATHRYN RIDDICK (Date) 8-29-95
(Company)	(Company)	(Laboratory)

Distribution: White, Canary-Laboratory - Pink, GCL