

Reviewed 9/19/95 by Leach



ENVIRONMENTAL
PROTECTION

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

95 AUG 25 PM 2:16 Telecopy

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

August 15, 1995

Ms. Amy Leach
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. Leach:

Enclosed is a copy of the quarterly monitoring and remediation status report for the second quarter 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



A Member of the Ultramar Group of Companies

BEACON
#1 Quality and Service



ENVIRONMENTAL
PROTECTION

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ENVIRONMENTAL PROJECT
QUARTERLY STATUS REPORT

DATE REPORT SUBMITTED: August 15, 1995
QUARTER ENDING: June 30, 1995

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

ULTRAMAR CONTACT: Terrence A. Fox

TEL. NO: 209-583-5545

BACKGROUND:

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

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

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

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

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

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



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BEACON
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Beacon Station 721
Quarterly Status Report
Page 2

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

SUMMARY OF THIS QUARTER'S ACTIVITIES:

Performed quarterly monitoring on June 13, 1995.

Continued to operate the remediation system.

RESULT OF QUARTERLY MONITORING:

Monitoring data indicates that measurable free product was not detected in any well. Benzene concentrations remained not detected in wells MW-4, MW-5, MW-6, MW-8, MW-9, and MW-11. The benzene concentration decreased in MW-2 from 39 ppb to 8.3 ppb. Benzene concentrations increased in MW-1 from 830 ppb to 1,300 ppb, in MW-3 from 4,900 ppb to 7,200 ppb, in MW-7 from 0.88 ppb to 7.3 ppb, in MW-10 from not detected to 9.0 ppb, and in RW-1 from 54 ppb to 1,600 ppb.

As of June 30, 1995, approximately 1,878,695 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:

<u>ACTIVITY</u>	<u>ESTIMATED COMPLETION DATE</u>
Continue quarterly ground-water monitoring.	Ongoing
Continue operation of remediation system.	Ongoing
Install air sparging points and perform air sparging test.	September 30, 1995



ENVIRONMENTAL
FRT TECHNICAL

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

August 9, 1995

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

Subject: *Quarterly Ground Water Monitoring Report, Second Quarter 1995,
and Status of Remediation System through June 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 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 and sampling activities performed at the site on June 13, 1995, and the remediation system status through June 1995. The site location is shown in Figure 1 and site features are illustrated in Figure 2.

Quarterly ground water monitoring conducted on June 13, 1995, included measurement of depth to water in six on-site monitoring wells (MW-1 through MW-6), five off-site monitoring wells (MW-7 through MW-11), and one on-site 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 and Flow Direction

Depth to ground water in the monitoring wells was measured on June 13, 1995. Depth to ground water ranged from 13.44 (MW-7) to 17.43 (MW-11) feet below the top of well casings. Cumulative ground water table measurements recorded at the site are compiled in Table 1. Based on the June 13, 1995, ground water table measurements, the direction of ground water flow was toward the southwest with an average hydraulic gradient of approximately 0.003. A water table contour map prepared from the June 13, 1995, data is included as Figure 3. The ground water treatment system was not operational due to air stripper packing replacement on June 13, 1995.

Mr. Terrence A. Fox
Ultramar Inc.
August 9, 1995
Page 2

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 June 13, 1995 site visit, no liquid-phase hydrocarbons was observed, a sheen was observed in monitoring well MW-3.

Ground Water Analytical Results

Ground water samples were collected from monitoring wells MW-1 through MW-11 and recovery well RW-1 on June 13, 1995, copies of the sampling information data sheets are included in Enclosure B.

The ground water samples were submitted to Western Environmental Science and Technology laboratory of Davis, California (a California-certified laboratory), for analysis of benzene, toluene, ethylbenzene, total xylenes, and total petroleum hydrocarbons as gasoline using EPA Methods 8020 and 8015 Modified, respectively. Benzene was below the laboratory's limits of detection in ground water samples collected from monitoring wells MW-4, MW-5, MW-6, MW-8, MW-9, and MW-11. Detectable benzene concentrations ranged from 7.3 micrograms per liter ($\mu\text{g/L}$) (MW-7) to 7,200 $\mu\text{g/L}$ (MW-3). A comparison of the March 1995 analytical results with the June 1995 results indicate that benzene concentrations increased in MW-1 (830 to 1,300 $\mu\text{g/L}$), MW-3 (4,900 to 7,200 $\mu\text{g/L}$), MW-7 (0.88 to 7.3 $\mu\text{g/L}$), MW-10 (< 5.0 to 9.0 $\mu\text{g/L}$), RW-1 (54 to 1,600 $\mu\text{g/L}$), and decreased in MW-2 (39 to 8.3 $\mu\text{g/L}$). Utilizing the second quarter 1995 ground water monitoring data, a benzene isoconcentration contour map was constructed and is included as Figure 4. Cumulative results of the chemical analyses are summarized in Table 2, and copies of the certified analytical reports and chain of custody documentation for the June 1995 sampling event are included in Enclosure C.

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 sanitary sewer associated with the Oro Loma Sanitary District.

The ground water remediation system was restarted during July 1995 operation and maintenance site visit when the packing in the air stripper was replaced. The ground water remediation system was not operating during the June 13, 1995 site visit. Cumulative totals for ground water treated by the remediation system are presented in Table 3.

Remediation System Analytical Results

Remediation system samples were not collected during the June 1995 site visit since the system was not operating. Results of the chemical analysis from previous quarters are summarized in Table 4.

Mr. Terrence A. Fox
Ultramar Inc.
August 9, 1995
Page 3

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:

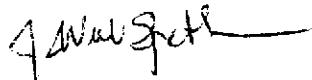
Mr. Steven Ritchie
California Regional Water Quality Control Board,
Region 2
2101 Webster Street
Oakland, California 94612

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

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

Sincerely,

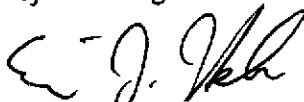
DELTA ENVIRONMENTAL CONSULTANTS, INC.



J. William Speth
Staff Scientist



Todd M. Galati
Project Manager



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

JWS (LRP638.TA)
Enclosures

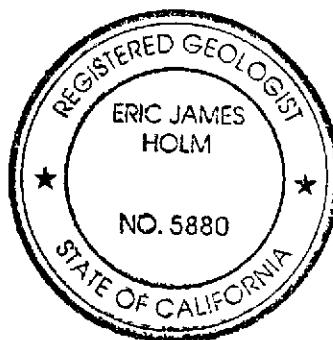


TABLE 1
GROUND WATER ELEVATIONS

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

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)*</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Physical Observation of Free Product or Sheen</u>
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	No free product or sheen
	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
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	No free product or sheen
	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
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

TABLE 1-Continued

GROUND WATER ELEVATIONS

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

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)*</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Physical Observation of Free Product or Sheen</u>
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
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
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

TABLE 1-Continued

GROUND WATER ELEVATIONS

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

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)*</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Physical Observation of Free Product or Sheen</u>
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
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
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

TABLE 1-Continued
GROUND WATER ELEVATIONS

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

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)*</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Physical Observation of Free Product or Sheen</u>
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
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	
	02/03/93		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

TABLE 1-Continued
GROUND WATER ELEVATIONS

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

<u>Monitoring Well</u>	<u>Date</u>	<u>Top of Riser Elevation (ft)*</u>	<u>Depth to Water (ft)</u>	<u>Ground Water Elevation (ft)</u>	<u>Physical Observation of Free Product or Sheen</u>
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

* All top of riser elevations surveyed by Aegis Environmental, and are assumed relative to mean sea level.

† 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 ($\mu\text{g/L}$)

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

<u>Monitoring Well</u>	<u>Date Sampled</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	<u>TPH as gasoline</u>
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
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°

TABLE 2-Continued
ANALYTICAL RESULTS OF GROUND WATER SAMPLES
Concentrations in micrograms per liter ($\mu\text{g}/\text{L}$)

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

<u>Monitoring Well</u>	<u>Date Sampled</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	TPH* as <u>gasoline</u>
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
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 ^a

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
 Concentrations in micrograms per liter ($\mu\text{g/L}$)

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

<u>Monitoring Well</u>	<u>Date Sampled</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	<u>TPH* as gasoline</u>
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
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°

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
Concentrations in micrograms per liter ($\mu\text{g/L}$)

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

<u>Monitoring Well</u>	<u>Date Sampled</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	<u>TPH^a as gasoline</u>
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
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

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
 Concentrations in micrograms per liter ($\mu\text{g/L}$)

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

<u>Monitoring Well</u>	<u>Date Sampled</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	<u>TPH^a as gasoline</u>
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
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
		6.4	2.9	150	4.7	4,000
		5.6	<2.5	150	5.7	6,700
		2.2	2.6	110	44	5,700
		<1.3	<1.3	77	27	3,500
		<5.0	6.7	150	23	7,200
		9.0	48	610	130	8,400

TABLE 2-Continued

ANALYTICAL RESULTS OF GROUND WATER SAMPLES
 Concentrations in micrograms per liter ($\mu\text{g}/\text{L}$)

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

<u>Monitoring Well</u>	<u>Date Sampled</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Xylenes</u>	<u>TPH^a as gasoline</u>
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 ^b
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

^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

<u>Date</u>	<u>Volume^a (gallons)</u>
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
12/14/94	1,515,272
03/15/95	1,842,372
06/30/95	1,878,695

* 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 ($\mu\text{g/L}$)

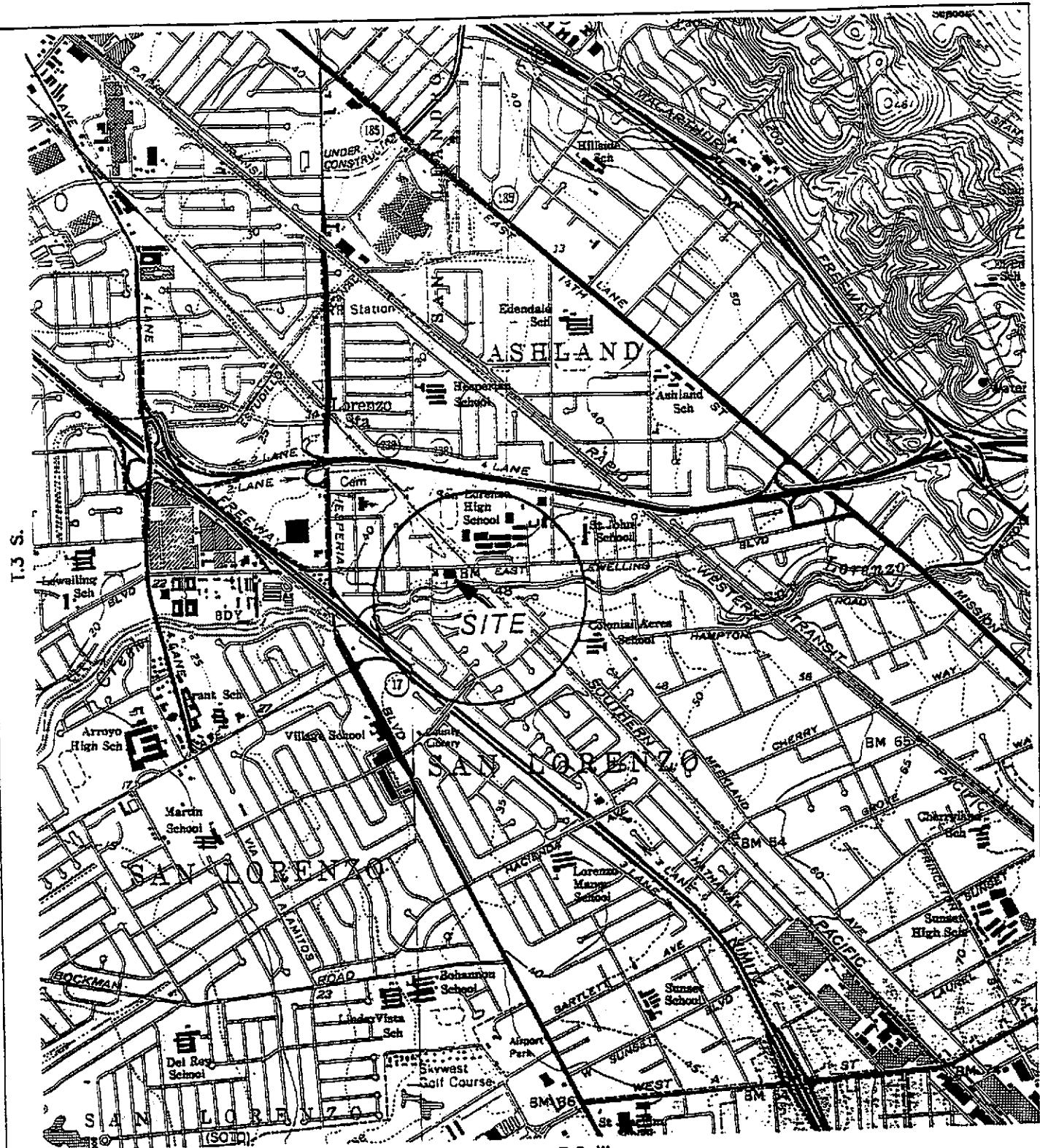
Beacon Station No. 721
44 Lewelling Boulevard
San Lorenzo, California

<u>Sample</u>	<u>Date</u>	<u>Benzene</u>	<u>Toluene</u>	<u>Ethylbenzene</u>	<u>Total Xylenes</u>	<u>TPH^a as gasoline</u>
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
	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
Influent	06/13/95	NS ^c	NS ^c	NS ^c	NS ^c	NS ^c
	12/14/95	<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
Mid Carbon	06/13/95	NS ^c	NS ^c	NS ^c	NS ^c	NS ^c
	12/14/95	<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 ^c	NS ^c	NS ^c	NS ^c	NS ^c

^a Total petroleum hydrocarbons.

^b Not sampled.

^c Not sampled due to system down.



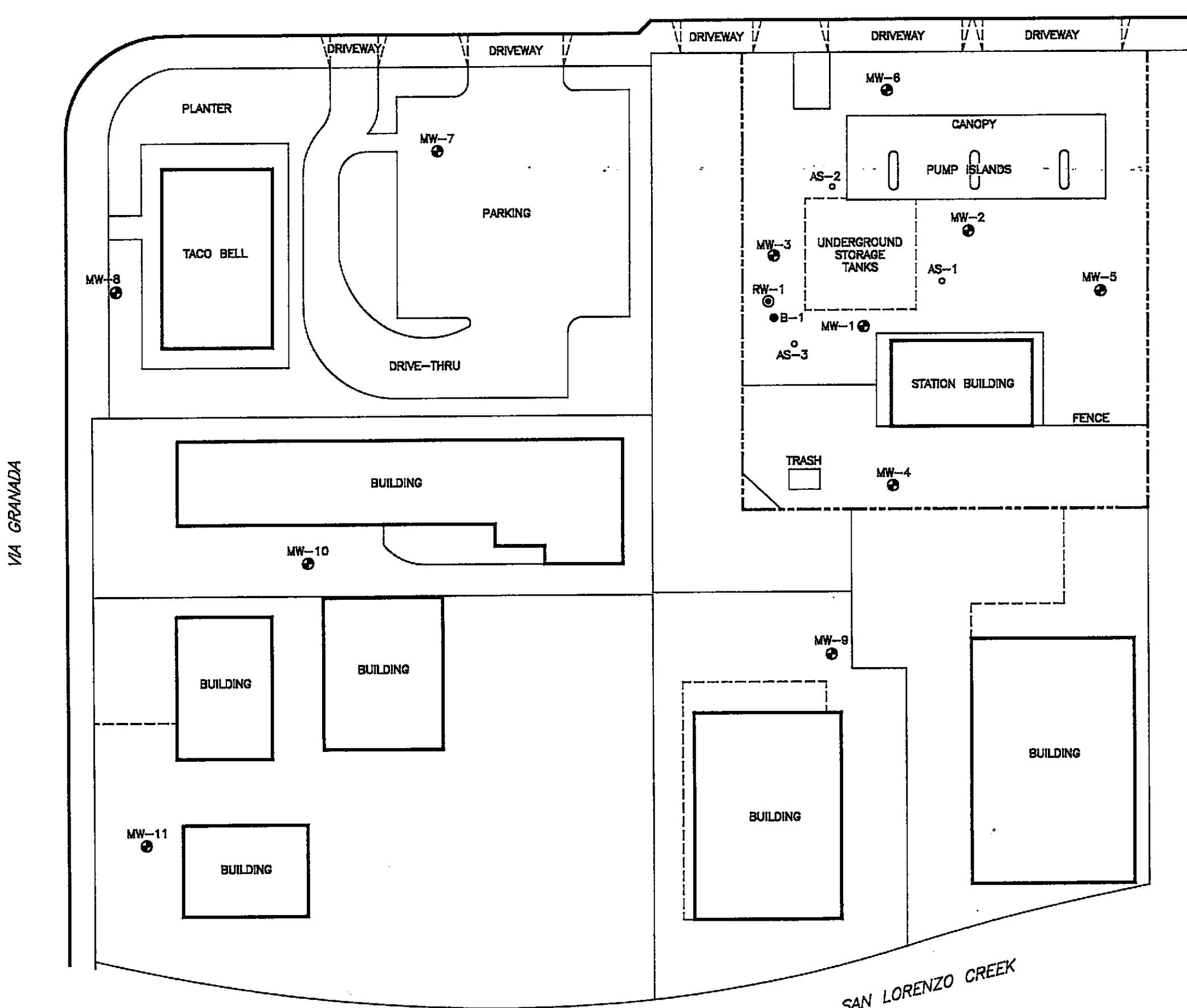
0 2000 FT
SCALE 1 : 24,000

FIGURE 1	
SITE LOCATION MAP	
BEACON STATION NO. 721	
44 LEWELLING BOULEVARD	
SAN LORENZO, CA.	
PROJECT NO. 40-93-936	DRAWN BY L.H. 11/2/82
FILE NO. _____	PREPARED BY TMC
REVISION NO. 1	REVIEWED BY J.D. 11/19/82



Delta
Environmental
Consultants, Inc.

LEWELLING BOULEVARD



North

LEGEND:

- B-1 SOIL BORING LOCATION
- ◎ RW-1 RECOVERY WELL LOCATION
- MW-1 MONITORING WELL LOCATION
- AS-1 PROPOSED AIR SPARGING WELL LOCATION

NOTE:

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



FIGURE 2
SITE VICINITY MAP

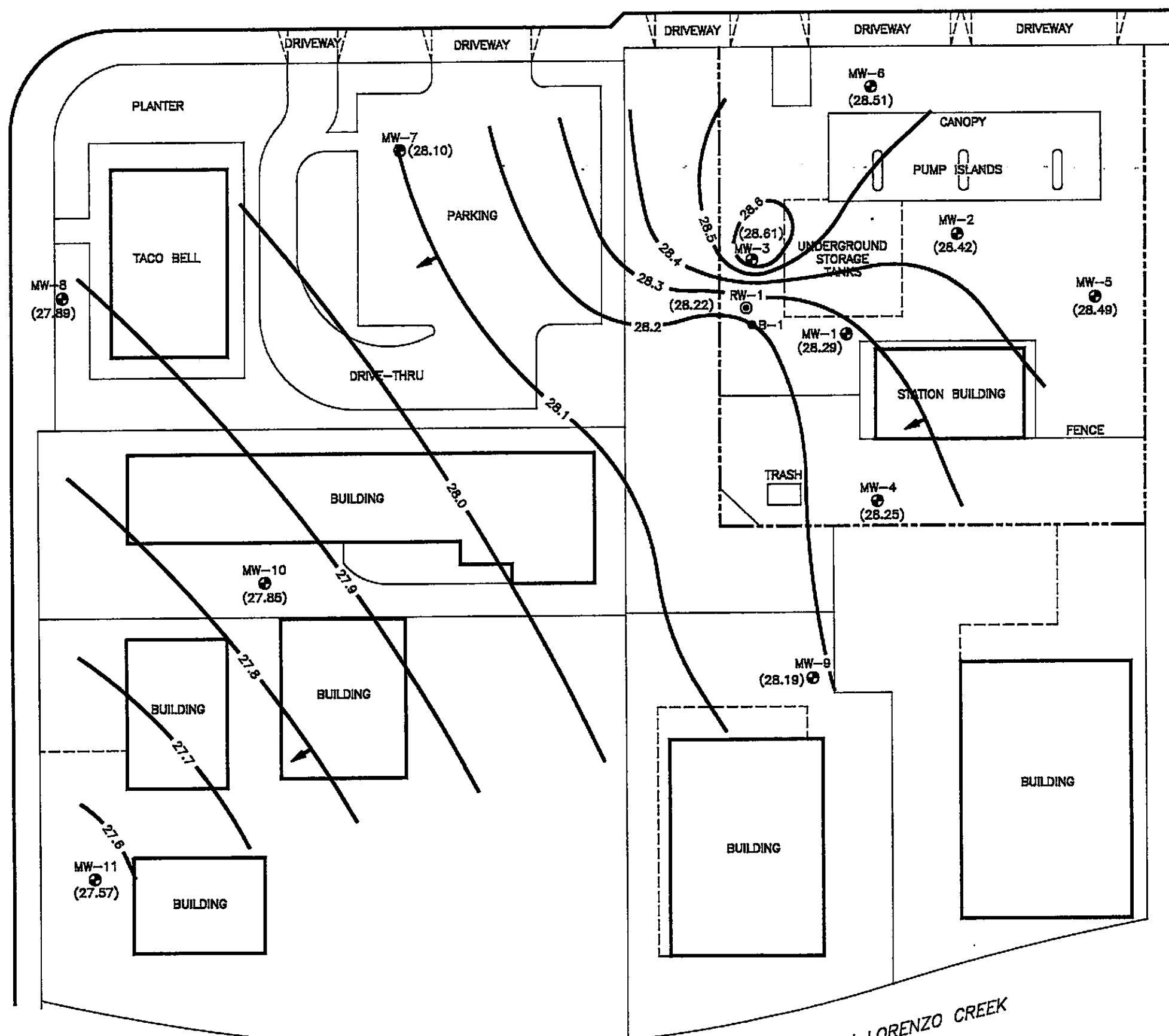
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. D093-936	DRAWN BY LH 4/10/95
FILE NO. 93-936-1	PREPARED BY JWS
REVISION NO. 2	REVIEWED BY <i>[Signature]</i>



LEWELLING BOULEVARD

VIA GRANADA



North

LEGEND:

- B-1 SOIL BORING LOCATION
- RW-1 RECOVERY WELL LOCATION
- MW-1 MONITORING WELL LOCATION
- (28.29) GROUND WATER ELEVATION RELATIVE TO MEAN SEA LEVEL (MSL)
- 28.0 — 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

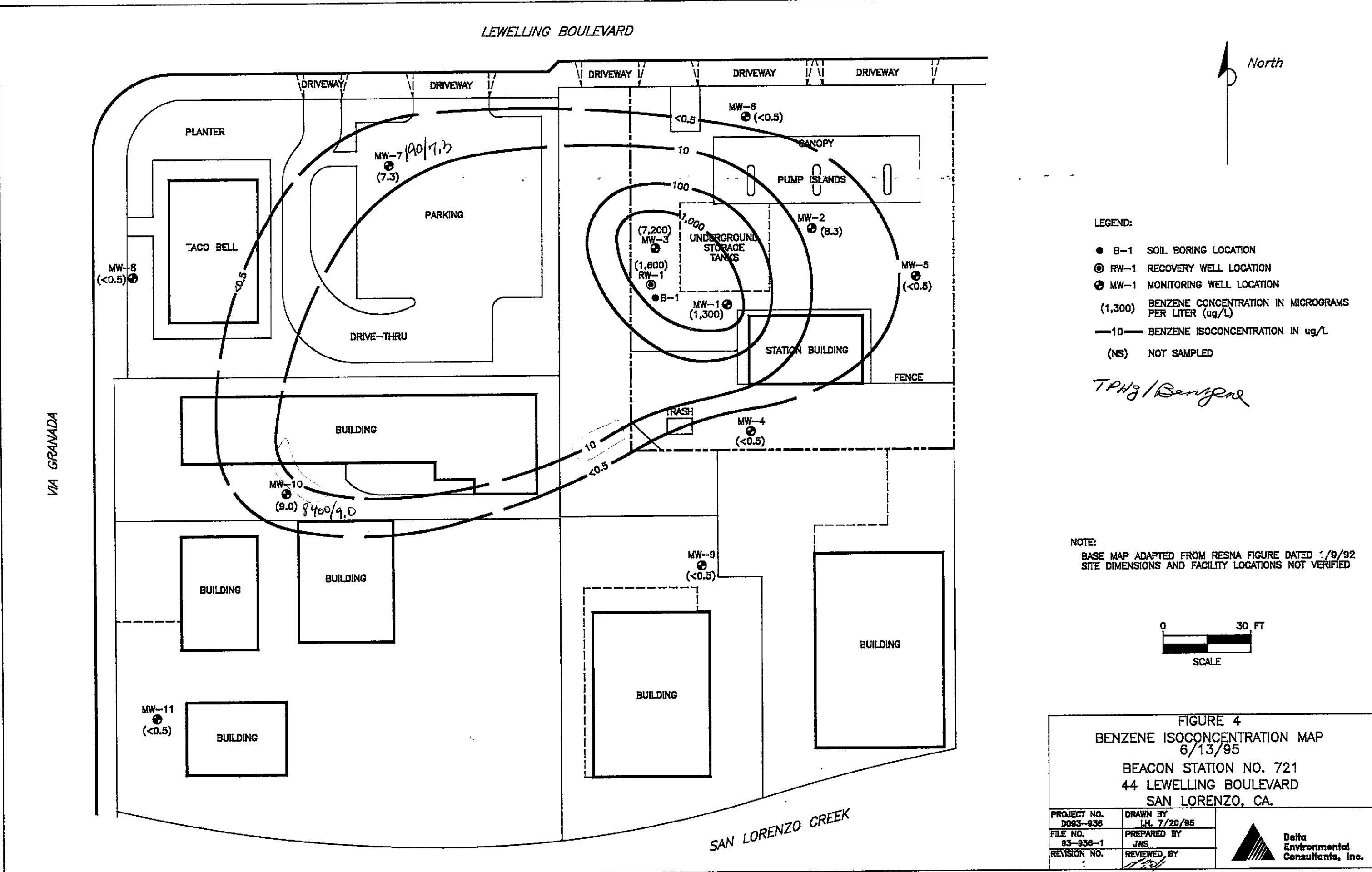


FIGURE 3
WATER TABLE CONTOUR MAP - 6/13/95
BEACON STATION NO. 721
44 LEWELLING BOULEVARD
SAN LORENZO, CA.

PROJECT NO. D083-936	DRAWN BY L.H. 7/20/95
FILE NO. 93-936-1	PREPARED BY JWS
REVISION NO. 1	REVIEWED BY <i>[Signature]</i>



• What receptors are here?



1.0 GROUND WATER AND FREE-FLOATING PRODUCT DEPTH DETERMINATION

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 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.

ENCLOSURE B

Field Sampling Data Sheets

SITE SAMPLING/VISIT CHECKLIST

Site: BERCON 721 Delta Project No: D093-436
44 LEWELLING BLVD.
SAN LORENZO, CA
Date: 6/13-95 Delta Computer No: —
Time Arrived at Site: 0830
Time Departed from Site: 1330

Wells Sampled:

MW-11, 10, 8, 7, 9, 6, 5, 2, 1, 3, RW-1, MW-9

Order in Which Wells Were Sampled:

6-13-95 1433

Date and Time Samples Shipped:

Tay S.

Carrier Samples Were Shipped By:

3TEX / TPHg

Parameters to be Sampled For:

Yes No

Water Level Data Sheets Attached:

Yes No

Sampling Data Sheets Attached:

Number of Sheets: 12

Yes No

Chain of Custody Attached:

Any Problems or Comments:

System Down - 6 Drums
of pure water onsite.

SAMPLING INFORMATION SHEET

Delta
Environmental
Consultants, Inc.

Serial No. D893-936

Sample D# MW-1 Project Name: BEACON 721
Location (address): 44 LEWELLING BLVD. SAN LORENZO, CA
Date Sampled: 6/13/95 Time: 1130
Wellhead assembly condition: 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): 15.38 ft Date: 6/13/95 Time 1123
Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"
Purging method: Submersible pump Bailer Centrifugal pump Other
At least 4 well volumes have been evacuated before sampling.
Tubing (type): (new or previously used) was used to purge well
Sampling method: Disposable bailer Sampling port
Samples collected: 2 vials for BTEX/TPH_o Sample appearance: clear/od
Note any sampling problems: none

GROUND WATER EVACUATION/STABILIZATION DATA

~~4 WELLS~~ VOLUMES = 10 mL

Geometrie

Examination (Physical examination) ice chest

Tay

Sanctioned by: _____

SAMPLING INFORMATION SHEET



Beta
Environmental
Consultants, Inc.

Sample ID# MW-2 Project Name: BEACON 721 Project No. 202-100
 Location (address) 44 LEWELLING BLVD. SAN LORENZO CA
 Date Sampled: 10/13/95 Time: 1100
 Wellhead assembly condition: Good Fair Poor (If poor, see comments)
 Equipment Replaced: bolts locks tooling cap
 Casing diameter 2 inches
 Well Depth 33.30 ft below top of casing
 Depth to water (below top of casing) 14.67 ± Date: 10/13/95 Time 1107
 Well Casing Volume Multiplier: 0.16 for 1", 0.65 for 4", 1.47 for 6"
 Purging method: Submersible pump Bailer Centrifugal pump Other
 At least 4 well volumes have been evacuated before sampling.
 Tubing (type): (new or previously used) was used to purge well
 Sampling method: Disposable bailer Sampling port
 Samples collected 2 VOCs FOR BTEX/TPH
 Note any sampling problems None
 Sample appearance Clean

GROUND WATER EVACUATION/STABILIZATION DATA

4 well volumes = 1/2 mL

CONTENTS

TRANSPORTATION (Thermal preservation) ICE CHEST

Digitized by

Digitized by

SAMPLING INFORMATION SHEET



Project No. 2093-936

Sample Date MW-3 Project Name: BEACON / 21
Location (address) 44 CLEVELAND BLVD. SAN LORENZO, CA
Date Sampled: 6/13/95 Time: 1155
Wellhead assembly condition: Good Fair Poor (If poor, see comments)
Equipment Replaced: bolts locknuts locking cap
Well Depth 29.30 ft below top of casing Casing diameter 2 inches
Depth to water (below top of casing) 10.49 ft Date: 6/13/95 Time 105
Well Casing Volume Multiplier: 0.16 for 3", 0.65 for 4", 1.47 for 5"
Purging method: Submersible pump Bailer Centrifugal pump Other
At least 4 well volumes have been evacuated before sampling.
Tubing (type:). (New or previously used) was used to purge well
Sampling method: Disposable bailer Sampling port
Samples collected 2 vials for BTEX/TPH Sample appearance cloudy / shee

GROUND WATER EVACUATION/STABILIZATION DATA

4 well volumes = 10 ml

CONTENTS

Transportation (thermal preservation) ICE CHEST

Form completed by: TS

Sampled by: TS

SAMPLING INFORMATION SHEET



Project No. D893-936

Sample ID# MW-4 Project Name: BEACON 721
 Location (address): 44 LEWELLING BLVD. SAN LORENZO, CA
 Date Sampled: 6/13/87 Time: 1300
 Wellhead assembly condition: 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) 16.4 ft Date: 6/13/87 Time: 1229
 Well Casing Volume Multiplier: 0.16 for 3", 0.65 for 4", 1.47 for 6"
 Purging method: Submersible pump Bailer Centrifugal pump Other
 At least 4 well volumes have been evacuated before sampling.
 Tubing type: (new or previously used) was used to purge well
 Sampling method: Disposable bailed Sampling port
 Samples collected 2 VOCs for BTEX/TPH_x Sample appearance black

GROUND WATER EVACUATION/STABILIZATION DATA

4 WELL VOLUMES = 1 G+L

Comments: _____

Transportation (thermal preservation) ICE CHEST Sampled by JS
Form completed by: JS

~~SAMPLING INFORMATION SHEET~~



Delta
Environmental
Consultants, Inc.

Project Name: BEACON 721
Project No. 2012-000
Sample Dr. MW - 5 Location (address) 44 LEWELLING BLVD. SAN LORENZO CA
Date Sampled: 6/3/85 Time: 1045
Wellhead assembly condition: Good Fair Poor (If poor, see comments)
Equipment Replaced: bolts locks locking w/p Casing diameter 2 inches
Well Depth 29.20 ft below top of casing Date: 6/3/85 Time 1046
Depth in water (below top of casing) 15.30 ft
Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"
Purging method: Submersible pump Bailer Centrifugal pump Other
At least 4 well volumes have been evacuated before sampling.
Tubing (type): (New or previously used) was used to purge well
Sampling method: Disposable bailer Sampling port
Samples collected 2 vials for BTEX/TPH Sample appearance clear
Note any sampling problems None

GROUND WATER EVACUATION/STABILIZATION DATA

$$\frac{4}{\text{WEI}} + \text{VOLUME} = 9 \text{ GAL}$$

Comments

Transcripción (bueno presentación) ICE & CIES

Form completed by: TS

Searched by: TS

SAMPLING INFORMATION SHEET



Project No. D093-936

Sample ID# MW-6 Project Name: BEACON 721
 Location (address) 44 LEWELLING BLVD. SAN LORENZO CA
 Date Sampled: 0 / 13 / 95 Time: 1030
 Wellhead assembly condition: Good Fair Poor (If poor, see comments)
 Equipment Replaced: bolts locks locking cap
 Well Depth 28.70 ± below top of casing Casing diameter 2 inches
 Depth to water (below top of casing) 13.96 ± Date: 6 / 13 / 95 Time 1030
 Well Casing Volume Multiplier 0.16 for 1", 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.
 Tracing (type): (new or previously used) was used to purge well
 Sampling method: Disposable baffle Sampling port
 Samples collected 2 VOCs for BTEX/TPH
 Note any sampling problems none
 Sample appearance clear

GROUND WATER EVACUATION/STABILIZATION DATA

~~4 WELL VOLUMES = 10 GAL~~

Contents

transcription (thermal preservation) ICE & CHEST

~~From associated by~~

Sampled by: 13

SAMPLING INFORMATION SHEET

Delta
Environmental
Consultants, Inc.

Sample ID# MW-7 Project Name: BEACON 721 Project No. D093-736
Location (address) 44 LEWELLING BLVD. SAN LORENZO CA
Date Sampled: 6/13/95 Time: 1000
Wellhead assembly condition: Good Fair Poor (If poor, see comments)
Equipment Replaced: bits tools packing cap
Casing diameter 2 inches
Well Depth 24.30 ft below top of casing
Depth to water (below top of casing) 13.44 ft Date: 6/13/95 Time 0959
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.
Tuning (type:). (New or previously used) was used to purge well
Sampling method: Disposable bailer Sampling port
Samples collected 2 VOCs for BTEX /TPH_x Sample appearance Clear
Note any sampling problems none

GROUND WATER EVACUATION/STABILIZATION DATA

$$4 \text{ well volumes} = 7 \text{ gal}$$

Comments

Transportation (thermal preservation) ICE & CHEST

~~Form completed by~~ TP

Sanctioned by: J

SAMPLING INFORMATION SHEET

DECA
Environmental
Consultants, Inc.

Project No. D093-936

Sample ID# MW-8 Project Name: BEACON 721
 Location (address): 44 LEWELLING BLVD. SAN LORENZO CA
 Date Sampled: 6/13/95 Time: 0945
 Wellhead assembly condition: 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) 14.37 ft Date: 6/13/95 Time 0738
 Well Casing Volume Multiplier: 0.16 for 1", 0.65 for 2", 1.47 for 3"
 Pumping method: Submersible pump Bailer Centrifugal pump Other
 At least 4 well volumes have been evacuated before sampling.
 Tubing (type): (New or previously used) was used to purge well
 Sampling method: Disposable baffle Sampling port
 Samples collected 2 VOCs for BTEX/TPHs Sample appearance clear
 Note any sampling problems None

GROUND WATER EVACUATION/STABILIZATION DATA

4 well volumes = 4 ml

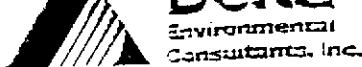
2000-05

— *—* (Hannibal Reservation) ICE & CHEST

Reviewed by TB

Signed by: J

SAMPLING INFORMATION SHEET



Project No. D893-736

Sample D# M-19 Project Name: BEACON 721
 Location (address) 44 LEWELLING BLVD. SAN LORENZO CA
 Date Sampled: 6 / 13 / 95 Time: 1015
 Wellhead assembly condition: Good Fair Poor (If poor, see comments)
 Equipment Replaced: bolts locks locking cap
 Casing diameter 2 inches
 Well Depth 23.80 ft below top of casing
 Depth to water (below top of casing) 16.75 ft Date: 6 / 12 / 95 Time 1012
 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.
 Pumping (type:). (New or previously used) was used to purge well
 Sampling method: Disposable bailer Sampling port
 Samples collected 2 VOCs for BTEX / TPH
 Note any sampling problems None
 Sample appearance Clear

SECOND WATER EVACUATION/STABILIZATION DATA

4 WELL VOLUMES = 5 mL

CONTINUATION

Prescription (Serial preservation) ICE & CURE

~~This document is~~ by TS.

Signed by: TS

~~SAMPLING INFORMATION SHEET~~

**Environmental
Consultants, Inc.**

Sample ID# MW-10 Project Name: BEACON 721 Project No. D093-936
 Location (address) 44 LEWELLING BLVD. SAN LORENZO CA
 Date Sampled: 6/13/81 Time: 0930
 Wellhead assembly condition: Good Fair Poor (If poor, see comments)
 Equipment Replaced: bolts locks locking cap
 Casing diameter: 2 inches
 Well Depth: 29.50 ft below top of casing
 Depth to water (below top of casing): 14.49 ft Date: 6/13/81 Time: 1922
 Well Casing Volume Multiplier: 0.16 for 2", 0.65 for 4", 1.47 for 6"
 Purging method: Submersible pump Bailer Compressed pump Other
 At least 3 well volumes have been evacuated before sampling.
 Tubing (type:). (~~new~~ or previously used) was used to purge well
 Sampling method: Disposable bailer Sampling port
 Samples collected 2 VOLS FOR BTEX / TPH Sample appearance clear
 Note any sampling problems None.

GROUND WATER EVACUATION/STABILIZATION DATA

Comments

$\frac{1}{4}$ well volumes = 10 ml

Transportation (thermal preservation) ICE & CHEST

Form generated by 

Sampled by: TS

SAMPLING INFORMATION SHEET



**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: 6/13/95 Time: 0910
 Wellhead assembly condition: + Good Fair Poor (If poor, see comments)
 Equipment Replaced: bolts locks locking cap
 Well Depth 29.50 ft below top of casing Casing diameter 2 inches
 Depth to water (below top of casing) 17.43 ft Date: 6/13/95 Time 0902
 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 3 well volumes have been evacuated before sampling.
 Tubing (type:). (new or previously used) was used to purge well
 Sampling method: Disposable bailer Sampling port
 Samples collected 2 VOCs for BTEX/TPH Sample appearance clear
 Note any sampling problems 110°

GROUND WATER EVACUATION/STABILIZATION DATA

Cambridge

4 WELL VOLUMES = 8 GAL

Transformation (thermal preservation) ICE CHEST

Form completed by: TS

Sampled by: J

SAMPLING INFORMATION SHEET

**Environmental
Consultants, Inc.**

GROUND WATER EVACUATION/STABILIZATION DATA

~~Comments: System Down - +~~ 4 well volumes = 85 GAL
~~Frac~~ pulled pump & primed well with
centrifugal pump

Transportation (thermal preservation)

See a code

Form completed by

Sampled by: JS



Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No. 721	Sampler (Print Name) Tay Stoops	ANALYSES						Date 13/11/81	Form No. 2 of 2		
Project No. MW-721	Sampler (Signature) Tay Stoops	BTEX	TPH (gasoline)	TPH (diesel)							
Project Location San Lorenzo	Affiliation DELMAR ENVIRONMENTAL								No. of Containers		
Sample No./Identification MW-1	Date 6/13/81	Time 1130	Lab No. K1						REMARKS		
MW-3		1155									
PW-1		1735									
MW-4		1700									
Relinquished by: (Signature/Affiliation) Tay Stoops / Dr. H.		Date 13/11/81	Time 1130	Received by: (Signature/Affiliation)					Date 13/11/81	Time 1130	
Relinquished by: (Signature/Affiliation)		Date	Time	Received by: (Signature/Affiliation)					Date	Time	
Relinquished by: (Signature/Affiliation)		Date	Time	Received by: (Signature/Affiliation)					Date 13/11/81	Time 1130	
Report To: TODD GALATI / DELTA (914) 638-2085				Bill to: ULTRAMAR INC. 525 West Third Street Hanford, CA 93230		Attention: <i>[Signature]</i>				32-8003-1-90	

WHITE: Return to Client with Report

YELLOW: Laboratory Copy

PINK: Originator Copy



Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No. 721	Sampler (Print Name) Tom Stoeck	ANALYSES						Date 10-17-95	Form No. / of ?	
Project No. DOT3-736	Sampler (Signature)							100-1100-0002		100-1100-0002
Project Location SAN LORENZO	Affiliation DELTA ENVIRONMENTAL							No. of Containers	REMARKS	
Sample No./Identification MW-11	Date 10-13-95	Time 1910	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	TPH	1	?	
MW-10										
MW-8										
MW-7										
MW-9										
MW-6										
MW-5										
MW-2	"	✓	1110							
Relinquished by: (Signature/Affiliation) Tom Stoeck / Delta	Date 10-13-95	Time 1930	Received by: (Signature/Affiliation)						Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)						Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)						Date	Time
Report To: TED GALANT / DELTA (916) 638-2085			Bill to: ULTRAMAR INC. 525 West Third Street Hanford, CA 93230 Attention: TELEPHONE							

WHITE: Return to Client with Report

YELLOW: Laboratory Copy

PINK: Originator Copy

ENCLOSURE C

Ground Water Sample Laboratory Reports

WEST LABORATORY

June 23, 1995
Sample Log 12226

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

Subject: Analytical Results for 12 Water Samples
Identified as: Beacon 721 (Proj. # DO93-936)
Received: 06/13/95

Dear Mr. Galati:

Analysis of the sample(s) referenced above has been completed. This report is written to confirm results communicated on June 23, 1995 and describes procedures used to analyze the samples.

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

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

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

Approved by:



Joel Kiff
Senior Chemist

WEST LABORATORY

Sample Log 12226

12226-09

Sample: MW-1

From : Beacon 721 (Proj. # DQ93-936)

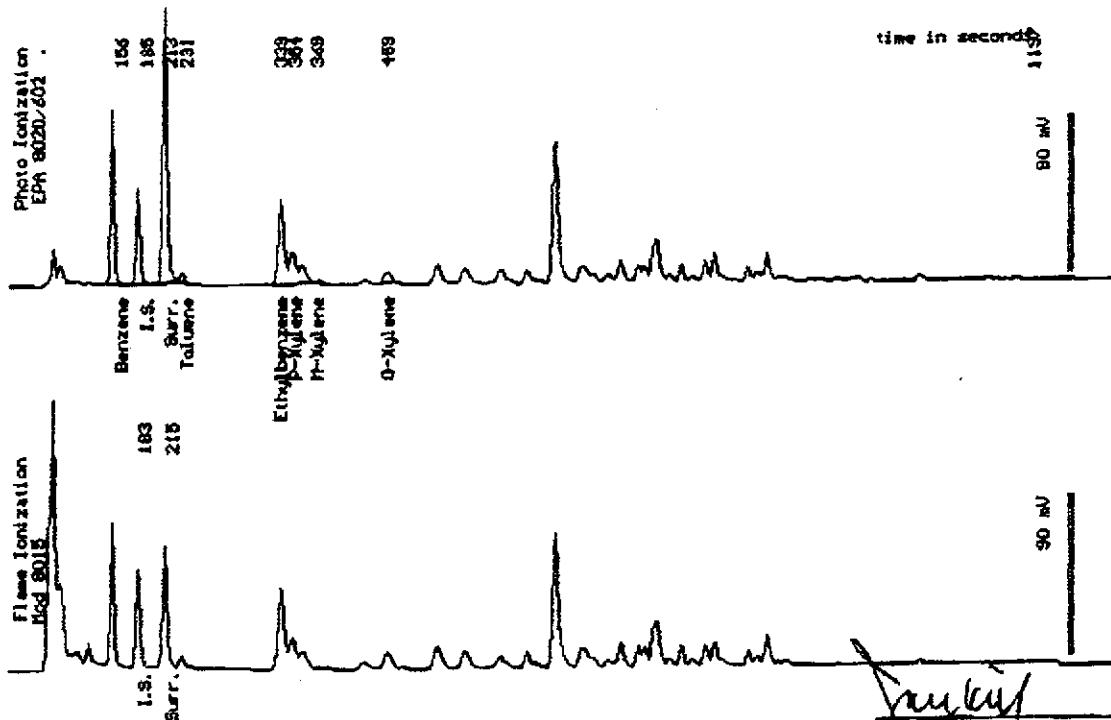
Sampled : 06/13/95

Dilution : 1:50

QC Batch : 4124N

Matrix : Water

Parameter	(MRL) $\mu\text{g}/\text{L}$	Measured Value $\mu\text{g}/\text{L}$
Benzene	(25)	1300
Toluene	(25)	99
Ethylbenzene	(25)	1500
Total Xylenes	(25)	1100
TPH as Gasoline	(2500)	22000
Surrogate Recovery		91 %



Date Analyzed: 06-20-95
Column : 0.53mm ID X 30m DBMAX (J&W Scientific)

Nitira Sarkhosh
Senior Chemist

WEST LABORATORYSample Log 12226
12226-06

Sample: MW-2

From : Beacon 721 (Proj. # D093-936)

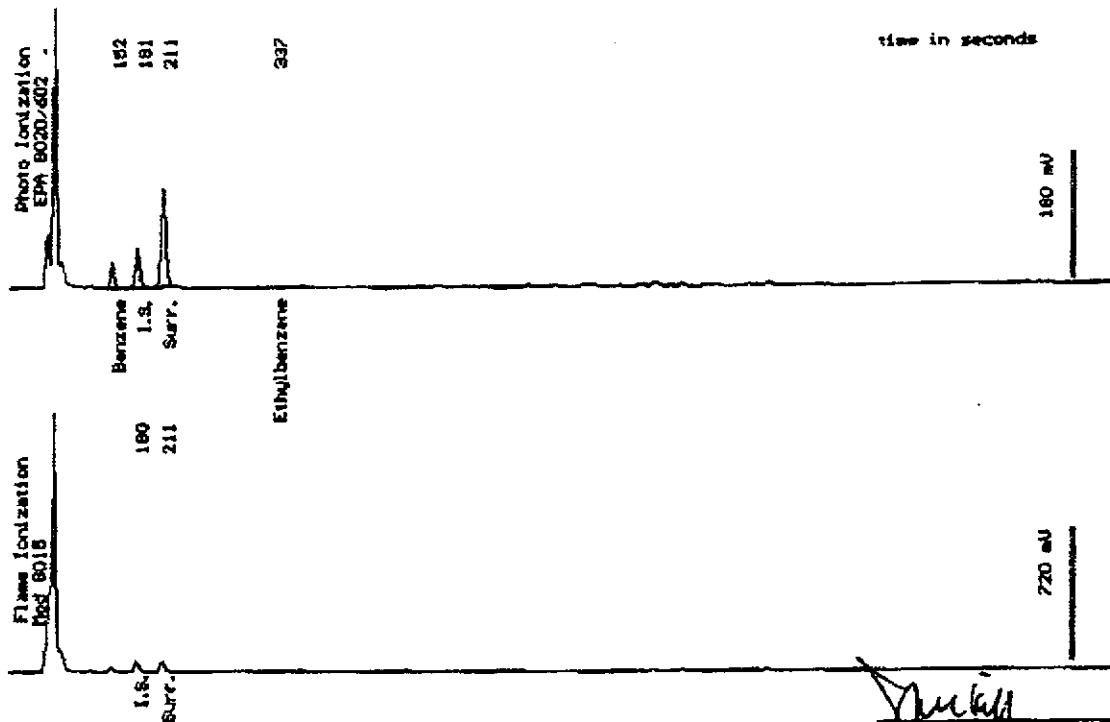
Sampled : 06/13/95

Dilution : 1:1

QC Batch : 4124N

Matrix : Water

Parameter	(MRL), ug/L	Measured Value ug/L
Benzene	(.50)	8.3
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	750 *
Surrogate Recovery		83 %
* Product is not typical gasoline.		

Date Analyzed: 06-20-95
Column: 0.53mm ID X 30m DB-5 (J&W Scientific)Mitra Sarkhosh
Senior Chemist*Mitra*

WEST LABORATORY

Sample Log 12226

12226-10

Sample: MW-3

From : Beacon 721 (Proj. # D093-936)

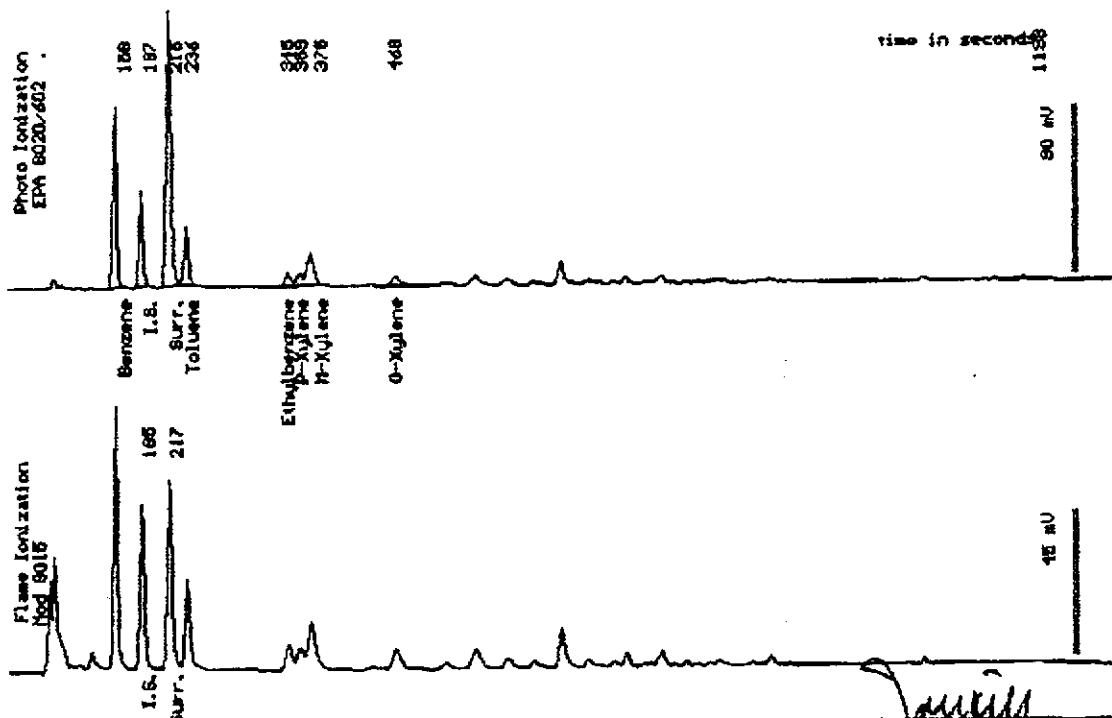
Sampled : 06/13/95

Dilution : 1:250

QC Batch : 4124N

Matrix : Water

Parameter	(MRL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
Benzene	(130)	7200
Toluene	(130)	2900
Ethylbenzene	(130)	1200
Total Xylenes	(130)	4600
TPH as Gasoline	(13000)	44000
Surrogate Recovery		94 %



Date Analyzed: 06-20-95
Column: 0.53mm ID X 30m DBWAX (J&W Scientific)

Nisha Sarkhost
Senior Chemist

WEST LABORATORY

Sample Log 12226
12226-12

Sample: MW-4

From : Beacon 721 (Proj. # DQ93-936)

Sampled : 06/13/95

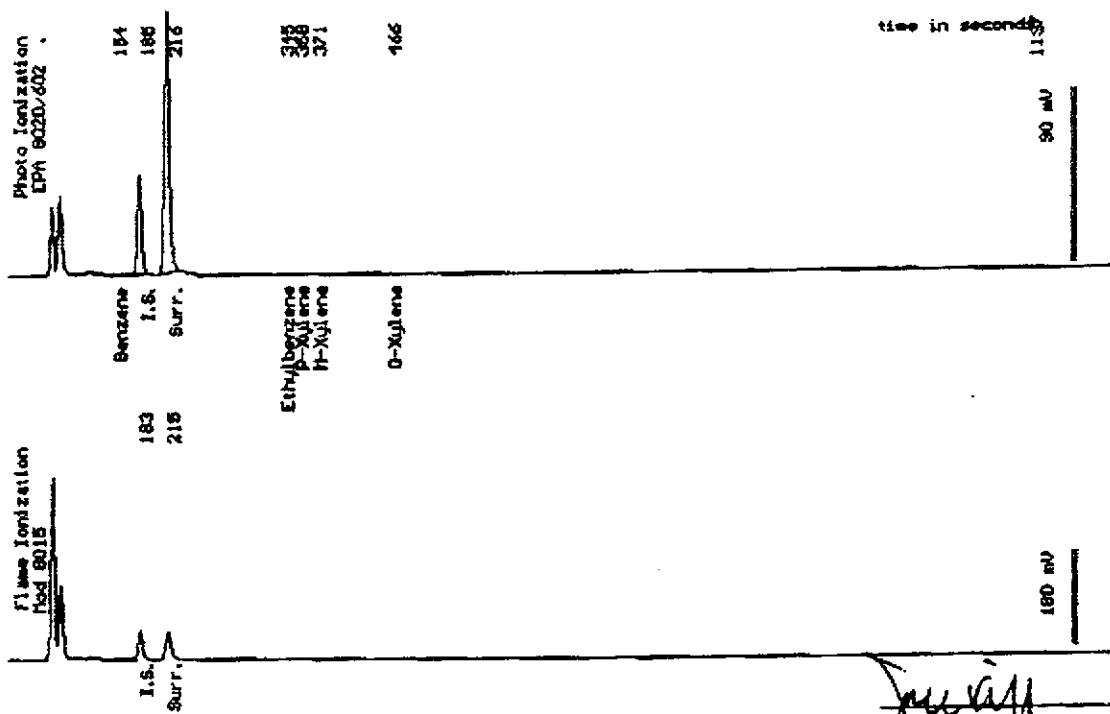
Dilution : 1:1

QC Batch : 4124J

Matrix : Water

Parameter	(MRL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	210 *
Surrogate Recovery		86 %

* Product is not typical gasoline.



Date Analyzed 06-13-95
Column : 0.63mm ID X 30m DBMAX (JW Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

Sample Log 12226
12226-07

Sample: MW-5

From : Beacon 721 (Proj. # D093-936)

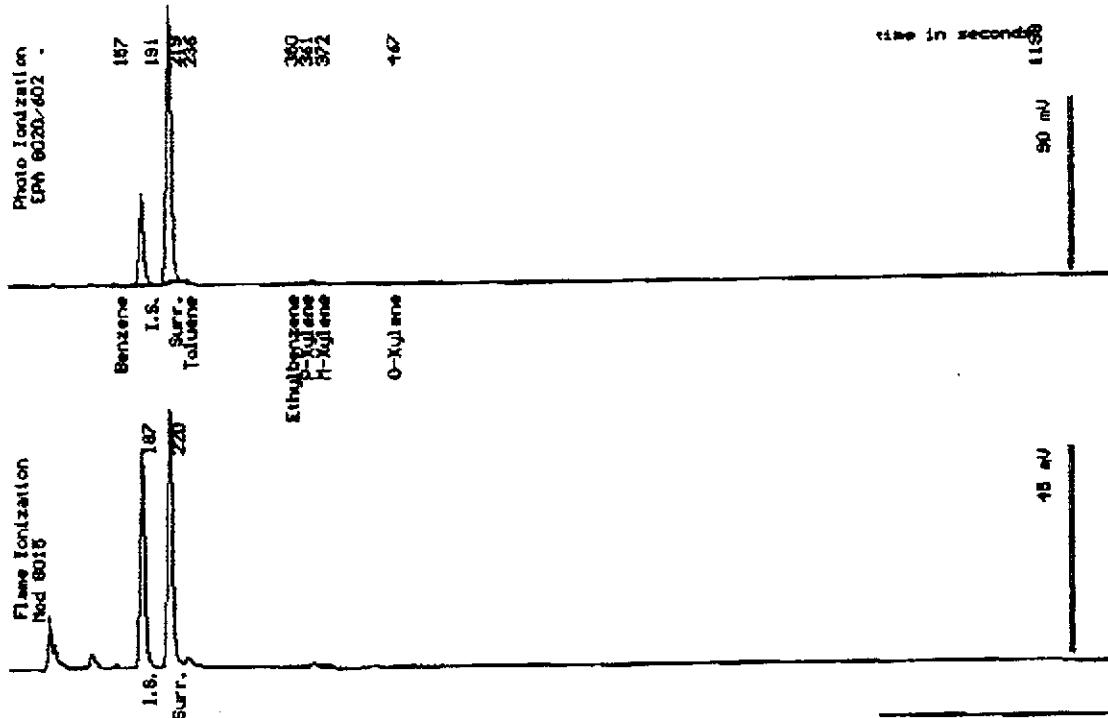
Sampled : 06/13/95

Dilution : 1:1

QC Batch : 41240

Matrix : Water

Parameter	(MRL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
Benzene	(.50)	<.50
Toluene	(.50)	.52
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		89 %



Date Analyzed: 06-21-95
Column: 0.53mm ID X 30m GEWAX (J&W Scientific)

Nitra Sarkhosh
Senior Chemist

WEST LABORATORY

Sample Log 12226

12226-06

Sample: MW-6

From : Beacon 721 (Proj. # D093-936)

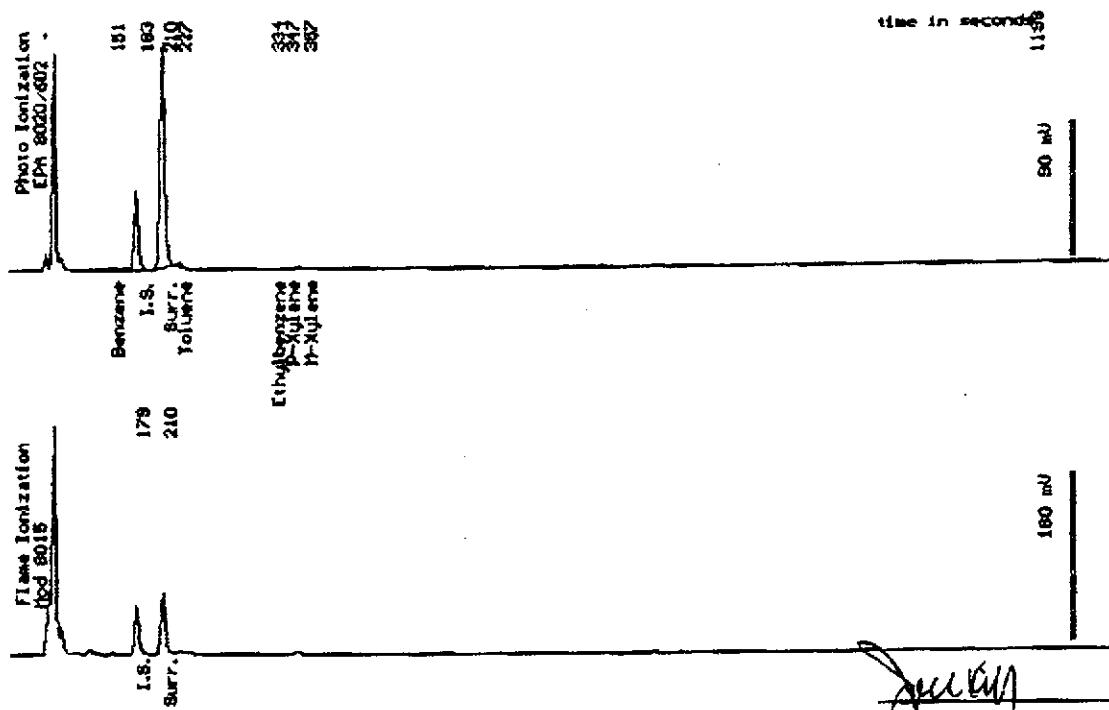
Sampled : 06/13/95

Dilution : 1:1

QC Batch : 4124P

Matrix : Water

Parameter	(MRL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
Benzene	(.50)	<.50
Toluene	(.50)	.87
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	150 *
Surrogate Recovery		90 %
* Product is not typical gasoline.		



Date Analyzed: 06-21-95
Column: 0.53mm ID x 30m DBMAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

Sample Log 12226

12226-04

Sample: MW-7

From : Beacon 721 (Proj. # D093-936)

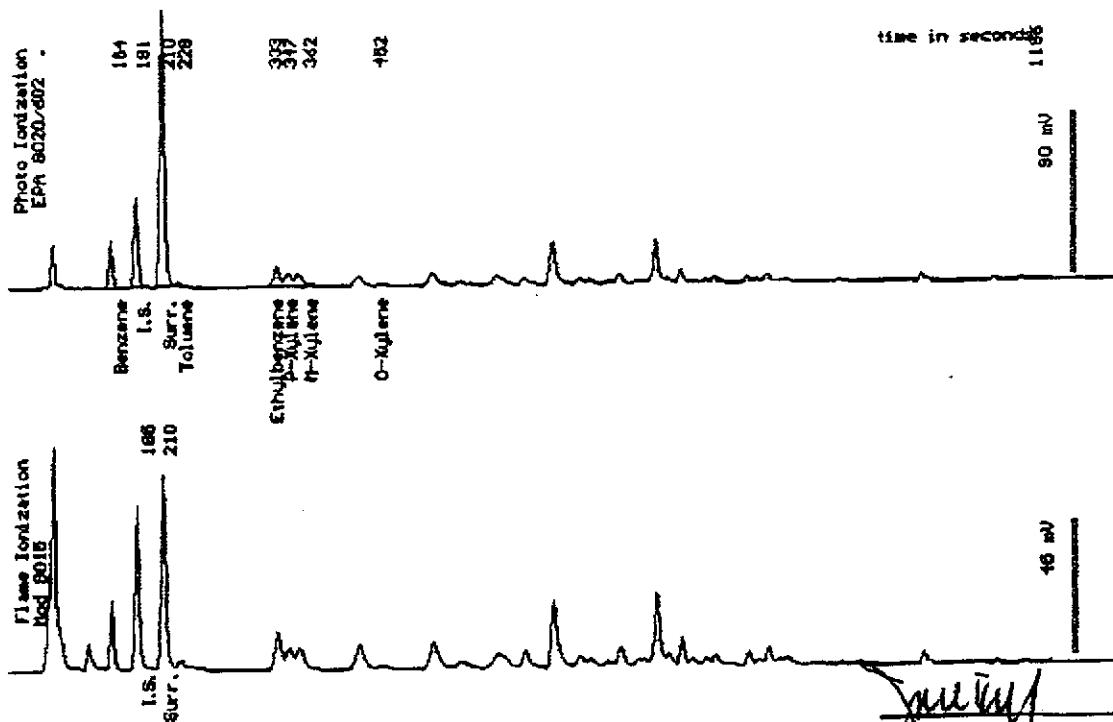
Sampled : 06/13/95

Dilution : 1:1

QC Batch : 4124N

Matrix : Water

Parameter	(MRL) $\mu\text{g}/\text{L}$	Measured Value $\mu\text{g}/\text{L}$
Benzene	(.50)	7.3
Toluene	(.50)	.79
Ethylbenzene	(.50)	7.6
Total Xylenes	(.50)	8.9
TPH as Gasoline	(50)	190
Surrogate Recovery		93 %



Date Analyzed: 06-20-95
Column: 0.53mm ID X 30m DBMAX (J&W Scientific)

Maria Sarkhosh
Senior Chemist

WEST LABORATORY

Sample Log 12226

12226-03

Sample: MW-8

From : Beacon 721 (Proj. # D093-936)

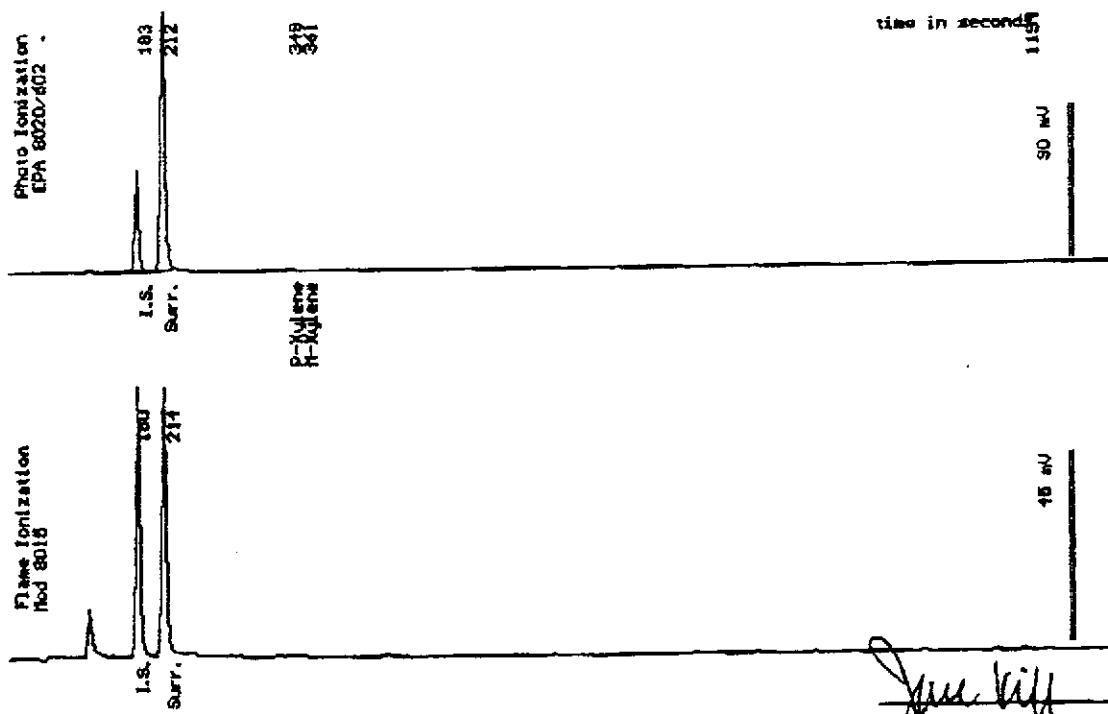
Sampled : 06/13/95

Dilution : 1:1

QC Batch : 4124R

Matrix : Water

Parameter	(MRL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		86 %



Date Analyzed: 06-21-95
Column: 0.53mm ID x 30m DBWOT (J&W Scientific)

Mitra Sarkhosh
Senior Chemist

Jas. Kiff

WEST LABORATORY

Sample Log 12226
12226-05

Sample: MW-9

From : Beacon 721 (Proj. # DO93-936)

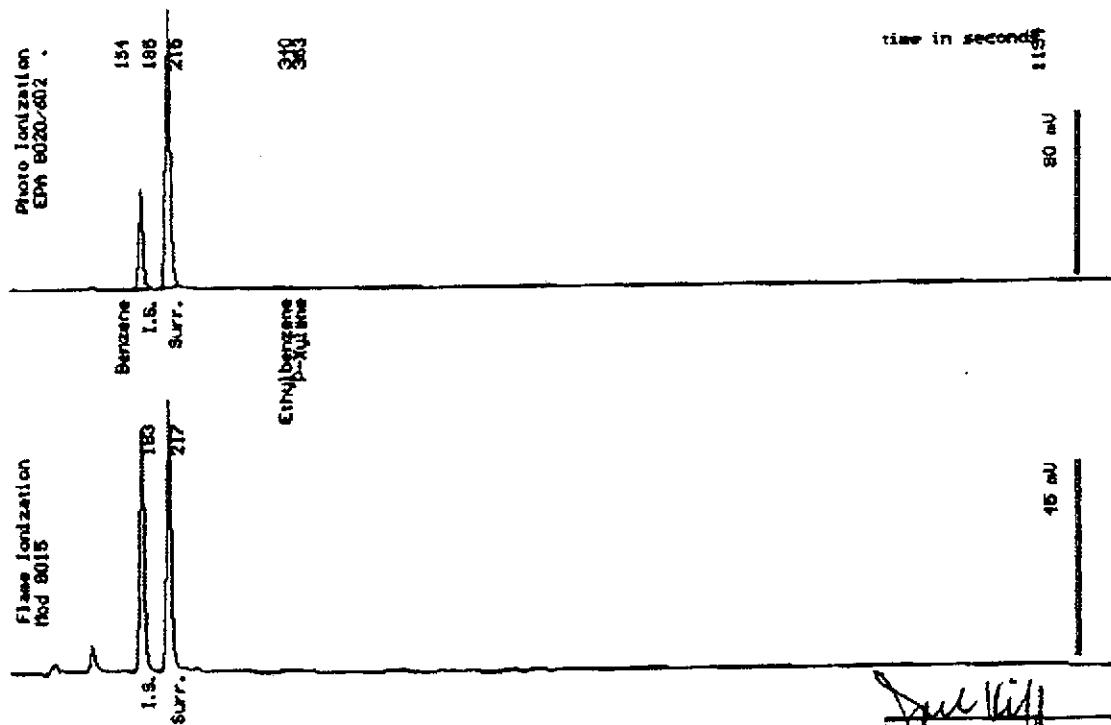
Sampled : 06/13/95

Dilution : 1:1

QC Batch : 4124R

Matrix : Water

Parameter	(MRL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	<50
Surrogate Recovery		86 %



Date Analyzed: 06-21-95
Column: 0.53 ID X 30m DBWAX (Jew Scientific)

Mitra Sarkar
Senior Chemist

Julie Viff

WEST LABORATORY

Sample Log 12226
12226-02

Sample: MW-10

From : Beacon 721 (Proj. # D093-936)

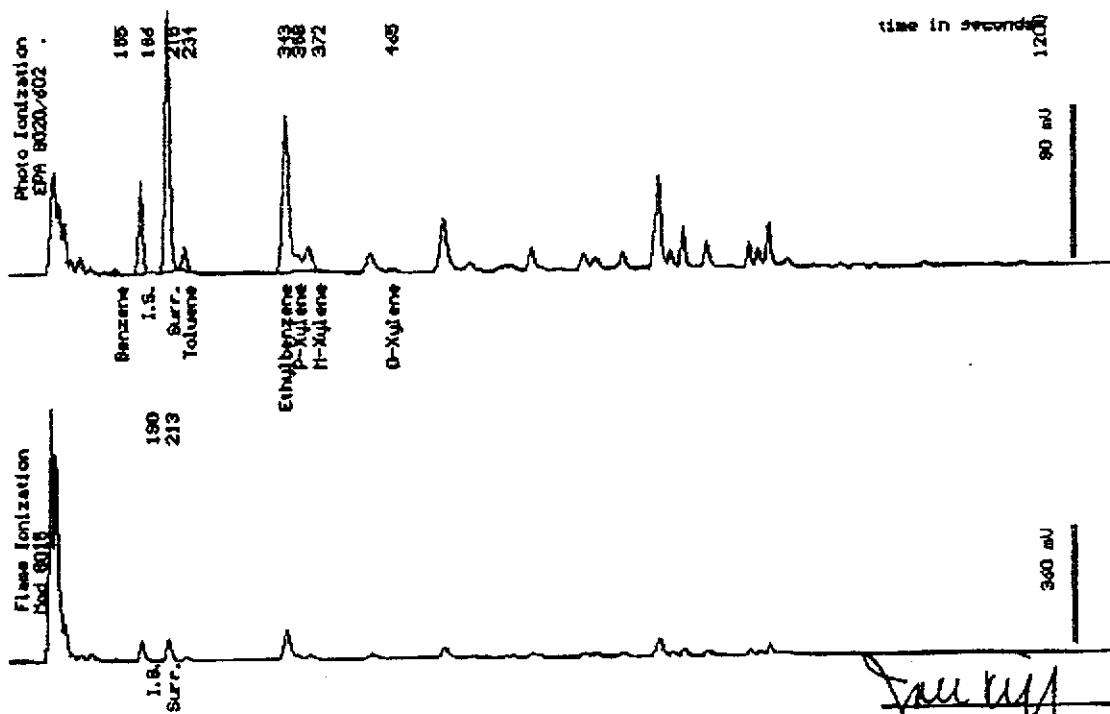
Sampled : 06/13/95

Dilution : 1:10

QC Batch : 4124Q

Matrix : Water

Parameter	(MRL) $\mu\text{g/L}$	Measured Value $\mu\text{g/L}$
Benzene	(5.0)	9.0
Toluene	(5.0)	48
Ethylbenzene	(5.0)	610
Total Xylenes	(5.0)	130
TPH as Gasoline	(500)	8400
Surrogate Recovery		94 %



Date Analyzed: 06-21-95
Column: 0.23mm ID x 30m DBAX (J&W Scientific)

Mitra Sarkhech
Senior Chemist

WEST LABORATORY

Sample Log 12226
12226-01

Sample: MW-11

From : Beacon 721 (Proj. # D093-936)

Sampled : 06/13/95

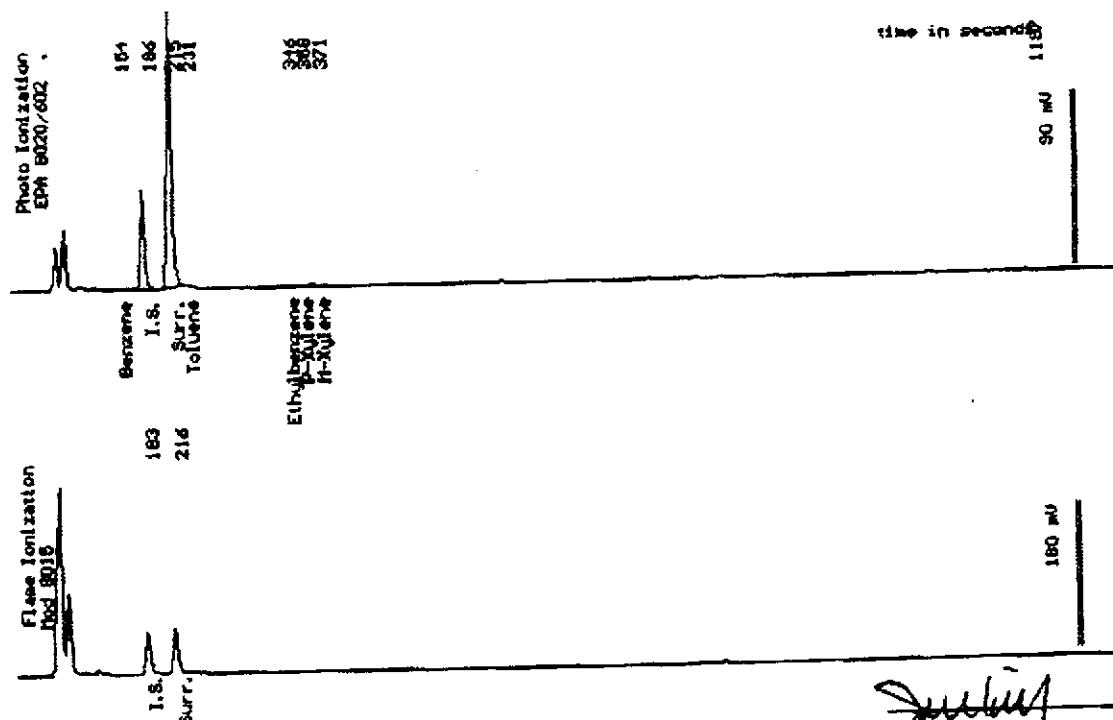
Dilution : 1:1

QC Batch : 4124N

Matrix : Water

Parameter	(MRL) mg/L	Measured Value mg/L
Benzene	(.50)	<.50
Toluene	(.50)	<.50
Ethylbenzene	(.50)	<.50
Total Xylenes	(.50)	<.50
TPH as Gasoline	(50)	210 *
Surrogate Recovery		90 %

* Product is not typical gasoline.



Date Analyzed: 06-20-95
Column: 0.53mm ID X 30m DB-5 (J&W Scientific)

Mitra Sarkhosh
Mitra Sarkhosh
Senior Chemist

WEST LABORATORY

Sample Log 12226

12226-11

Sample: RW-1

From : Beacon 721 (Proj. # D093-936)

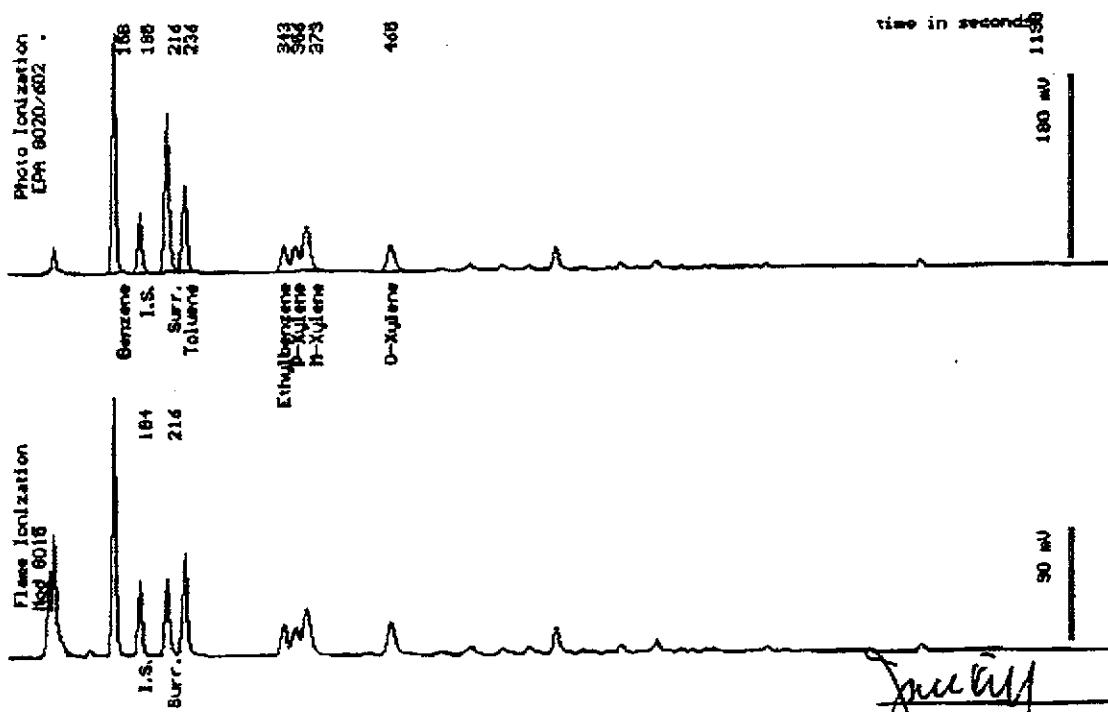
Sampled : 06/13/95

Dilution : 1:25

QC Batch : 4124J

Matrix : Water

Parameter	(MRL) $\mu\text{g}/\text{mL}$	Measured Value $\mu\text{g}/\text{L}$
Benzene	(13)	1600
Toluene	(13)	780
Ethylbenzene	(13)	340
Total Xylenes	(13)	1400
TPH as Gasoline	(1300)	8200
Surrogate Recovery		84 %



Date Analyzed: 06-13-95
Column: 0.53mm ID X 30m DB4MAX (J&W Scientific)

Mitra Sarkhosh
Senior Chemist



Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No. 721	Sampler (Print Name) Tay Stoops		ANALYSES			Date 10-13-95	Form No. 1 of 2
Project No. DO93-936	Sampler (Signature)		X	TPH (gasoline)	TPH (diesel)	WEST LAB - DAVIS	
Project Location SAN LORENZO	Affiliation DELTA ENVIRONMENTAL					STANDARD TAC	
Sample No./Identification MW-11	Date 10-13-95	Time 0910	Lab No.			REMARKS 2	
MW-10		0930					
MW-8		0945					
MW-7		1000					
MW-9		1015					
MW-6		1038					
MW-5		1055					
MW-2		1110					
Relinquished by: (Signature/Affiliation) Terence Fox / Delta	Date 10-13-95	Time 1438	Received by: (Signature/Affiliation)			Date 10-13-95	Time 1438
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)			Date	Time
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)			Date 10-13-95	Time 1438
Report To: TODD GALAN / DELTA (916) 638-2085	Bill to: ULTRAMAR INC. 525 West Third Street Hanford, CA 93230 Attention: TERRENCE FOX						

WHITE: Return to Client with Report

YELLOW: Laboratory Copy

PINK: Originator Copy



Ultramar Inc.
CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No. 721	Sampler (Print Name) Tay Stoops		ANALYSES		Date 6-13-95	Form No. 2 of 2		
Project No. D093-936	Sampler (Signature)				WEST LAB-DAVIS			
Project Location SAN LORENZO	Affiliation DELTA ENVIRONMENTAL				STANDARD TAT			
Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	REMARKS
MW-1	6-13-95	1130		X				
MW-3		1155						
RW-1		1235						
MW-4		1300		X				
Relinquished by: (Signature/Affiliation) Tay Stoops / Delta	Date 6-13-95	Time 1438	Received by: (Signature/Affiliation)		Date	Time		
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)		Date	Time		
Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)		Date	Time		
Report To: TODD GALANT / DELTA (916) 638-2085	Bill to:	ULTRAMAR INC. 525 West Third Street Hanford, CA 93230 Attention: TERRENCE FOX						

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