Ultramar

Ultramar, Inc.
P.O. Box 466
525 W. Third Street
Hanford, CA 93232-0466
(209) 582-0241

Telecopy: 209-585-5685 Credit
209-583-3330 Administrative
209-583-3302 Information Services
209-583-3358 Accounting

December 15, 1995

Ms. Amy Leach
Hazardous Materials Program
Department of Environmental Health
Alameda County Health Care Services
1131 Harbor Bay Parkway, 2nd Floor
Alameda, CA 94502

SUBJECT: BEACON STATION NO. 721, 44 LEWELLING BLVD., SAN LORENZO, CALIFORNIA

Dear Ms. Leach:

Enclosed is a copy of the Quarterly Ground Water Monitoring Report, Third Quarter 1995 and Status of Remediation Sysytem through September 1995 for the above-referenced Ultramar facility. Also included is a copy of the Quarterly Status Report which describes the work completed this quarter and the work anticipated to be completed next quarter.

Please call if you have any questions regarding this project.

Sincerely,

ULTRAMAR INC.

Terrence A. Fox
Senior Project Manager
Marketing Environmental Department

Enclosures

cc w/encl: Mr. Steven Ritchie, San Francisco Bay Region, RWQCB

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ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: December 27, 1995
QUARTER ENDING: September 30, 1995

SERVICE STATION NO.: 721
ADDRESS: 44 Lewelling Blvd., San Lorenzo, CA
COUNTY: Alameda

ULTRAMAR CONTACT: Terrence A. Fox **TEL. NO:** 209-583-5545

BACKGROUND:

In April 1987, three underground gasoline storage tanks were excavated and removed. Samples collected from beneath the former tanks indicated that hydrocarbons were present in the soil. In May 1987, three monitoring wells (MW-1 through MW-3) were installed by Conoco. Hydrocarbons were detected in soil and ground-water samples collected from the wells. In December 1988, four additional wells (MW-4 through MW-7) were installed. Dissolved-phase hydrocarbons were detected in the new wells. In September 1989, two additional wells (MW-8 and MW-9) were installed. The site has been on a monitoring program since May 1987.

In July 1990, the site was purchased by Ultramar Inc. from Conoco. The monitoring program has continued. Submitted work plan for additional assessment on March 14, 1991.

In October 1991, drilled two additional offsite wells (MW-10 and MW-11) southwest of the site and one onsite recovery well (RW-1). In November 1991, performed ground-water pump test and vapor extraction test.

In April 1992, Ultramar submitted an Interim Remediation Plan. The plan was approved in June 1992.

In March 1993, installed the subsurface piping for the remediation system. Completed installation of ground-water remediation system in April 1993. Began operation in June 1993.

In April 1993, the ground-water extraction system began operation. In March 1994, the vapor extraction system began operation.

Obtained the Permit to Operate for the vapor extraction system on June 8, 1994.

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Performed quarterly monitoring on September 28, 1995.

Continued to operate the remediation system.

RESULT OF QUARTERLY MONITORING:

Monitoring data indicates that measurable free product was not detected in any well. Benzene concentrations remained not detected in wells MW-4, MW-5, and MW-9. The benzene concentration decreased in MW-1 from 1,300 ppb to 580 ppb, in MW-2 from 8.3 ppb to not detected, in MW-3 from 7,200 ppb to 5,600 ppb, in MW-7 from 7.3 ppb to 1.5 ppb, and in RW-1 from 1,600 ppb to not detected. Benzene concentrations increased in MW-6 from not detected to 0.78 ppb, in MW-10 from 9.0 ppb to 22 ppb, and in MW-11 from not detected to 4.1 ppb. MW-8 was not sampled this quarter.

As of September 23, 1995, approximately 1,018,150 gallons of ground water have been removed, treated, and discharged. Reportedly, approximately 5,958 pounds of hydrocarbons have been removed the vapor extraction system.

PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:

ACTIVITY	ESTIMATED COMPLETION DATE
Continue quarterly ground-water monitoring.	Ongoing
Continue operation of remediation system.	Ongoing
Install air sparging points and perform air sparging test.	October 10, 1995

Delta
Environmental
Consultants, Inc.

3164 Gold Camp Drive
Suite 200
Rancho Cordova, CA 95670
916/638-2085
FAX: 916/638-8385

December 20, 1995

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

Subject: *Quarterly Ground Water Monitoring Report, Third Quarter 1995, and Status of Remediation System through September 1995*
Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California
Delta Project No. D093-936

Dear Mr. Fox:

Delta Environmental Consultants, Inc. (Delta), has been authorized by Ultramar Inc. to conduct quarterly ground water monitoring and perform remedial actions at the above-referenced site. The monitoring is intended to evaluate the distribution of dissolved petroleum hydrocarbon constituents in ground water in the vicinity of the subject site and evaluate the effectiveness of the remediation system currently in operation. This letter report summarizes the results of ground water monitoring activities, field sampling, and data collection performed at the site on September 28, 1995, and the remediation system status through September 1995. The site location is shown in Figure 1 and site features are illustrated in Figure 2.

Quarterly ground water monitoring conducted on September 28, 1995, included measurement of depth to water in six on-site monitoring wells (MW-1 through MW-6), five off-site monitoring wells (MW-7, and MW-9 through MW-11), and one on-site ground water recovery well (RW-1), subjective analyses of water samples to evaluate the presence or absence of free petroleum product or product sheen in the monitoring wells, and collection of ground water samples for chemical analysis. Monitoring well MW-8 was purged for sampling, but ground water in the well did not recharge sufficiently to sample. Methods used in the performance of these tasks are described in Enclosure A.

Water Table Elevation Measurements and Flow Direction

Depth to ground water in the monitoring wells was measured and ranged from 14.84 (MW-7) to 27.63 (RW-1) feet below the tops of well casings. Depths have decreased an average of approximately two feet since the last quarterly monitoring event in June 1995. Cumulative ground water table measurements recorded at the site are compiled in Table 1. Based on the ground water table measurements, the direction of ground water flow was toward pumping recovery well RW-1. A water table contour map prepared from the third quarter 1995 data is included as Figure 3.

Free Petroleum Product or Product Sheen

The presence of separate phase petroleum product or product sheen in the monitoring wells was evaluated using procedures described in Enclosure A. During the September 1995 site visit, no liquid-phase petroleum hydrocarbons or product sheen was observed.

Ground Water Analytical Results

Ground water samples were collected from monitoring wells MW-1 through MW-11 and recovery well RW-1, using the field methods described in Enclosure A. Copies of the sampling information data sheets are included in Enclosure B.

The ground water samples were submitted to Western Environmental Science and Technology laboratory of Davis, California (a California-certified laboratory), for analysis of benzene, toluene, ethylbenzene, total xylenes, and total petroleum hydrocarbons as gasoline using EPA Methods 8020 and 8015 Modified, respectively. Benzene was below the laboratory's limits of detection in ground water samples collected from monitoring wells MW-2, MW-4, MW-5, MW-9, and RW-1. Detectable benzene concentrations ranged from 0.78 micrograms per liter (µg/L) (MW-6) to 5,600 µg/L (MW-3). A comparison of the June 1995 analytical results with the September 1995 results indicate that benzene concentrations decreased in MW-1 (1,300 µg/L to 580 µg/L), MW-2 (8.3 µg/L to <0.50 µg/L), MW-3 (7,200 µg/L to 5,600 µg/L), MW-7 (7.3 µg/L to 1.5 µg/L), RW-1 (1,600 µg/L to 0.50 µg/L), and increased in MW-6 (<0.50 µg/L to 0.78 µg/L), MW-10 (9.0 µg/L to 22 µg/L), MW-11 (<0.5 to 4.1). Utilizing the third quarter 1995 ground water monitoring data, a benzene isoconcentration contour map was constructed and is included as Figure 4. Cumulative results of the chemical analyses are summarized in Table 2, and copies of the certified analytical report with chain of custody documentation for the September 1995 sampling event are included in Enclosure C.

Status of Remediation System

Delta has performed operation and maintenance of the ground water treatment and soil vapor extraction (SVE) system at the site since April 1993. The ground water treatment system pumps ground water from recovery well RW-1 and is designed to remove petroleum hydrocarbon constituents through treatment in an air stripper. Treated ground water is discharged to the Oro Loma Sanitary Sewer District (Permit No. 018). The SVE system removes soil vapors under vacuum from monitoring well MW-3 and recovery well RW-1. The soil vapors removed were abated by an Anguil Remedi-Cat 500 standard cubic feet per minute catalytic oxidizer through September 1995. Delta has petitioned the Bay Area Air Quality Management District to replace the catalytic oxidizer with vapor phase GAC.

The ground water remediation system was restarted during July 1995 operation and maintenance site visit when the packing in the air striper was replaced. The ground water remediation system was operating during the September 28, 1995 site visit. Cumulative totals for ground water treated by the remediation system are presented in Table 3.

Remediation System Analytical Results

Remediation system samples were collected during the third quarter 1995 site visits, and results of the chemical analyses are summarized in Table 4, and copies of the analytical reports are presented in Enclosure D.

Remarks\Signatures

The interpretations contained in this report represent our professional opinions, and are based in part, on information supplied by the client. These opinions are based on currently available information and are arrived at in accordance with currently accepted hydrogeologic and engineering practices at this time and location. Other than this, no warranty is implied or intended.

It is recommended that copies of this letter report be forwarded to:

Mr. Steven Ritchie
California Regional Water Quality
Control Board, Region 2
2101 Webster Street
Oakland, California 94612

Ms. Amy Leech
Alameda County Environmental
Health Dept.
470 27th Street, Room 322
Oakland, California 94612

If you have any questions, please call Todd M. Galati at (916) 638-2085.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

J. William Speth
Staff Scientist

Todd M. Galati
Project Manager

Eric J. Holm, R.G.
California Registered Geologist No. 5880

REGISTERED GEOLOGIST
ERIC JAMES HOLM
NO. 5880
STATE OF CALIFORNIA

JWS (LRP048.CAC)
Enclosures

TABLE 1

GROUND WATER ELEVATIONS

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date	Top of Riser Elevation (ft)*	Depth to Water (ft)	Ground Water Elevation (ft)	Physical Observation of Free Product or Sheen
MW-1	02/18/92	43.67	16.42	27.25	
	05/14/92		17.28	26.39	
	08/27/92		19.48	24.19	
	11/19/92		20.57	23.10	
	02/03/93		15.91	27.76	
	06/23/93		16.21	27.46	No free product or sheen
	09/22/93		17.85	25.82	No free product or sheen
	01/24/94		17.91	25.76	
	04/07/94		16.94	26.73	No free product or sheen
	06/07/94		17.20	26.47	No free product or sheen
	09/28/94		18.73	24.94	No free product or sheen
	12/14/94		17.56	26.11	Product sheen
	03/15/95		14.92	28.75	Product sheen
	06/13/95		15.38	28.29	No free product or sheen
	09/28/95		16.75	26.92	No free product or sheen
MW-2	02/18/92	43.09	16.65	26.44	
	05/14/92		16.64	26.45	
	08/27/92		16.61	26.28	
	11/19/92		19.91	23.18	
	02/03/93		15.23	27.86	
	06/23/93		15.55	27.54	No free product or sheen
	09/22/93		17.22	25.87	No free product or sheen
	01/24/94		17.20	25.89	
	04/07/94		16.26	26.83	No free product or sheen
	06/07/94		16.46	26.63	No free product or sheen
	09/28/94		18.06	25.03	No free product or sheen
	12/14/94		16.86	26.23	No free product or sheen
	03/15/95		14.08	29.01	No free product or sheen
	06/13/95		14.67	28.42	No free product or sheen
	09/28/95		16.07	27.02	No free product or sheen

TABLE 1-Continued

GROUND WATER ELEVATIONS

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date	Top of Riser Elevation (ft)[a]	Depth to Water (ft)	Ground Water Elevation (ft)	Physical Observation of Free Product or Sheen
MW-3	02/18/92	43.10	16.89	26.21	
	05/14/92		16.60	26.50	
	08/27/92		18.96	24.14	
	11/18/92		20.38	23.01	
	02/03/93		15.43	27.67	
	06/23/93		15.67	27.43	Product sheen
	09/22/93		17.20	25.90	No free product or sheen
	01/24/94		17.35	25.75	
	04/07/94		14.48	28.62	No free product or sheen
	06/07/94		13.37	29.73	Product sheen
	09/28/94		18.05	25.05	No free product or sheen
	12/14/94		16.92	26.18	Product sheen
	03/15/95		14.22	28.88	Product sheen
	06/13/95		14.49	28.61	Product sheen
	09/28/95		15.17	27.93	No free product or sheen
MW-4	02/18/92	44.66	18.51	26.15	
	05/14/92		18.22	26.44	
	08/27/92		20.47	24.19	
	11/19/92		21.58	23.08	
	02/03/93		16.98	27.68	
	06/23/93		17.23	27.43	No free product or sheen
	09/22/93		18.83	25.83	No free product or sheen
	01/24/94		18.86	25.80	
	04/07/94		17.90	26.76	No free product or sheen
	06/07/94		18.08	26.58	No free product or sheen
	09/28/94		19.70	24.96	No free product or sheen
	12/14/94		18.55	26.11	No free product or sheen
	03/15/95		16.14	28.52	No free product or sheen
	06/13/95		16.41	28.25	No free product or sheen
	09/28/95		17.88	26.78	No free product or sheen

TABLE 1-Continued

GROUND WATER ELEVATIONS

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date	Top of Riser Elevation (ft)*	Depth to Water (ft)	Ground Water Elevation (ft)	Physical Observation of Free Product or Sheen
MW-5	02/18/92	43.79	17.37	26.42	
	05/14/92		17.29	26.50	
	08/27/92		22.18	21.61	
	11/19/92		20.68	23.11	
	02/03/93		15.91	27.88	
	06/23/93		16.24	27.55	No free product or sheen
	09/22/93		17.93	25.86	No free product or sheen
	01/24/94		17.82	25.97	
	04/07/94		16.91	26.88	No free product or sheen
	06/07/94		17.10	26.69	No free product or sheen
	09/28/94		18.73	25.06	No free product or sheen
	12/14/94		17.53	26.26	No free product or sheen
	03/15/95		14.96	28.83	No free product or sheen
	06/13/95		15.30	28.49	No free product or sheen
	09/28/95		16.74	27.05	No free product or sheen
MW-6	02/18/92	42.47	15.87	26.60	
	05/14/92		16.04	26.43	
	08/27/92		18.17	24.30	
	11/19/92		19.30	23.17	
	02/03/93		14.60	27.87	
	06/23/93		15.00	27.47	No free product or sheen
	09/22/93		16.66	25.81	No free product or sheen
	01/24/94		16.52	25.95	
	04/07/94		15.70	26.77	No free product or sheen
	06/07/94		15.88	26.59	No free product or sheen
	09/28/94		17.51	24.96	No free product or sheen
	12/14/94		16.27	26.20	No free product or sheen
	03/15/95		13.52	28.95	No free product or sheen
	06/13/95		13.96	28.51	No free product or sheen
	09/28/95		15.61	26.86	No free product or sheen

TABLE 1-Continued

GROUND WATER ELEVATIONS

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date	Top of Riser Elevation (ft)[a]	Depth to Water (ft)	Ground Water Elevation (ft)	Physical Observation of Free Product or Sheen
MW-7	02/18/92	41.54	15.51	26.03	
	05/14/92		15.41	26.13	
	08/27/92		17.45	24.09	
	11/19/92		18.54	23.00	
	02/03/93		14.10	27.44	
	06/23/93		14.33	27.21	No free product or sheen
	09/22/93		15.92	25.62	No free product or sheen
	01/24/94		16.07	25.47	
	04/07/94		15.10	26.44	
	06/07/94		15.16	26.38	No free product or sheen
	09/28/94		16.82	24.72	No free product or sheen
	12/14/94		15.75	25.79	No free product or sheen
	03/15/95		14.00	27.54	No free product or sheen
	06/13/95		13.44	28.10	No free product or sheen
	09/28/95		14.84	26.70	No free product or sheen
MW-8	02/18/92	42.26	16.57	25.69	
	05/14/92		16.24	26.02	
	08/27/92		18.28	23.98	
	11/19/92		19.32	22.94	
	02/03/93		14.87	27.39	
	06/23/93		15.18	27.08	No free product or sheen
	09/22/93		18.79	23.47	No free product or sheen
	01/24/94		17.06	25.20	
	04/07/94		15.95	26.31	No free product or sheen
	06/07/94		15.10	27.16	No free product or sheen
	09/28/94		17.63	24.63	No free product or sheen
	12/14/94		16.66	25.60	No free product or sheen
	03/15/95		14.30	27.96	No free product or sheen
	06/13/95		14.37	27.89	No free product or sheen
	09/28/95		15.62	26.64	No free product or sheen

TABLE 1-Continued

GROUND WATER ELEVATIONS

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date	Top of Riser Elevation (ft)[a]	Depth to Water (ft)	Ground Water Elevation (ft)	Physical Observation of Free Product or Sheen
MW-9	02/18/92	44.94	18.87	26.07	
	05/14/92		18.55	26.39	
	08/27/92		20.80	24.14	
	11/19/92		21.90	23.04	
	02/03/93		17.25	27.69	
	06/23/93		17.61	27.33	No free product or sheen
	09/22/93		19.18	25.76	No free product or sheen
	01/24/94		19.17	25.77	
	04/07/94		18.23	26.71	No free product or sheen
	06/07/94		18.40	26.54	No free product or sheen
	09/28/94		20.01	24.93	No free product or sheen
	12/14/94		18.88	26.06	No free product or sheen
	03/15/95		16.24	28.70	No free product or sheen
	06/13/95		16.75	28.19	No free product or sheen
	09/28/95		18.04	26.90	No free product or sheen
MW-10	02/18/92	42.34	16.63	25.71	
	05/14/92		15.25	27.09	
	08/27/92		18.35	23.99	
	11/19/92		19.43	22.91	
	02/03/93		15.01	27.33	
	06/23/93		15.30	27.04	No free product or sheen
	09/22/93		16.90	25.44	No free product or sheen
	01/24/94		NM[b]	NM	
	04/07/94		15.97	26.37	No free product or sheen
	06/07/94		16.04	26.30	No free product or sheen
	09/28/94		17.69	24.65	No free product or sheen
	12/14/94		16.65	25.69	No free product or sheen
	03/15/95		14.08	28.26	No free product or sheen
	06/13/95		14.49	27.85	No free product or sheen
	09/28/95		15.81	26.53	No free product or sheen

TABLE 1-Continued

GROUND WATER ELEVATIONS

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date	Top of Riser Elevation (ft)[a]	Depth to Water (ft)	Ground Water Elevation (ft)	Physical Observation of Free Product or Sheen
MW-11	02/18/92	45.00	17.00	28.00	
	05/14/92		19.02	25.98	
	08/27/92		21.13	23.87	
	11/19/92		17.91	27.09	
	02/03/92		17.91	27.09	
	06/23/93		18.14	26.86	No free product or sheen
	09/22/93		19.63	25.37	No free product or sheen
	01/24/94		19.79	25.21	
	04/07/94		18.78	26.22	No free product or sheen
	06/07/94		18.88	26.12	No free product or sheen
	09/28/94		20.45	24.55	No free product or sheen
	12/14/94		19.45	25.55	No free product or sheen
	03/15/95		17.32	27.68	No free product or sheen
	06/13/95		17.43	27.57	No free product or sheen
	09/28/95		18.67	26.33	No free product or sheen

TABLE 1-Continued

GROUND WATER ELEVATIONS

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date	Top of Riser Elevation (ft)[a]	Depth to Water (ft)	Ground Water Elevation (ft)	Physical Observation of Free Product or Sheen
RW-1	05/14/92	43.17	16.88	26.29	
	08/27/92		19.05	24.12	
	11/19/92		21.11	22.07	
	02/03/92		15.48	27.69	
	06/23/93		28.25	14.92	No free product or sheen
	09/22/93		17.83	25.34	No free product or sheen
	01/24/94		24.00	19.17	
	04/07/94		16.05	27.12	No free product or sheen
	06/07/94		16.00	27.17	No free product or sheen
	09/28/94		18.35	24.82	No free product or sheen
	12/14/94		19.50	23.67	No free product or sheen
	03/15/95		17.00	26.17	No free product or sheen
	06/13/95		14.95	28.22	No free product or sheen
	09/28/95		27.63	15.54	No free product or sheen

[a] All top of riser elevations surveyed by Aegis Environmental, and are assumed relative to mean sea level.
[b] Not measured.

Note: Aegis Environmental, Inc., collected data prior to 06/23/93.

TABLE 2

GROUND WATER SAMPLE ANALYTICAL RESULTS

Concentrations in micrograms per liter (μg/L)

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH[a] as gasoline
MW-1	02/18/92	—	—	—	—	—
	05/15/92	2,000	47	1,200	400	41,000
	08/28/92	3,800	54	850	970	110,000
	11/19/92	200	<5.0	90	140	3,600
	02/03/93	180	22	79	130	3,000
	06/23/93	2,400	74	650	510	12,000
	09/22/93	3,000	290	1,100	1,200	23,000
	01/24/94	2,400	280	1,100	1,700	18,000
	04/07/94	4,200	820	1,600	2,100	20,000
	06/07/94	1,800	510	1,100	1,600	26,000
	09/28/94	1,700	210	970	870	18,000
	12/14/94	4,400	2,400	2,300	4,300	31,000
	03/15/95	830	310	840	1,200	17,000
	06/13/95	1,300	99	1,500	1,100	22,000
	09/28/95	580	<25	780	410	8,800
MW-2	02/18/92	<0.5	<0.5	1.9	<0.5	1,600
	05/14/92	1.2	1.0	1.3	<0.5	740
	08/27/92	6.5	1.1	0.6	<0.5	1,400
	11/19/92	<0.5	<0.5	2.7	<0.5	360
	02/03/93	1.2	1.6	4.5	6.4	590
	06/23/93	<0.5	<0.5	0.52	0.50	160
	09/22/93	<0.5	0.59	1.2	0.59	290
	01/24/94	<0.5	<0.5	0.68	<0.5	330
	04/07/94	<0.5	<0.5	<0.5	4.4	490
	06/07/94	<0.5	<0.5	1.5	<0.5	550
	09/28/94	<0.5	<0.5	<0.5	<0.5	190
	12/14/94	7.2	0.84	<0.5	<0.5	1,400
	03/15/95	39	<0.5	0.53	<0.5	730
	06/13/95	8.3	<0.5	<0.5	<0.5	750[c]
	09/28/95	<0.5	<0.5	<0.5	<0.5	670[c]

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
Concentrations in micrograms per liter (μg/L)

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH[a] as gasoline
MW-3	02/18/92	—	—	—	—	—
	05/15/92	6,300	5,900	1,700	6,100	160,000
	08/28/92	25,000	40,000	6,700	44,000	1,300,000
	11/19/92	—	—	—	—	—
	02/03/93	7,200	11,000	2,900	13,000	82,000
	06/23/93	3,200	5,300	2,500	9,100	61,000
	09/22/93	12,000	14,000	3,900	18,000	94,000
	01/24/94	14,000	17,000	4,200	14,000	110,000
	04/07/94	6,500	1,800	1,700	4,100	28,000
	06/07/94	6,400	2,300	1,500	3,500	27,000
	09/28/94	7,400	4,300	1,500	4,600	40,000
	12/14/94	17,000	21,000	3,900	22,000	140,000
	03/15/95	4,900	1,900	1,800	7,100	58,000
	06/13/95	7,200	2,900	1,200	4,600	44,000
	09/28/95	5,600	2,100	1,900	6,900	30,000
MW-4	02/18/92	<0.5	<0.5	12	21	5,100
	05/14/92	<0.5	5.6	1.8	2.2	4,600
	08/28/92	6.6	1.3	1.6	3.1	1,700
	11/19/92	<0.5	<0.5	<0.5	<0.5	400
	02/03/93	<0.5	<0.5	<0.5	<0.5	1,100
	06/23/93	<0.5	<0.5	<0.5	<0.5	120
	09/22/93	<0.5	<0.5	<0.5	<0.5	110
	01/24/94	<0.5	<0.5	<0.5	<0.5	260
	04/07/94	<0.5	<0.5	<0.5	<0.5	430
	06/07/94	<0.5	<0.5	<0.5	<0.5	150
	09/28/94	<0.5	<0.5	<0.5	<0.5	75
	12/14/94	<0.5	<0.5	<0.5	<0.5	160
	03/15/95	<0.5	<0.5	<0.5	<0.5	500
	06/13/95	<0.5	<0.5	<0.5	<0.5	210[c]
	09/28/95	<0.5	<0.5	<0.5	<0.5	140[c]

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
Concentrations in micrograms per liter (μg/L)

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH[a] as gasoline
MW-5	02/18/92	<0.5	<0.5	<0.5	<0.5	<50
	05/14/92	<0.5	<0.05	<0.5	<0.5	<50
	08/27/92	<0.5	<0.5	<0.5	<0.5	<50
	11/19/92	<0.5	<0.5	<0.5	<0.5	<50
	02/03/93	3.0	2.7	8.0	9.9	55
	06/23/93	<0.5	<0.5	<0.5	<0.5	<50
	09/22/93	0.66	1.1	<0.5	0.6	<50
	01/24/94	<0.5	<0.5	<0.5	<0.5	<50
	04/07/94	<0.5	<0.5	<0.5	<0.5	<50
	06/07/94	<0.5	<0.5	<0.5	<0.5	<50
	09/28/94	<0.5	<0.5	<0.5	<0.5	<50
	12/14/94	<0.5	<0.5	<0.5	<0.5	<50
	03/15/95	<0.5	<0.5	<0.5	<0.5	<50
	06/13/95	<0.5	0.52	<0.5	<0.5	<50
	09/28/95	<0.5	<0.5	<0.5	<0.5	<50
MW-6	02/18/92	4.8	<0.5	<0.5	<0.5	370
	05/14/92	<0.5	<0.5	<0.5	<0.5	120
	08/27/92	1.2	<0.5	<0.5	<0.5	<50
	11/19/92	1.3	<0.5	1.0	1.1	66
	02/03/93	1.9	2.6	23	12	100
	06/23/93	<0.5	<0.5	<0.5	<0.5	<50
	09/22/93	2.2	3.8	0.53	2.7	81
	01/24/94	<0.5	<0.5	<0.5	<0.5	98
	04/07/94	0.71	<0.5	<0.5	<0.5	150
	06/07/94	<0.5	<0.5	<0.5	<0.5	180
	09/28/94	<0.5	<0.5	<0.5	<0.5	100
	12/14/94	<0.5	<0.5	<0.5	<0.5	140
	03/15/95	<0.5	<0.5	<0.5	<0.5	110
	06/13/95	<0.5	0.87	<0.5	<0.5	150[c]
	09/28/95	0.78	<0.5	<0.5	<0.5	<50

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
Concentrations in micrograms per liter (μg/L)

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH[a] as gasoline
MW-7	02/18/92	16	<0.5	10	16	670
	05/14/92	44	<0.5	38	88	1,500
	08/27/92	400	5.8	290	1,400	23,000
	11/19/92	29	<0.5	10	53	330
	02/03/93	200	<0.5	110	480	2,000
	06/23/93	20	<0.5	16	16	280
	09/22/93	71	2.2	33	210	860
	01/24/94	61	<1.3	10	160	900
	04/07/94	53	<0.5	7.1	49	630
	06/07/94	55	<0.5	14	24	730
	09/28/94	21	<0.5	2.3	3.1	300
	12/14/94	19	<0.5	3.3	32	430
	03/15/95	0.88	<0.5	<0.5	<0.5	70
	06/13/95	7.3	0.79	7.6	8.9	190
	09/28/95	1.5	<0.5	1.2	0.84	60
MW-8	02/18/92	<0.5	<0.5	9.5	<0.5	1,200
	05/14/92	<0.5	<0.5	<0.5	<0.5	130
	08/28/92	<0.5	<0.5	<0.5	<0.5	140
	11/19/92	<0.5	<0.5	2.0	<0.5	320
	02/03/93	<0.5	<0.5	<0.5	<0.5	<50
	06/23/93	<0.5	<0.5	<0.5	<0.5	<50
	09/22/93	<0.5	0.67	<0.5	<0.5	<50
	01/24/94	<0.5	<0.5	<0.5	<0.5	290
	04/07/94	<0.5	<0.5	<0.5	<0.5	<50
	06/07/94	<0.5	<0.5	<0.5	<0.5	<50
	09/28/94	<0.5	<0.5	<0.5	<0.5	<50
	12/14/94	<0.5	<0.5	<0.5	<0.5	<50
	03/15/95	<0.5	<0.5	<0.5	<0.5	<50
	06/13/95	<0.5	<0.5	<0.5	<0.5	<50
	09/28/95	NS	NS	NS	NS	NS

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
Concentrations in micrograms per liter (μg/L)

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH[a] as gasoline
MW-9	02/18/92	<0.5	<0.5	<0.5	<0.5	<50
	05/14/92	<0.5	<0.5	<0.5	<0.5	<50
	08/27/92	<0.5	<0.5	<0.5	<0.5	<50
	11/19/92	<0.5	<0.5	<0.5	1.3	<50
	02/03/93	<0.5	<0.5	<0.5	<0.5	<50
	06/23/93	<0.5	<0.5	<0.5	<0.5	<50
	09/22/93	<0.5	<0.5	<0.5	<0.5	<50
	01/24/94	<0.5	<0.5	<0.5	<0.5	<50
	04/07/94	<0.5	<0.5	<0.5	<0.5	<50
	06/07/94	<0.5	<0.5	<0.5	<0.5	<50
	09/28/94	<0.5	<0.5	<0.5	<0.5	<50
	12/14/94	<0.5	<0.5	<0.5	<0.5	<50
	03/15/95	<0.5	<0.5	<0.5	<0.5	<50
	06/13/95	<0.5	<0.5	<0.5	<0.5	<50
	09/28/95	<0.5	<0.5	<0.5	<0.5	<50
MW-10	02/18/92	110	57	440	53	18,000
	05/15/92	24	9.8	97	<0.5	8,500
	08/29/92	20	2.8	40	3.5	9,600
	11/19/92	36	21	330	31	5,700
	02/03/93	15	4.6	36	9.6	2,200
	06/23/93	21	24	540	45	8,100
	09/22/93	22	17	350	16	6,200
	01/24/94	NS[b]	NS	NS	NS	NS
	04/07/94	6.4	2.9	150	4.7	4,000
	06/07/94	5.6	<2.5	150	5.7	6,700
	09/28/94	2.2	2.6	110	44	5,700
	12/14/94	<1.3	<1.3	77	27	3,500
	03/15/95	<5.0	6.7	150	23	7,200
	06/13/95	9.0	48	610	130	8,400
	09/28/95	22	17	360	24	6,300

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
Concentrations in micrograms per liter (μg/L)

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH[a] as gasoline
MW-11	02/18/92	<0.5	<0.5	<0.5	<0.5	2,400
	05/15/92	<0.5	1.9	1.3	0.7	1,600
	08/27/92	15	2	0.6	1.2	2,100
	11/19/92	<0.5	<0.5	<0.5	<0.5	490
	02/03/93	<0.5	<0.5	0.55	<0.5	500
	06/23/93	<0.5	<0.5	<0.5	<0.5	350
	09/22/93	<0.5	0.65	<0.5	0.71	200
	01/24/94	<0.5	<0.5	<0.5	<0.5	450
	04/07/94	<0.5	<0.5	<0.5	<0.5	500
	06/07/94	<0.5	<0.5	<0.5	0.64	560
	09/28/94	<0.5	<0.5	<0.5	<0.5	600
	12/14/94	<0.5	<0.5	<0.5	<0.5	340
	03/15/95	<0.5	<0.5	<0.5	<0.5	340
	06/13/95	<0.5	<0.5	<0.5	<0.5	210[c]
	09/28/95	4.1	0.50	<0.5	<0.5	93
RW-1	05/15/92	270	62	29	140	790
	08/29/92	1,300	200	68	810	24,000
	11/19/92	—	—	—	—	—
	02/03/93	71	35	22	110	620
	06/23/93	30	33	9.8	35	220
	09/22/93	800	400	170	910	4,100
	01/24/94	33	6.0	6.9	23	190
	04/07/94	110	57	32	260	1,500
	06/07/94	130	51	45	180	1,700
	09/28/94	54	9.2	12	29	350
	12/14/94	6.8	2.1	1.2	3.4	79
	03/15/95	NS	NS	NS	NS	NS
	04/10/95	54	11	11	69	410
	06/13/95	1,600	780	340	1,400	8,200
	09/28/95	<0.5	<0.5	<0.5	<0.5	<50

[a] Total petroleum hydrocarbons.
[b] Not sampled.
[c] Product is not typical gasoline.

Note: Aegis Environmental, Inc., collected data prior to 06/23/93.

TABLE 3

VOLUME OF GROUND WATER TREATED
by Remediation System

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Date	Volume[a] (gallons)
06/21/93	2,120
07/14/93	117,367
08/14/93	210,470
09/22/93	255,241
01/24/94	399,520
03/31/94	460,075
06/21/94	597,663
09/28/94	662,894
12/14/94	723,160
03/15/95	902,621
06/30/95	929,056
09/23/95	1,018,150

[a] Cumulative volume of water discharged to sanitary sewer at the indicated date.

TABLE 4

ANALYTICAL RESULTS OF SYSTEM WATER SAMPLES

Concentrations in micrograms per liter (µg/L)

Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

Sample	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH[a] as gasoline
Influent	12/14/94	<0.5	<0.5	<0.5	<0.5	<50
	03/22/95	<0.5	<0.5	<0.5	<0.5	<50
	04/10/95	3.9	0.57	0.65	5.5	<50
	06/13/95	NS	NS	NS	NS	NS
	08/10/95	<0.5	<0.5	<0.5	<0.5	<50
	09/14/95	<0.5	<0.5	<0.5	<0.5	490[d]
Mid Carbon	12/14/94	<0.5	<0.5	<0.5	<0.5	<50
	03/22/95	<0.5	<0.5	<0.5	<0.5	<50
	04/10/95	<0.5	<0.5	<0.5	<0.5	<50
	06/13/95	NS	NS	NS	NS	NS
	08/10/95	<0.5	<0.5	<0.5	<0.5	<50
	09/14/95	<0.5	<0.5	<0.5	<0.5	<50
Effluent	05/28/93	<0.5	<0.5	<0.5	<0.5	<50
	10/01/93	<0.5	<0.5	<0.5	<0.5	<50
	01/24/94	<0.5	<0.5	<0.5	<0.5	<50
	04/07/94	<0.5	<0.5	<0.5	<0.5	<50
	05/18/94	<0.5	<0.5	<0.5	<0.5	<50
	09/28/94	NS	NS	NS	NS	NS
	12/14/94	<0.5	<0.5	<0.5	<0.5	<50
	03/22/95	<0.5	<0.5	<0.5	<0.5	<50
	04/10/95	<0.5	<0.5	<0.5	<0.5	<50
	06/13/95	NS	NS	NS	NS	NS
	07/28/95	<0.5	<0.5	<0.5	<0.5	<50
	08/10/95	<0.5	<0.5	<0.5	<0.5	<50
	09/14/95	<0.5	<0.5	<0.5	<0.5	<50

[a] Total petroleum hydrocarbons.
[b] Not sampled.

GENERAL NOTES:
BASE MAP FROM U.S.G.S.
HAYWARD, CA.
7.5 MINUTE TOPOGRAPHIC
PHOTOREVISED 1980

QUADRANGLE LOCATION

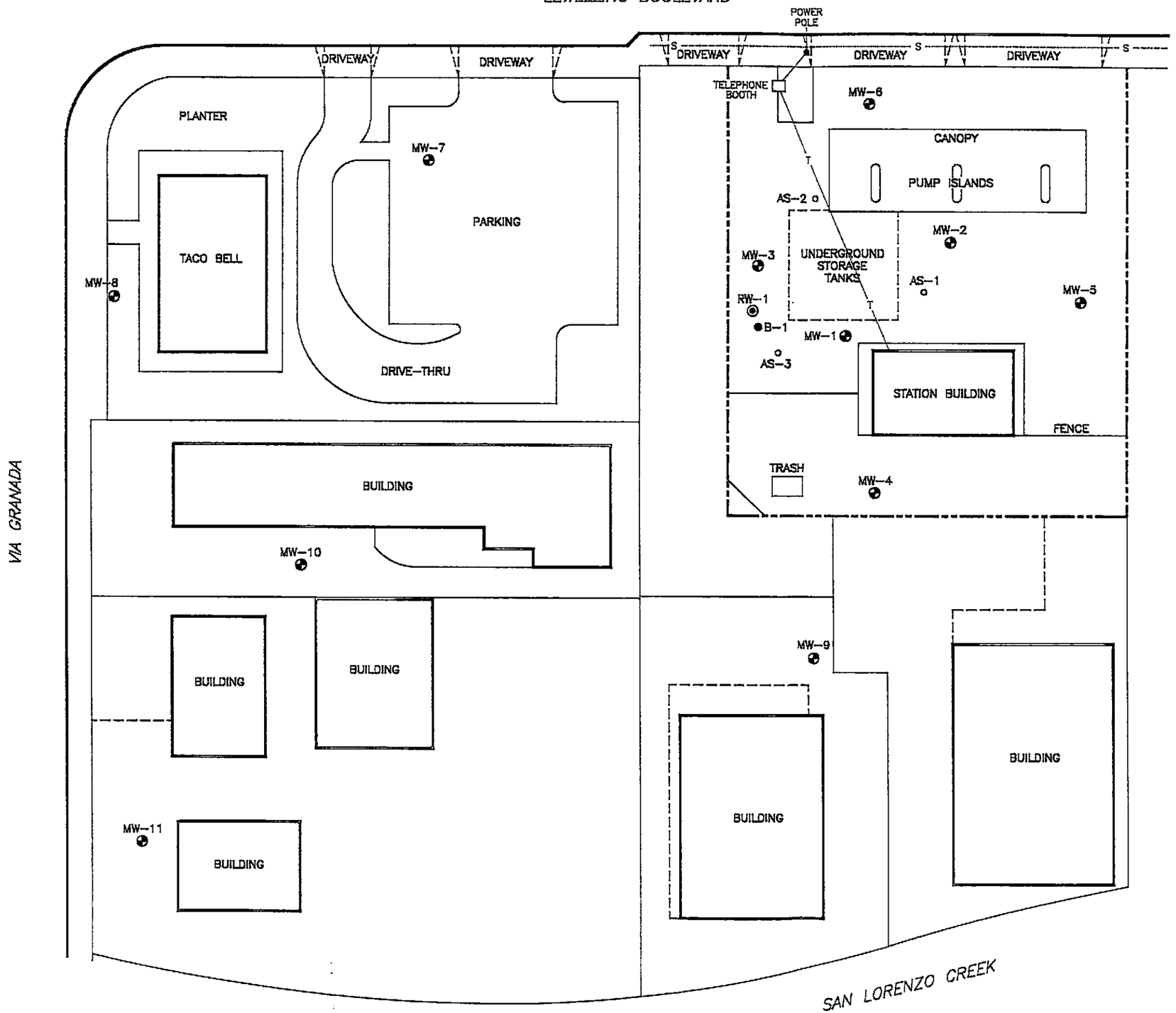
0 2000 FT

SCALE 1 : 24,000

FIGURE 1
SITE LOCATION MAP
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. 40-93-936	DRAWN BY LH. 11/2/92
FILE NO. ———	PREPARED BY TMG
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.



North

LEGEND:

- ● B-1 SOIL BORING LOCATION
- ◉ RW-1 RECOVERY WELL LOCATION
- ◕ MW-1 MONITORING WELL LOCATION
- ○ AS-1 AIR SPARGING WELL LOCATION

UTILITIES

—T— TELEPHONE LINE (OVERHEAD)
—S— SEWER LINE (BURIED)

NOTE:
BASE MAP ADAPTED FROM RESNA FIGURE DATED 1/9/92
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED

0 30 FT
SCALE

FIGURE 2
SITE VICINITY MAP
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. 0093-836	DRAWN BY LH. 10/12/95
FILE NO. 93-936-1	PREPARED BY JWS
REVISION NO. 3	REVIEWED BY

Delta Environmental Consultants, Inc.

LEWELLING BOULEVARD

VIA GRANADA

SAN LORENZO CREEK

DRIVEWAY
DRIVEWAY
DRIVEWAY
DRIVEWAY
DRIVEWAY
PLANTER
TELEPHONE BOOTH
MW-6 (26.86)
CANOPY
PUMP ISLANDS
MW-7 (26.70)
PARKING
TACO BELL
MW-8 (26.64)
(27.93) MW-3
UNDERGROUND STORAGE TANKS
MW-2 (27.02)
MW-5 (27.05)
RW-1 (15.54)
B-
MW-1 (26.92)
18.0
20.0
22.0
24.0
26.0
DRIVE-THRU
STATION BUILDING
FENCE
TRASH
MW-4 (26.78)
BUILDING
MW-10 (26.53)
BUILDING
BUILDING
MW-9 (26.90)
BUILDING
BUILDING
MW-11 (26.33)
BUILDING

North

LEGEND:

- B-1 SOIL BORING LOCATION
- RW-1 RECOVERY WELL LOCATION
- MW-1 MONITORING WELL LOCATION
- (26.92) GROUND WATER ELEVATION ASSUMED RELATIVE TO MEAN SEA LEVEL
- 26.0 WATER TABLE CONTOUR ASSUMED RELATIVE TO MEAN SEA LEVEL
- GROUND WATER FLOW DIRECTION

NOTE:
BASE MAP ADAPTED FROM RESNA FIGURE DATED 1/9/92
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED

0 30 FT
SCALE

FIGURE 3
WATER TABLE CONTOUR MAP – 9/28/95
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. D093-938	DRAWN BY I.H. 11/14/95
FILE NO. 93-938-1	PREPARED BY JWS
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

LEWELLING BOULEVARD

VIA GRANADA

SAN LORENZO CREEK

DRIVEWAY

DRIVEWAY

DRIVEWAY

DRIVEWAY

DRIVEWAY

PLANTER

TACO BELL

PARKING

DRIVE-THRU

BUILDING

BUILDING

BUILDING

BUILDING

BUILDING

BUILDING

CANOPY

PUMP ISLANDS

UNDERGROUND STORAGE TANKS

STATION BUILDING

TRASH

FENCE

MW-1 (580)

MW-2 (<0.5)

MW-3 (5,600)

MW-4 (<0.5)

MW-5 (<0.5)

MW-6 (0.78)

MW-7 (1.5)

MW-8 (NS)

MW-9 (<0.5)

MW-10 (22)

MW-11 (4.1)

RW-1 (<0.5)

B-1

<0.5

10

100

1,000

?

North

LEGEND:

- B-1 SOIL BORING LOCATION
- RW-1 RECOVERY WELL LOCATION
- MW-1 MONITORING WELL LOCATION
- (580) BENZENE CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
- —10— BENZENE ISOCONCENTRATION IN ug/L
- (NS) NOT SAMPLED

NOTE:

BASE MAP ADAPTED FROM RESNA FIGURE DATED 1/9/92
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED

0 30 FT

SCALE

FIGURE 4
BENZENE ISOCONCENTRATION MAP
9/28/95
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. D093-936	DRAWN BY I.H. 10/12/95
FILE NO. 93-936-1	PREPARED BY JWS
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

1.0 GROUND WATER AND FREE-FLOATING PRODUCT DEPTH ASSESSMENT

A water/petroleum product interface probe was used to assess free product thickness and ground water depth in each well. If a free floating product layer was not measured by the interface probe, the tip of the probe was subjectively analyzed for product sheen or detectable odor. All measurements and physical observations were then recorded on separate data sheets in the field.

2.0 SUBJECTIVE ANALYSIS OF GROUND WATER

Prior to the purging of ground water monitoring wells, a water sample was collected from the monitoring well for subjective analysis. The sample was retrieved by gently lowering a clean disposable bailer approximately one-half the bailer length past the air/liquid interface. The bailer was then retrieved and the sample contained within the bailer was examined for floating product levels, appearance of a petroleum product sheen, and any detectable petroleum product odor.

3.0 MONITORING WELL PURGING AND SAMPLING

Monitoring wells were purged using a centrifugal pump with new disposable tubing. Monitoring wells were sampled using new dedicated disposable bailers. Ground water removed from the wells was stored in 55-gallon barrels at the site. The purge water was treated by the remediation system. After pH, temperature, and conductivity were recorded during the purging of each well. After purging, ground water levels were allowed to stabilize. Samples were collected in air-tight vials, appropriately labeled and stored on ice from the time of collection through the time of delivery to the laboratory. A chain-of-custody form was completed to document possession of the sample. Ground water samples were transported to the laboratory and analyzed within the EPA-specified holding times for the requested analyses.

ENCLOSURE B

Field Sampling Data Sheets

SAMPLING INFORMATION SHEET

Environmental Consultants, Inc.

Sample ID# MW-1 Project Name: BEACON 721 Project No. D093-936

Location (address) 44 LEWELLING BLVD. SAN LORENZO, CA

Date Sampled: 9 / 28 / 95 Time: 1215

Wellhead assembly condition: X Good ____ Fair ____ Poor (If poor, see comments)

Equipment Replaced: ____ bolts ____ locks ____ locking cap

Well Depth 31.20 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 16.75 ft. Date: 9 / 28 / 95 Time 0915

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: ____ Submersible pump ____ Bailer X Centrifugal pump ____ Other ____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: ____). (new or previously used) was used to purge well

Sampling method: X Disposable bailer ____ Sampling port

Samples collected 2 VOAS FOR BTEX/TPHg Sample appearance cloudy

Note any sampling problems NONE

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (umhos/cm) X1.00	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1210	74.0	7.38	9.55		0
1212	73.8	7.42	9.68		5
1219	73.1	7.57	10.01		9

Comments: 4 WELL VOLUMES = 9 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: M Sampled by: M

SAMPLING INFORMATION SHEET

Environmental Consultants, Inc.

Sample ID# MW-2 Project Name: BEACON 721 Project No. D093-936

Location (address) 44 LEWELLING BLVD. SAN LORENZO, CA

Date Sampled: 9 / 28 / 95 Time: 1200

Wellhead assembly condition: X Good ____ Fair ____ Poor (If poor, see comments)

Equipment Replaced: ____ bolts ____ locks ____ locking cap

Well Depth 33.30 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 16.07 ft Date: 9 / 19 / 95 Time 0917

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: ____ Submersible pump ____ Bailer X Centrifugal pump ____ Other ____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: ____). (new or previously used) was used to purge well

Sampling method: X Disposable bailer ____ Sampling port

Samples collected 2 VOAs FOR BTEX/TPHg Sample appearance CLEAR

Note any sampling problems NONE

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	X100 Conductance (umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1153	68.3	6.95	8.80		0
1154	71.5	6.78	10.89		5
1156	70.1	6.26	10.91		11

Comments: 4 WELL VOLUMES = 11 GAL

Transportation (thermal preservation) ICED IN CHEST

Form completed by: ____ Sampled by: LG

Consultants, Inc.

Sample ID# MW-3 Project Name: BEACON 721 Project No. 2093-936

Location (address) 44 LEWELLING BLVD. SAN LORENZO, CA

Date Sampled: 9/28/95 Time: 1730

Wellhead assembly condition: X Good _____ Fair _____ Poor (If poor, see comments)

Equipment Replaced: _____ bolts _____ locks _____ locking cap

Well Depth 29.30 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 15.17 ft. Date: 9/28/95 Time 0923

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6" X

Purging method: _____ Submersible pump _____ Bailer _____ Centrifugal pump _____ Other _____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: _____). (new or previously used) was used to purge well

Sampling method: X Disposable bailer _____ Sampling port

Samples collected 2 VOAs FOR BTEX/TPHg Sample appearance cloudy

Note any sampling problems NONE

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (umhos/cm) >100	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1224	70.6	6.70	10.14		0
1225	73.9	6.99	10.51		5
1226	74.0	7.04	10.23		9

Comments: 4 WELL VOLUMES = 9 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: _____ Sampled by: _____

SAMPLING INFORMATION SHEET

Environmental Consultants, Inc.

Sample ID# MW-4 Project Name: BEACON 721 Project No. D093-936

Location (address) 41 LEWELLING BLVD. SAN LORENZO CA

Date Sampled: 9/28/95 Time: 1245

Wellhead assembly condition: X Good ____ Fair ____ Poor (If poor, see comments)

Equipment Replaced: ____ bolts ____ locks ____ locking cap

Well Depth 24.60 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 17.88 ft. Date: 9/28/95 Time 0937

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: ____ Submersible pump ____ Bailer X Centrifugal pump ____ Other ____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: ____). (new or previously used) was used to purge well

Sampling method: X Disposable bailer ____ Sampling port

Samples collected 2 VOAS FOR BTEX/TPHg Sample appearance Clear

Note any sampling problems None.

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (x1000 umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1239	76.7	7.17	10.23		0
1239	72.7	7.26	8.40		2
1240	72.5	7.06	8.79		4

Comments: 4 WELL VOLUMES = 4 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: [signature] Sampled by: [signature]

SAMPLING INFORMATION SHEET

Environmental Consultants, Inc.

Sample ID# MW-5 Project Name: BEACON 721 Project No. D093-936

Location (address) 41 LEWELLING BLVD. SAN LORENZO CA

Date Sampled: 9/28/95 Time: 1195

Wellhead assembly condition: ✓ Good ____ Fair ____ Poor (If poor, see comments)

Equipment Replaced: ____ bolts ____ locks ____ locking cap

Well Depth 29.20 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 16.74 ft. Date: 9/28/95 Time 0915

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: ____ Submersible pump ____ Bailer ✓ Centrifugal pump ____ Other ____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: ____). (new or previously used) was used to purge well

Sampling method: ✓ Disposable bailer ____ Sampling port

Samples collected 2 VOAS FOR BTEX/TPHg Sample appearance clear

Note any sampling problems NONE

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1191	72.3	7.83	6.78		0
1192	70.6	7.46	6.99		4
1193	70.2	7.40	6.98		8

Comments: 4 WELL VOLUMES = 8 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: LM Sampled by: LM

SAMPLING INFORMATION SHEET

Environmental Consultants, Inc.

Sample ID# MW-6 Project Name: BEACON 721 Project No. 2093-936

Location (address) 44 LEWELLING BLVD. SAN LORENZO CA

Date Sampled: 9/28/95 Time: 1135

Wellhead assembly condition: T Good ____ Fair ____ Poor (If poor, see comments)

Equipment Replaced: ____ bolts ____ locks ____ locking cap

Well Depth 28.70 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 15.61 ft. Date: 9/28/95 Time 09/7

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: ____ Submersible pump ____ Bailer ✓ Centrifugal pump ____ Other ____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: ____). (new or previously used) was used to purge well

Sampling method: X Disposable bailer ____ Sampling port

Samples collected 2 VOAs FOR BTEX/TPHg Sample appearance Clear

Note any sampling problems NONE

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1127	70.8	7.61	1.90		2
1128	69.9	7.07	7.0		4
1179	69.8	7.50	7.10		8

4 WELL VOLUMES = 8 GAL

Comments: ____

Transportation (thermal preservation) ICE & CHEST

Form completed by: ____ Sampled by: ____

SAMPLING INFORMATION SHEET

Environmental Consultants, Inc.

Sample ID# MW-7 Project Name: BEACON 721 Project No. D093-936

Location (address) 41 LEWELLING BLVD. SAN LORENZO CA

Date Sampled: 9/28/95 Time: 1055

Wellhead assembly condition: 1 Good _____ Fair _____ Poor (If poor, see comments)

Equipment Replaced: _____ bolts _____ locks _____ locking cap

Well Depth 24.30 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 14.89 ft. Date: 9/28/95 Time 1045

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: _____ Submersible pump _____ Bailer 4 Centrifugal pump _____ Other _____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: _____). (new or previously used) was used to purge well

Sampling method: 4 Disposable bailer _____ Sampling port

Samples collected 2 VOAS FOR BTEX/TPHg Sample appearance clear

Note any sampling problems none

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (x100 umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1048	70.9	7.92	6.99		0
1048	73.4	7.45	10.01		~
1049	72.9	7.20	10.29		9.5

Comments: 4 WELL VOLUMES = 9.5 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: _____ Sampled by: _____

SAMPLING INFORMATION SHEET

Environmental Consultants, Inc.

Sample ID# MW-8 Project Name: BEACON 721 Project No. D093-936

Location (address) 41 LEWELLING BLVD. SAN LORENZO, CA

Date Sampled: 9/28/95 Time: ~~1015~~

Wellhead assembly condition: X Good _____ Fair _____ Poor (If poor, see comments)

Equipment Replaced: _____ bolts _____ locks _____ locking cap

Well Depth 23.20 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 15.62 ft. Date: 9/28/95 Time 1015

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: _____ Submersible pump _____ Bailer X Centrifugal pump _____ Other _____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: _____). (new or previously used) was used to purge well

Sampling method: X Disposable bailer _____ Sampling port

Samples collected 2 VOAs FOR BTEX/TPHg Sample appearance CLEAR

Note any sampling problems ~~PARTY~~ well purged Dry - wouldn't Recharge.

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (x100 umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1018	70.8	7.25	5.89		0
1018	70.1	7.38	3.02		2
1019	70.0	7.43	2.81		5

Comments: Well purged Dry, & wouldn't 4 WELL VOLUMES = 5 GAL Recharge - Check it before leaving Site @ 1345 And NO Recharge - unable to produce any more

Transportation (thermal preservation) ICE & CHEST

Form completed by: JM Sampled by: JM

SAMPLING INFORMATION SHEET

Environmental Consultants, Inc.

Sample ID# MW-9 Project Name: BEACON 721 Project No. D093-936

Location (address) 44 LEWELLING BLVD. SAN LORENZO CA

Date Sampled: 9 / 28 / 95 Time: 1110

Wellhead assembly condition: X Good ____ Fair ____ Poor (If poor, see comments)

Equipment Replaced: ____ bolts ____ locks ____ locking cap

Well Depth 23.80 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 18.04 ft Date: 9 / 28 / 95 Time 1101

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: ____ Submersible pump ____ Bailer X Centrifugal pump ____ Other ____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: ____) (new or previously used) was used to purge well

Sampling method: X Disposable bailer ____ Sampling port

Samples collected 2 VOAS FOR BTEX/TPHg Sample appearance clear

Note any sampling problems NONE

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1100	74.6	7.07	10.86		0
1106	73.3	7.03	9.61		1.5
1107	73.1	7.00	8.65		3.5

Comments: 4 WELL VOLUMES = 3.5 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: N/A Sampled by: [signature]

SAMPLING INFORMATION SHEET

Environmental Consultants, Inc.

Sample ID# MW-10 Project Name: BEACON 721 Project No. D093-936

Location (address) 44 LEWELLING BLVD. SAN LORENZO, CA

Date Sampled: 9 / 19 / 95 Time: 1010

Wellhead assembly condition: OK Good _____ Fair _____ Poor (If poor, see comments)

Equipment Replaced: _____ bolts _____ locks _____ locking cap

Well Depth 29.50 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 15.81 ft. Date: 9 / 19 / 95 Time 1000

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: _____ Submersible pump _____ Bailer X Centrifugal pump _____ Other _____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: _____). (new or previously used) was used to purge well

Sampling method: X Disposable bailer _____ Sampling port

Samples collected 2 VOAS FOR BTEX/TPHg Sample appearance CLEAR

Note any sampling problems NONE

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (umhos/cm) X100	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1002	66.1	8.43	6.00		0
1003	66.8	7.44	5.33		4
1004	66.8	7.36	5.35		9

Comments: 4 WELL VOLUMES = 9 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: MY Sampled by: MY

SAMPLING INFORMATION SHEET

Delta Environmental Consultants, Inc.

Sample ID# MW-11 Project Name: BEACON 721 Project No. D093-936

Location (address) 42 LEWELLING BLVD. SAN LORENZO, CA

Date Sampled: 9 / 18 / 95 Time: 0955

Wellhead assembly condition: X Good ____ Fair ____ Poor (If poor, see comments)

Equipment Replaced: ____ bolts ____ locks ____ locking cap

Well Depth 29.50 ft below top of casing Casing diameter 2 inches

Depth to water (below top of casing) 18.67 ft. Date: 9 / 18 / 95 Time 0938

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: ____ Submersible pump ____ Bailer X Centrifugal pump ____ Other ____

At least 4 well volumes have been evacuated before sampling.

Tubing (type: ____). (new or previously used) was used to purge well

Sampling method: X Disposable bailer ____ Sampling port

Samples collected 2 VOAS FOR BTEX/TPHg Sample appearance Clear

Note any sampling problems NONE

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	X100 Conductance (umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
0945	72.9	8.90	7.17		0
0946	67.9	8.59	6.50		3
0947	67.9	8.91	6.31		7

Comments: 4 WELL VOLUMES = 7 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: ____ Sampled by: ____

SAMPLING INFORMATION SHEET

Delta Environmental Consultants, Inc.

Sample ID# RW-1 Project Name: BEACON 721 Project No. D093-936

Location (address) 44 LEWELLING BLVD. SAN LORENZO CA

Date Sampled: 9 / 28 / 95 Time: 1250

Wellhead assembly condition: ____ Good ____ Fair ____ Poor (If poor, see comments)

Equipment Replaced: ____ bolts ____ locks ____ locking cap

Well Depth 29.50 ft below top of casing Casing diameter ____ inches

Depth to water (below top of casing) 27.63 ft. Date: 9 / 28 / 95 Time 0925

Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"

Purging method: ____ Submersible pump ____ Bailer ____ Centrifugal pump ____ Other ____

At least ____ well volumes have been evacuated before sampling.

Tubing (type: ____). (new or previously used) was used to purge well

Sampling method: ____ Disposable bailer ✓ Sampling port

Samples collected ____ Sample appearance Clear

Note any sampling problems none

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)

Comments: Sampled at system 4 WELL VOLUMES = ____ GAL

Transportation (thermal preservation) ____

Form completed by: [signature] Sampled by: [signature]

Ultramar Inc.

CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No.
721	Jay Stroups	[illegible]	1 of 2
Project No.	Sampler (Signature)		
[illegible] 3-956	[signature]		
Project Location	Affiliation		
San Lorenzo	Delta		

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)						No. of Containers	REMARKS
MW-11	7-20-95	0950		X	X							2	
MW-10	↓	1010		↓	↓							↓	
~~MW-8~~		~~1035~~											~~No sample [illegible]~~
MW-7		1055											
MW-9		1110											
MW-6		1135											
MW-5		1145											
MW-2		1200											

Remarks: [illegible] TAT

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature] Delta	[illegible]	1440			
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
			[signature]	7/28/95	1440

Report To: [illegible]

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: T. Fox

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

32-8003 1/90

Ultramar Inc.

CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No.
771	[illegible]	[illegible]	2 of 2

Project No. [illegible]	Sampler (Signature) [illegible signature]
Project Location [illegible]	Affiliation [illegible]

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)						No. of Containers	REMARKS
MW-1	[illegible]	1215		✓	✓							1	[illegible]
MW-3	✓	1230		✓	✓							✓	
MW-4	✓	1245		✓	✓							✓	
RW-1	✓	1250		✓	✓							✓	

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[illegible signature]	[illegible]	[illegible]			
			[illegible signature]	[illegible]	[illegible]

Report To: [illegible]

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: [illegible]

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

32-8003 1/90

ENCLOSURE C

Ground Water Sample Laboratory Report

WEST LABORATORY

October 5, 1995
Sample Log 13016

Todd Galati
Delta Environmental Consultants, Inc.
3164 Gold Camp Drive, Suite 200
Rancho Cordova, CA 95670

Subject: Analytical Results for 11 Water Samples
Identified as: Beacon 721 (Proj. # DO93-936)
Received: 09/28/95

Dear Mr. Galati:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on October 5, 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

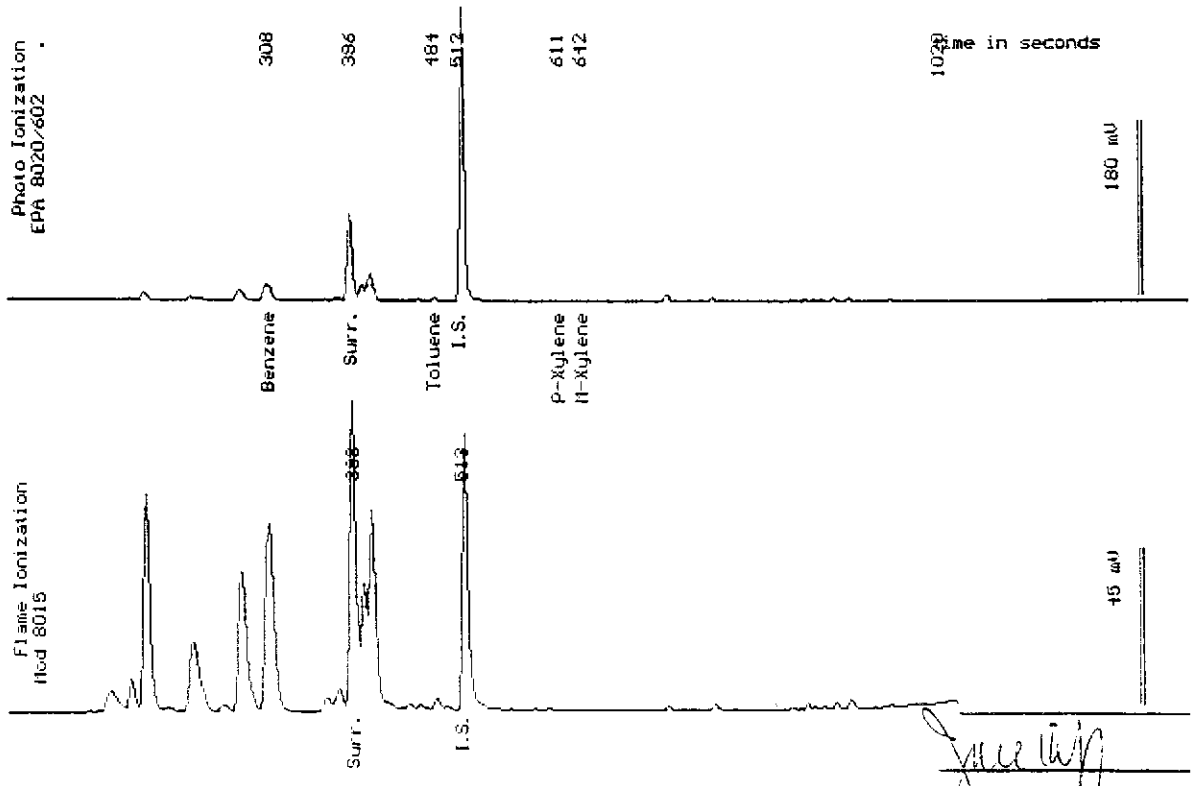
Sample Log 13016

13016-01

Sample: **MW-11**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:1 QC Batch : 2129Z
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	4.1
Toluene	(.50)	.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	93
Surrogate Recovery		93 %



Date Analyzed: 10-03-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

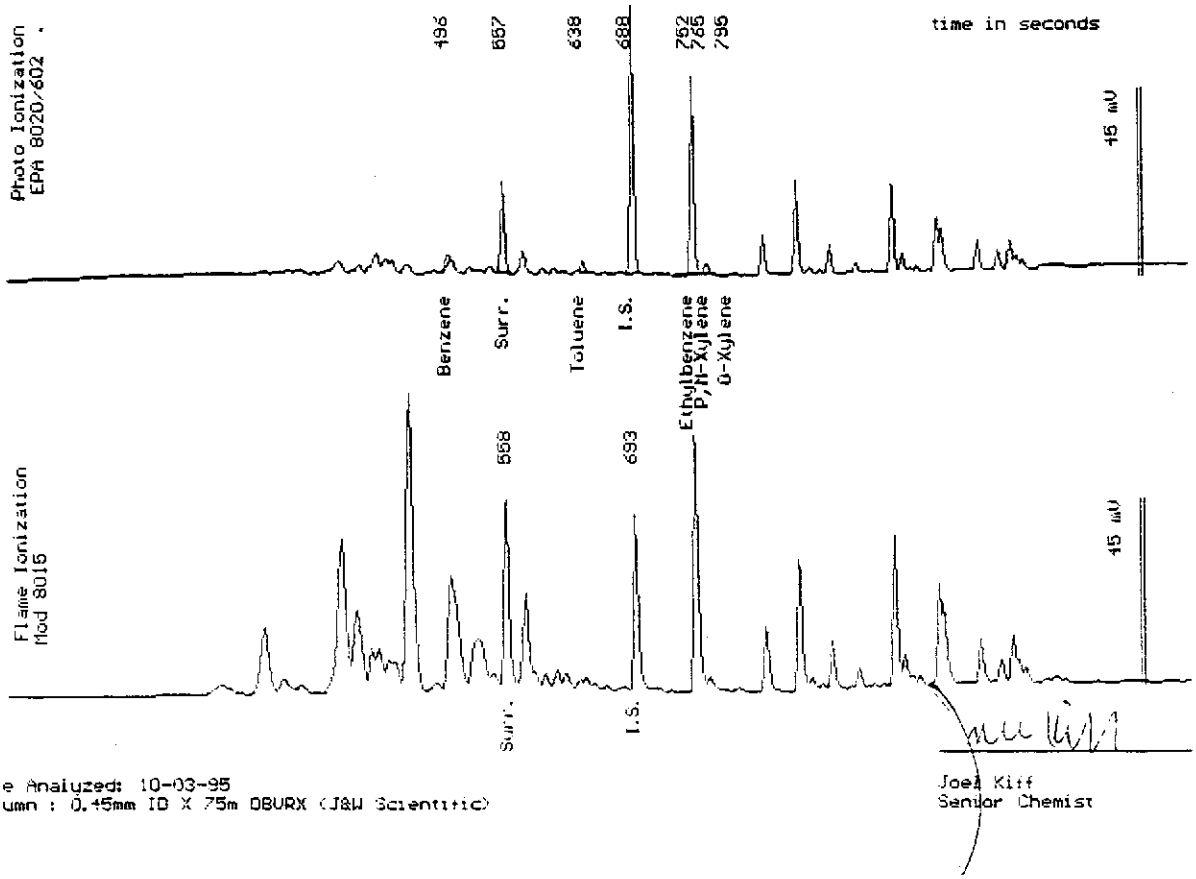
Sample Log 13016

13016-02

Sample: **MW-10**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:10 QC Batch : 6158T
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L	
Benzene	(5.0)	22	
Toluene	(5.0)	17	
Ethylbenzene	(5.0)	360	
Total Xylenes	(5.0)	24	
TPH as Gasoline	(500)	6300	
Surrogate Recovery		86	%



Date Analyzed: 10-03-95
Column : 0.45mm ID X 75m DBURX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

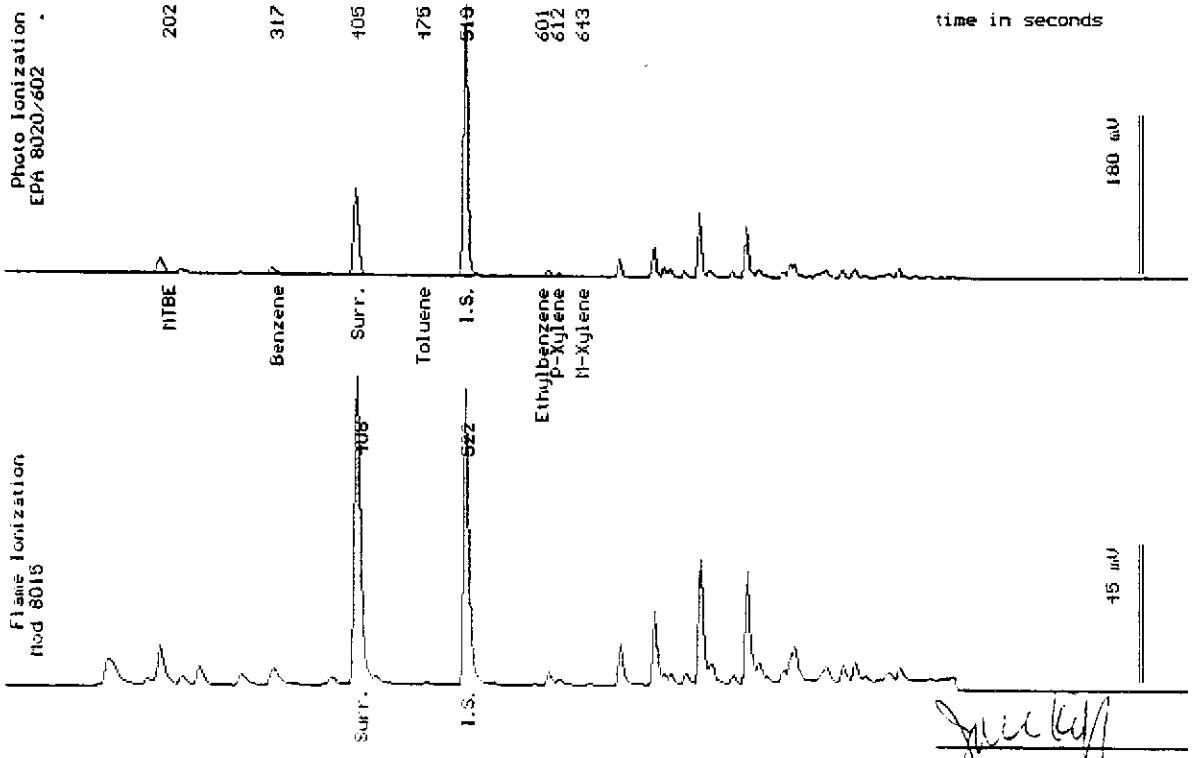
Sample Log 13016

13016-03

Sample: **MW-7**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:1 QC Batch : 2130K
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	1.5
Toluene	(.50)	<.50
Ethylbenzene	(.50)	1.2
Total Xylenes	(.50)	.84
TPH as Gasoline	(50)	60
Surrogate Recovery		99 %



Date Analyzed: 10-06-95
Column : 0.53mm ID X 60m RTX-1301 (Restek)

Joel Kiff
Senior Chemist

WEST LABORATORY

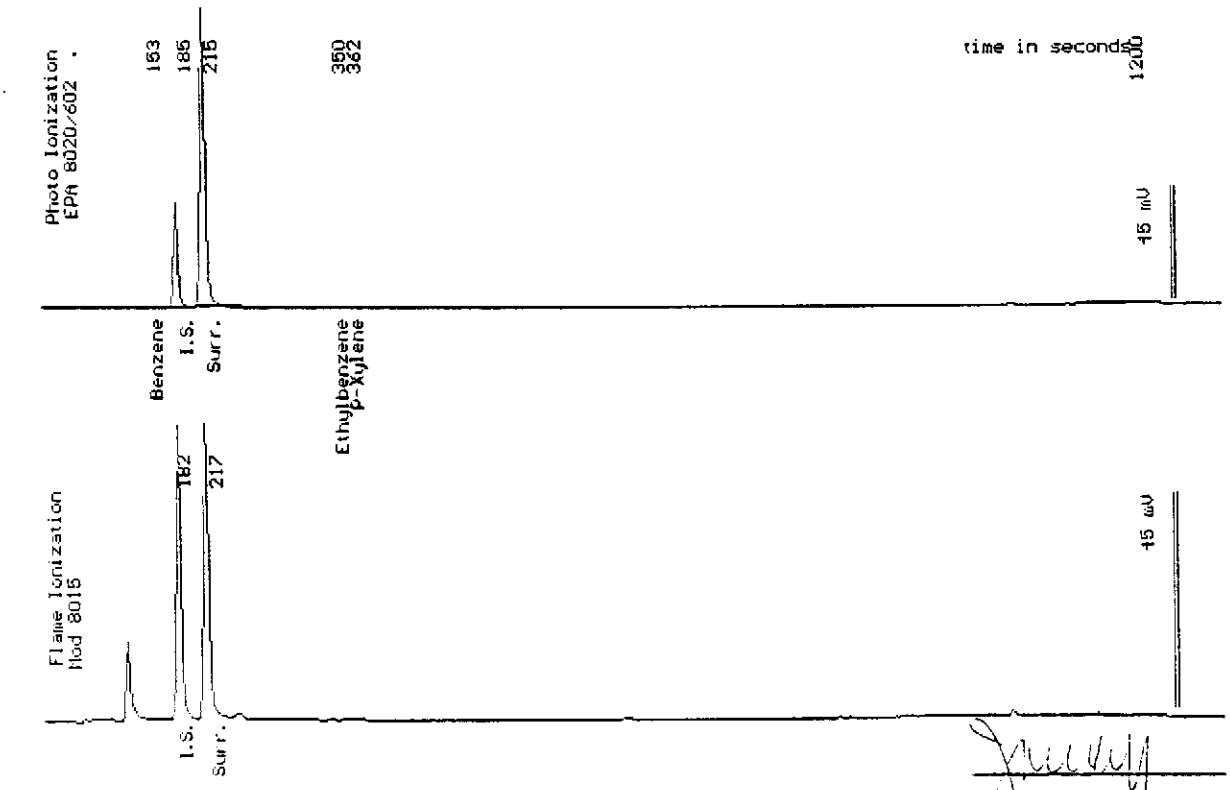
Sample Log 13016

13016-04

Sample: **MW-9**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:1 QC Batch : 4132S
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: 10-03-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joell Kiff
Senior Chemist

WEST LABORATORY

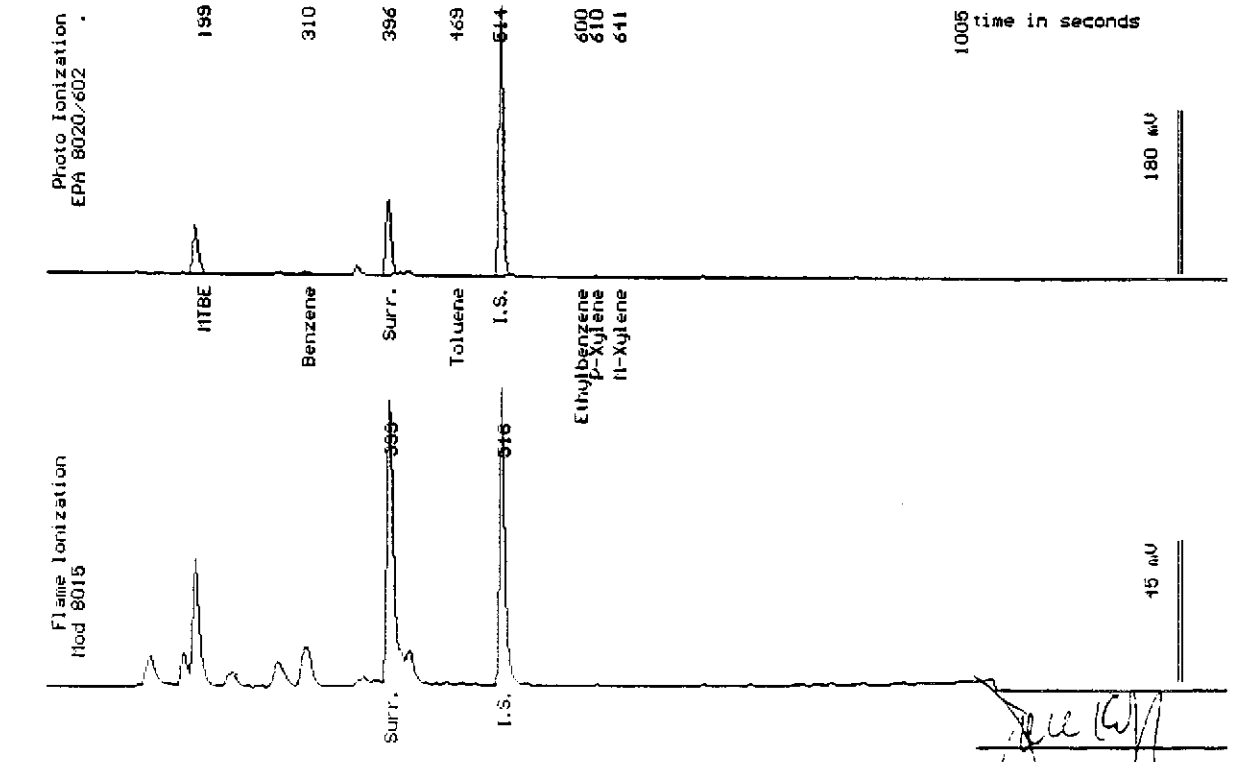
Sample Log 13016

13016-05

Sample: **MW-6**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:1 QC Batch : 2130K
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	.78
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		95 %



Date Analyzed: 10-06-95
Column : 0.53mm ID X 60m RTX-1301 (Restek)

Joel Kiff
Senior Chemist

WESTLAB LABORATORY

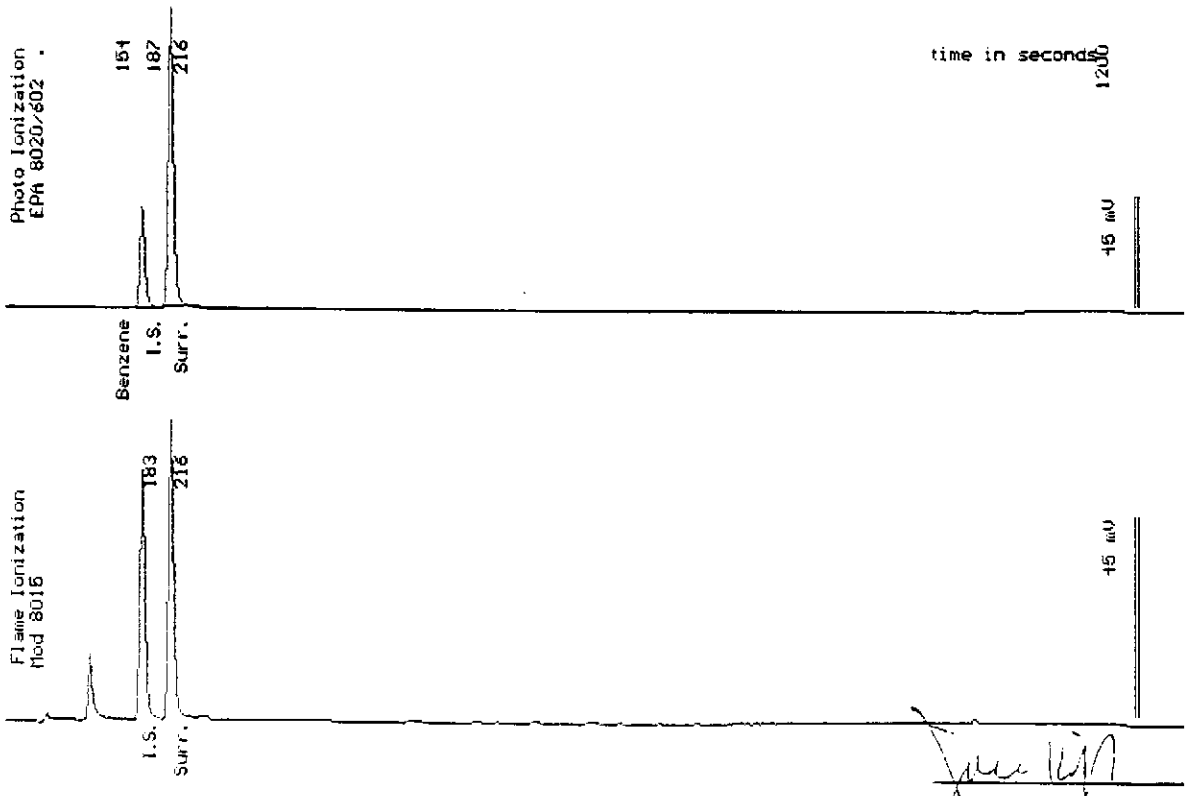
Sample Log 13016

13016-06

Sample: **MW-5**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:1 QC Batch : 4132S
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		93 %



Date Analyzed: 10-03-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

Sample Log 13016

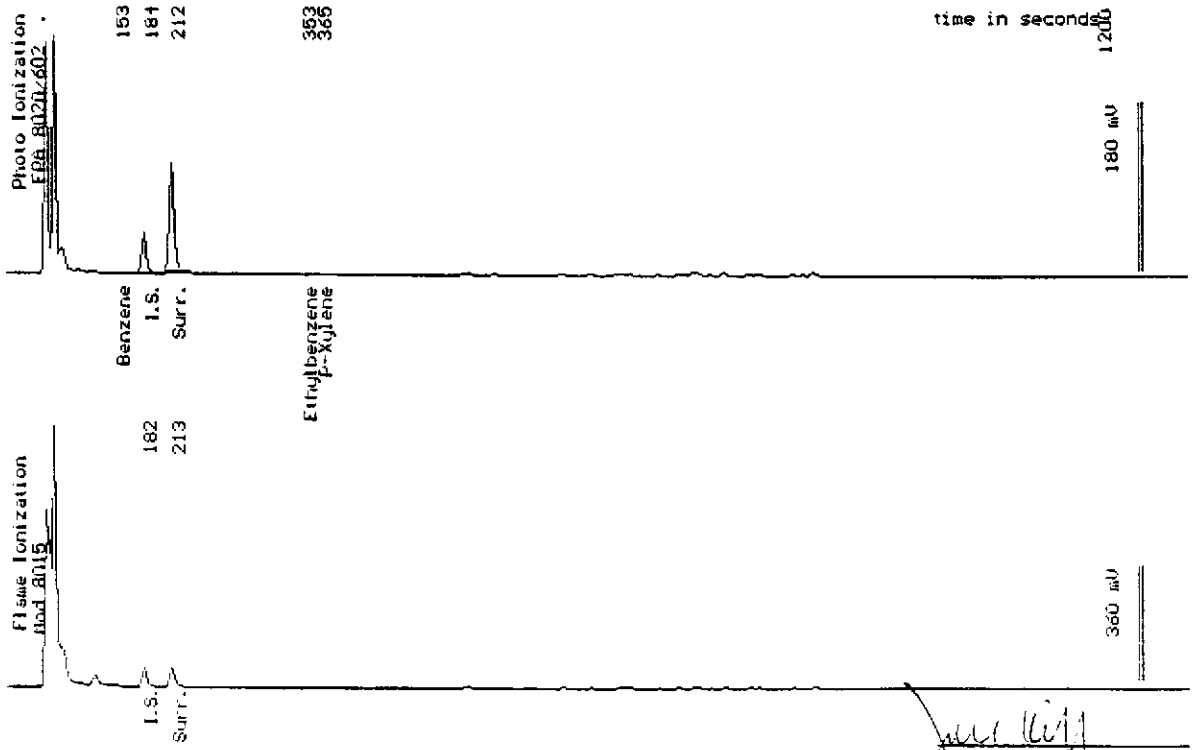
13016-07

Sample: **MW-2**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:1 QC Batch : 4132S
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)	670 *
Surrogate Recovery		93 %

* Product is not typical gasoline.



Date Analyzed: 10-03-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

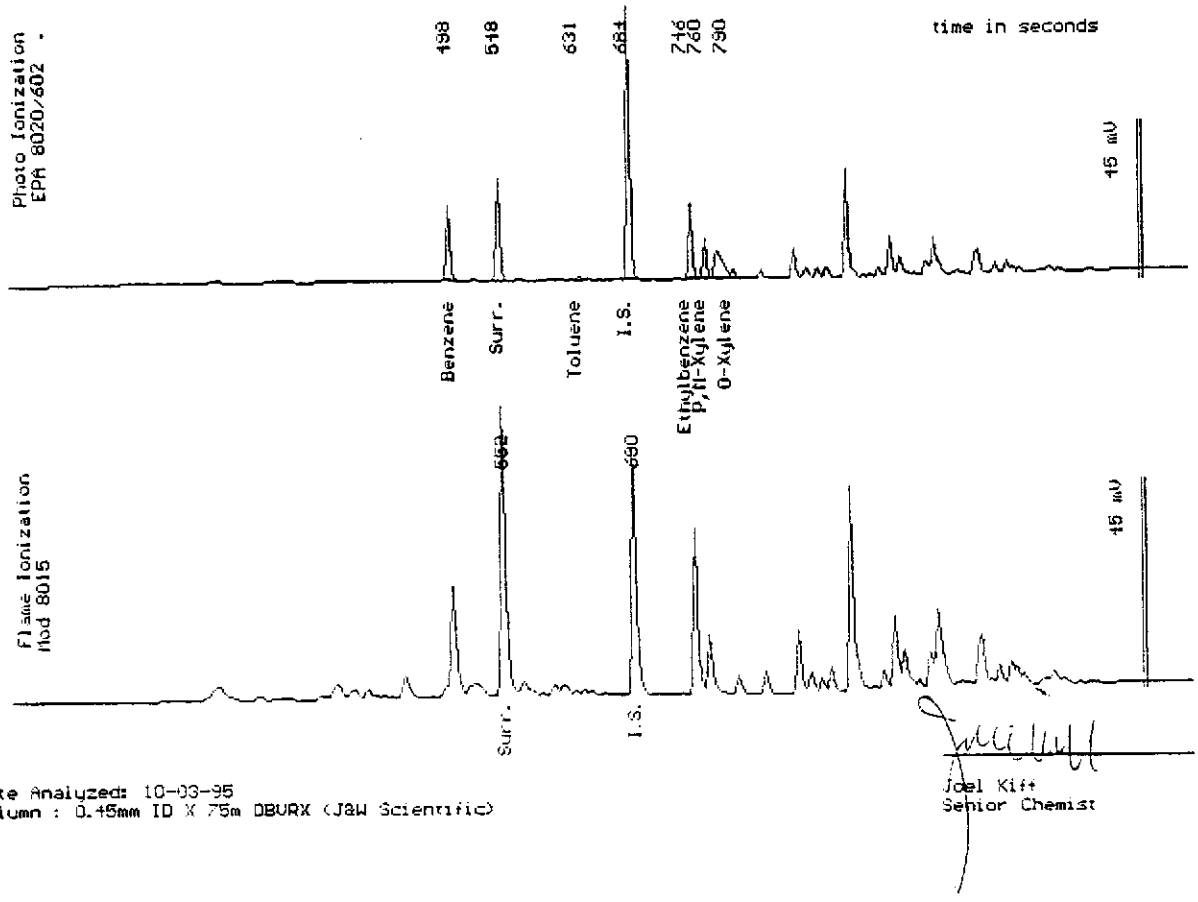
Sample Log 13016

13016-08

Sample: **MW-1**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:50 QC Batch : 6158T
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(25)	580
Toluene	(25)	<25
Ethylbenzene	(25)	780
Total Xylenes	(25)	410
TPH as Gasoline	(2500)	8800
Surrogate Recovery		88 %



Date Analyzed: 10-03-95
Column : 0.45mm ID X 75m DBURX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

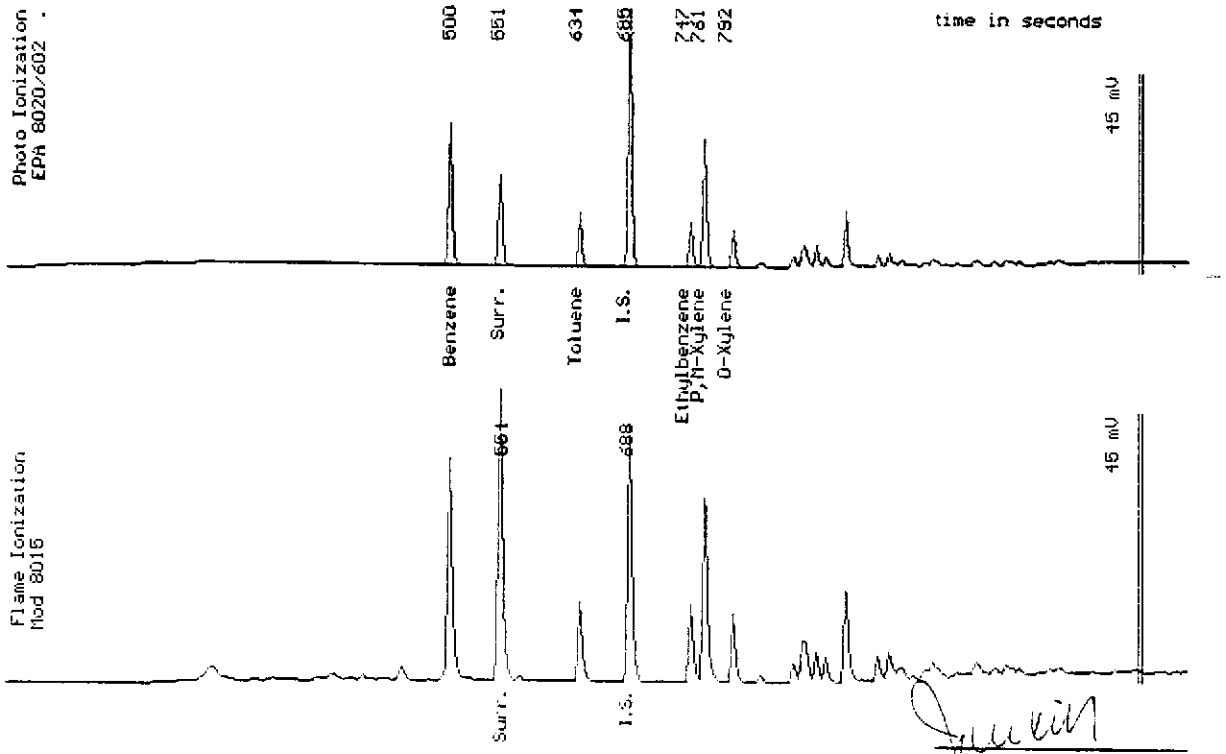
Sample Log 13016

13016-09

Sample: **MW-3**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:250 QC Batch : 6158T
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(130)	5600
Toluene	(130)	2100
Ethylbenzene	(130)	1900
Total Xylenes	(130)	6900
TPH as Gasoline	(13000)	30000
Surrogate Recovery		85 %



Date Analyzed: 10-03-95
Column : 0.45mm ID X 75m OBVRX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

Sample Log 13016

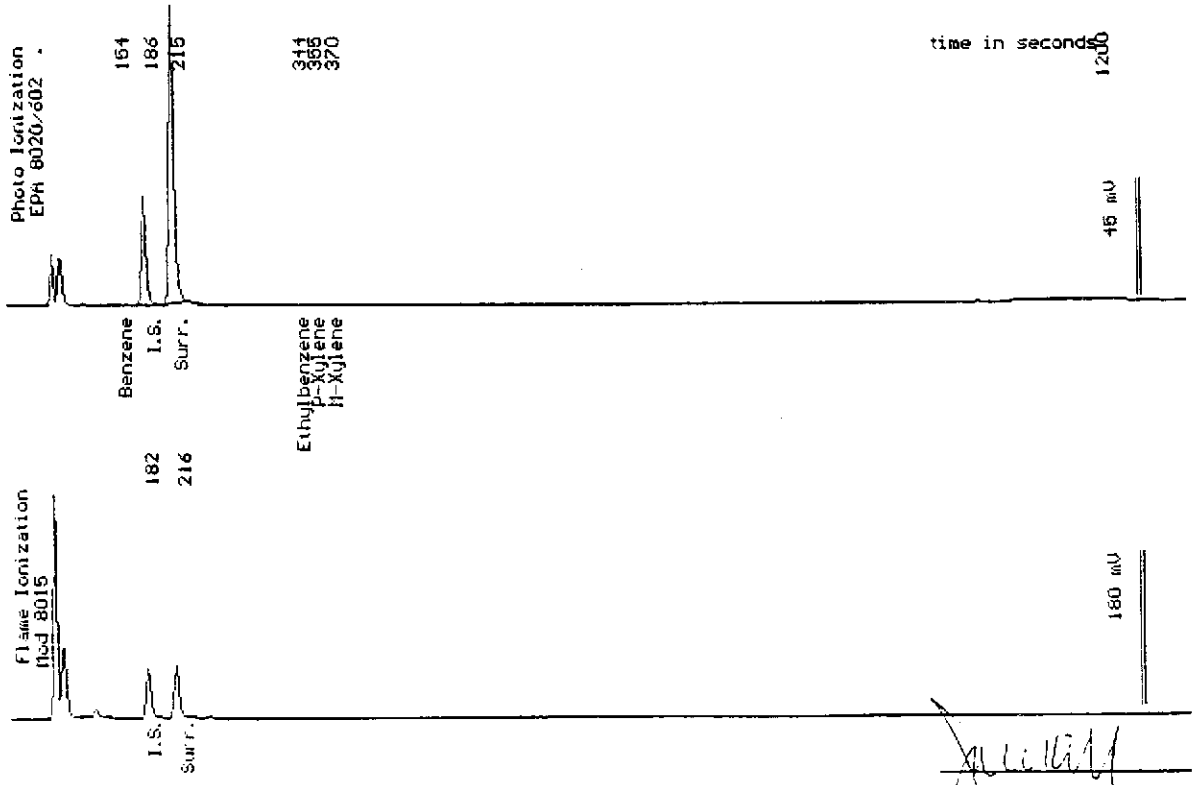
13016-10

Sample: **MW-4**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:1 QC Batch : 4132S
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)	140 *
Surrogate Recovery		100 %

* Product is not typical gasoline.



Date Analyzed: 10-03-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

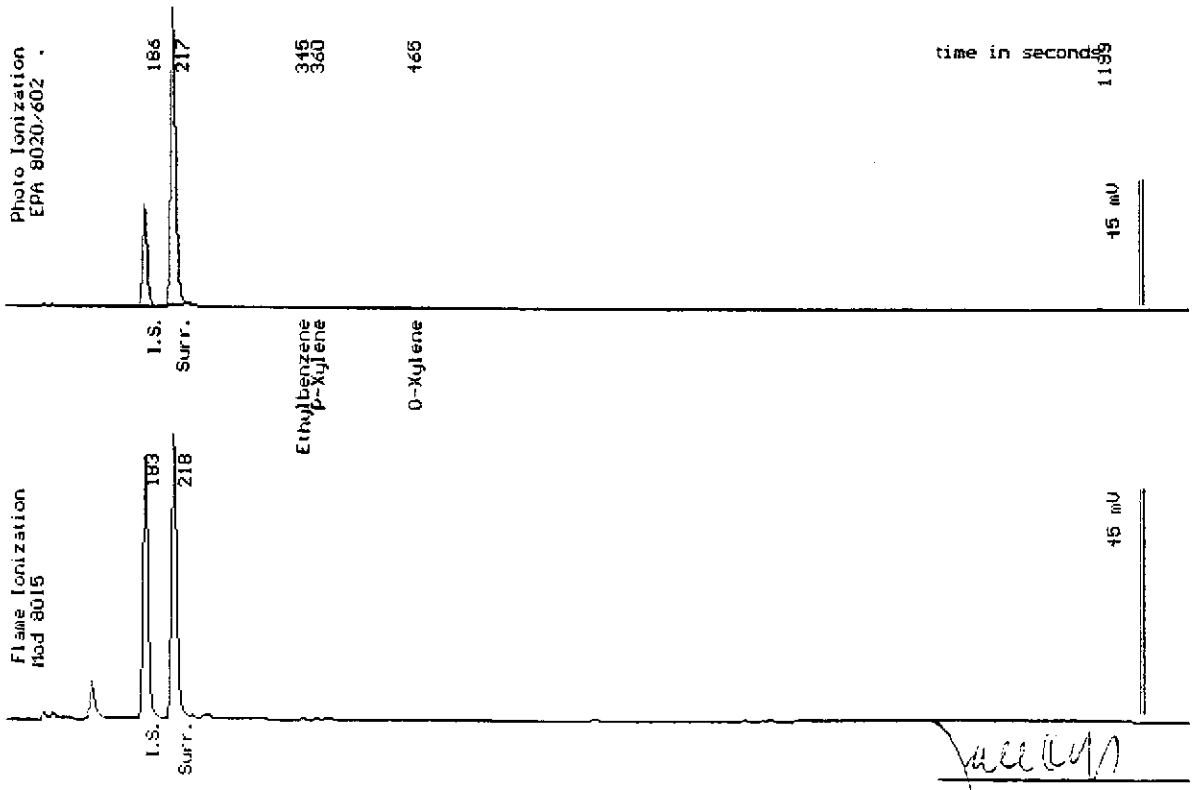
Sample Log 13016

13016-11

Sample: RW-1

From : Beacon 721 (Proj. # DO93-936)
Sampled : 09/28/95
Dilution : 1:1 QC Batch : 4132W
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		100 %



Date Analyzed: 10-05-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)			Date	Form No.
721	Jay Stoops			9-28-95	1 of 2
Project No.	Sampler (Signature)				
DQ93-956					
Project Location	Affiliation				
San Lorenzo	Delta				

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	REMARKS
MW-11	9-28-95	0950		X	X		2	
MW-10		1010						
MW-8		1025						NO SAMPLE FOR MW 8
MW-7		1055						
MW-9		1120						
MW-6		1135						
MW-5		1195						
MW-2		1200						

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Jay Stoops Delta	9-28-95	1400			
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
				9/29/95	1040

Report To: Todd Colati

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: T. Fox

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

32 8003 1/90

Box 1301 3

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No.
721	Jay Graves, SS	9-28-95	2 of 2
Project No.	**Sampler (Signature)**		
10093-936			
Project Location	**Affiliation**		
San Lorenzo	RE-1		

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	REMARKS
MW-1	9-28-95	1215		X	X		1	
MW-3		1230						
MW-4		1245						
RW-1		1250						

WEST SIDE
STRATIGRAPHIC TEST

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature] / RE-1	9-28-95	1400			
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
				28/95	1440

Report To: Terri Calati

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: T. Cox

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

32 8003 1/90

ENCLOSURE D

Remediation System Analytical Results

August 2, 1995
Sample Log 12601

Todd Galati
Delta Environmental Consultants, Inc.
3164 Gold Camp Drive, Suite 200
Rancho Cordova, CA 95670

Subject: Analytical Results for 1 Water Sample
Identified as: Beacon 721 (Proj. # DO93-936)
Received: 07/31/95

Dear Mr. Galati:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on August 2, 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

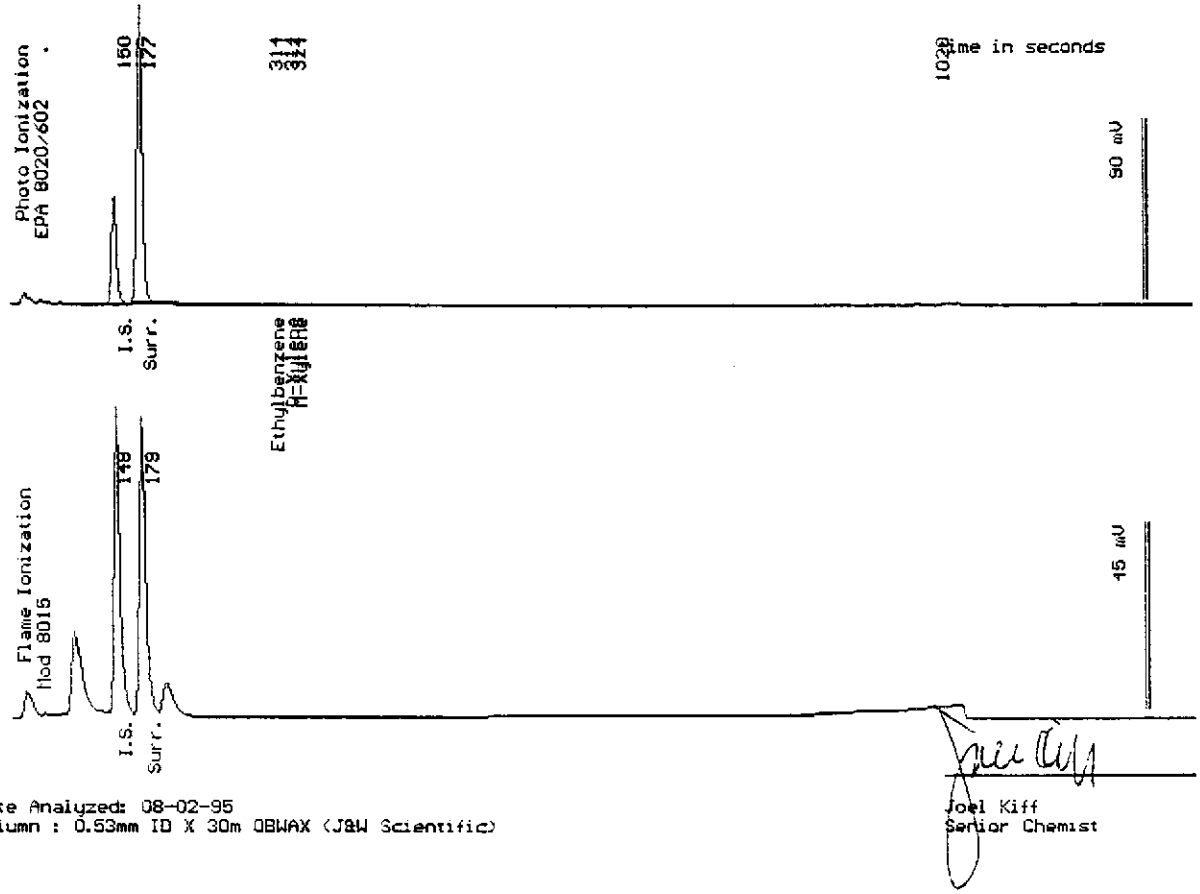
Sample Log 12601

12601-01

Sample: effluent

From : Beacon 721 (Proj. # DO93-936)
Sampled : 07/28/95
Dilution : 1:1 QC Batch : 2125G
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		100 %



Date Analyzed: 08-02-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

Anlab
ANALYTICAL LABORATORY
1910 S STREET SACRAMENTO, CALIFORNIA 95814 • 916-447-2946 • FAX 916-447-8321

August 8, 1995

Western Environmental Science
& Technology
1046 Olive Drive, Suite 3
Davis, CA 95616
Attn: Leslie Biddle

P.O. #: 12601
Project #: DO-93-936
Project Name: Beacon 721

Anlab I.D. AE14896 — Client Code: 315
SAMPLE DESCRIPTION: EFFLUENT — Matrix: WW
Sample collection date: 07/28/95 — Time: 08:00
Lab submittal date: 07/31/95 — Time: 13:39
Turn-Around-Time: TYPE 10 — Sample Disposal: LAB

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
COD by EPA 410.4	mg/l	ND	20

ND = Not Detected

Date Analyzed: 08/02/95

Report Approved By: Patty Buckell
ELAP ID #: 1468

:lki

ANLAB QA/QC REPORT AE14896

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

LCS = LAB CONTROL SAMPLE
% Dup RPD: X=SAMPLE OR MATRIX SPIKE RESULT Y=DUPLICATE OR MATRIX SPIKE DUP RESULT ((ABS(X-Y))/((X+Y))/2)*100

Analysis/Analyte	MDL	Units	QA Sample Number	QA Sample Result	LCS % Rec	Spike Result	Matrix Duplicate or MSD Result	QA/QC Summary		Analyst Initials
								% Spike Rec	% Dup RPD	
COD by EPA 410.4	20	mg/l	AE14884	ND	95	25.6	24.9	102	2.8	KM

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)			ANALYSES								Date	Form No.
721	Martin W. Morgan											7/28/95	1 of 1
Project No.	Sampler (Signature)											West Labs	
D093-936												916 753 9500	
Project Location	Affiliation											STANDARD	
San Lorenzo, CA	Delta												
Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	COD				No. of Containers	REMARKS	
effluent	7/28/95	0825		X	X		X				4		
												7/31/95 1203	

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
M. W. Mor / Delta	7/31/95	0830	T. Amaro / Delta	7/31/95	0830
T. Amaro / Delta	Date	Time	Sid Padelford	7/31/95	1130
Sid Padelford	7/31/95	1203	Received by: (Signature/Affiliation)	Date	Time
				7/31/95	1203

Report To: TODD GALATI

Phone 916 638 2085 Fax 8365

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: Terry Fox

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

32 8003 1/90

August 15, 1995
Sample Log 12677

23

Todd Galati
Delta Environmental Consultants, Inc.
3164 Gold Camp Drive, Suite 200
Rancho Cordova, CA 95670

Subject: Analytical Results for 3 Water Samples
Identified as: Beacon 721 (Proj. # DO93-936)
Received: 08/10/95

Dear Mr. Galati:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on August 15, 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:

Stewart Podolsky
Senior Chemist

WEST LABORATORY

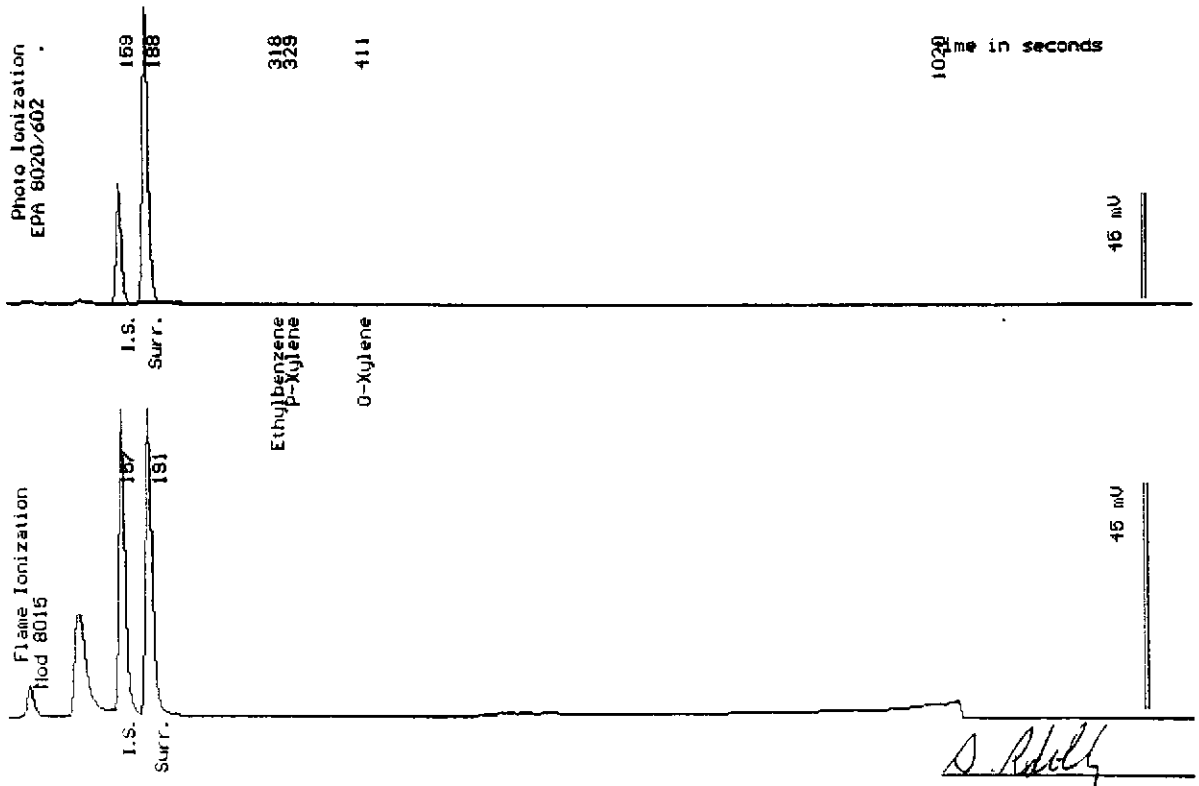
Sample Log 12677

12677-03

Sample: influent

From : Beacon 721 (Proj. # DO93-936)
Sampled : 08/10/95
Dilution : 1:1 QC Batch : 2126B
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		95 %



Date Analyzed: 08-15-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

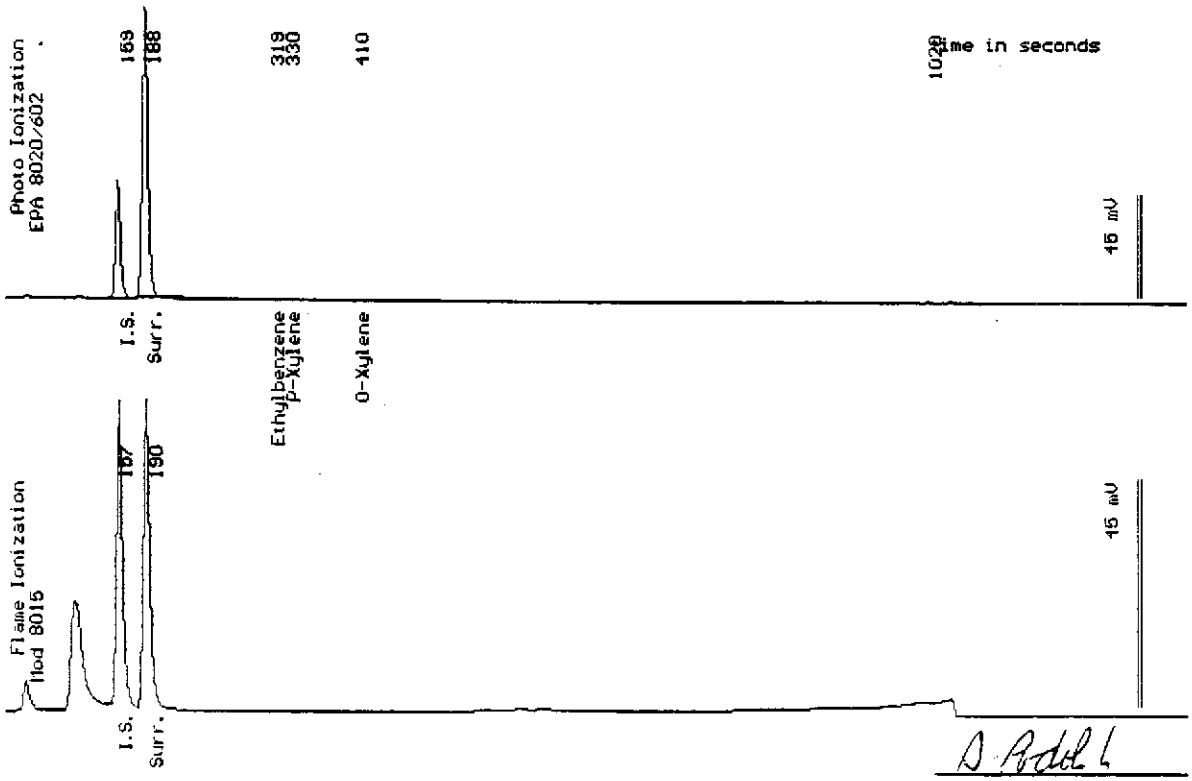
Sample Log 12677

12677-02

Sample: MID

From : Beacon 721 (Proj. # DO93-936)
Sampled : 08/10/95
Dilution : 1:1 QC Batch : 2126B
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		96 %



Date Analyzed: 08-15-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

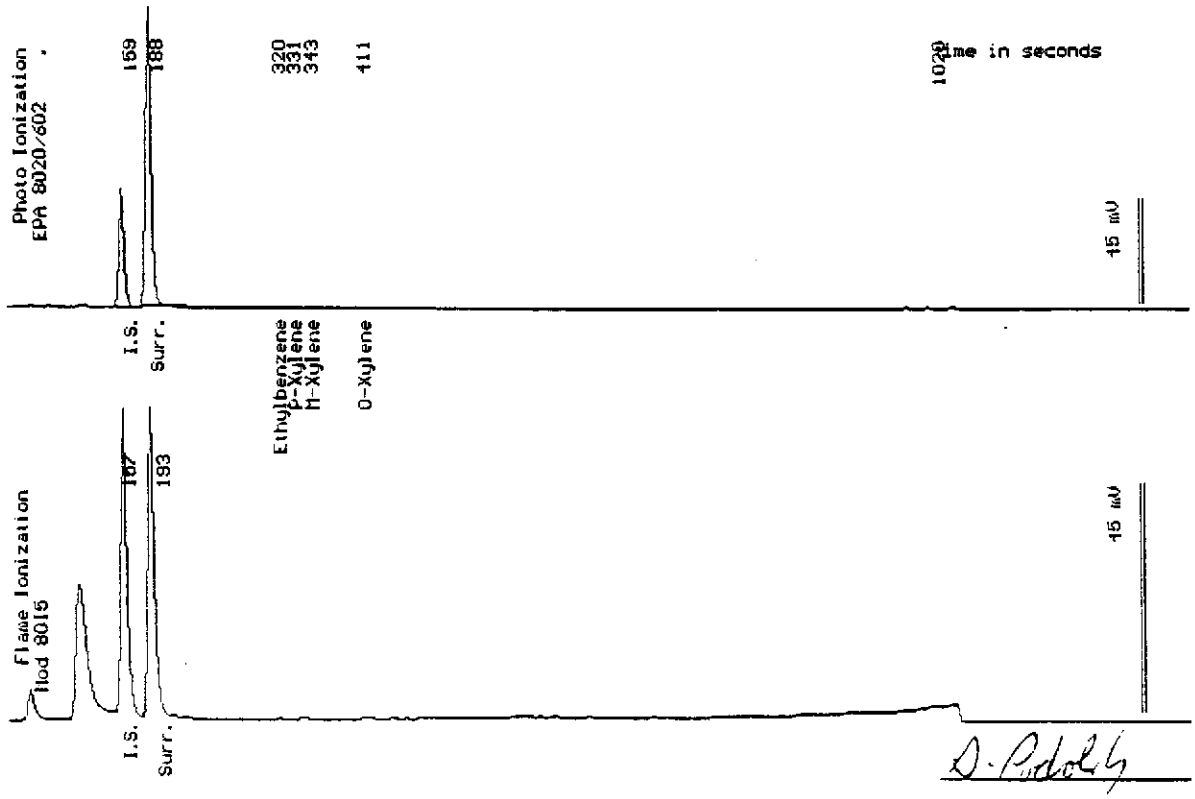
Sample Log 12677

12677-01

Sample: effluent

From : Beacon 721 (Proj. # DO93-936)
Sampled : 08/10/95
Dilution : 1:1 QC Batch : 2126B
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		96 %



Date Analyzed: 08-15-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

Anlab
ANALYTICAL LABORATORY
1910 S STREET SACRAMENTO, CALIFORNIA 95814 • 916-447-2946 • FAX 916-447-8321

August 21, 1995

Western Environmental Science & Technology
1046 Olive Drive, Suite 3
Davis, CA 95616
Attn: L. Biddle

P.O.#: 12677
Project#: 0093-0936
Project Name: Beacon 721

Anlab I.D. AE15884 — Client Code: 315
SAMPLE DESCRIPTION: EFFLUENT — Matrix: W
Sample collection date: 08/10/95 — Time: 08:15
Lab submittal date: 08/10/95 — Time: 12:27
Turn-Around-Time: TYPE 10 — Sample Disposal: LAB

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
COD by EPA 410.4	mg/l	ND	3
Tot. Suspended Solids, EPA 160.2	mg/l	ND	3

ND = Not Detected

Date Analyzed: EPA 410.4 08/11/95
EPA 160.2 08/16/95

Report Approved By: Patty Bucknell
ELAP ID #: 1468

:rdm

ANLAB QA/QC REPORT AE15884

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

LCS = LAB CONTROL SAMPLE
% Dup RPD: X=SAMPLE OR MATRIX SPIKE RESULT Y=DUPLICATE OR MATRIX SPIKE DUP RESULT ((ABS(X-Y))/((X+Y))/2)*100

Analysis/Analyte	MDL	Units	QA Sample Number	QA Sample Result	LCS % Rec	Spike Result	Matrix Duplicate or MSD Result	QA/QC Summary % Spike Rec	% Dup RPD	Analyst Initials
Tot. Suspended Solids, EPA 160.2	3	mg/l	AE15865	340	95		330		3.0	KM
COD by EPA 410.4	3	mg/l	AE16290	ND	95	25.1	27.3	100	8.4	KM

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No. 1 of 1
721	Martin W. Morgan	8/10/95	
Project No.	**Sampler (Signature)**		
D093-936			
Project Location	**Affiliation**		
San Lorenzo, CA	Delta Environ. Cons.		

West Labs
916 753 9500

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	COD	TSS	No. of Containers	REMARKS
effluent	8/10/95	0815		X	X		X	X	4	
MID	8/10/95	0818		X	X				2	
influent	8/10/95	0820		X	X				2	

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
M. W. M / Delta	8/10/95	1225			
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
				8/10/95	1225

Report To: Todd Galati

Phone 916 638 2085 Fax 8385

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: Terry Fox

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

32-8003 1/90

September 21, 1995
Sample Log 12918

OCT 12

Todd Galati
Delta Environmental Consultants, Inc.
3164 Gold Camp Drive, Suite 200
Rancho Cordova, CA 95670

Subject: Analytical Results for 2 Air Samples and 3 Water Samples
Identified as: Beacon 721 (Proj. # D093-936)
Received: 09/14/95

Dear Mr. Galati:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on September 21, 1995 and describes procedures used to analyze the samples.

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

"BTEX" (EPA Method 8020/Purge-and-Trap)
"BTEX" (EPA Method 602/Purge-and-Trap)
"TPH as Gasoline" (Modified EPA Method 8015/Purge-and-Trap)
"Total Suspended Solids" (EPA Method 160.2)

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 12918

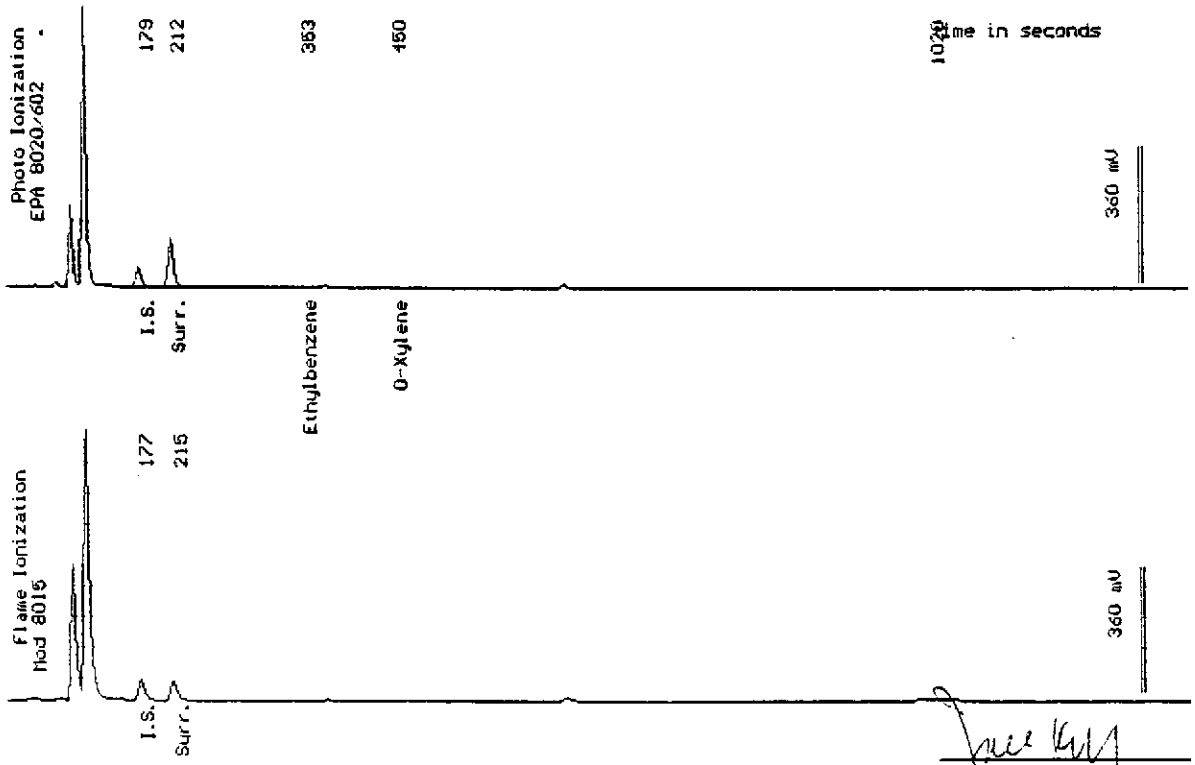
12918-03

Sample: Influent

From : Beacon 721 (Proj. # D093-936)
Sampled : 09/14/95
Dilution : 1:1 QC Batch : 2128U
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)	490 *
Surrogate Recovery		100 %

* Product is not typical gasoline.



Date Analyzed: 09-20-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

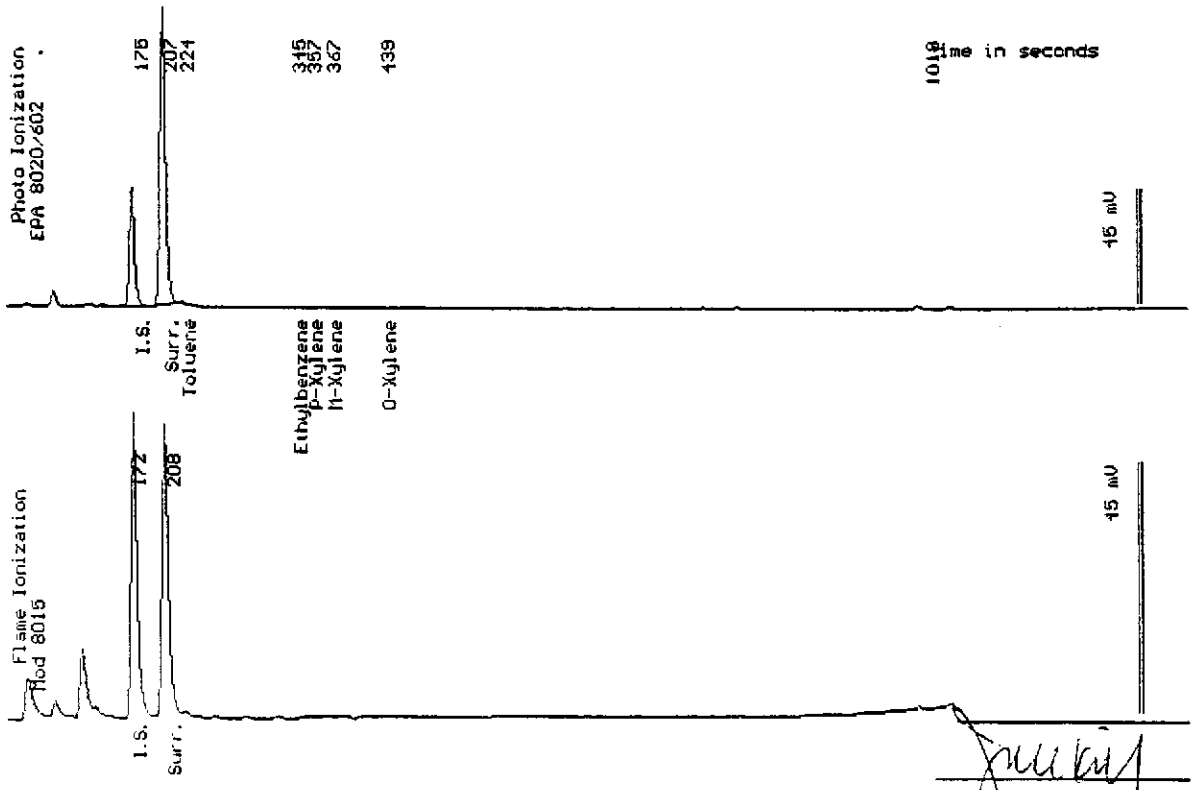
Sample Log 12918

12918-02

Sample: **Mid**

From : Beacon 721 (Proj. # D093-936)
Sampled : 09/14/95
Dilution : 1:1 QC Batch : 2128Q
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		104 %



Date Analyzed: 09-19-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

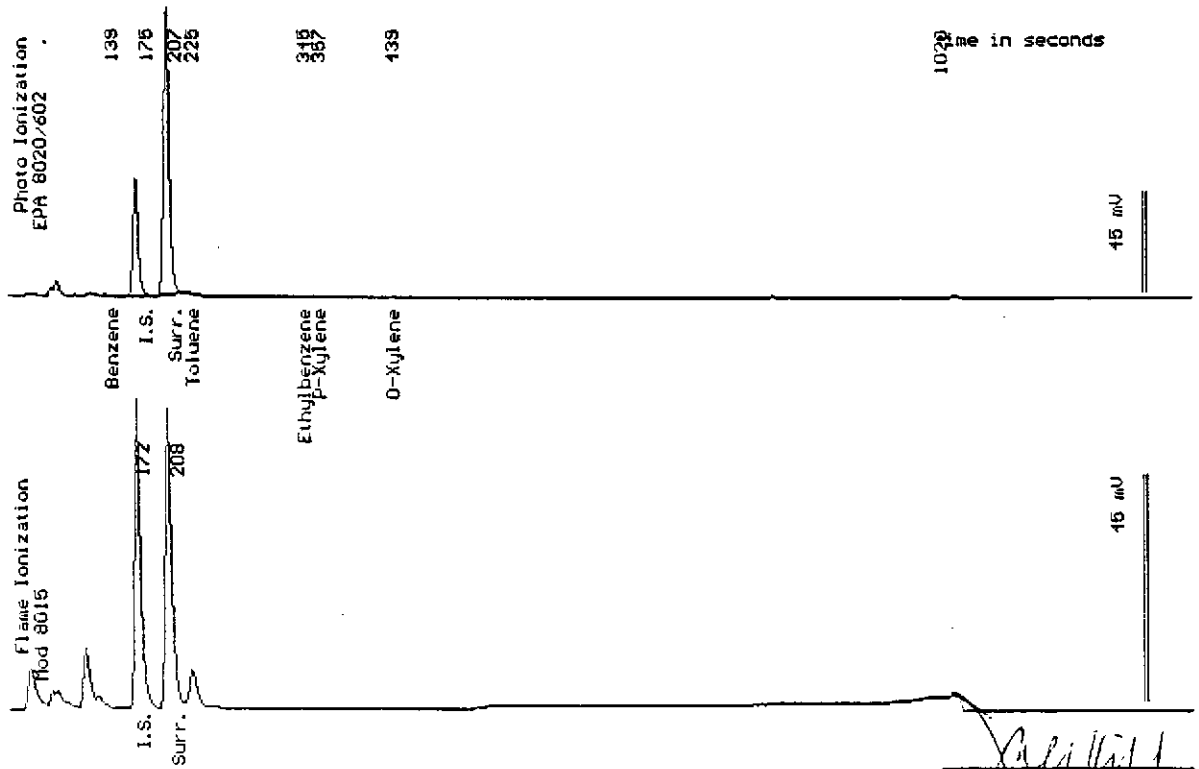
Sample Log 12918

12918-01

Sample: **Effluent**

From : Beacon 721 (Proj. # D093-936)
Sampled : 09/14/95
Dilution : 1:1 QC Batch : 2128Q
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		104 %



Date Analyzed: 09-19-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

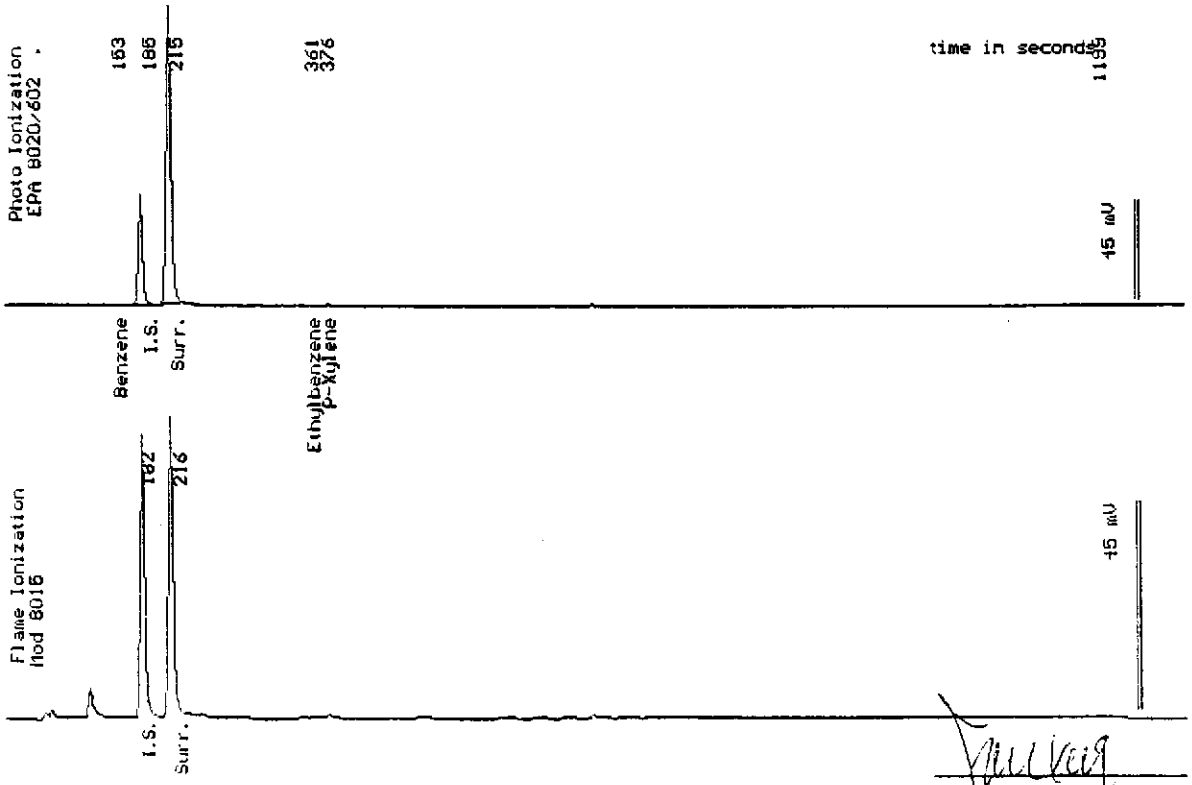
Sample Log 12918

12918-04

Sample: Effluent Air

From : Beacon 721 (Proj. # D093-936)
Sampled : 09/14/95
Dilution : 1:1 QC Batch : 4131G
Matrix : Air

Parameter	(MRL) Molar ppm	Measured Value Molar ppm
Benzene	(.050)	<.050
Toluene	(.050)	<.050
Ethylbenzene	(.050)	<.050
Total Xylenes	(.050)	<.050
TPH as Gasoline	(5.0)	<5.0
Surrogate Recovery		102 %



Date Analyzed: 09-15-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

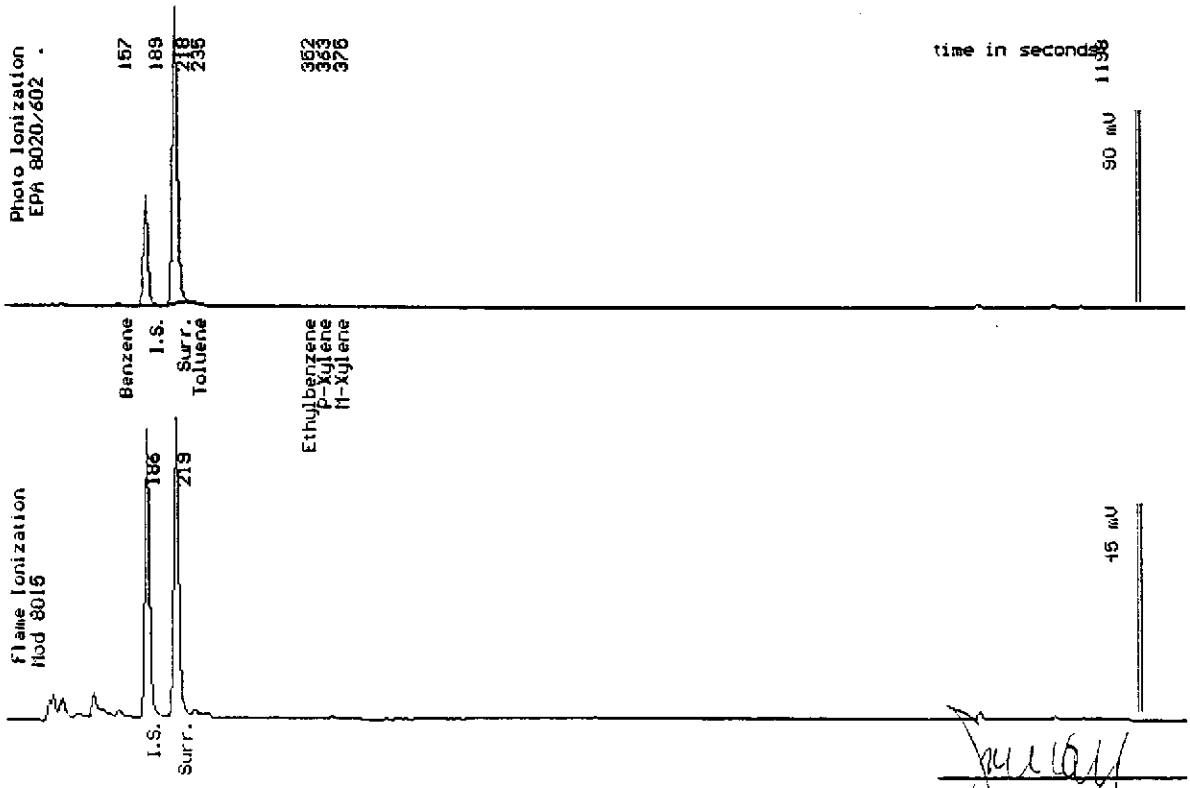
Sample Log 12918

12918-05

Sample: Influent Air

From : Beacon 721 (Proj. # D093-936)
Sampled : 09/14/95
Dilution : 1:1 QC Batch : 4131F
Matrix : Air

Parameter	(MRL) Molar ppm	Measured Value Molar ppm
Benzene	(.050)	<.050
Toluene	(.050)	<.050
Ethylbenzene	(.050)	<.050
Total Xylenes	(.050)	<.050
TPH as Gasoline	(5.0)	<5.0
Surrogate Recovery		97 %



Date Analyzed: 09-14-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

September 21, 1995
Sample Log 12918

From : Beacon 721 (Project # D093-936)
Date Sampled : 09/14/95
Matrix : Water
Duplicate Sample : 12918-01

Date Received : 09/14/95
Units : mg/L

Total Suspended Solids EPA Method 160.2

West ID	Sample ID	Result	MRL	Blank	% RPD	Date Analyzed
12918-01	**Effluent**	<3.0	3.0	<3.0	0	09/20/95

MRL = Method Reporting Limit
RPD = Relative Percent Difference between a sample and its duplicate.

The RPD Limits are ± 20 %.

Michelle L. Anderson
Inorganics Supervisor

Anlab
ANALYTICAL LABORATORY
1910 S STREET SACRAMENTO, CALIFORNIA 95814 • 916-447-2946 • FAX 916-447-8321

September 28, 1995

Western Environmental Science
& Technology
1046 Olive Drive, Suite 3
Davis, CA 95616

P.O. #: 12918
PROJECT #: D093-936
PROJECT NAME: Beacon 721

Anlab I.D. AE19277
SAMPLE DESCRIPTION: EFFLUENT
Sample collection date: 09/14/95
Lab submittal date: 09/14/95
Turn-Around-Time: TYPE 10

Client Code: 315
Matrix: WW
Time: 11:26
Time: 13:15
Sample Disposal: LAB

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
COD by EPA 410.4	mg/l	ND	20

ND = Not Detected

Date Analyzed: 09/19/95

Report Approved By: Patty Buchanan
ELAP ID #: 1468

:klh

ANLAB QA/QC REPORT AE19277

This report is applicable only to the sample received by the laboratory. The liability of the laboratory is limited to the amount paid for this report. This report is for the exclusive use of the client to whom it is addressed and upon the condition that the client assumes all liability for the further distribution of the report or its contents.

LCS = LAB CONTROL SAMPLE
% Dup RPD: X=SAMPLE OR MATRIX SPIKE RESULT Y=DUPLICATE OR MATRIX SPIKE DUP RESULT ((ABS(X-Y))/((X+Y))/2)*100

Analysis/Analyte	MDL	Units	QA Sample Number	QA Sample Result	LCS % Rec	Spike Result	Matrix Duplicate or MSD Result	QA/QC Summary % Spike Rec	QA/QC Summary % Dup RPD	Analyst Initials
COD by EPA 410.4	20	mg/l	AE18957	ND	95	24.1	24.8	96	2.9	KM

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No.
721	Martin W. Morgan	9/14/95	1 of 1

Project No.: D093-936

Sampler (Signature): [signature]

Project Location: San Lorenzo, CA

Affiliation: Delta Env. Cons.

WEST LABS 916 753 9500

STANDARD TAT

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	COD	TSS				No. of Containers	REMARKS
effluent	9/14/95	1126		X	X		X	X				4	
MID	9/14/95	1130		X	X							2	
influent	9/14/95	1132		X	X							2	
effluent Air	9/14/95	1113		X	X							1	
influent Air	9/14/95	1114		X	X							1	

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature] / Delta	9/14/95	1315			
			[signature]	9/14/95	1315

Report To: TODD GALATI (DELTA)

Phone 916 638 2085 FAX 8385

Bill to: ULTRAMAR INC.
525 West Third Street
Hanford, CA 93230
Attention: Terry Fox

WHITE: Return to Client with Report YELLOW: Laboratory Copy PINK: Originator Copy

32-8003 1/90

12918