Reviewed by Afreen on 2/6/95

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Ultramar

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

Telecopy: 209-584-6113 Credit & Wholesale
209-583-3330 Administrative
209-583-3302 Information Services
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Per J. Shin's letter dated 6/30/94, there is currently no remediation plan underway for the area off-site & downgradient encompassing MW7-MW11.

November 14, 1994

Ms. Juliet Shin
Hazardous Materials Program
Department of Environmental Health
Alameda County Health Care Services
80 Swan Way, Room 200
Oakland, CA 94612

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

Dear Ms. Shin:

Enclosed is a copy of the ground-water monitoring report for the third quarter 1994 and the remediation system status through September 1994 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.

The ground-water system was not operating when the water levels were collected so no cone of depression was observed. An additional set of data was collected on October 19, 1994, after the system was restarted and had operated for some time. Enclosed is a ground-water contour map which ilustrates the cone of depression around the recovery well.

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: November 14, 1994
QUARTER ENDING: September 30, 1994

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, 1994. Continued to operate the remediation system.

RESULT OF QUARTERLY MONITORING:

Monitoring data indicates that measurable free product was not detected in any well this quarter. Benzene concentrations remained not detected in wells MW-2, MW-4, MW-5, MW-6, MW-8, MW-9, and MW-11. The benzene concentration decreased in MW-1 from 1,800 ppb to 1,700 ppb, in MW-7 from 55 ppb to 21 ppb, in MW-10 from 5.6 ppb to 2.2 ppb, and in RW-1 from 130 ppb to 54 ppb. The benzene concentration increased in MW-3 from 6,400 ppb to 7,400 ppb.

As of September 28, 1994, approximately 1,424,246 gallons of ground water have been removed, treated, and discharged.

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.

3330 Data Drive
Suite 100
Rancho Cordova, CA 95670
916/638-2085
FAX: 916/638-8385

November 1, 1994

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

Subject: *Quarterly Ground Water Monitoring Report, Third Quarter 1994, and Status of Remediation System through September 1994*
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 monitoring at the above-referenced site. The monitoring is intended to evaluate the presence of 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 and sampling activities performed at the site on September 28, 1994, and the remediation system status through September 1994. The site location is shown in Figure 1, and site features are illustrated in Figure 2.

Quarterly ground water monitoring conducted on September 28, 1994, 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 ground water recovery well (RW-1), subjective analyses of water samples to evaluate the presence 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.

Water Table Elevation Measurements, Flow Direction, and Hydraulic Gradient

Depth to ground water in the monitoring wells was measured on September 28, 1994. Depth to ground water ranged from 16.82 (MW-7) to 20.45 (MW-11) feet below the top of well casings. The water table elevation measurements indicate slight ground water mounding around MW-3. Ground water mounding could be caused by the soil vapor extraction system. Ground water table measurements recorded at the site on September 28, 1994, are compiled in Table 1 along with measurements recorded since February 1992. A water table contour map prepared from the September 28, 1994 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. On September 28, 1994 site visit, no liquid phase hydrocarbons or product sheen was observed.

Ground Water Analytical Results

Ground water samples were collected from monitoring wells MW-1 through MW-11, and ground water recovery well RW-1 on September 28, 1994. Sampling procedures are described in Enclosure A, and copies of the sampling information data sheets are included in Enclosure B.

The ground water samples were submitted for analysis of benzene, toluene, ethylbenzene, xylenes, and total petroleum hydrocarbons as gasoline. Benzene was not detected in monitoring wells MW-2, MW-4, MW-5, MW-6, MW-8, MW-9, and MW-11. Detectable benzene concentrations ranged from 2.2 parts per billion (ppb) (MW-10) to 7,400 ppb (MW-3). A comparison of the September 1994 analytical results with the June 1994 results indicate that the benzene concentrations decreased in MW-1 (1,800 to 1,700 ppb), MW-7 (55 to 21 ppb), RW-1 (130 to 54 ppb), and MW-10 (5.6 to 2.2 ppb), and increased in MW-3 (6,400 to 7,400 ppb). Results of the chemical analyses for the September 28, 1994, sampling event are summarized in Table 2, and copies of the certified analytical reports are included in Enclosure C. A benzene isoconcentration contour map is included as Figure 4.

Status of Remediation System

Delta has performed operation and maintenance of the ground water remediation system at the site since April 1993. The 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 District.

The ground water treatment system was not operational on the September 28, 1994, sampling event due to failure of the mechanical seal on transfer pump number 1. The ground water system ran intermittently throughout the third quarter 1994, and only 11,260 gallons were treated. The volume of ground water treated by the remediation system through September 28, 1994, is 1,424,246 gallons as shown in Table 3.

The soil vapor extraction system was started in March 1994 and is operational. The permit to operate the soil vapor extraction system was issued on June 8, 1994, by the Bay Area Air Quality Management District.

Remediation System Analytical Results

Due to the ground water system's intermittent operations and mechanical seal failure, remediation system samples were not collected at the sewer discharge location. Results of the chemical analysis are summarized in Table 4.

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. Juliet Shin
Alameda County Environmental
Health Dept.
470 27th Street, Room 322
Oakland, California 94612

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

Sincerely,

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Richard D. Munsch
Project Engineer

Todd M. Galati
Project Manager

James R. Brownell, R.G.
California Registered Geologist No. 5078

RDM (LRP478.TA)
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
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
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

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-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
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
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

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
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
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

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-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
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

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

[a] All top of riser elevations surveyed by Aegis Environmental.
[b] Not Measured.

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

TABLE 2

GROUND WATER SAMPLE ANALYTICAL RESULTS

Concentrations in parts per billion (ppb)

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

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	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
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
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

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES

Concentrations in parts per billion (ppb)

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

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	TPH[a] as gasoline
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
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
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

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
Concentrations in parts per billion (ppb)

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

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	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
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
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

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES

Concentrations in parts per billion (ppb)

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

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	TPH[a] as gasoline
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
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

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
Concentrations in parts per billion (ppb)

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

Monitoring Well	Date Sampled	Benzene	Toluene	Ethylbenzene	Xylenes	TPH[a] as gasoline
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

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

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	1,242,108
03/31/94	1,353,840
06/21/94	1,412,980
09/28/94	1,424,246

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

TABLE 4

ANALYTICAL RESULTS OF SYSTEM WATER SAMPLES
Concentrations in parts per billion (ppb)

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

Sample	Date	Benzene	Toluene	Ethylbenzene	Total Xylenes	TPH[a] as gasoline
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[b]	NS	NS	NS	NS

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

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

North

CALIF

QUADRANGLE LOCATION

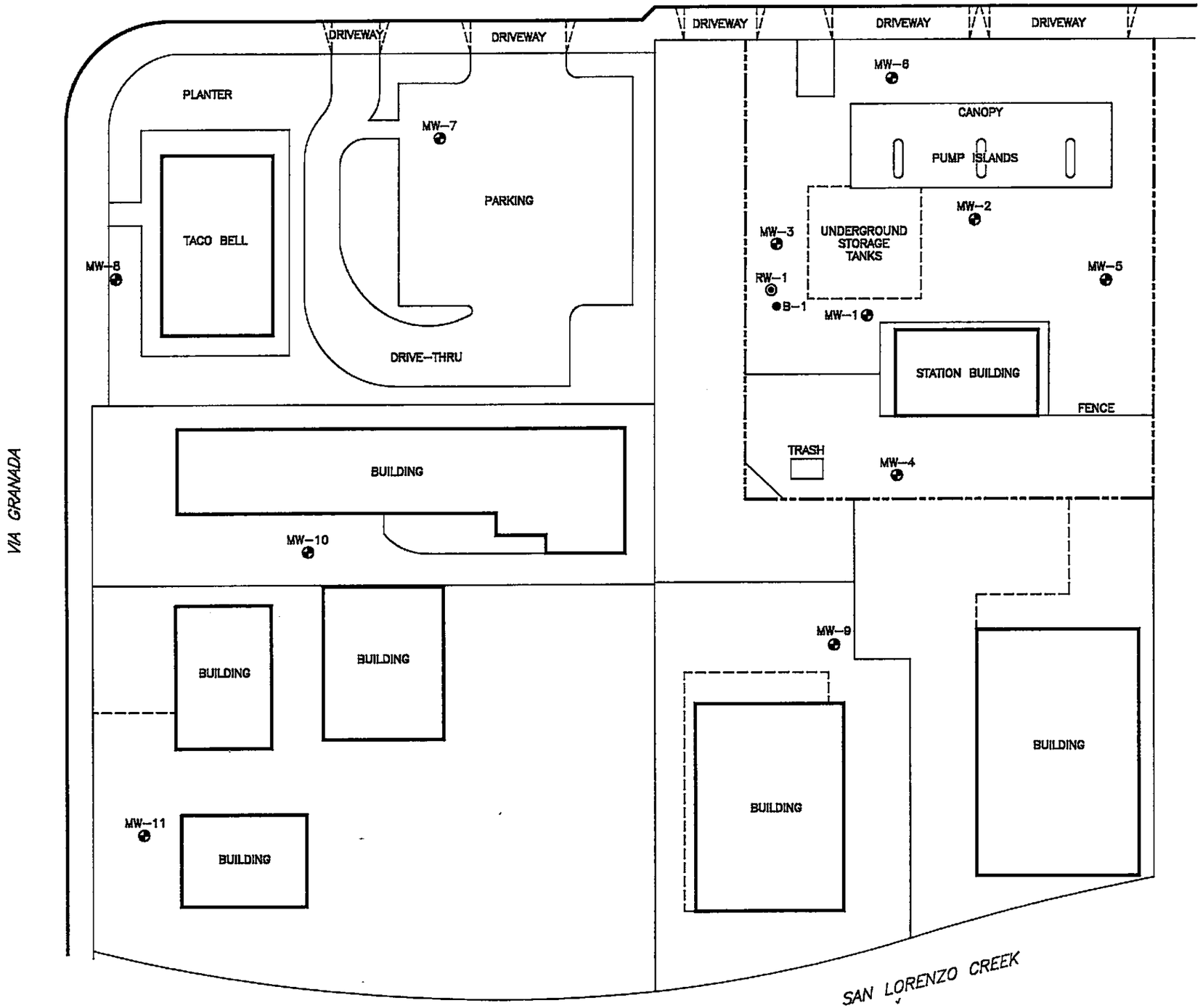
0 2000 FT

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.	REVIEWED BY

Delta Environmental Consultants, Inc.



North

LEGEND:

- B-1 SOIL BORING LOCATION
- RW-1 RECOVERY WELL LOCATION
- MW-1 MONITORING WELL LOCATION

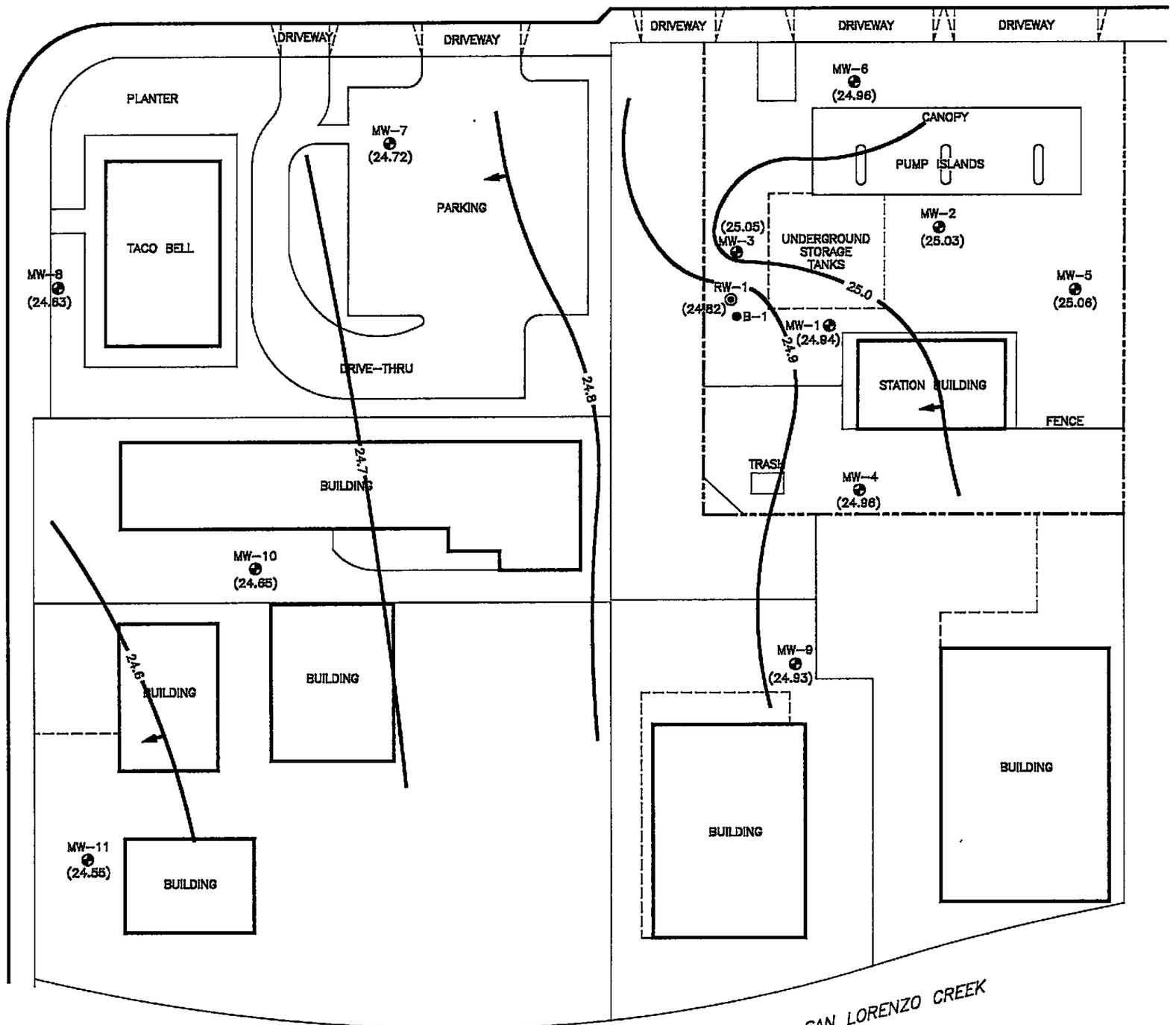
NOTE:
BASE MAP ADAPTED FROM RESNA FIGURE DATED 1/9/92
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED

0 30 FT
SCALE

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

PROJECT NO. 40-93-936	DRAWN BY I.H. 8/11/93
FILE NO. 93-936-1	PREPARED BY JRB
REVISION NO. 1	REVIEWED BY 3/11/93

Delta Environmental Consultants, Inc.



North

LEGEND:

- ● B-1 SOIL BORING LOCATION
- ◉ RW-1 RECOVERY WELL LOCATION
- ⊕ MW-1 MONITORING WELL LOCATION
- (24.94) GROUND WATER ELEVATION RELATIVE TO AN ASSUMED BENCH MARK
- —24.5— WATER TABLE CONTOUR RELATIVE TO AN ASSUMED BENCH MARK
- ← GROUND WATER FLOW DIRECTION

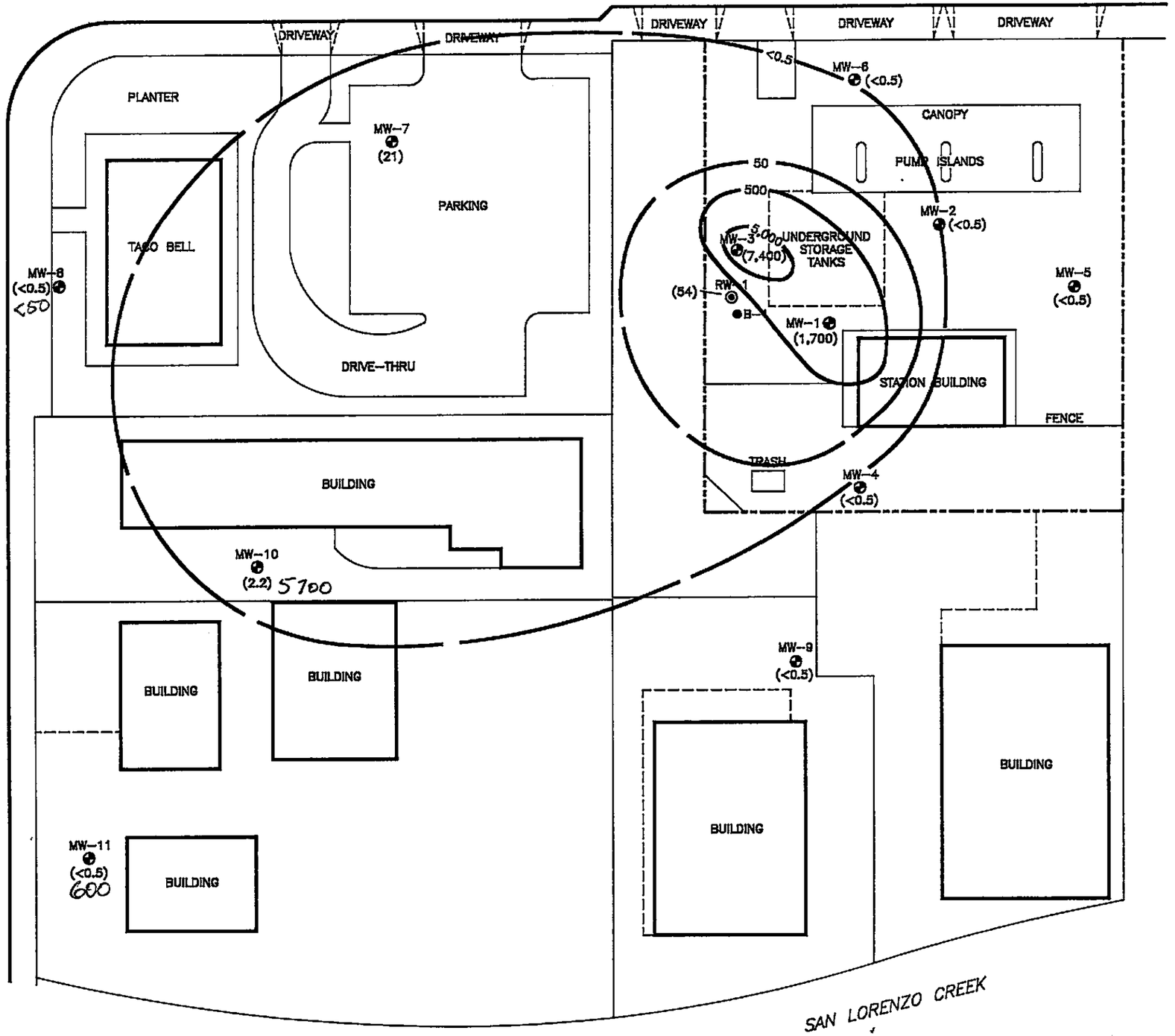
NOTE:
BASE MAP ADAPTED FROM RESNA FIGURE DATED 1/9/92
SITE DIMENSIONS AND FACILITY LOCATIONS NOT VERIFIED

0 30 FT
SCALE

FIGURE 3
WATER TABLE CONTOUR MAP – 9/28/94
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. D083-938	DRAWN BY I.H. 10/10/94
FILE NO. 93-938-1	PREPARED BY RDM
REVISION NO. 1	REVIEWED BY JPB 10/26/94

Delta Environmental Consultants, Inc.



North

LEGEND:

- B-1 SOIL BORING LOCATION
- RW-1 RECOVERY WELL LOCATION
- MW-1 MONITORING WELL LOCATION
- (1,700) BENZENE CONCENTRATION IN PARTS PER BILLION
- —50— BENZENE ISOCONCENTRATION CONTOUR IN PARTS PER BILLION

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 CONTOUR MAP
9/28/94
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. D093-938	DRAWN BY LH. 10/10/94
FILE NO. 93-938-1	PREPARED BY RDM
REVISION NO. 1	REVIEWED BY JRD 10/14/94

Delta Environmental Consultants, Inc.

LEWELLING BOULEVARD

VIA GRANADA

DRIVEWAY
DRIVEWAY
DRIVEWAY
DRIVEWAY
DRIVEWAY

PLANTER

MW–7
(24.39)

PARKING

TACO BELL

MW–8
(24.36)

DRIVE–THRU

MW–6
(24.64)

CANOPY

PUMP ISLANDS

MW–2
(24.64)

(24.65)
MW–3

UNDERGROUND STORAGE TANKS

MW–5
(24.68)

RW–1
(20.62)
B–1

MW–1 (24.58)

24.5
23.50
23.75
24.00
24.25

STATION BUILDING

FENCE

TRASH

MW–4
(24.59)

BUILDING

MW–10
(24.32)

BUILDING
BUILDING

MW–9
(24.55)

BUILDING
BUILDING

24.25

MW–11
(24.22)

BUILDING

SAN LORENZO CREEK

North

LEGEND:

- ● B–1 SOIL BORING LOCATION
- ◉ RW–1 RECOVERY WELL LOCATION
- ⊕ MW–1 MONITORING WELL LOCATION
- (24.58) GROUND WATER ELEVATION RELATIVE TO AN ASSUMED BENCH MARK
- —24.25— WATER TABLE CONTOUR RELATIVE TO AN ASSUMED BENCH MARK
- ← 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 5
WATER TABLE CONTOUR MAP – 10/19/94
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. D093–936	DRAWN BY I.H. 11/7/94
FILE NO. 93–936–1	PREPARED BY JRB
REVISION NO. 2	REVIEWED BY JRB 11/8/94

Delta Environmental Consultants, Inc.

1.0 GROUND WATER AND FREE-FLOATING PRODUCT DEPTH DETERMINATION

A water/petroleum product interface probe was used to determine free product thickness and ground water depth in each well. If a free floating product layer was not detected 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 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 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 ensure sample integrity. Ground water samples were transported to the laboratory and analyzed within the EPA-specified holding times for the requested analyses.

DELTA ENVIRONMENTAL CONSULTANTS, INC.

Ground Water Level Data

PROJECT: BEACON 721 DELTA PROJECT NO.: D093-936-4.0015

DATE: 7-28-94 RECORDED BY: CHILL-Monty MEASURING DEVICE: Slope

Well No.	Time	Reference Elevation	Depth to G.W.	Elevation	Free Product Thickness	Physical Observations/Comments
MW-1	0959	43.67	18.73			31.20 TOTAL DEPTH
MW-2	1003	43.09	18.06			33.30
MW-3	0955	43.10	18.05			29.30
MW-4	1001	44.66	19.70			24.60
MW-5	0914	43.79	18.73			29.20
MW-6	0953	42.47	17.51			28.70
MW-7	0948*	41.54	16.82			24.30
MW-8	0935*	42.26	17.63			23.20
MW-9	0951*	44.94	20.01			23.80
MW-10	0944*	42.34	17.69			29.50
MW-11	0938*	45.00	20.45			29.50 TOTAL DEPTH
RW-1	0956	43.17	18.35			

* Measured from top of riser unless otherwise noted.

1012/3-89

9-28-94 Beacon 721 D093-936
CH2L-property

0910 Onsite to sample wells
Systems Down

Sample Wells

1041	MW10
1045	MW11
1111	MW8
1114	MW7
1142	MW5
1144	MW2
1216	MW6
1238	MW9
1233	MW1
1253	MW4
1259	MW3
1340	RW1

All Wells Bailed

Pumped with honda Pump

1340: VES down due to therm OVlds tripped, reset o'loads & restarted; placed back at same readings as prior visit...

thermox hrs - 1800.3

Investigated GW sys problems - need to use hose to repair broken flange, probable compressor problems due to press. switch...

1415 Dept Site VES in Auto; GW sys down...

SAMPLING INFORMATION SHEET

Weather Conditions
Cloud Cover: _____ Temperature: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-10 Project: BEACON 721
Location: 44 LEWELLING BLVD. SAN LORENZO, CA W.O. #: D093-936-4.0015
Sampling Point: MW-10 Date Sampled: 9/28/94 Time: 1041
Describe Sampling Point: SEE SITE MAP

Well Depth: 29.50 ft. below MP Casing diameter: 2 inches
Depth to water (below MP): 17.69 ft. Date: 9/28/94 Time: 0944
Discharge rate _____ gpm x 0.00[illegible] = _____ cfm
At least 4 Well volumes have been evacuated before sampling.
Sampling Method: ____ Tap ____ Submersible pump X Bailer ____ Other ____
Pump intake or bailer set at _____ ft. below MP
Tubing (type: DISPOSABLE BAILER) (new) or previously used) was used to collect all samples X Yes ___ No and all field measurements (X Yes ___ No). Tubing was used only for MW-10
Sample appearance: _____
Note any sampling problems: _____
Note any cleaning performed in the field: SLOPE INDICATOR
Samples collected: 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	X1000 Temperature Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1020	8.2	1.34	67.7		0 GAL	
1028	7.2	.84	67.3		4 GAL	
1036	7.0	.84	67.2		8 GAL	
					9	

Bailing start time: _____ WL: _____
Bailing stop time: _____ WL: _____

Comments: _____

Transportation (thermal preservation): COOLER & ICE

Form completed by: CHILL Submitted by: CHILL

SAMPLING INFORMATION SHEET

Weather Conditions
Cloud Cover: _____ Temperature: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-11 Project: BEACON 721
Location: 44 LEWELLING BLVD. SAN LORENZO, CA WO #: 093-936-4.0015
Sampling Point: MW-11 Date Sampled: 9/28/94 Time: 1045
Describe Sampling Point: SEE SITE MAP

Well Depth: 29.50 ft. below MP Casing diameter: 2 inches
Depth to water (below MP): 20.45 ft. Date: 9/28/94 Time: 0938
Discharge rate: _____ gpm x 0.00[illegible] = _____ cfm
At least: 4 Well volumes have been evacuated before sampling.
Sampling Method: ____ Tap ____ Submersible pump X Bailer ____ Other
Pump Intake or bailer set at: _____ ft. below MP
Tubing (type): DISPOSABLE BAILER Is (new) or previously used) was used to collect all samples X Yes ___ No and all field measurements (X Yes ___ No). Tubing was used only for MW-11
Sample appearance: _____
Note any sampling problems: _____
Note any cleaning performed in the field: SLOPE INDICATOR
Samples collected: 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature - Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1027	7.03	686	65		2	
1034	6.93	664	65		4	
1042	6.92	681	65		6	
					6gal	

Bailing start time: 10:20 Wt. 20.45
Bailing stop time: 10:42 Wt. _____

Comments: _____

Transportation (Thermal preservation): COOLER & ICE

Form completed by: MWM-Ch:11 Submitted by: MWM

SAMPLING INFORMATION SHEET

Weather Conditions

Cloud Cover: _____ Temperature: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-8 Project: BEACON 721

Location: 44 LEWELLING BLVD. SAN LORENZO, CA W.O. #: D093-936-4.0015

Sampling Point: MW-8 Date Sampled: 9/28/94 Time: 1111

Describe Sampling Point: SEE SITE MAP

Well Depth: 23.20 ft. below MP Casing diameter: 2 inches

Depth to water (below MP): 17.63 ft. Date: 9/28/94 Time: 17.63

Discharge rate _____ gpm x 0.00[illegible] = _____ cfs.

At least 4 Well volumes have been evacuated before sampling.

Sampling Method ____ Tap ____ Submersible pump X Bailer ____ Other ____

Pump intake or bailer set at _____ ft. below MP

Tubing (type: DISPOSABLE BAILER); (new) or previously used) was used to collect all samples X Yes ___ No and all field measurements (X Yes ___ No). Tubing was used only for MW-8

Sample appearance _____

Note any sampling problems _____

Note any cleaning performed in the field SLOPE INDICATOR

Samples collected 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature Corrected Conductance (umhos/cm) X1000	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1054	8.4	.28	66.6		0 GAL	
1102	7.7	.28	66.7		2 GAL	
1107	7.4	.28	66.7		4 GAL	
					4 gal	

Bailing start time: _____ WL: _____

Bailing stop time: _____ WL: _____

Comments: _____

Transportation (thermal preservation): COOLER & ICE

Form completed by: CHILL Sampled by: CHILL

SAMPLING INFORMATION SHEET

Weather Conditions
Cloud Cover: _____ Temperature: _____
Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-7 Project: BEACON 721
Location: 44 LEWELLING BLVD. SAN LORENZO, CA W.O.: DO93-936-4.0015
Sampling Point: MW-7 Date Sampled: 9/28/94 Time: 1114
Describe Sampling Point: SEE SITE MAP

Well Depth: 24.30 ft. below MP Casing diameter: 2 inches
Depth to water (below MP): 16.82 ft. Date: 9/28/94 Time: 0948
Discharge rate _____ gpm x 0.00[illegible] = _____ cfm
At least 4 Well volumes have been evacuated before sampling.
Sampling Method ____ Tap ____ Submersible pump X Bailer ____ Other ____
Pump Intake or bailer set at _____ ft. below MP
Tubing (type: DISPOSABLE BAILER); (new) or previously used) was used to collect all samples X Yes ___ No and all field measurements (X Yes ___ No). Tubing was used only for MW-7
Sample appearance _____
Note any sampling problems _____
Note any cleaning performed in the field SLOPE INDICATOR
Samples collected 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature - Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1106	7.36	1150	68			
1111	6.71	1107	68			
	6.66	1110	68			
					5gal	

Bailing start time: 1100 WL: 16.82
Bailing stop time: _____ WL: _____

Comments: _____

Transportation (Thermal preservation): COOLER & ICE

Form completed by: _____ Sampled by: _____

SAMPLING INFORMATION SHEET

Weather Conditions

Cloud Cover: _____ Temperature: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-5 Project: BEACON 721

Location: 44 LEWELLING BLVD. SAN LORENZO, CA WO.: DO93-936-4.0015

Sampling Point: MW-5 Date Sampled: 9/28/94 Time: 1142

Describe Sampling Point: SEE SITE MAP

Well Depth: 29.20 ft. below MP Casing diameter: 2 inches

Depth to water (below MP): 18.73 ft. Date: 9/28/94 Time: 0914

Discharge rate _____ gpm x 0.0022 = _____ cfm

At least 4 Well volumes have been evacuated before sampling.

Sampling Method ____ Tap ____ Submersible pump X Bailer ____ Other ____

Pump intake or bailer set at _____ ft. below MP

Tubing (type: DISPOSABLE BAILER) ~~New~~ or previously used) was used to collect all samples X Yes ___ No and all field measurements (X Yes ___ No). Tubing was used only for MW-5

Sample appearance _____

Note any sampling problems _____

Note any cleaning performed in the field SLOPE INDICATOR

Samples collected 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1130	6.89	728	68			
1135	7.05	721	69			
1140	7.09	709	69			
					7gal	

Bailing start time: 1125 WL 18.73

Bailing stop time: 1140 WL _____

Comments: _____

Transportation (Chemical preservation) COOLER & ICE

Form completed by: Marty-Chrill Sampled by: Marty

SAMPLING INFORMATION SHEET

Weather Conditions
Cloud Cover: _____ Temperature: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-2 Project: BEACON 721
Location: 44 LEWELLING BLVD. SAN LORENZO, CA W.O.: D093-936-4.0015
Sampling Point: MW-2 Date Sampled: 9/28/94 Time: 1144
Describe Sampling Point: SEE SITE MAP

Well Depth: 33.30 ft. below MP Casing diameter: 2 inches
Depth to water (below MP): 18.06 ft. Date: 9/28/94 Time: 1003
Discharge rate: _____ gpm x 0.00[illegible] = _____ cfs
At least 4 Well volumes have been evacuated before sampling.
Sampling Method: ___ Tap ___ Submersible pump X Bailer ___ Other _____
Pump Intake or bailer set at _____ ft. below MP
Tubing (type: DISPOSABLE BAILER); (new) or previously used) was used to collect all samples X Yes ___ No
and all field measurements (X Yes ___ No). Tubing was used only for MW-2
Sample appearance: _____
Note any sampling problems: _____
Note any cleaning performed in the field: SLOPE INDICATOR
Samples collected: 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature Corrected Conductance (umhos/cm)	Temperature (F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1129	6.9	1.29	69.1		6Gal	
1132	6.6	1.21	69.5		5GAL	
1141	6.7	1.00	69.5		10GAL	
					1DGal	

Bailing start time: _____ WL _____
Bailing stop time: _____ WL _____

Comments: _____

Transportation (thermal preservation): COOLER & ICE

Form completed by: CHILL Sampled by: CHILL

SAMPLING INFORMATION SHEET

Weather Conditions

Cloud Cover: _____ Temperature: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-6 Project: BEACON 721

Location: 44 LEWELLING BLVD. SAN LORENZO, CA WO.: D093-936-4.0015

Sampling Point: MW-6 Date Sampled: 9/28/94 Time: 1216

Description Sampling Point: SEE SITE MAP

Well Depth: 28.70 ft. below MP Casing diameter: 2 inches

Depth to water (below MP): 17.51 ft. Date: 9/28/94 Time: 0953

Discharge rate _____ gpm x 0.00[illegible] = _____ cfs.

At least 4 Well volumes have been evacuated before sampling.

Sampling Method ____ Tap ____ Submersible pump X Bailer ____ Other ____

Pump Intake or bailer set at _____ ft. below MP

Tubing (type: DISPOSABLE BAILER) (new) or previously used) was used to collect all samples X Yes ___ No and all field measurements (X Yes ___ No). Tubing was used only for MW-6

Sample appearance _____

Note any sampling problems _____

Note any cleaning performed in the field SLOPE INDICATOR

Samples collected 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1158	7.7	.93	64.7		OLAK	
1254	7.3	.86	68.5		5. SAK	
1212	6.9	.86	68.2		7.5 AK	
					7.5	

Bailing start time: _____ WL _____

Bailing stop time: _____ WL _____

Comments: _____

Transportation (thermal preservation) COOLER & ICE

Form completed by: CHILL Sampled by: CHILL

SAMPLING INFORMATION SHEET

Weather Conditions
Cloud Cover: _____ Temperature: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-9 Project: BEACON 721
Location: 44 LEWELLING BLVD. SAN LORENZO, CA W.O. #: D093-936-4.0015
Sampling Point: MW-9 Date Sampled: 9/28/94 Time: 1238
Describe Sampling Point: SEE SITE MAP

Well Depth: 23.80 ft. below MP Casing diameter: 2 inches
Depth to water (below MP): 20.01 ft. Date: 9/28/94 Time: 0951
Discharge rate _____ gpm x 0.00[illegible] = _____ cfm
At least 4 Well volumes have been evacuated before sampling.
Sampling Method ____ Tap ____ Submersible pump X Bailer ____ Other ____
Pump intake or bailer set at _____ ft. below MP
Tubing (type: DISPOSABLE BAILER) (new) or previously used) was used to collect all samples X Yes ___ No
and all field measurements (X Yes ___ No). Tubing was used only for MW-9
Sample appearance _____
Note any sampling problems _____
Note any cleaning performed in the field SLOPE INDICATOR
Samples collected 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	X1000 Temperature Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1226	7.4	1.39	69.9		0 GAL	
1232	6.7	1.37	69.9		2.5 GAL	
					7.5	

Bailing start time: _____ WL _____
Bailing stop time: _____ WL _____

Comments: _____

Transportation (thermal preservation) COOLER & ICE

Form completed by: CHILL Sampled by: CHILL

SAMPLING INFORMATION SHEET

Weather Conditions
Cloud Cover: _____ Temperature: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-1 Project: BEACON 721
Location: 44 LEWELLING BLVD. SAN LORENZO, CA W.O.: D093-936-4.0015
Sampling Point: MW-1 Date Sampled: 9 / 28 / 94 Time: 1233
Description Sampling Point: SEE SITE MAP

Well Depth: 31.20 ft. below MP Casing diameter: 2 inches
Depth to water (below MP): 18.73 ft. Date: 9/28/94 Time: 0955
Discharge rate: _____ gpm x 0.00[illegible] = _____ cfs.
At least 4 Well volumes have been evacuated before sampling.
Sampling Method: ____ Tap ____ Submersible pump X Bailer ____ Other
Pump intake or bailer set at _____ ft. below MP
Tubing (type: DISPOSABLE BAILER) (new) or previously used) was used to collect all samples X Yes ___ No and all field measurements (X Yes ___ No. Tubing was used only for MW-1
Sample appearance: _____
Note any sampling problems: _____
Note any cleaning performed in the field: SLOPE INDICATOR
Samples collected: 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature - Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
					8 gal	

Bailing start time: 1200 WL: 18.73
Bailing stop time: 1230 WL: _____
Comments: Water Has Sheen & Odor ⇒ no pH taken...

Transportation (thermal preservation): COOLER & ICE
Forms completed by: MWM / CHH Samples by: MWM

SAMPLING INFORMATION SHEET

Weather Conditions: _____ Temperature: _____

Cloud Cover: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-4 Project: BEACON 721

Location: 44 LEWELLING BLVD. SAN LORENZO, CA W.O. #: D093-936-4.0015

Sampling Point: MW-4 Date Sampled: 9/28/94 Time: 1253

Describe Sampling Point: SEE SITE MAP

Well Depth: 24.60 ft. below MP Casing diameter: 2 inches

Depth to water (below MP): 19.70 ft. Date: 9/28/94 Time: 1001

Discharge rate _____ gpm x 0.00[illegible] = _____ cfs.

At least 4 Well volumes have been evacuated before sampling.

Sampling Method ____ Tap ____ Submersible pump X Bailer ____ Other ____

Pump intake or bailer set at _____ ft. below MP

Tubing (type: DISPOSABLE BAILER) (new) or previously used) was used to collect all samples X Yes ___ No and all field measurements (X Yes ___ No). Tubing was used only for MW-4

Sample appearance _____

Note any sampling problems _____

Note any cleaning performed in the field SLOPE INDICATOR

Samples collected 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature - Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (GPM)
1244	7.7	1.13	69.1		0 GAL	
1247	6.8	1.23	69.8		1.5 GAL	
1251	6.6	1.22	69.7		3.5 GAL	
					3.5	

Bailing start time: _____ WL _____

Bailing stop time: _____ WL _____

Comments: _____

Transportation (thermal preservation) COOLER & ICE

Form completed by: CHILL Sampled by: CHILL

SAMPLING INFORMATION SHEET

Weather Conditions
Cloud Cover: _____ Temperature: _____
Wind Speed: _____

GENERAL CONDITIONS

Sample ID: MW-3 Project: BEACON 721
Location: 44 LEWELLING BLVD. SAN LORENZO, CA W.O. #: D093-936-4.0015
Sampling Point: MW-3 Date Sampled: 9/28/94 Time: 1259
Describe Sampling Point: SEE SITE MAP

Well Depth: 29.30 ft. below MP Casing diameter: 2 inches
Depth to water (below MP): 18.05 ft. Date: 9/28/94 Time: 0955
Discharge rate: _____ gpm x 0.00[illegible] = _____ cfs.
At least 4 Well volumes have been evacuated before sampling.
Sampling Method: ____ Tap ____ Submersible pump X Bailer ____ Other ____
Pump intake or bailer set at: _____ ft. below MP
Tubing (type: DISPOSABLE BAILER); (new) or previously used) was used to collect all samples X Yes ___ No
and all field measurements (X Yes ___ No). Tubing was used only for MW-3
Sample appearance: _____
Note any sampling problems: _____
Note any cleaning performed in the field: SLOPE INDICATOR
Samples collected: 2 VOAS - TESTED FOR BTEX / TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
					1.5	

Bailing start time: 1240 wt. 18.05
Bailing stop time: _____ wt. _____

Comments: Sheen

Transportation (thermal preservation): COOLER & ICE

Forms completed by: _____ Sampled by: _____

SAMPLING INFORMATION SHEET

Weather Conditions

Cloud Cover: _____ Temperature: _____

Wind Speed: _____

GENERAL CONDITIONS

Sample ID: RW-1 Project: BEACON 721

Location: 44 FREWELLING BLVD SAN LORENZO, CA W.O.: D093-936-4.0015

Sampling Point: RW-1 Date Sampled: 9/28/94 Time: 1340

Describe Sampling Point: SEE SITE MAP

Well Depth: 29.50 ft. below MP Casing diameter: 6" inches

Depth to water (below MP): 18.35 ft. Date: 9/28/94 Time: 0956

Discharge rate _____ gpm x 0.00223 = _____ cfs

At least 4 Well volumes have been evacuated before sampling.

Sampling Method ____ Tap ____ Submersible pump X Bailer ____ Other ____

Pump intake or bailer set at _____ ft. below MP

Tubing (type: DISPOSABLE BAILER) (new) or previously used) was used to collect all samples X Yes ___ No and all field measurements (X Yes ___ No). Tubing was used only for _____

Sample appearance _____

Note any sampling problems _____

Note any cleaning performed in the field SLOPE INDICATOR

Samples collected 2 VOAS - TESTED FOR BTEX/TPHg

EVACUATION/STABILIZATION TEST DATA

Time	pH Units	Temperature Corrected Conductance (umhos/cm)	Temperature (°F)	Water Level (Nearest 0.01 ft.)	Cumulative Volume of Water Removed from Well (gallons)	Pumping Rate (gpm)
1312	7.6	1.36	74.6		10GAL	
1322	7.1	.82	73.9		40GAL	
1340	7.8	.61	75.2		65 GAL	
					85.5	

Bailing start time: _____ WL _____

Bailing stop time: _____ WL _____

Comments: USE Hoola Pump TO Purge well

Transportation (thermal preservation) COOLER & ICE

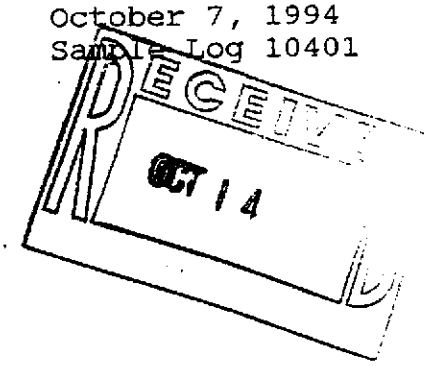
Form completed by: _____ Sampled by: _____

ENCLOSURE C

Ground Water Sample Laboratory Reports

WEST LABORATORY

October 7, 1994
Sample Log 10401



Todd Galati
Delta Environmental Consultants, Inc.
3330 Data Drive
Rancho Cordova, CA 95670

Subject: Analytical Results for 12 Water Samples
Identified as: Project # DO93-936 (Beacon 721)
Received: 09/29/94

Dear Mr. Galati:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on October 7, 1994 and describes procedures used to analyze the samples.

Sample(s) were received in 40-milliliter glass vials sealed with TFE lined septae and plastic screw-caps. Each sample was transported and received under documented chain of custody and stored at 4 degrees C until analysis was performed.

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

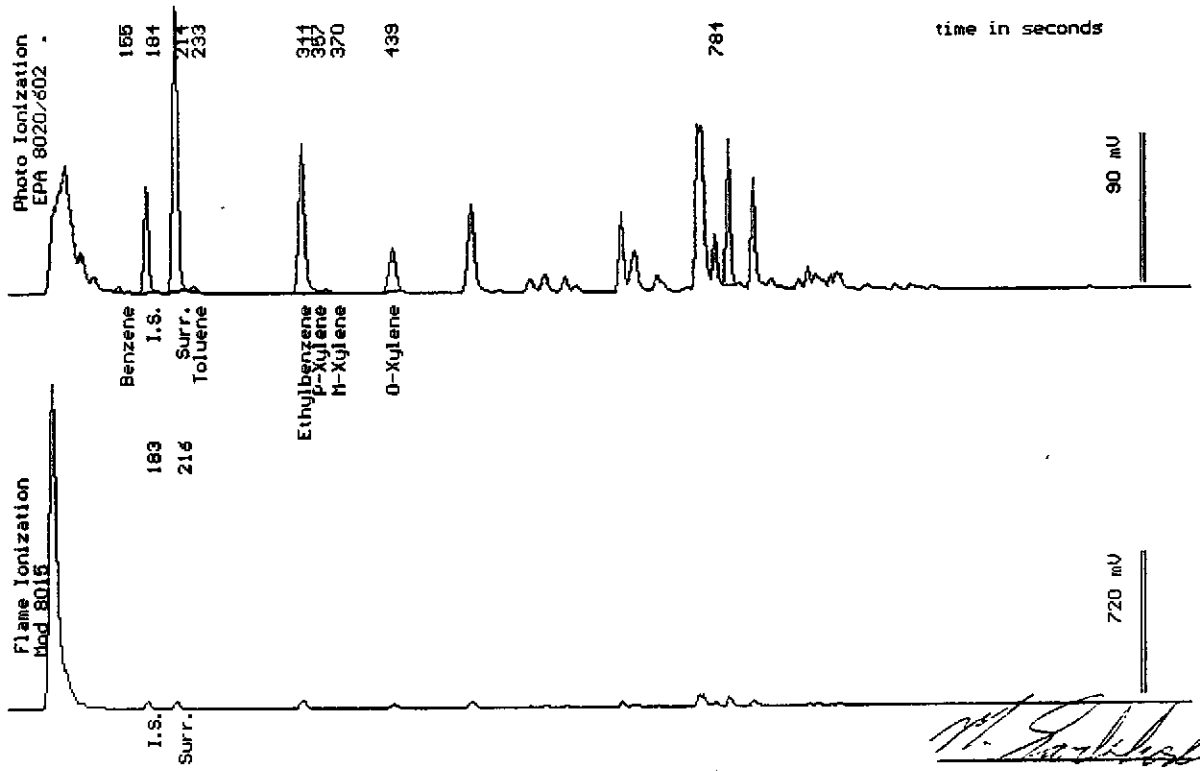
Sample Log 10401

10401-1

Sample: **MW10**

From : Project # D093-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:3 QC Batch : 4104E
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(1.3)	2.2
Toluene	(1.3)	2.6
Ethylbenzene	(1.3)	110
Total Xylenes	(1.3)	44
TPH as Gasoline	(130)	5700
Surrogate Recovery		104 %



Date Analyzed: 10-04-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

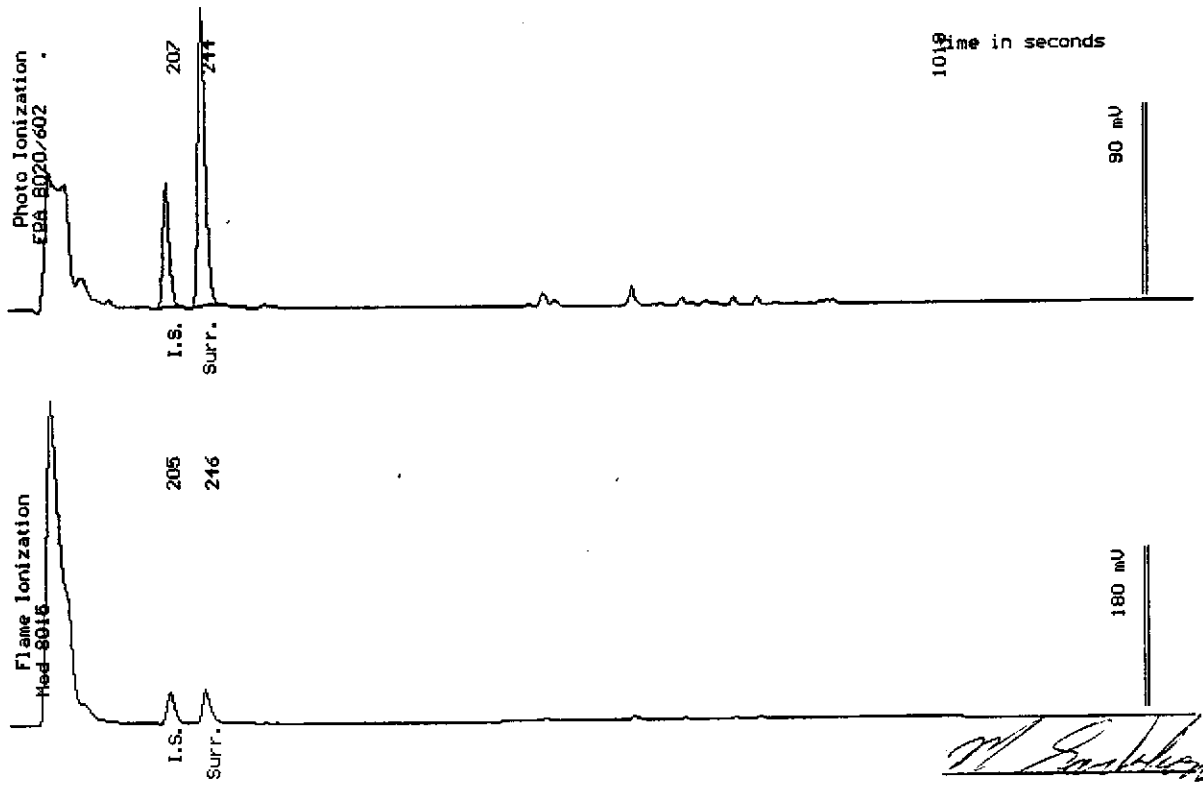
Sample Log 10401

10401-2

Sample: **MW11**

From : Project # DO93-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:1 QC Batch : 2105J
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)	600
Surrogate Recovery		101 %



Date Analyzed: 10-04-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

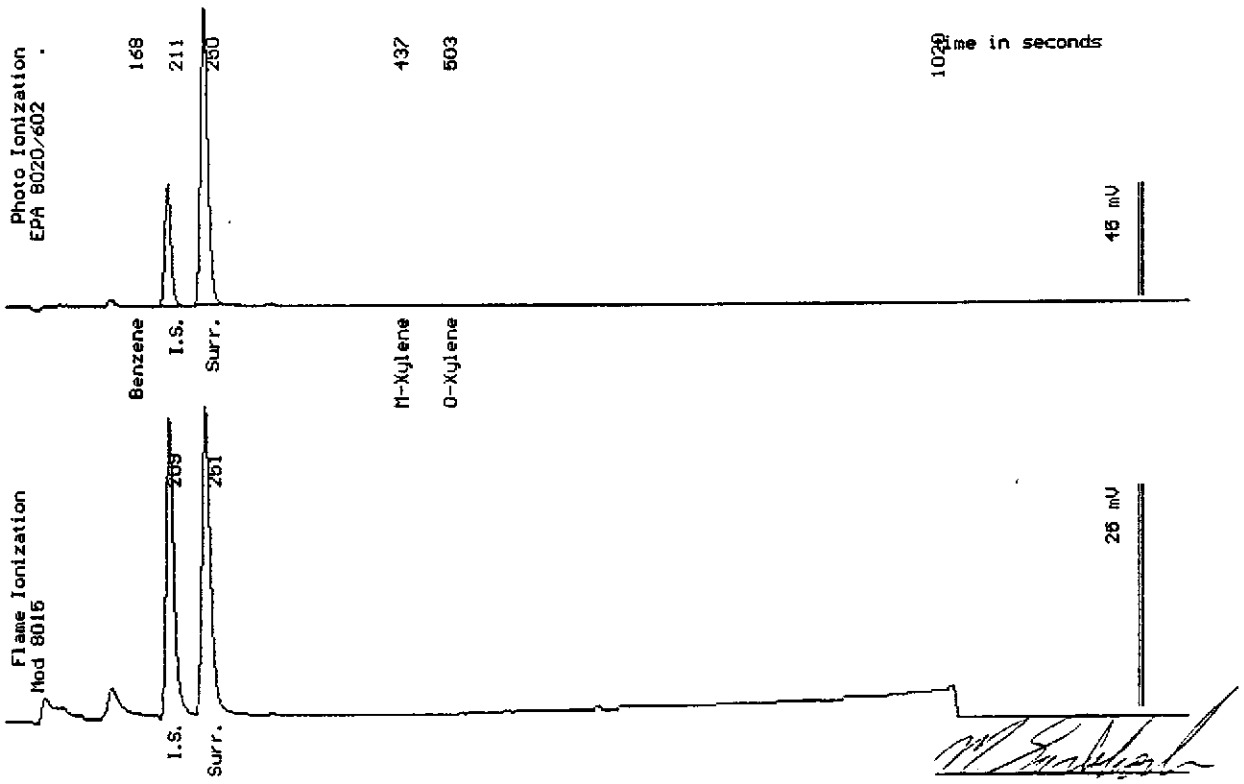
Sample Log 10401

10401-3

Sample: **MW8**

From : Project # DO93-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:1 QC Batch : 2105K
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		103 %



Date Analyzed: 10-04-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

IEST LABORATORY

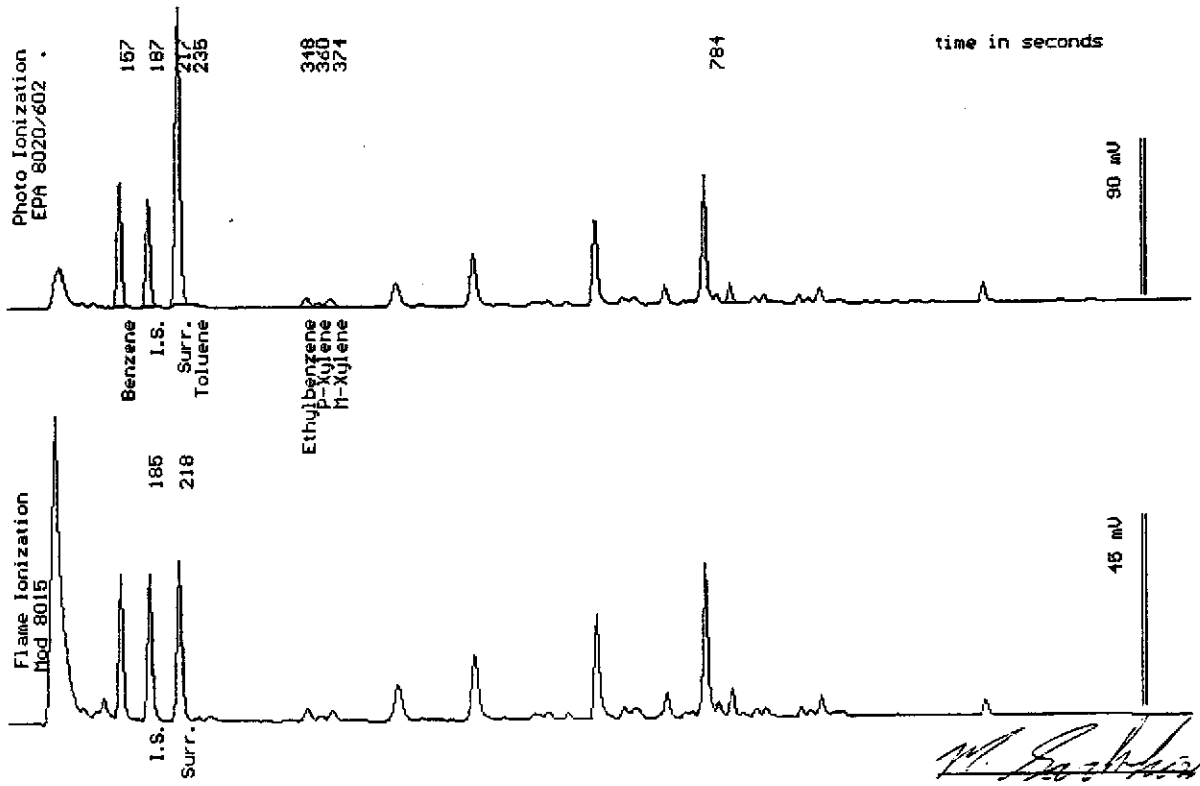
Sample Log 10401

10401-4

Sample: **MW7**

From : Project # DO93-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:1 QC Batch : 4104J
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	21
Toluene	(.50)	<.50
Ethylbenzene	(.50)	2.3
Total Xylenes	(.50)	3.1
TPH as Gasoline	(50)	300
Surrogate Recovery		102 %



Date Analyzed: 10-06-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

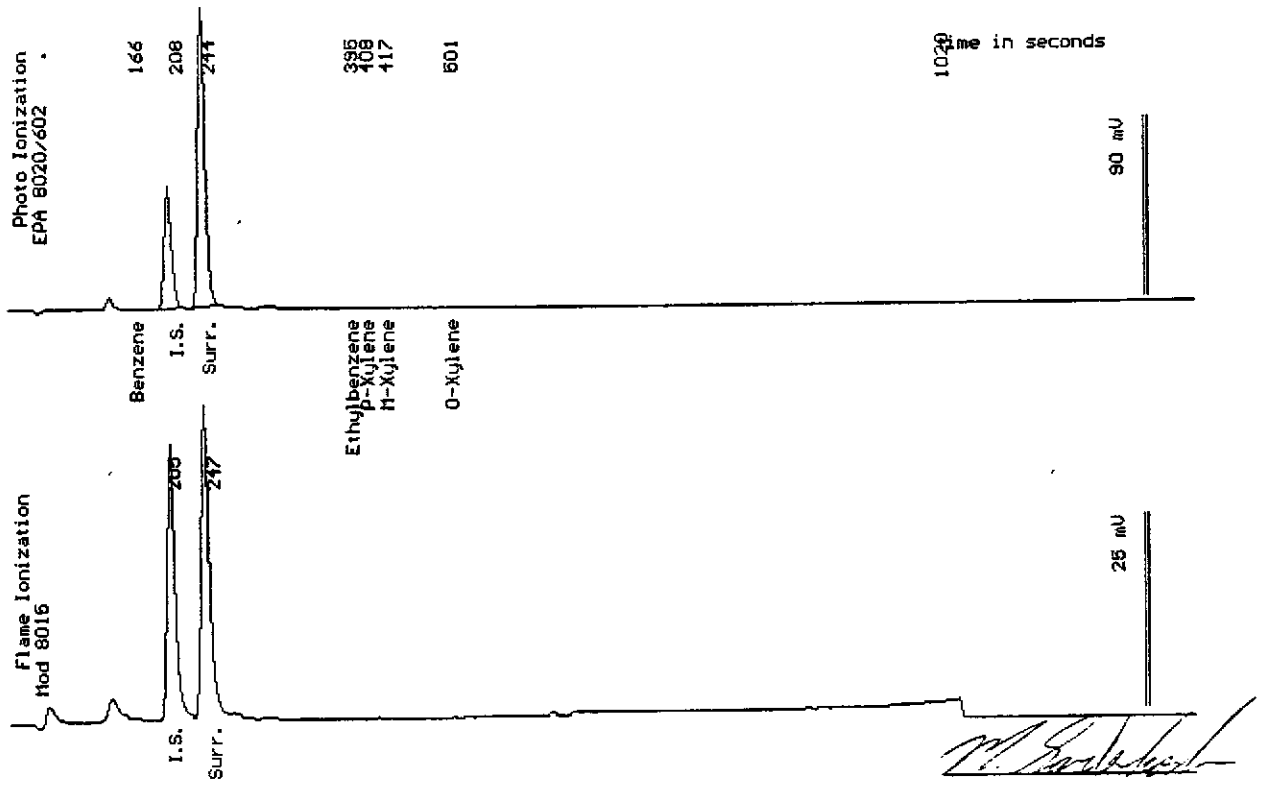
Sample Log 10401

10401-5

Sample: **MW5**

From : Project # D093-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:1 QC Batch : 2105K
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		90 %



Date Analyzed: 10-04-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

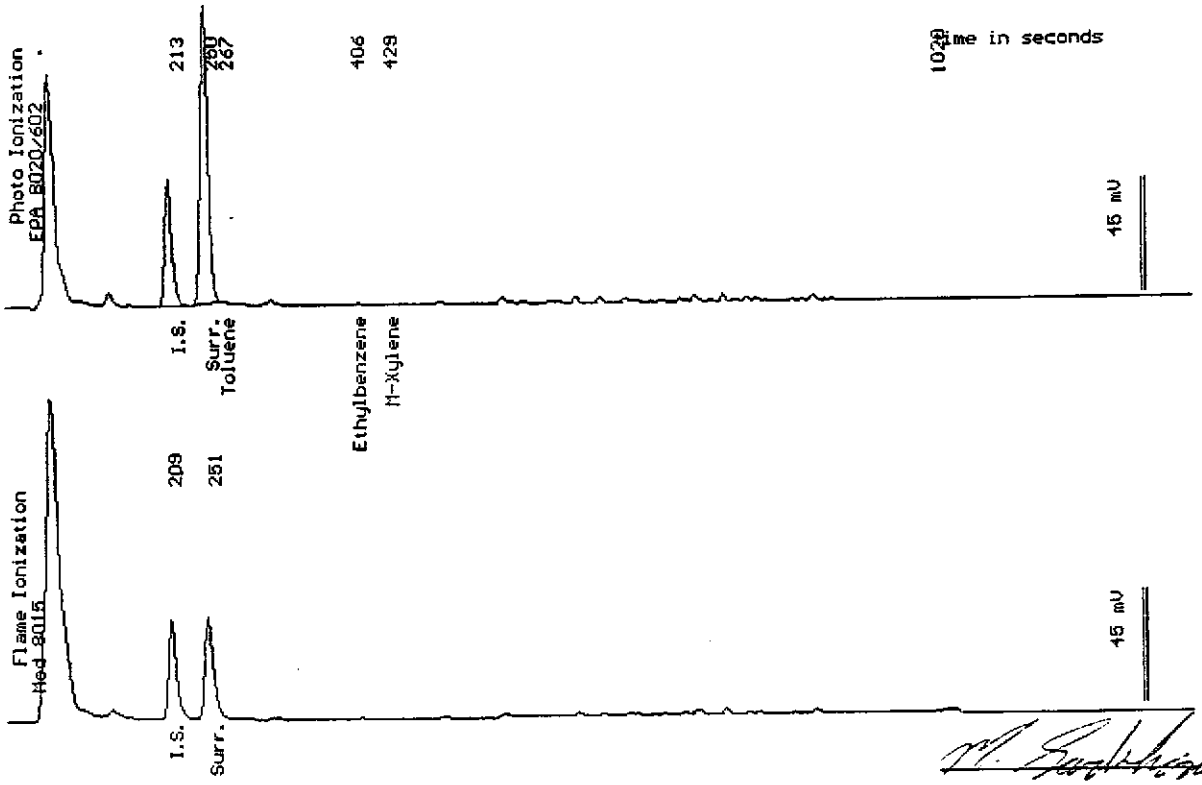
Sample Log 10401

10401-6

Sample: **MW2**

From : Project # D093-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:1 QC Batch : 21050
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)	190	
Surrogate Recovery		95	%



Date Analyzed: 10-06-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

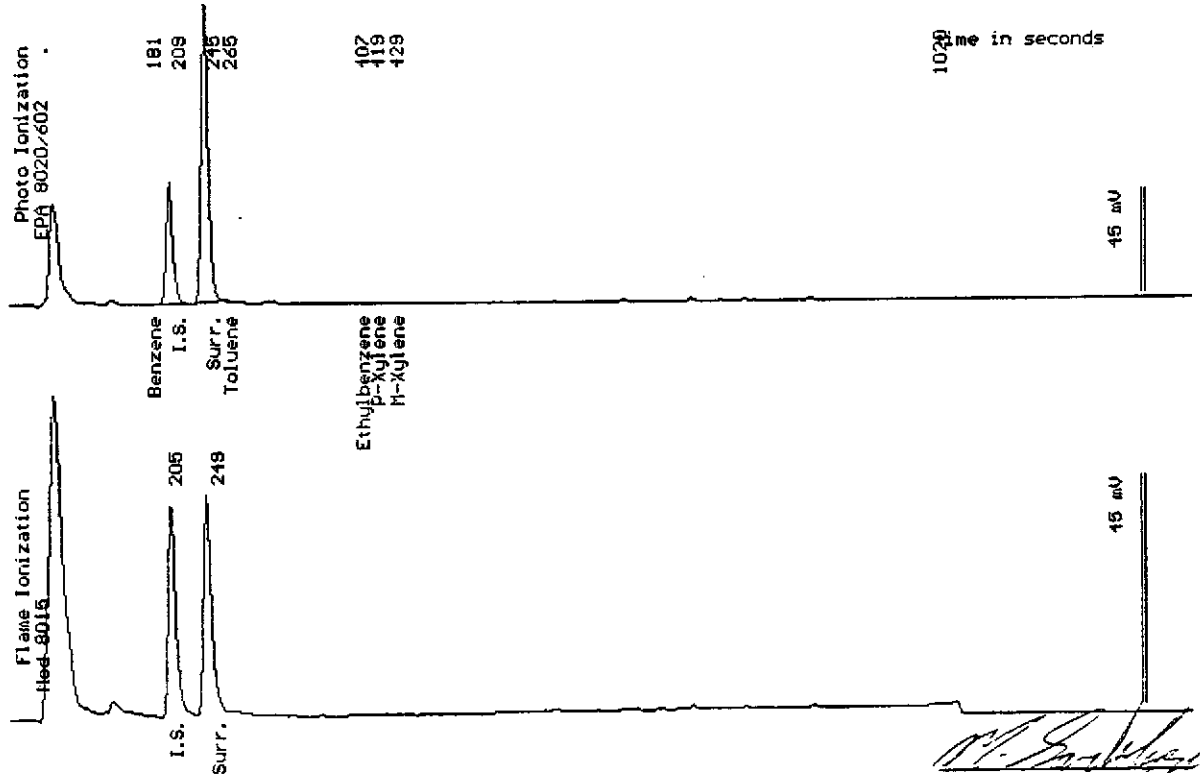
Sample Log 10401

10401-7

Sample: **MW6**

From : Project # DO93-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:1 QC Batch : 21050
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)	100
Surrogate Recovery		96 %



Date Analyzed: 10-06-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

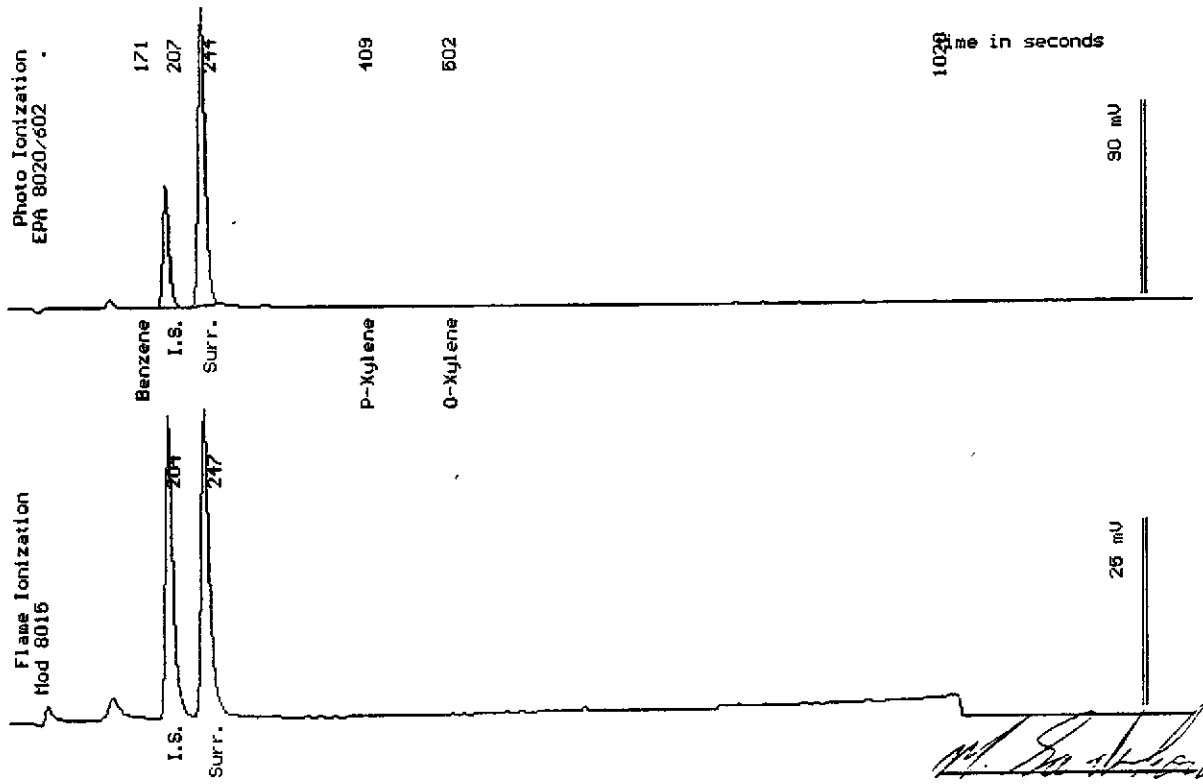
Sample Log 10401

10401-8

Sample: **MW9**

From : Project # DO93-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:1 QC Batch : 2105K
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: 10-05-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

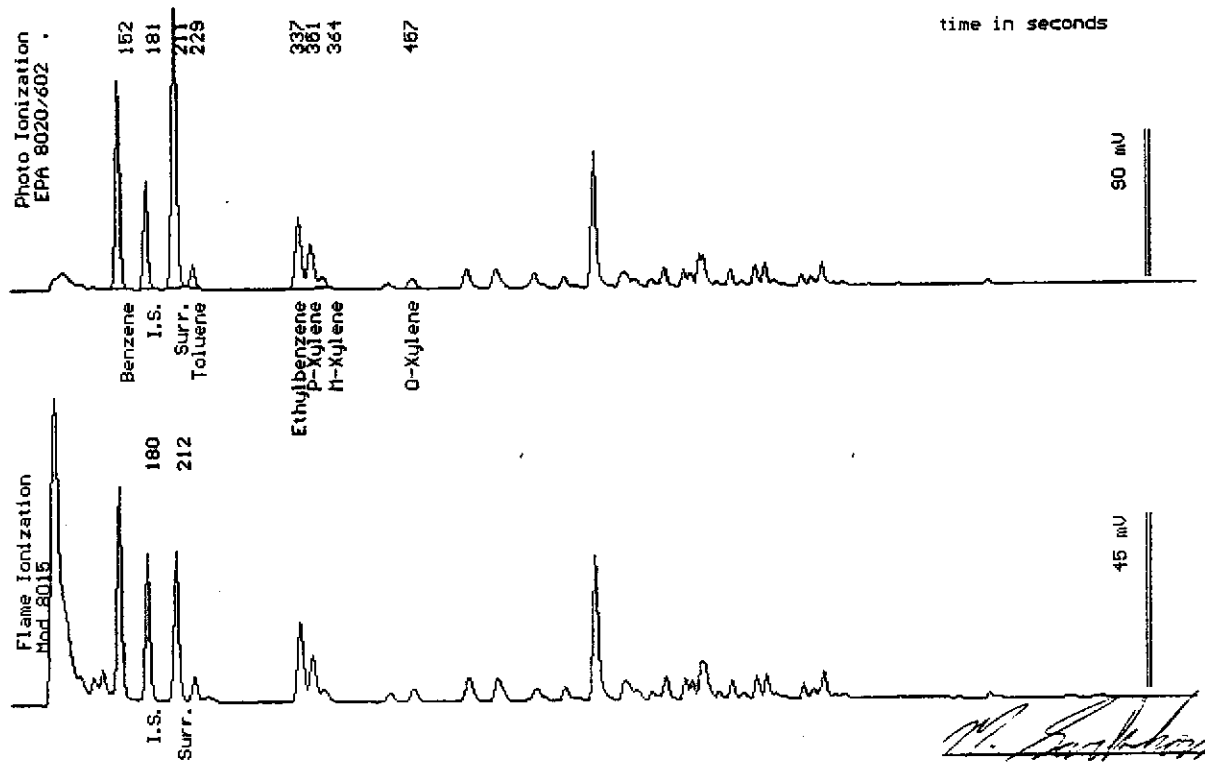
Sample Log 10401

10401-9

Sample: **MW1**

From : Project # DO93-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:50 QC Batch : 4104H
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(25)	1700
Toluene	(25)	210
Ethylbenzene	(25)	970
Total Xylenes	(25)	870
TPH as Gasoline	(2500)	18000
Surrogate Recovery		101 %



Date Analyzed: 10-05-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

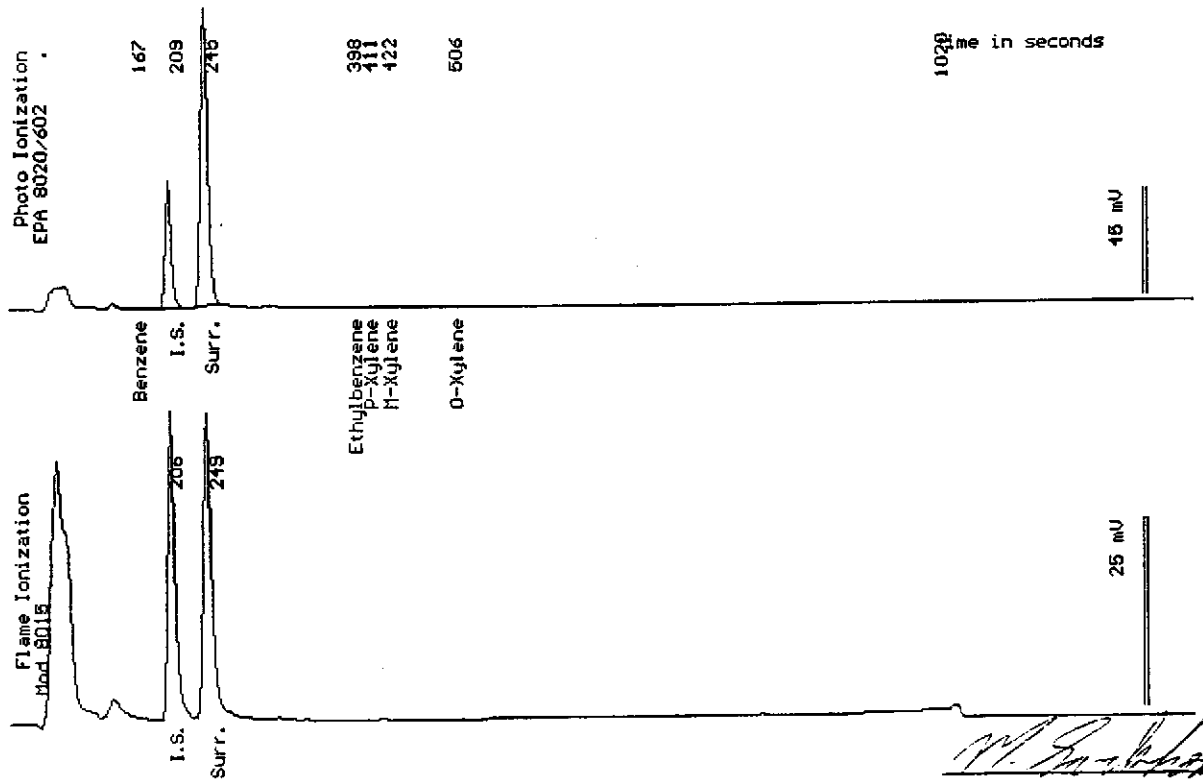
Sample Log 10401

10401-10

Sample: **MW4**

From : Project # DO93-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:1 QC Batch : 21050
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)	75
Surrogate Recovery		104 %



Date Analyzed: 10-06-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

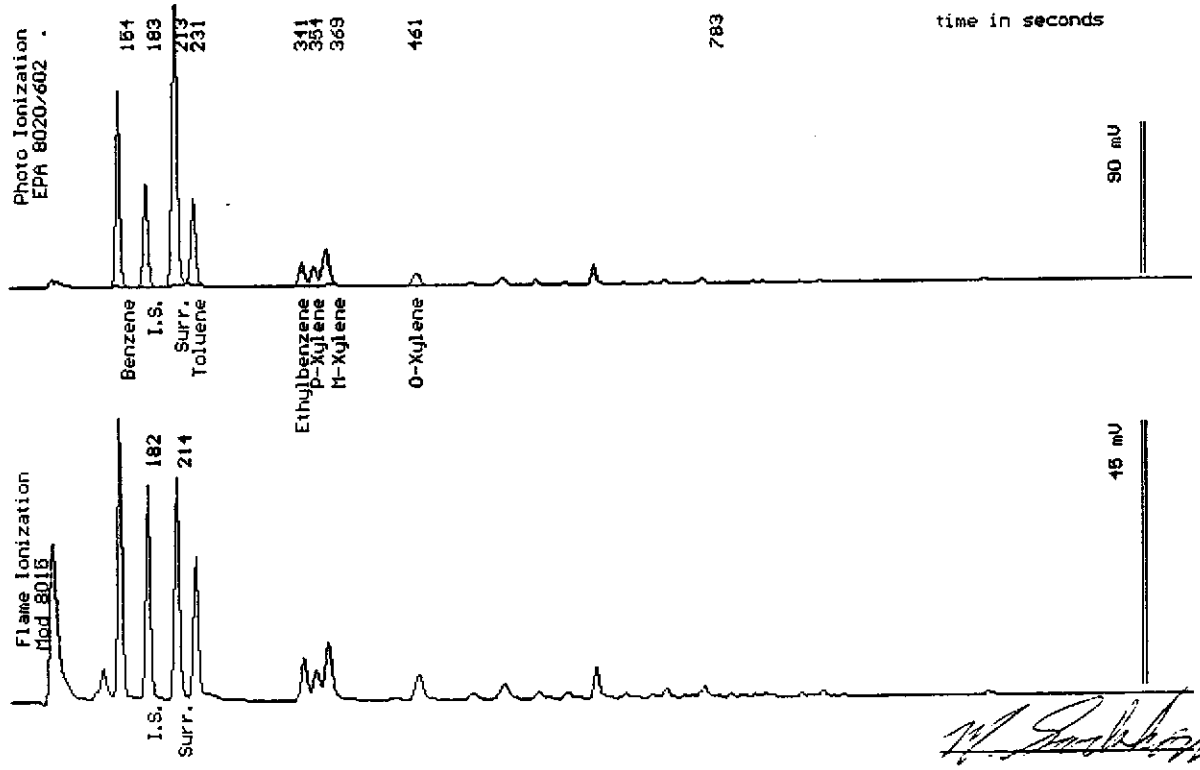
Sample Log 10401

10401-11

Sample: **MW3**

From : Project # DO93-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:250 QC Batch : 4104H
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(130)	7400
Toluene	(130)	4300
Ethylbenzene	(130)	1500
Total Xylenes	(130)	4600
TPH as Gasoline	(13000)	40000
Surrogate Recovery		104 %



Date Analyzed: 10-05-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

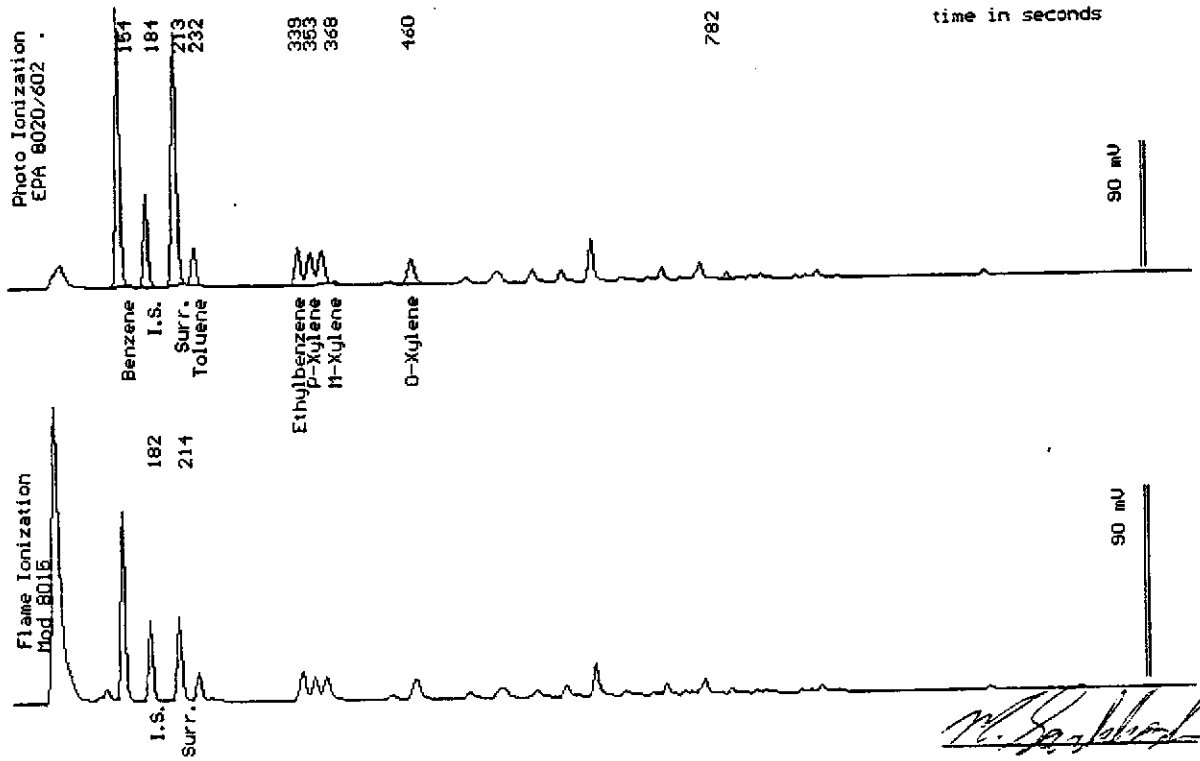
Sample Log 10401

10401-12

Sample: **RW1**

From : Project # DO93-936 (Beacon 721)
Sampled : 09/28/94
Dilution : 1:1 QC Batch : 4104J
Matrix : Water

Parameter	(MRL) ug/L	Measured Value ug/L
Benzene	(.50)	54
Toluene	(.50)	9.2
Ethylbenzene	(.50)	12
Total Xylenes	(.50)	29
TPH as Gasoline	(50)	350
Surrogate Recovery		99 %



Date Analyzed: 10-07-94
Column : 0.53mm ID X 30m DBWAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No.
721	Chris Hill / Martin W. Morgan	9-28-94	1 of 2

Project No.	D093-936
Project Location	SAN Lorenzo
Sampler (Signature)	[signature] / [signature]
Affiliation	Delta

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)						No. of Containers	REMARKS
													West Standard TAT
Mw 10	9-28-94	1041		X	X							2	
mw 11		1045		X	X							2	
mw8		1111		X	X							2	
mw7		1114		X	X							2	RECEIVED DATE [illegible] TIME 1101
mw5		1142		X	X							2	TEMP [illegible]
mw2	9-28-94	1144		X	X							2	INITIAL [initials] WEST. LAB

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature] Delta	9/28/94	1632	[signature] Delta	9/28/94	1032
[signature] Delta	9/29/94	1015	[signature]	9/29/94	1015
[signature]	9/29/94	1055	[signature] WEST	9/29/94	1055

Report To: Todd Galati Delta

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

32-6003 1/90

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

Ultramar Inc.

CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No.	Sampler (Print Name)	Date	Form No.
721	Chris Hill / Martin W. Morgan	9-28-94	1 of 2

Project No.: D093-936

Sampler (Signature): [signatures]

Project Location: SAN LORENZO

Affiliation: Delta

Remarks: West standard TAT

Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)						No. of Containers	REMARKS
mw6	9-28-94	1216		X	X							2	
mw9		1238		X	X							2	
mw1		1233		X	X							2	
mw4		1253		X	X							2	
mw3		1259		X	X							2	RECEIVED DATE 9/29 TIME 11:01 TEMP 9°C INIT. WEST. LAB
Rw1	9-28-94	1340		X	X							2	

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time
[signature]	9-28-94	1632	T. Ashley Delta	9/28/94	1632
T. Ashley Delta	9/29/94	1025	[signature]	9/29/94	1015
[signature]	9/29/94	1055	[signature] WEST	9/29/94	1055

Report To: Todd Galati Delta

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

32-8003 1/90

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