MTBE is being reported

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

February 14, 1996

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, Fourth Quarter 1995 and Status of Remediation Sysytem through December 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

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

ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: February 14, 1996
QUARTER ENDING: December 31, 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 December 28, 1995.

Continued to operate the remediation system.

In December 1995, installed an air sparging 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, MW-8, MW-9, and RW-1. The benzene concentration decreased in MW-1 from 580 ppb to 4.9 ppb, in MW-3 from 5,600 ppb to 32 ppb, in MW-6 from 0.78 ppb to not detected, in MW-7 from 1.5 ppb to not detected, in MW-10 from 22 ppb to 4.4 ppb, and in MW-11 from 4.1 ppb to not detected. Benzene concentrations increased in MW-2 from not detected to 9.5 ppb.

As of December 6, 1995, approximately 1,083,611 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

Delta
Environmental
Consultants, Inc.

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

February 13, 1996

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

Subject: *Quarterly Ground Water Monitoring Report, Fourth Quarter 1995, and Status of Remediation System through December 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 performed at the site on December 28, 1995, and the remediation system status to December 28, 1995. The site location is shown in Figure 1 and site features are illustrated in Figure 2.

This event's ground water monitoring included measurement of depth to water in six on-site monitoring wells MW-1 through MW-6, five off-site monitoring wells MW-7 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. Methods used in the performance of these tasks are described in Enclosure A.

Ground Water Table Measurements and Flow Direction

Ground water was present in all of the monitoring wells and one recovery well at depths ranging from 14.54 (RW-1) to 18.31 (MW-11) feet below the tops of well casings. Depths have increased an average of approximately 0.3 feet since the last quarterly monitoring event in September 1995. Cumulative ground water table measurements at the site are compiled in Table 1. Based on the ground water table measurements, ground water was mounded around recovery well RW-1, probably due to soil vapor extraction and air sparging systems operating during ground water measurements. The ground water recovery system was not operating during this monitoring event. A water table contour map prepared from the current event data is included as Figure 3.

Ground Water Analytical Results

Ground water samples were collected from all the monitoring wells and the recovery well. 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 (BTEX), and methyl tertiary butyl ether (MTBE) using EPA Method 8020, and total petroleum hydrocarbons (TPH) as gasoline using EPA Method 8015 Modified.

Benzene was below the laboratory's limits of detection in ground water samples collected from monitoring wells MW-4 through MW-9, MW-11, and recovery well RW-1. Detectable benzene concentrations ranged from 4.4 micrograms per liter (μg/L) (MW-10) to 32 μg/L (MW-3). A comparison of the September 1995 analytical results with the December 1995 results indicate that benzene concentrations decreased in MW-1 (580 μg/L to 4.9 μg/L), MW-3 (5,600 μg/L to 32 μg/L), MW-6 (0.78 μg/L to <0.5 μg/L), MW-7 (1.5 μg/L to <0.5 μg/L) MW-10 (22 μg/L to 4.4 μg/L), MW-11 (4.1 μg/L to <0.5 μg/L), and increased in MW-2 ($<0.5\mu$g/L to 9.5 μg/L). Utilizing the current events ground water analytical data, a benzene isoconcentration contour map was constructed and is included as Figure 4. Cumulative ground water analytical results for BTEX and TPH as gasoline are summarized in Table 2. A copy of the certified analytical report with chain of custody documentation for the December 1995 sampling event is 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. The catalytic oxidizer was replaced with two granular activated carbon columns during December 1995.

An air sparging system was installed by Delta at the site in December 1995. The air is sparged into air sparging wells AS-1 through AS-3 shown on Figure 2. The sparging is intended to increase dissolved oxygen in the ground water to increase the rate of biodegradation of petroleum hydrocarbons in the ground water.

The totalizer that measures ground water pumped from the recovery well was inoperable and will be replaced in January 1996. Cumulative totals for ground water treated by the remediation system are presented in Table 3.

Remediation System Analytical Results

Remediation system samples were collected on the December 6, 1995 site visit, and results of the chemical analyses are summarized in Table 4. A copy of the analytical report is 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 Owen Kittredge at (916) 638-2085.

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

J. William Speth
Staff Scientist

Owen Kittredge, C.E.G.
Project Manager
California Registered Geologist No. 5853

REGISTERED GEOLOGIST
OWEN M. KITTREDGE
NO. 5853
STATE OF CALIFORNIA

JWS (LRP086.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)[a]	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
	12/28/95		17.28	26.39	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
	12/28/95		16.46	26.63	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
	12/28/95		15.45	27.65	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
	12/28/95		17.81	26.85	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-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
	12/28/95		15.10	28.69	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
	12/28/95		15.54	26.93	No free product or sheen odor

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
	12/28/95		14.55	26.99	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
	12/28/95		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
	12/28/95		17.87	27.07	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
	12/28/95		15.46	26.88	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
	12/28/95		18.31	26.69	No 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
	12/28/95		14.54	28.63	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
	12/28/95	4.9	<1.3	<1.3	290	4,800
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]
	12/28/95	9.5	<5.0	<5.0	5.2	3,100

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
	12/28/95	32	5.8	18	4,700	16,000
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]
	12/28/95	<0.5	<0.5	<0.5	<0.5	510[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
	12/28/95	<0.5	<0.5	<0.5	<0.5	120
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
	12/28/95	<0.5	<0.5	<0.5	6.3	410

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
	12/28/95	<0.5	<0.5	0.91	0.69	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
	12/28/95	<0.5	<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-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
	12/28/95	<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
	12/28/95	4.4	5.6	340	11	5,000

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
	12/28/95	<0.5	<0.5	<0.5	<0.5	380[c]
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
	12/28/95	<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
12/06/95	1,083,611

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

TABLE 4

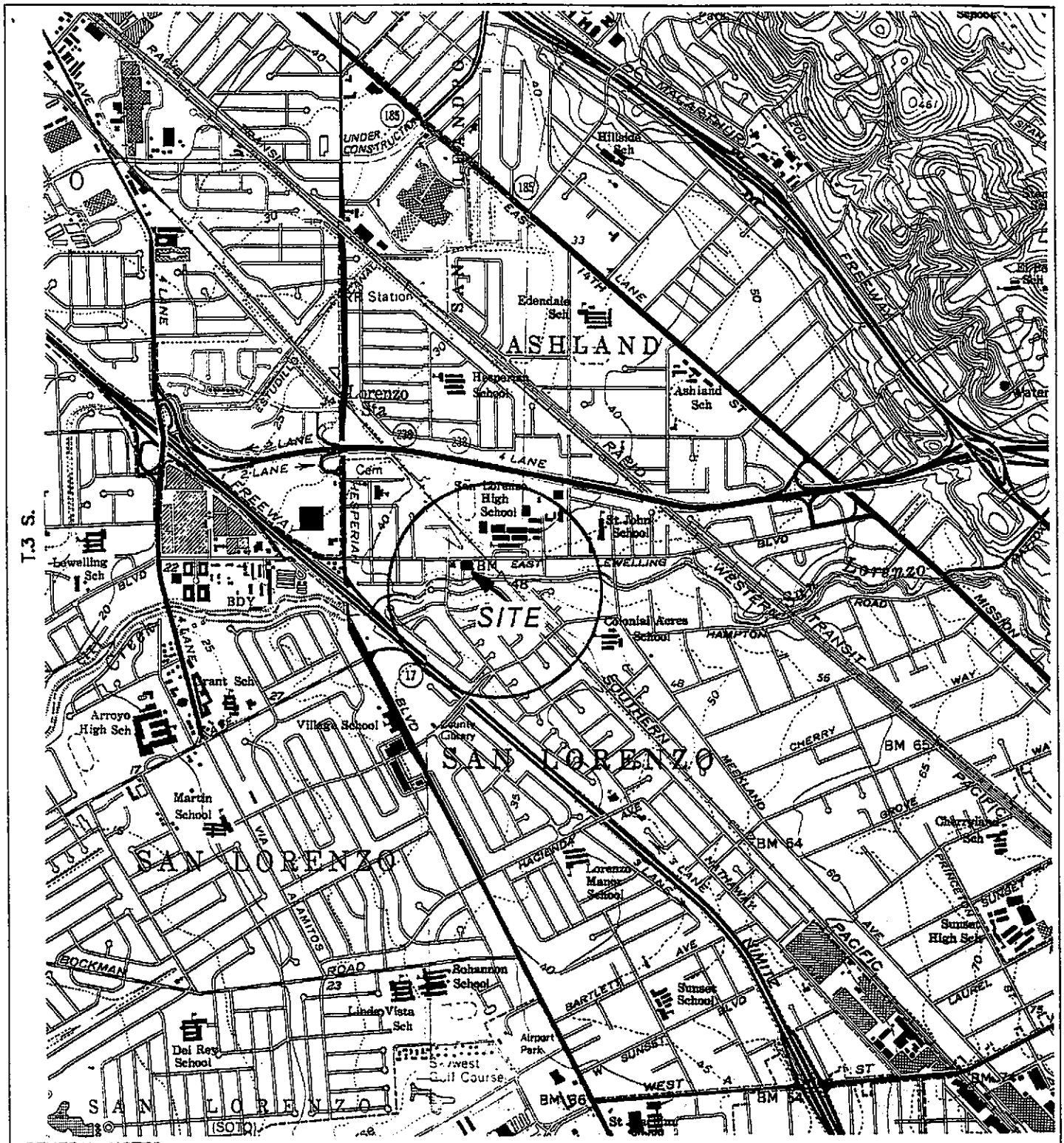
ANALYTICAL RESULTS OF SYSTEM WATER SAMPLES

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[b]	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[c]
	12/06/95	<0.5	<0.5	<0.5	<0.5	<50
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
	12/06/95	<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
	12/06/95	<0.5	<0.5	<0.5	<0.5	<50

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



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

CALIF
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 I.H. 11/2/92
FILE NO. ———	PREPARED BY TMG
REVISION NO. 1	REVIEWED BY

Delta Environmental Consultants, Inc.

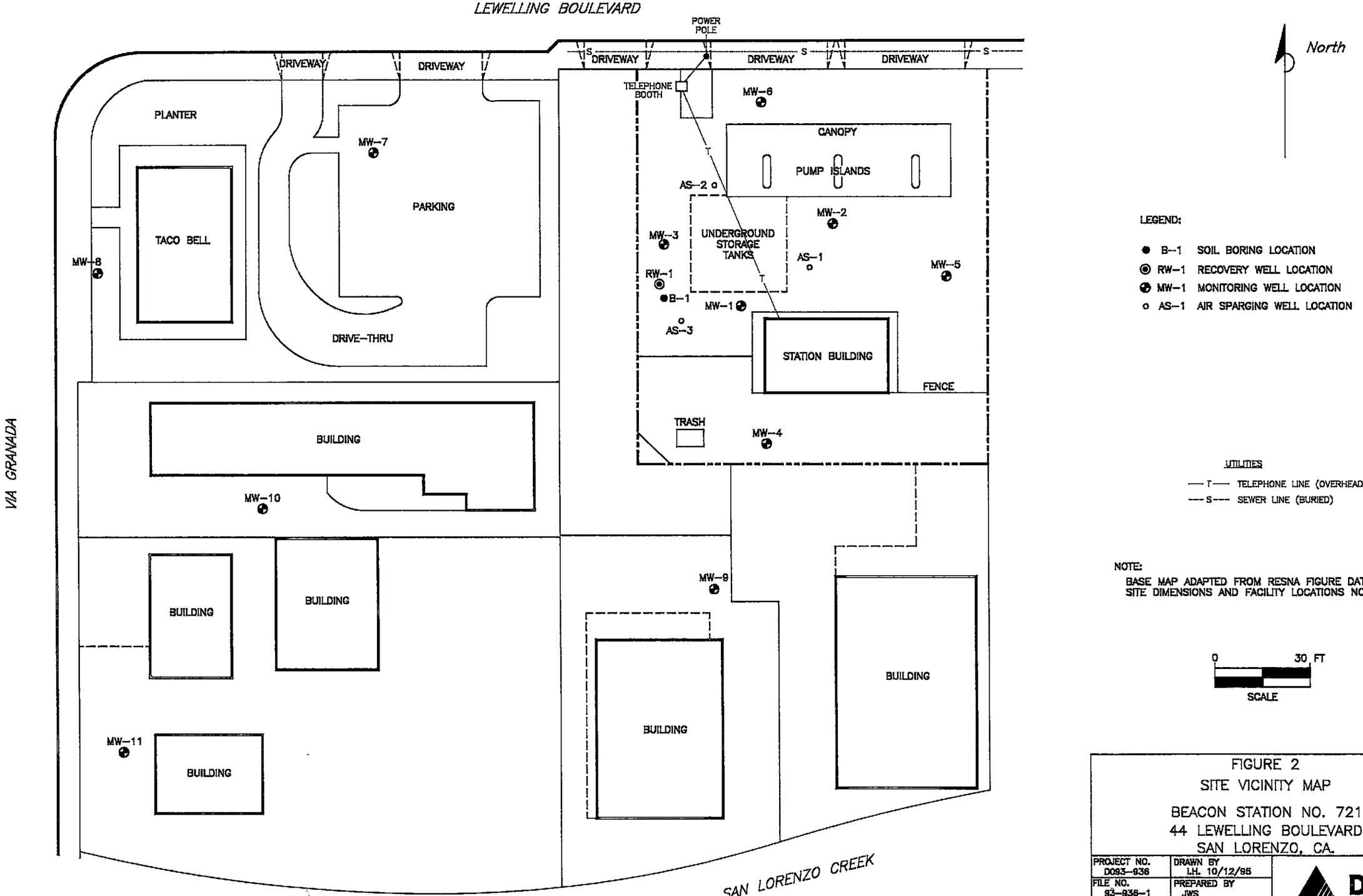
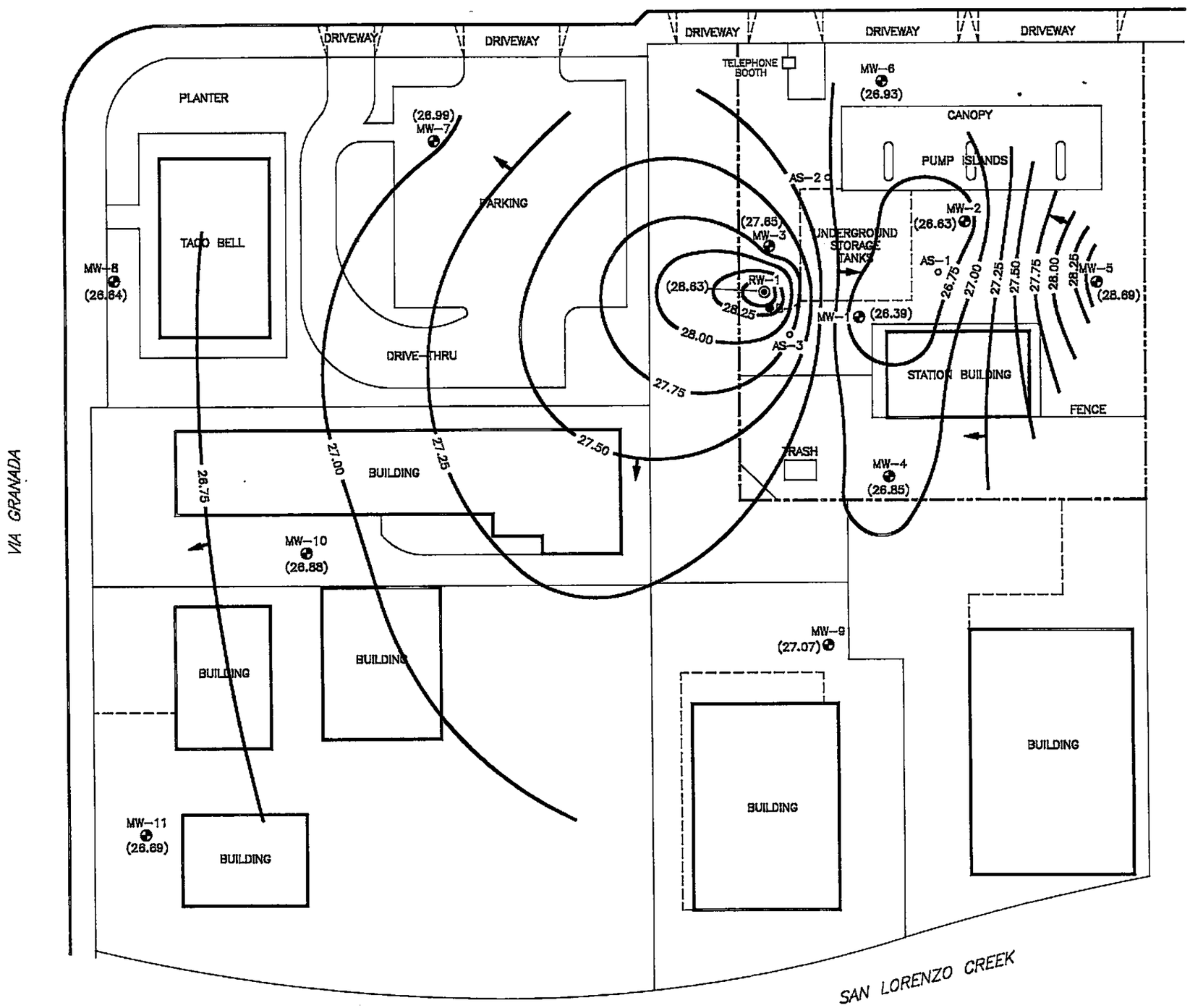


FIGURE 2
SITE VICINITY MAP

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. 3	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
- (26.39) GROUND WATER ELEVATION RELATIVE TO MEAN SEA LEVEL (MSL)
- — 27.0 — WATER TABLE CONTOUR RELATIVE TO MSL
- ← GROUND WATER FLOW DIRECTION

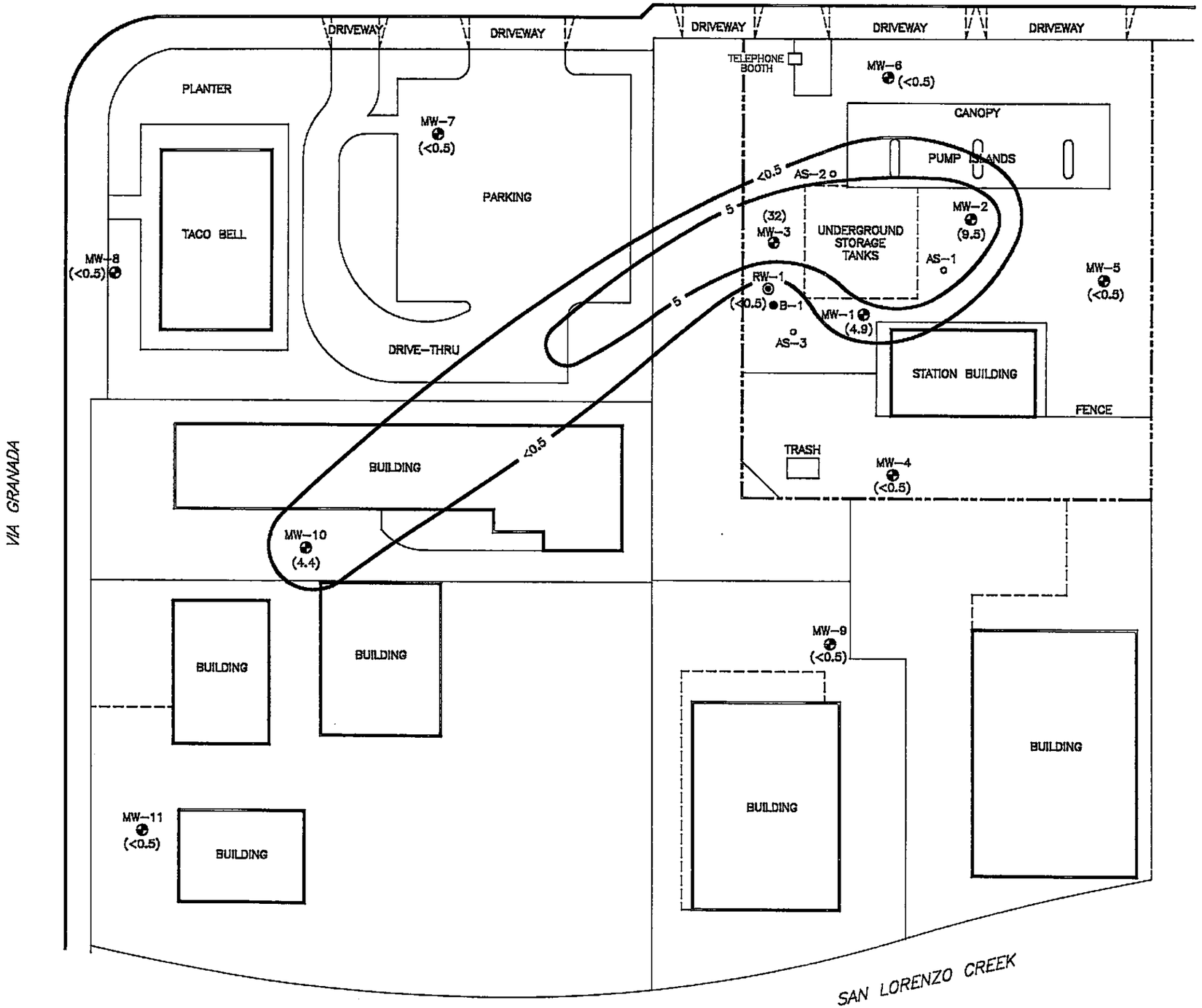
NOTE:
BASE MAP ADAPTED FROM RESNA FIGURE DATED 1/9/92
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED

0 30 FT
SCALE

FIGURE 3
WATER TABLE CONTOUR MAP – 12/28/95
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. D093-936	DRAWN BY L.H. 1/18/96
FILE NO. 93-936-1	PREPARED BY JWS
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
- (4.9) BENZENE CONCENTRATION IN MICROGRAMS PER LITER (ug/L)
- — 5 — BENZENE ISOCONCENTRATION IN ug/L

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
12/28/95
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. D093-936	DRAWN BY L.H. 2/5/96
FILE NO. 93-936-1	PREPARED BY JWS
REVISION NO. 2	REVIEWED BY

Delta Environmental Consultants, Inc.

FIELD METHODS AND PROCEDURES

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.

SAMPLING INFORMATION SHEET

Delta 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: 12/28/95 Time: 1115

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) ~~15.45~~ 17.28 ft. Date: 12/28/95 Time 1000

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 cloudy

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)
1111	68.9	7.26	1.16		0
1112	70.4	7.21	1.12		3
1112	70.2	7.20	1.13		6
1113	70.7	7.19	1.13		10

Comments: DO = 1.4 4 WELL VOLUMES = 10 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: ____ Sampled by: ____

SAMPLING INFORMATION SHEET

Delta Environmental Consultants, Inc.

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

Location (address) 41 LEWELLING BLVD. SAN LORENZO CA

Date Sampled: 12 / 28 / 95 Time: 1100

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) 16.96 ft. Date: 12 / 28 / 95 Time 0958

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 9 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)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1057	68.9	7.41	0.89		0
1057	70.3	7.29	0.99		5
1058	70.5	7.29	0.99		8
1059	70.8	7.29	0.99		11

Comments: DO = 1.5 4 WELL VOLUMES = 11 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: ____ Sampled by: ____

SAMPLING INFORMATION SHEET

Delta Environmental Consultants, Inc.

Sample ID# MW-3 Project Name: BEACON 721 Project No. D093-936

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

Date Sampled: 12 / 28 / 95 Time: 1135

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) 15.95 ft. Date: 12 / 28 / 95 Time 1002

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

Purging method: ____ Submersible pump ____ Bailer V 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/sheer / foam

Note any sampling problems ~~Bail~~ Bubble Reaction - one VOA has removable tiny bubbles.

GROUND WATER EVACUATION/STABILIZATION DATA

Time	Temperature (°F)	pH Units	Conductance (umhos/cm) x 1,000	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1129	73.2	7.13	1.20		0
1130	74.5	7.12	1.35		3
1131	74.6	7.10	1.38		6
1131	74.6	7.06	1.39		9

Comments: DO = 3.8 4 WELL VOLUMES = 9 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: M Sampled by: M

SAMPLING INFORMATION SHEET

Delta 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: 12 / 20 / 95 Time: 1215

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) 17.81 ft. Date: 12 / 20 / 95 Time 1006

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 NOW

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)
1200	68.3	7.01	1.01		0
1202	68.1	7.01	.99		2
1203	68.0	7.03	.99		4

Comments: 4 WELL VOLUMES = 4 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: ____ Sampled by: ____

SAMPLING INFORMATION SHEET

Delta 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: 12/28/95 Time: 1052

Wellhead assembly condition: X 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) 15.10 ft. Date: 12/28/95 Time 0956

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)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
1042	68.5	7.45	0.94		0
1043	68.5	7.92	0.93		5
1043	68.5	7.37	0.93		9

Comments: DO = 3.7 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-6 Project Name: BEACON 721 Project No. D093-936

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

Date Sampled: 12 / 28 / 95 Time: 1020

Wellhead assembly condition: X 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) 15.54 ft. Date: 12 / 28 / 95 Time 0954

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/odor

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)
1018	71.9	7.42	0.91		2
1019	72.1	7.43	0.93		4
1020	71.3	7.47	0.92		8

Comments: DO=1.8 4 WELL VOLUMES = 8 GAL

well very silty on bottom

Transportation (thermal preservation) ICE & CHEST

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

SAMPLING INFORMATION SHEET

Delta Environmental Consultants, Inc.

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

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

Date Sampled: 12 / 28 / 95 Time: 0935

Wellhead assembly condition: X 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) 14.55 ft. Date: 12 / 28 / 95 Time 0923

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) K1000	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
0928	68.8	6.93	0.36		0
0928	68.6	6.72	1.04		2
0929	69.1	6.69	1.04		3
0930	69.4	6.70	1.06		6

Comments: DO = .3 4 WELL VOLUMES = 6 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: ____ Sampled by: ____

SAMPLING INFORMATION SHEET

Delta Environmental Consultants, Inc.

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

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

Date Sampled: 12/20/95 Time: 0920

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: 12/20/95 Time 0905

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: Y 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	X 1000 Conductance (umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
0912	67.3	7.01	0.73		0
0913	68.9	7.11	0.38		2
0913	68.7	7.15	0.37		4
0914	68.8	7.19	0.38		6

Comments: DO=.2 Well DW at 6 gal 4 WELL VOLUMES= 5 Gal

Transportation (thermal preservation) ICE & CHEST

Form completed by: ____ Sampled by: ____

SAMPLING INFORMATION SHEET

Delta 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: 12 / 28 / 95 Time: 0950

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) 7.87 ft. Date: 12 / 28 / 95 Time 0940

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)
1243	68.2	7.10	1.06		0
1249	68.8	7.04	1.07		2
1244	68.7	7.09	1.07		4

Comments: DO = .6 4 WELL VOLUMES = 4.0 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: ____ Sampled by: ____

SAMPLING INFORMATION SHEET

Delta 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: 12 / 28 / 95 Time: 0900

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) 15.96 ft. Date: 12 / 28 / 95 Time 0850

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 9 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	X1000 Conductance (umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
0854	66.8	7.29	0.75		0
0855	68.2	7.20	0.74		3
0856	68.2	7.19	0.75		6
0856	68.2	7.10	0.73		9

Comments: DO = 0.7 4 WELL VOLUMES = 9 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: ____ Sampled by: ____

SAMPLING INFORMATION SHEET

Delta Environmental Consultants, Inc.

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

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

Date Sampled: 12 / 28 / 95 Time: 0845

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) 18.31 ft. Date: 12 / 28 / 95 Time 0832

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	X-000 Conductance (umhos/cm)	Water Level (Nearest 0.01 ft)	Cumulative Volume of Water Removed from Well (gallons)
0839	63.3	7.65	1.16		0
0840	65.6	7.67	0.78		3
0840	65.4	7.57	079		5
0841	65.4	7.92	075		7

Comments: DO = 0.6 4 WELL VOLUMES = 7 GAL

Transportation (thermal preservation) ICE & CHEST

Form completed by: MY Sampled by: MY

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: 12/28/95 Time: 1150

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 ____ inches

Depth to water (below top of casing) ____ ft. Date: ____/____/____ Time ____

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

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

At least 4 well volumes have been evacuated before sampling.

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

Sampling method: ____ Disposable bailer X Sampling port

Samples collected 2 VOAs - TPHg, BTEX 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) ____

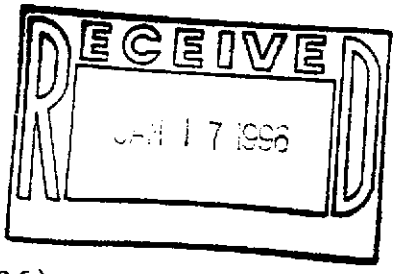
Form completed by: ____ Sampled by: ____

ENCLOSURE C

Ground Water Sample Laboratory Report

WEST LABORATORY

January 8, 1996
Sample Log 13683



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

Subject: Analytical Results for 12 Water Samples
Identified as: Beacon 721 (Proj. # D093-936)
Received: 12/29/95

Dear Mr. Galati:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on January 8, 1996 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

January 8, 1996
Sample Log 13683

MTBE (Methyl-t-butyl ether) Results

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Received : 12/29/95
Matrix : Water

MTBE	(MRL) ug/L	Measured Value ug/L
MW-1	(13)	74
MW-2	(50)	4600
MW-3	(50)	360
MW-4	(5.0)	<5.0
MW-5	(5.0)	<5.0
MW-6	(5.0)	70
MW-7	(5.0)	9.8
MW-8	(5.0)	<5.0
MW-9	(5.0)	<5.0
MW-10	(13)	37
MW-11	(5.0)	<5.0
RW-1	(5.0)	<5.0

Approved By:

Joel Kiff
Senior Chemist

WEST LABORATORY

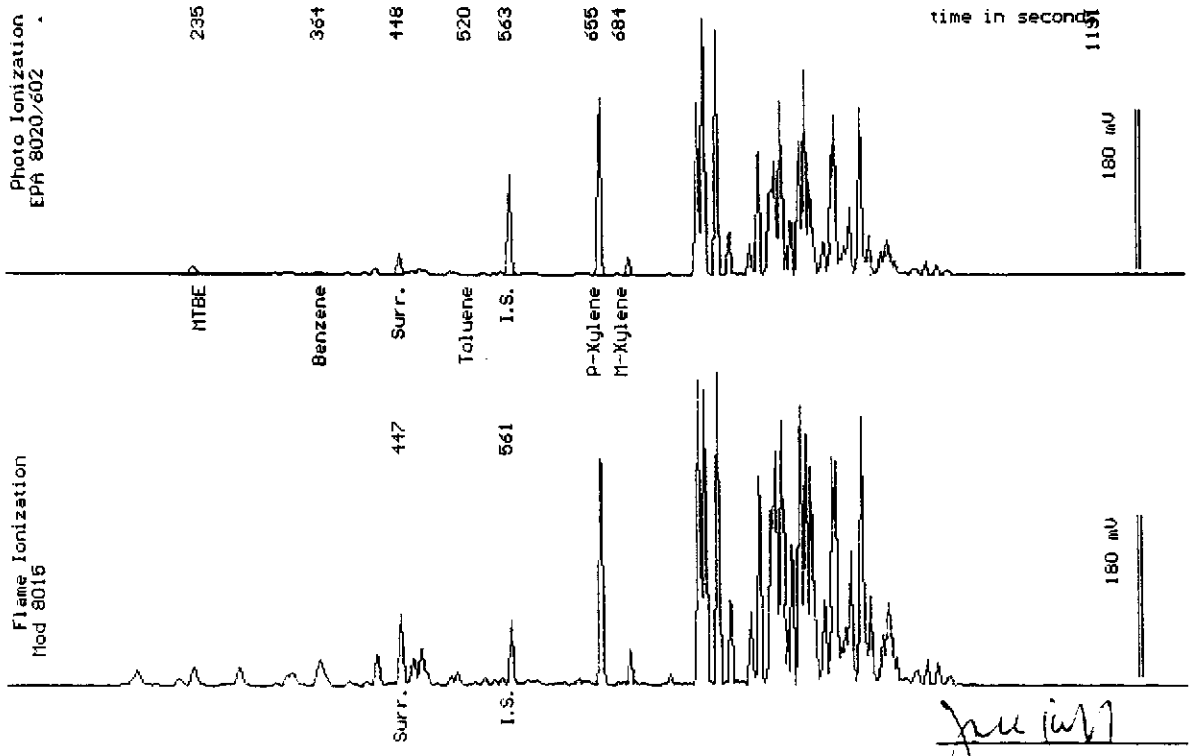
Sample Log 13683

13683-01

Sample: **MW-1**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:3 QC Batch : 2136S
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(1.3)	4.9
Toluene	(1.3)	<1.3
Ethylbenzene	(1.3)	<1.3
Total Xylenes	(1.3)	290
TPH as Gasoline	(130)	4800
Surrogate Recovery		90 %



Date Analyzed: 01-04-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Jbel Kiff
Senior Chemist

WEST LABORATORY

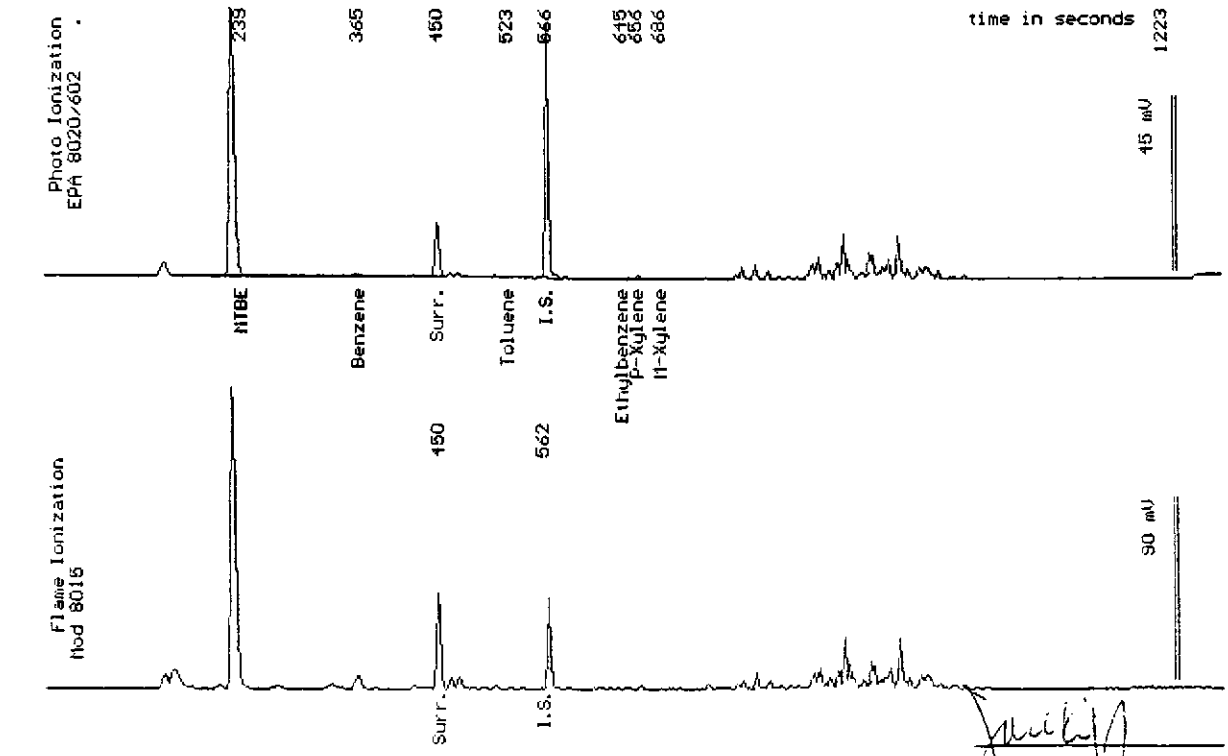
Sample Log 13683

13683-02

Sample: **MW-2**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:10 QC Batch : 2136V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(5.0)	9.5
Toluene	(5.0)	<5.0
Ethylbenzene	(5.0)	<5.0
Total Xylenes	(5.0)	5.2
TPH as Gasoline	(500)	3100
Surrogate Recovery		101 %



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

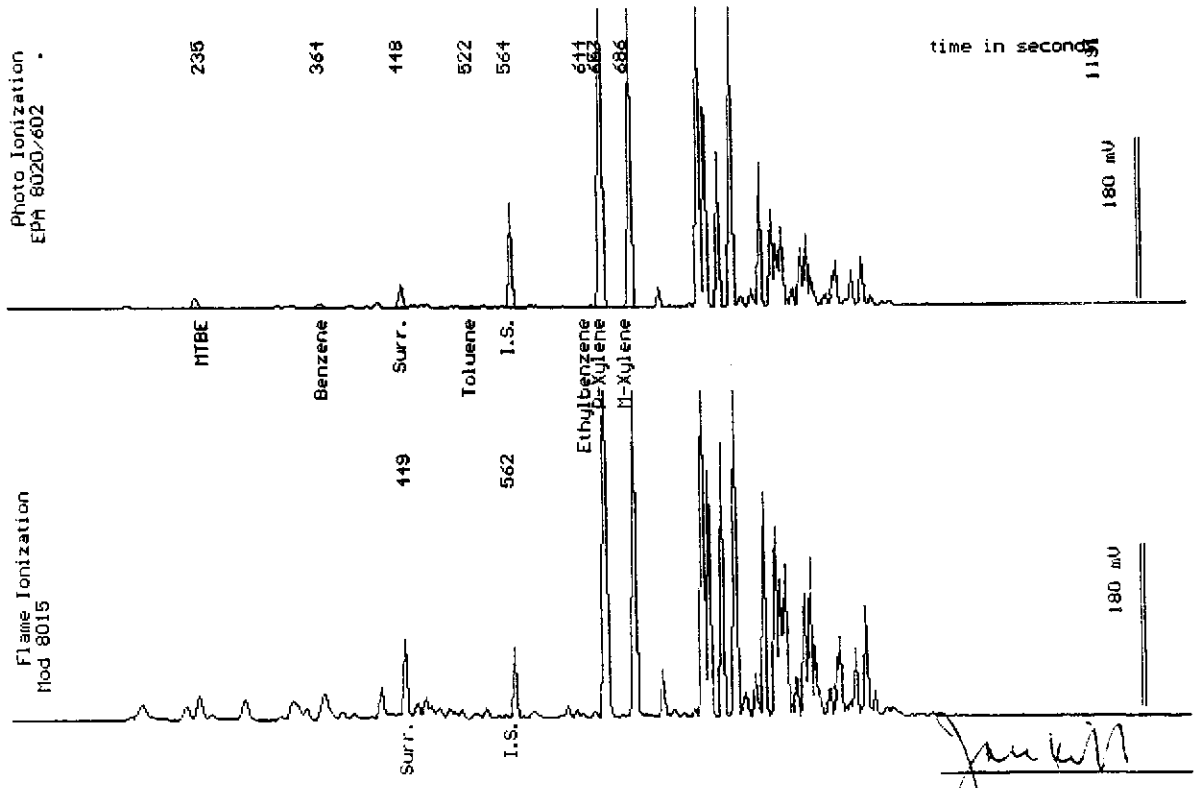
Sample Log 13683

13683-03

Sample: **MW-3**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:10 QC Batch : 2136S
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(5.0)	32
Toluene	(5.0)	5.8
Ethylbenzene	(5.0)	18
Total Xylenes	(5.0)	4700
TPH as Gasoline	(500)	16000
Surrogate Recovery		100 %



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

Sample Log 13683

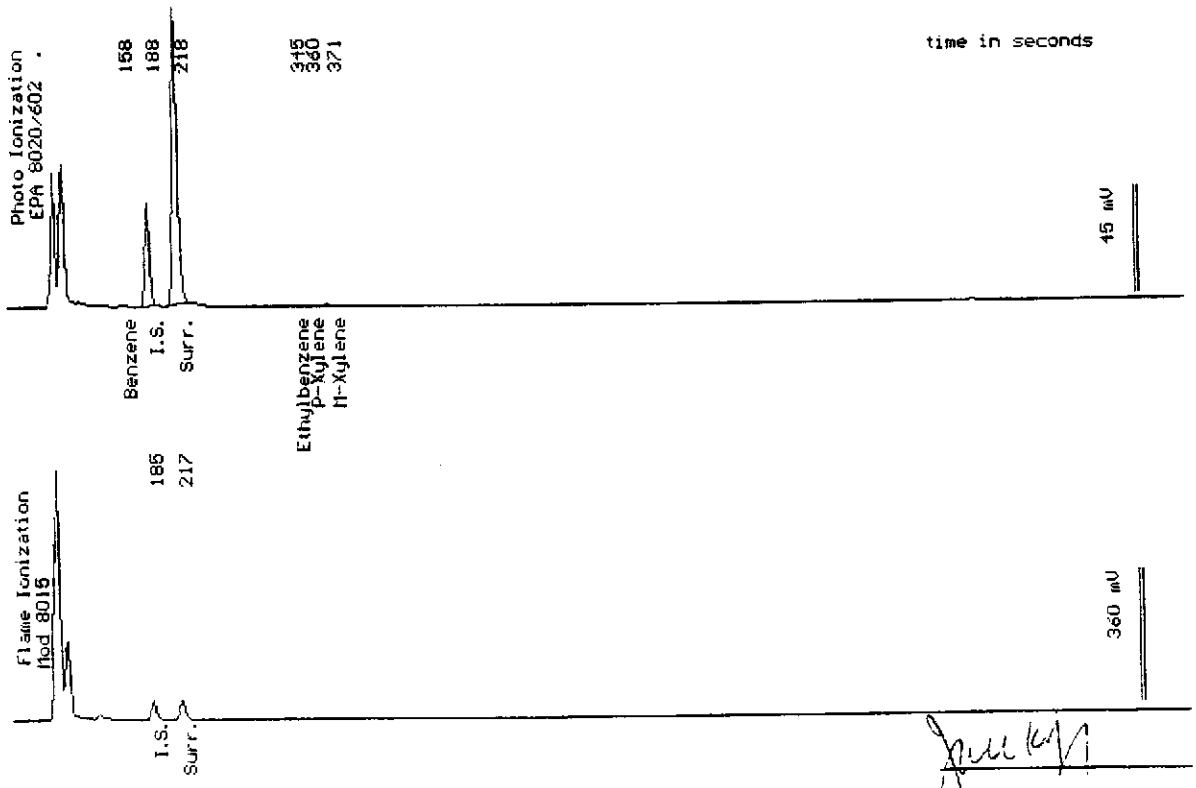
13683-04

Sample: **MW-4**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:1 QC Batch : 4140V
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)	510 *
Surrogate Recovery		103 %

* Product is not typical gasoline.



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

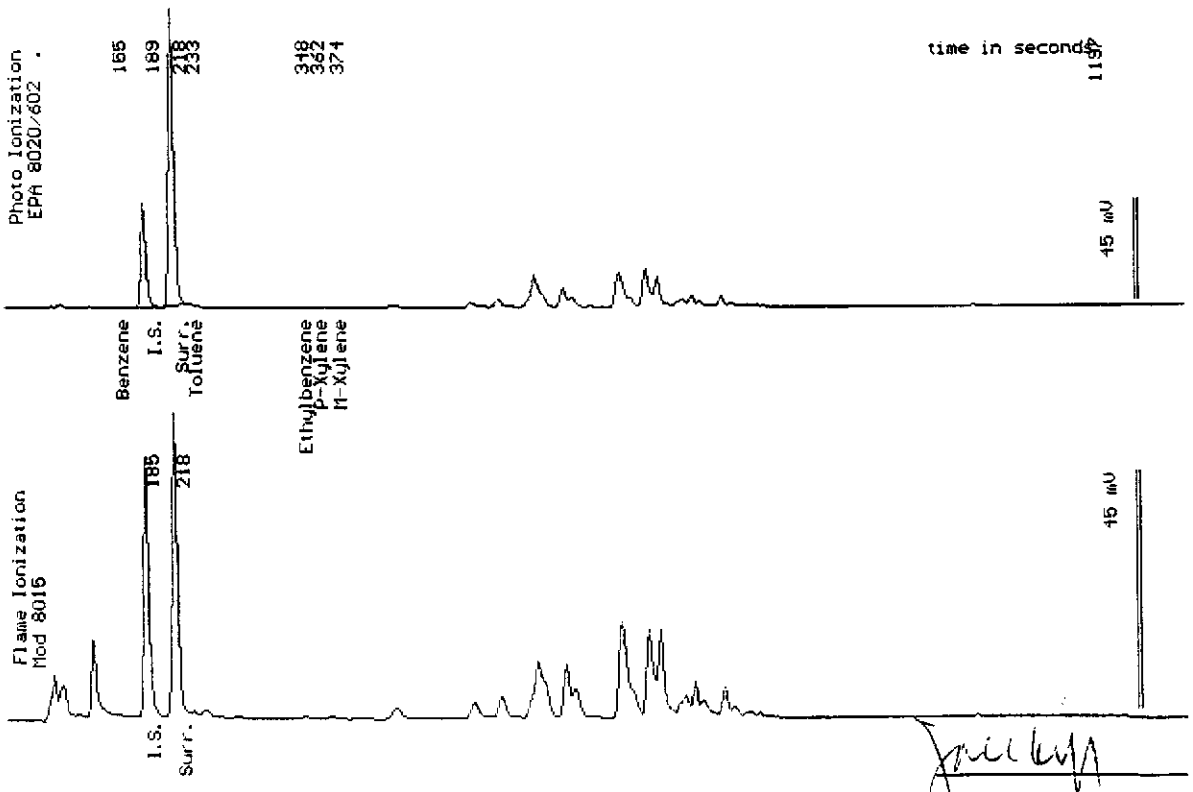
Sample Log 13683

13683-05

Sample: **MW-5**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:1 QC Batch : 4140V
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)	120
Surrogate Recovery		96 %



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

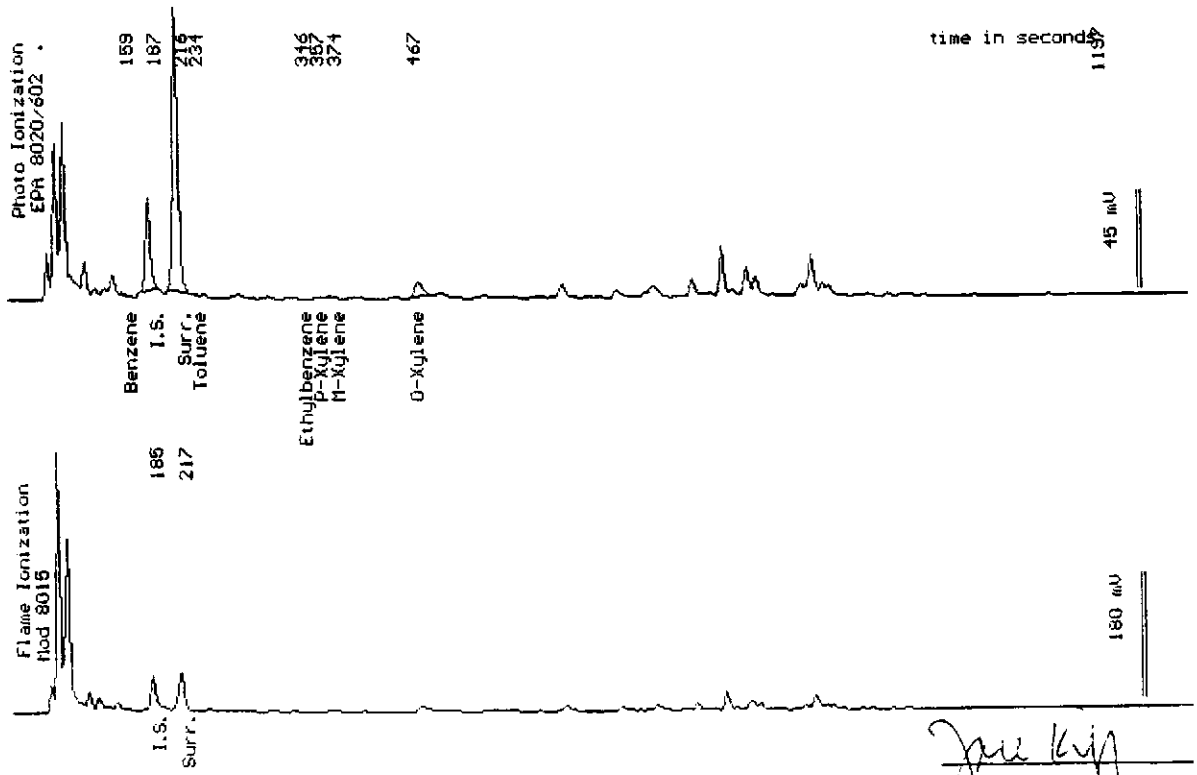
Sample Log 13683

13683-06

Sample: **MW-6**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:1 QC Batch : 4140V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	6.3
TPH as Gasoline	(50)	410
Surrogate Recovery		106 %



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

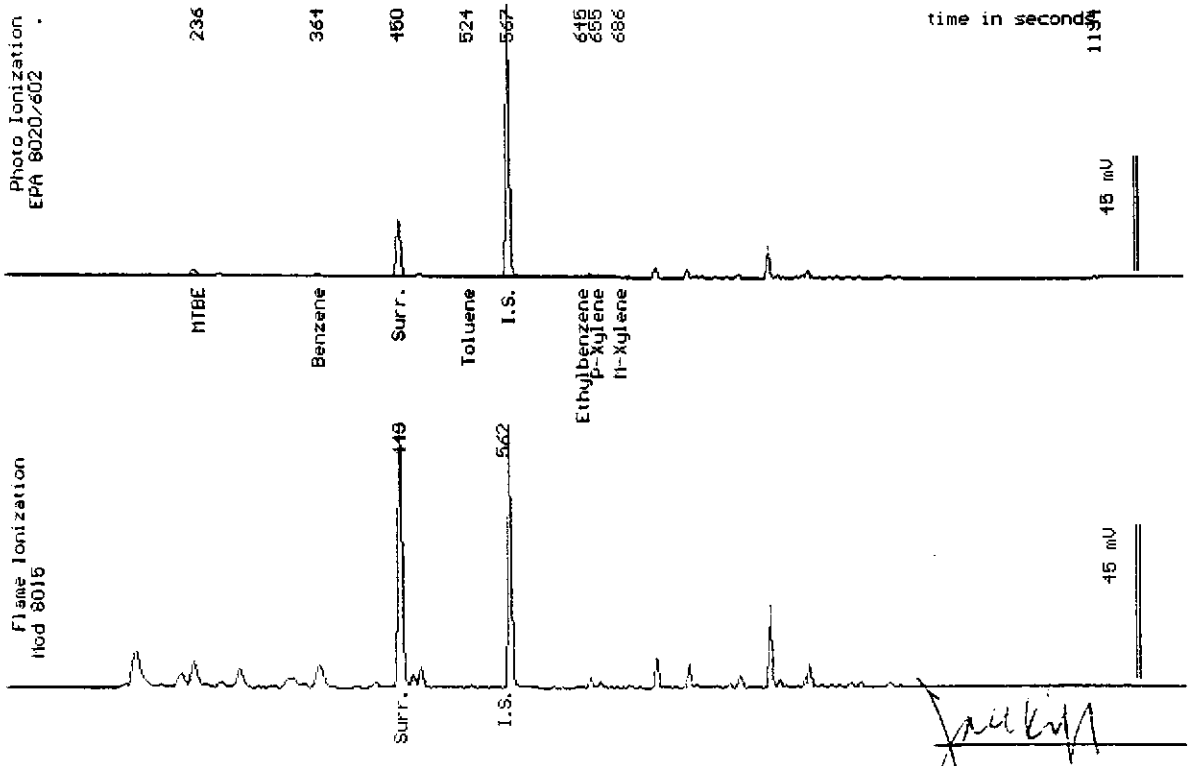
Sample Log 13683

13683-07

Sample: **MW-7**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:1 QC Batch : 2136S
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	.91
Total Xylenes	(.50)	.69
TPH as Gasoline	(50)	60
Surrogate Recovery		101 %



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m OBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

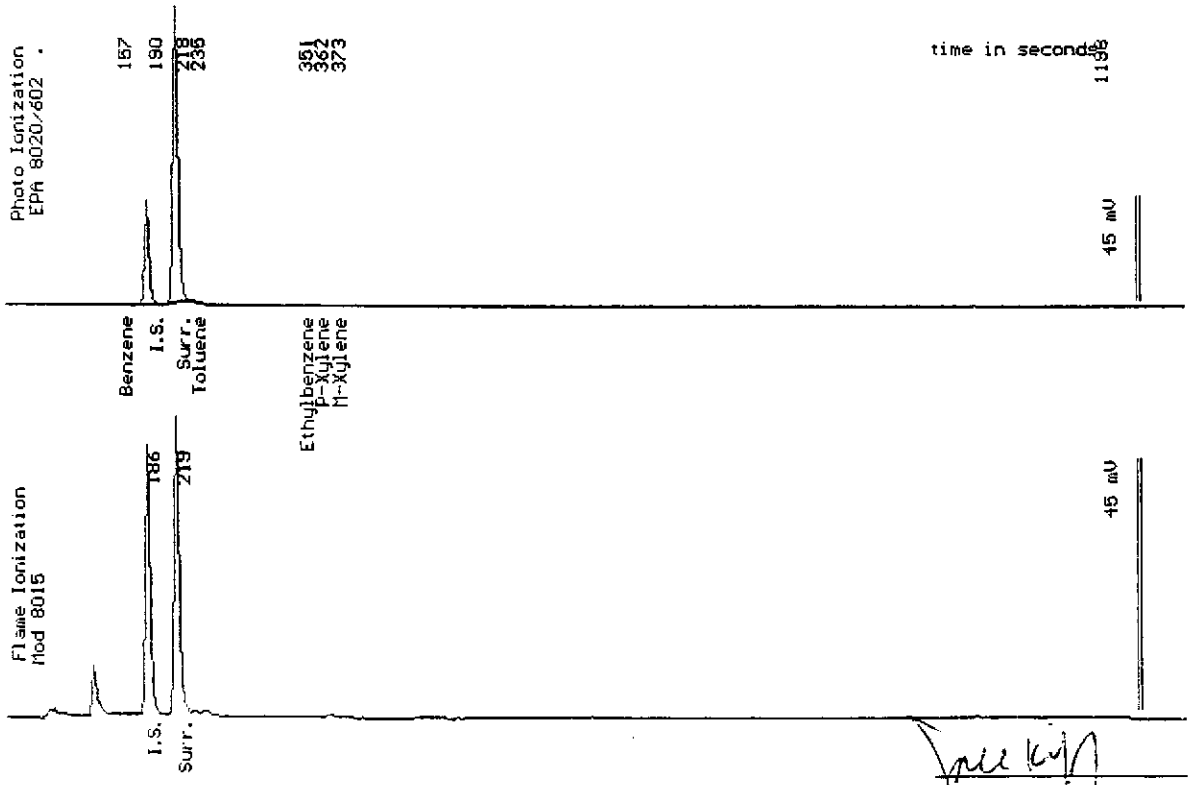
Sample Log 13683

13683-08

Sample: **MW-8**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:1 QC Batch : 4140V
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		106 %



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

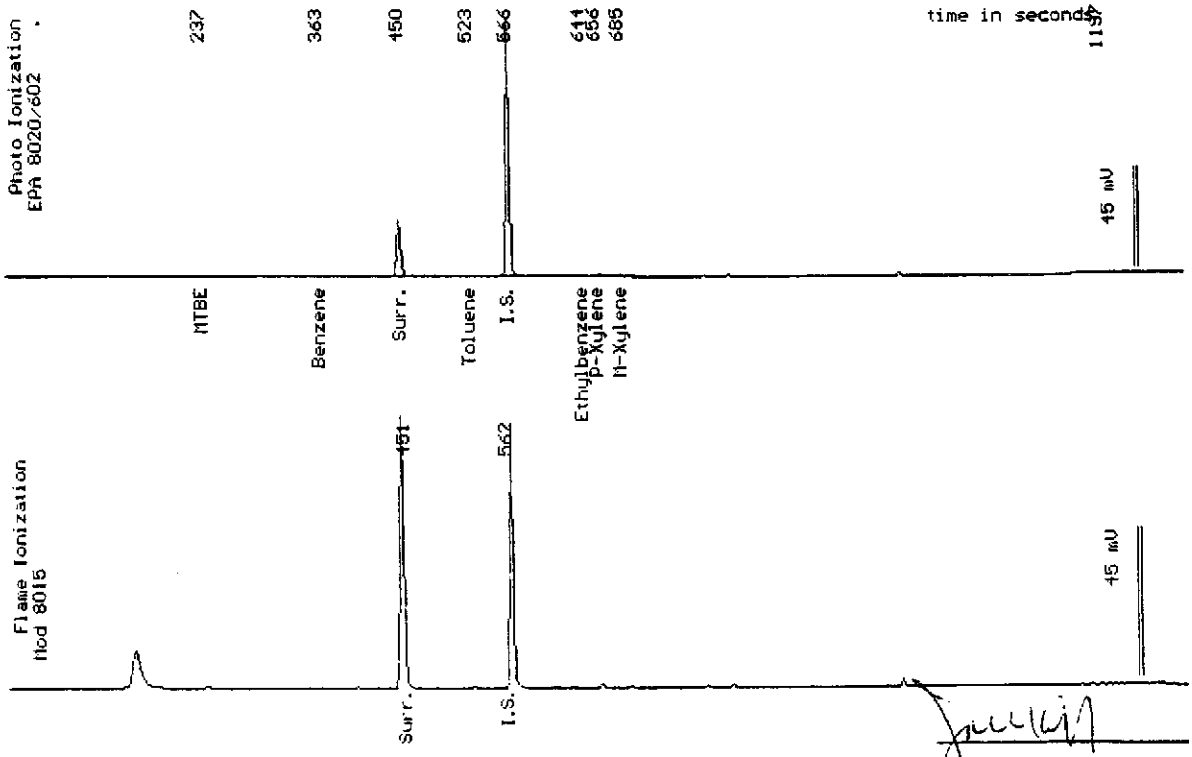
Sample Log 13683

13683-09

Sample: **MW-9**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:1 QC Batch : 2136S
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		101 %



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

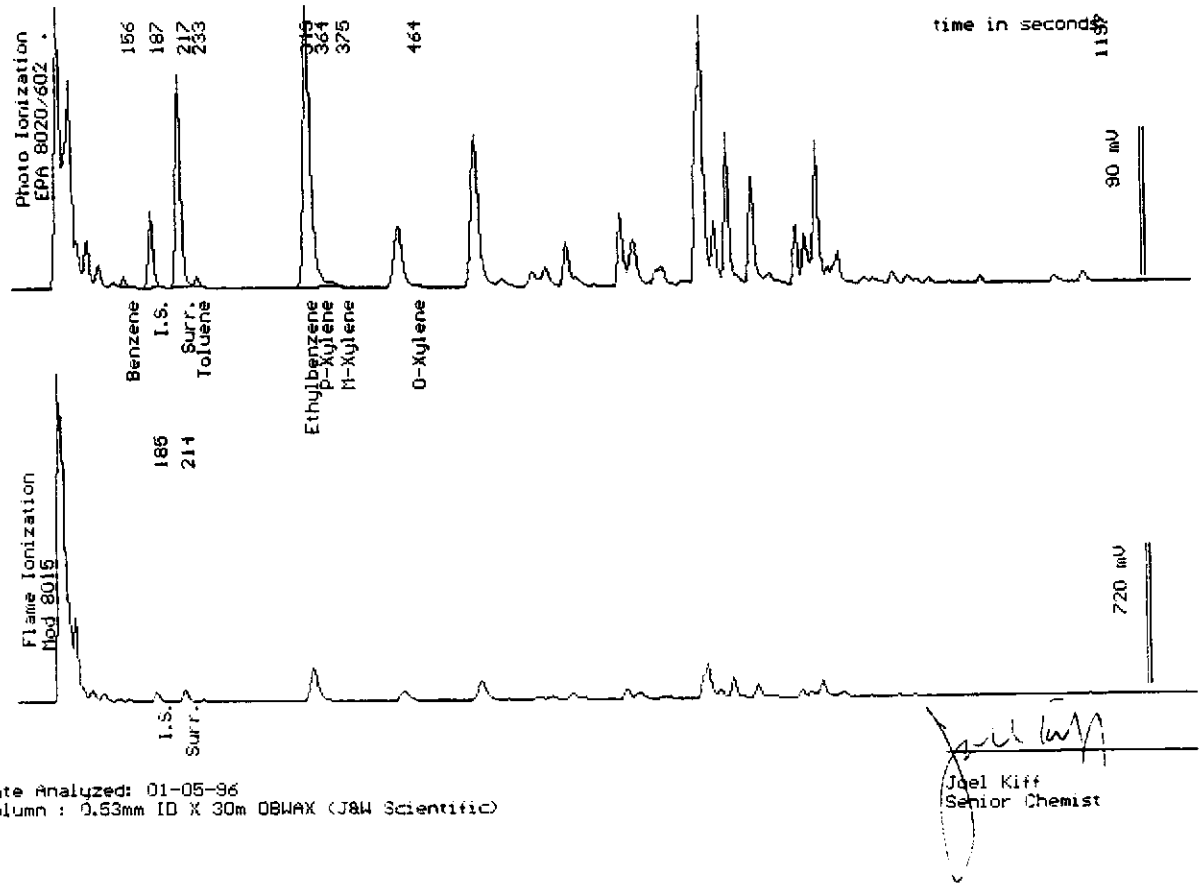
Sample Log 13683

13683-10

Sample: **MW-10**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:3 QC Batch : 4140V
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(1.3)	4.4
Toluene	(1.3)	5.6
Ethylbenzene	(1.3)	340
Total Xylenes	(1.3)	11
TPH as Gasoline	(130)	5000
Surrogate Recovery		101 %



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

Sample Log 13683

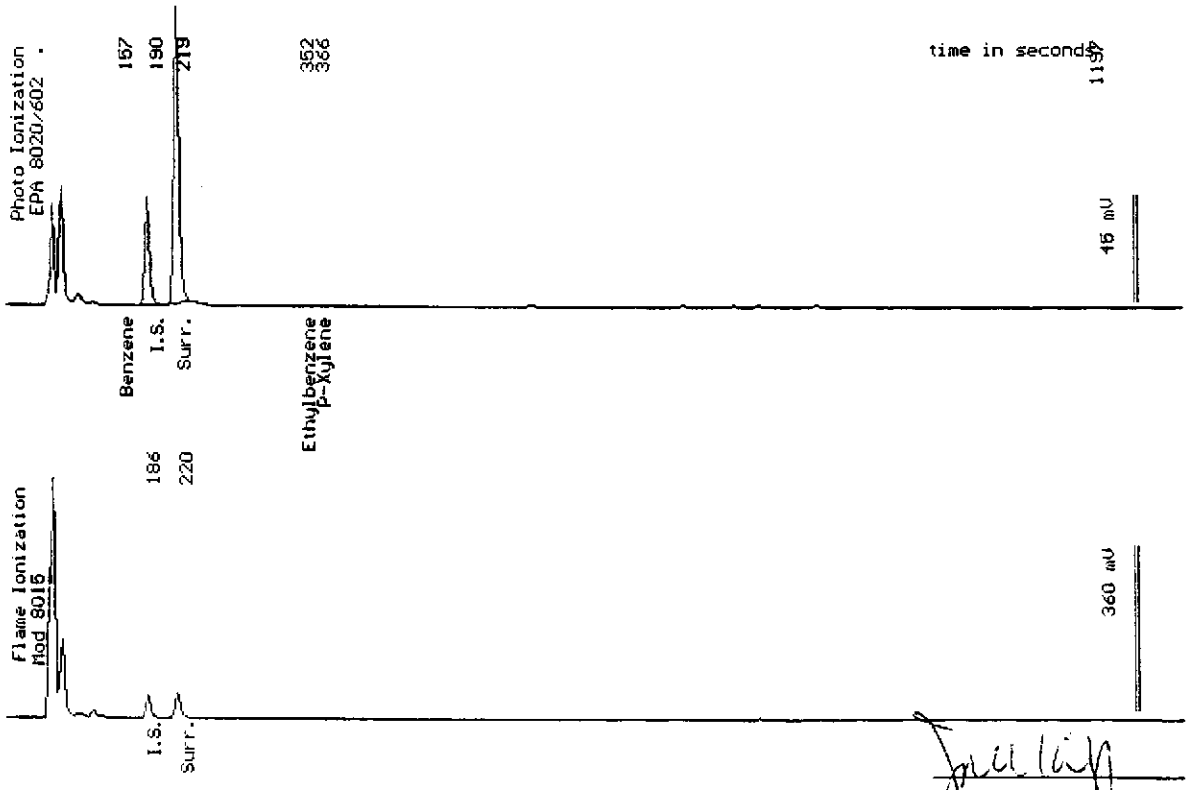
13683-11

Sample: **MW-11**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:1 QC Batch : 4140V
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)	380 *
Surrogate Recovery		103 %

* Product is not typical gasoline.



Date Analyzed: 01-05-96
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

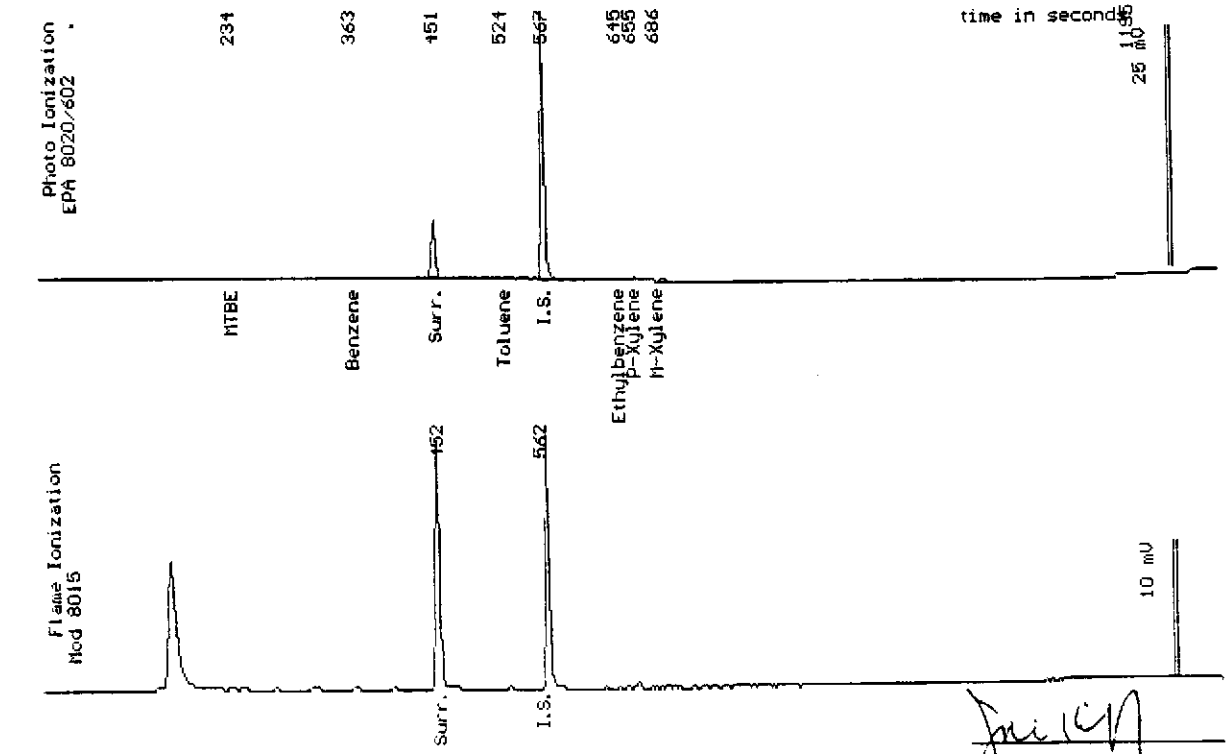
Sample Log 13683

13683-12

Sample: **RW-1**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/28/95
Dilution : 1:1 QC Batch : 2136S
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: 01-05-96
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)			ANALYSES					Date	Form No.
721	Jay Stoops								12-28-95	1 of 2
Project No.	Sampler (Signature)								WEST LAB – Davis	
D093-936									Standard TAT	
Project Location	Affiliation									
San Lorenzo	Delta									
Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)		No. of Containers	REMARKS	
mw-1	12-28-95			X	X			1		
mw-2										
mw-3									One VOA had Tiny Bubbles	
mw-4										
mw-5										
mw-6									12/29/95 1740	
mw-7										
mw-8										

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Jay Stoops / Delta	12/28/95	5:00	D. Zamzow / Delta	12/28	5:00
D. Zamzow / Delta	12/29/95	14:12	Troy A. Fuqua / WEST	12/29/95	14:12
Troy A. Fuqua / WEST	12/29/95	17:40	John Mady	12/29/95	17:40

Report To: Todd Galati – Delta

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.
721	Jay Strup	12-28-95	2 of 2

Project No.: D093-936

Sampler (Signature): [signature]

Project Location: San Lorenzo

Affiliation: Delta

WEST LAB - Davis
Standard TAT

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)						No. of Containers	REMARKS
mw-9	12-28-95			X	X							2	
mw-10	↓			↓	↓							↓	
mw-11	↓			↓	↓							↓	
RW-1	↓			↓	↓							↓	
													12/29/95 1740
													0°
													[initials]

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature] / Delta	12-28-95	3:80	S. Sanner / Delta	12/28	3:00
S. Sanner / Delta	12/29/95	14:12	[signature] / WEST	12/29/95	14:12
[signature] / WEST	12/29/95	17:40	John Martz	12/29/95	1740

Report To: Todd Galati / Delta

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

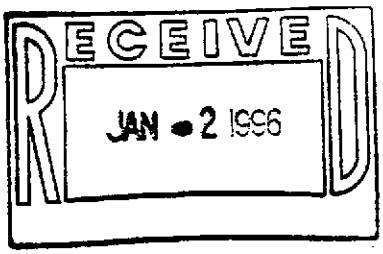
32-8003 1/90

ENCLOSURE D

Remediation System Analytical Results

WEST LABORATORY

Sample Log 13512
December 13, 1995



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

Subject : 3 water samples
Project Name : Beacon 721
Project Number : DO93-936

Dear Mr. Galati,

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

WEST Laboratory is certified by the State of California (# 1346). If you have any questions regarding procedures or results, please call me at 916-753-9500.

Sincerely,

Joel L. Kiff

WEST LABORATORY

December 11, 1995
Sample Log 13512

MTBE (Methyl-t-butyl ether) Results

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/06/95
Received : 12/07/95
Matrix : Water

MTBE	(MRL) ug/L	Measured Value ug/L
Effluent	(5.0)	<5.0
MID	(5.0)	<5.0
Influent	(5.0)	8.2

Approved By:

Joel Kiff
Senior Chemist

WEST LABORATORY

December 13, 1995
Sample Log 13512

From : Beacon 721 (Project # D093-936)
Date Sampled : 12/06/95
Start Time of Analysis : 12/11/95, 16:45
Matrix : Water
Duplicate Sample : 13496-01

Date Received : 12/06/95
End Time : 12/12/95, 18.15
Units : mg/L

Total Suspended Solids EPA Method 160.2

West ID	Sample ID	Result	MRL	Blank	% RPD	Date Analyzed
13512-01	**Effluent**	<3.0	3.0	<3.0	6	12/12/95

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

The RPD Limits are ± 20 %.

Michelle L. Anderson
Inorganics Supervisor

WEST LABORATORY

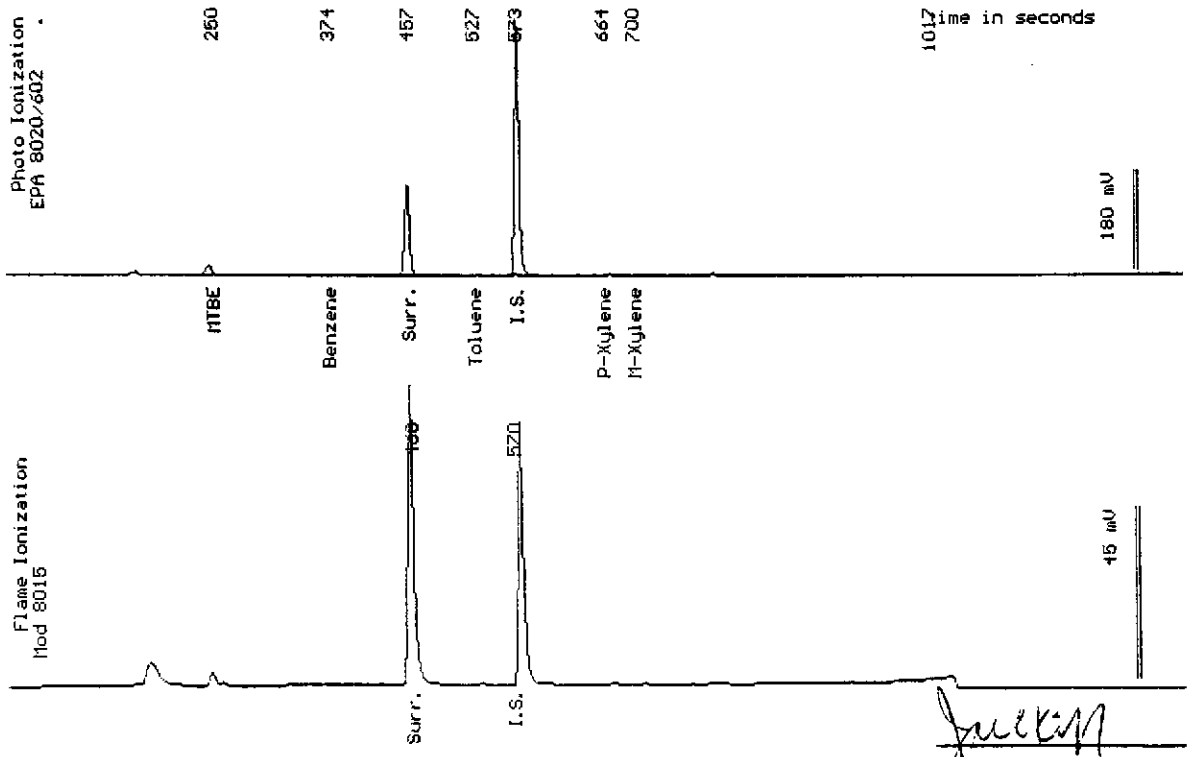
Sample Log 13512

13512-03

Sample: **Influent**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/06/95
Dilution : 1:1 QC Batch : 2134Z
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		102 %



Date Analyzed: 12-08-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

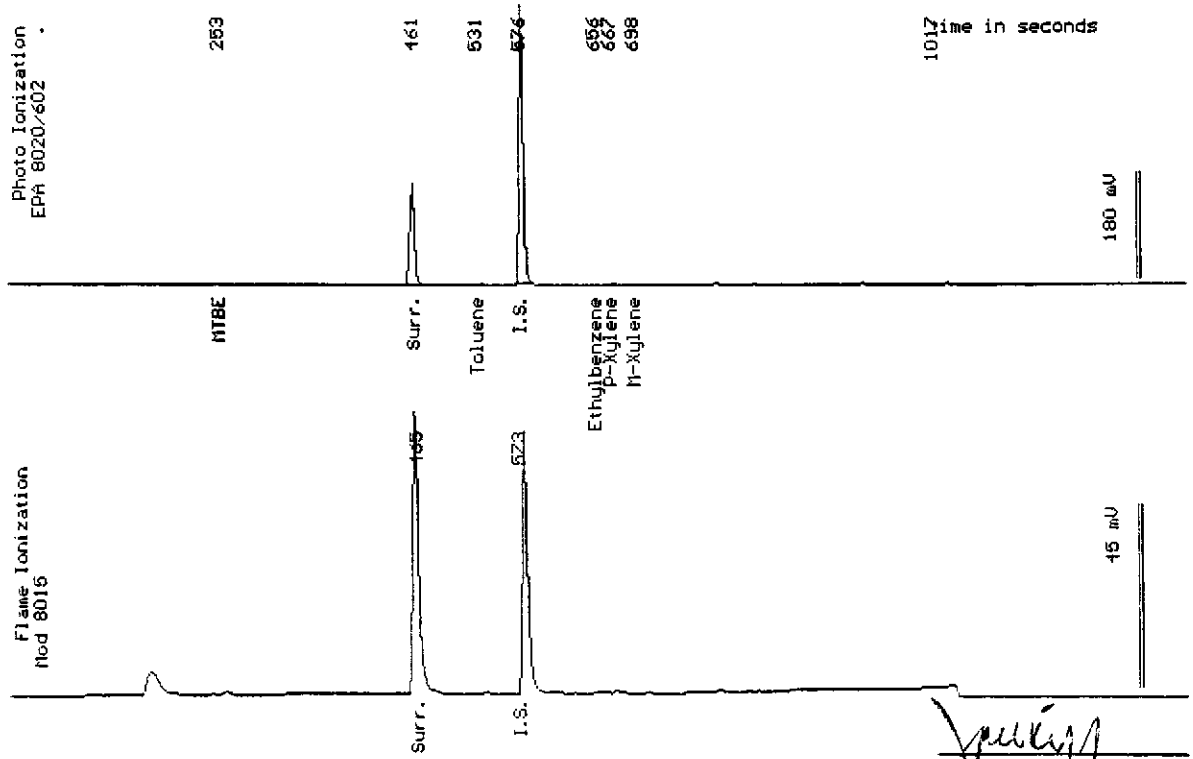
Sample Log 13512

13512-02

Sample: MID

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/06/95
Dilution : 1:1 QC Batch : 2135A
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: 12-08-95
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Joel Kiff
Senior Chemist

WEST LABORATORY

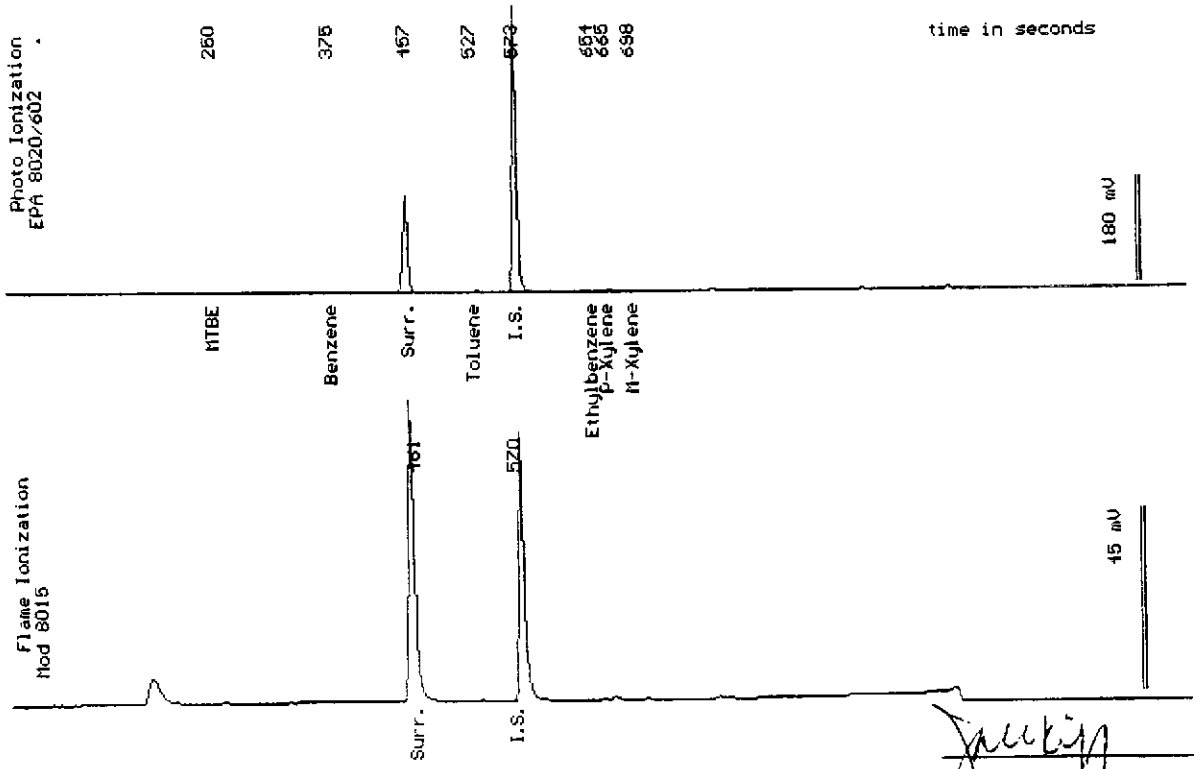
Sample Log 13512

13512-01

Sample: **Effluent**

From : Beacon 721 (Proj. # DO93-936)
Sampled : 12/06/95
Dilution : 1:1 QC Batch : 2135A
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		102 %



Date Analyzed: 12-08-95
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

December 22, 1995

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

P.O. #: 13512
Project #: 0093-936
Project Name: Beacon 721

Anlab I.D. AE25629
SAMPLE DESCRIPTION: EFFLUENT
Sample collection date: 12/06/95
Lab submittal date: 12/07/95
Turn-Around-Time: TYPE 10

Client Code: 315
Matrix: W
Time: 08:50
Time: 15:51
Sample Disposal: LAB

TEST PARAMETER	UNITS	TEST RESULT	DETECTION LIMIT
COD by EPA 410.4	mg/l	3.1	3.0

Date Analyzed: 12/08/95

Report Approved By: Patty Buckwell
ELAP ID #: 1468

:lki

ANLAB QA/QC REPORT AE25629

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	3.0	mg/l	AE25629	3.1	95	25.8	25.8	91	0.0	SN

#13512

Ultramar Inc.

CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No.
721	Martin W. Morgan	12/6/95	1 of 1
Project No.	**Sampler (Signature)**		
D093-936			
Project Location	**Affiliation**		
San Lorenzo, CA	Delta Env. Cons. Inc.		

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	COD	TDS	No. of Containers	REMARKS
Effluent	12/6/95	0850		X	X		X	X	4	WEST Labs 916 753 9520 Standard Turn
MID	12/6/95	0852		X	X				2	
Influent	12/6/95	0854		X	X				2	
										DATE 12/07/95 1350 0°
										WEST LABS

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
M.W.M. / Delta	12/7/95	1350			
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation) John Matty	Date	Time
				12/07/95	1350

Report To: TODD GALATI

Phone 916 638 2085

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