

**Ultramar**

**ENVIRONMENTAL  
PROTECTION**

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

99 NOV -1 PM 4:42

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

High MTBE in MW-2 (vapor to GW? No  
BTX) noted starting 11/97

October 28, 1999

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

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

Dear Ms. Chu:

Enclosed is a copy of the ***Quarterly Ground Water Monitoring and Remediation System Status Report, Third Quarter 1999*** for the above-referenced Ultramar facility. Also included is a copy of the Quarterly Status Report.

Please call me at (559) 583-3345 if you have any questions regarding this project.

Sincerely,

**ULTRAMAR INC.**

*Terrence A. Fox*

Terrence A. Fox  
Senior Project Manager  
Marketing Environmental Department

Enclosures

cc w/encl: Mr. Steve Morse, San Francisco Bay Region, RWQCB



A Member of the Ultramar Group of Companies

**BEACON**  
#1 Quality and Service

# **Ultramar**

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## **ENVIRONMENTAL PROJECT QUARTERLY STATUS REPORT**

**DATE REPORT SUBMITTED:** October 28, 1999  
**QUARTER ENDING:** September 30, 1999

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

**ULTRAMAR CONTACT:** Terrence A. Fox

**TEL. NO:** 559-583-3345

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**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**  
#1 Quality and Service

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

In December 1995, installed an air sparging system.

In January 1997, discontinued to operate the remediation system. Approximately 1,184,392 gallons of ground water have been removed, treated, and discharged. Approximately 103 gallons of hydrocarbons have been removed the vapor extraction system.

In October 1997, drilled confirmation borings. Results indicate soil clean.

In June 1998, the air sparging system was restarted.

**SUMMARY OF THIS QUARTER'S ACTIVITIES:**

Performed quarterly monitoring on August 30, 1999. Continued to operate the air sparging system. In July 1999, the ground water system was restarted

**RESULT OF QUARTERLY MONITORING:**

Monitoring data indicates that benzene concentrations were detected in MW-1, MW-3, and MW-10.

Approximately 1,222,742 gallons have been processed by the system.

**PROPOSED ACTIVITY OR WORK FOR NEXT QUARTER:**

<b><u>ACTIVITY</u></b>	<b><u>ESTIMATED COMPLETION DATE</u></b>
Continue quarterly ground-water monitoring.	
Continue to operate the remediation system.	



3164 Gold Camp Drive  
Suite 200  
Rancho Cordova, CA 95670-6021  
U.S.A.  
916/638-2085  
FAX: 916/638-8385

October 21, 1999

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

Subject: *Quarterly Ground Water Monitoring and  
Remediation System Status Report  
Third Quarter 1999*  
Beacon Station No. 721  
44 Lewelling Boulevard  
San Lorenzo, California  
Delta Project No. D093-936

Dear Mr. Fox:

Delta Environmental Consultants, Inc. (Delta) has been authorized by Ultramar Inc. to conduct quarterly ground water monitoring and remedial actions at the subject site. The monitoring is intended to evaluate the distribution of dissolved petroleum hydrocarbon constituents in ground water in the vicinity of the site. The remedial activities are intended to decrease the petroleum hydrocarbon constituents in soil and ground water beneath the site. This report summarizes the results of ground water monitoring activities performed at the site on August 30, 1999. The site location is shown in Figure 1. Site features are illustrated in Figure 2.

Ground water monitoring includes measurement of depth to ground water, subjective analyses of water samples to evaluate the presence or absence of free petroleum product or product sheen and collection of ground water samples for chemical analysis. Methods used to perform these tasks are described in Enclosure A.

#### **Ground Water Table Measurements and Flow Direction**

On August 30, 1999, depth to ground water was measured in monitoring wells MW-1 through MW-11, and recovery well RW-1 at depths ranging from 14.23 (MW-7) to 18.19 (MW-11) feet below the top of the well casings. Ground water elevations have decreased an average of 0.78 feet since the previous quarterly event in June 1999. Cumulative ground water elevation measurements at the site are compiled in Table 1. Based on the ground water elevation measurements, the inferred ground water flow direction is generally toward the southwest with a gradient of less than 0.01. A ground water elevation contour map prepared from the current event data is included as Figure 3.

Mr. Terrence A. Fox  
Ultramar Inc.  
October 21, 1999  
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### **Ground Water Analytical Results**

On August 30, 1999, ground water samples were collected from monitoring wells MW-1 through MW-3, MW-10 and recovery well RW-1. The ground water samples were submitted to Kiff Analytical of Davis, California (a California-certified laboratory). The ground water samples were analyzed for benzene, toluene, ethylbenzene, and total xylenes (BTEX) and methyl tertiary butyl ether (MTBE) by EPA Method 8020 and total petroleum hydrocarbons (TPH) as gasoline by EPA Method 8015 Modified. Copies of the sampling information data sheets are included in Enclosure B. Ground water sampling consists of quarterly sampling of monitoring wells MW-1, MW-2, MW-3 and MW-10; semi-annual sampling of monitoring wells MW-4 and MW-11; annual sampling of monitoring well MW-7. Sampling has been discontinued in monitoring wells MW-5, MW-6, MW-8 and MW-9. A description of the ground water sampling frequency is outlined in the January 19, 1999 letter from the Alameda County Health Care Services Agency. A copy of this letter is included in Enclosure B.

Benzene was not detected at or above the laboratory reporting limits in ground water samples collected from monitoring well MW-2 and recovery well RW-1. Benzene was reported in the samples collected from monitoring wells MW-1, MW-3 and MW-10 at concentrations ranging from 2.0 micrograms per liter ( $\mu\text{g/L}$ ) in monitoring well MW-1 to 15  $\mu\text{g/L}$  in monitoring well MW-10. The samples collected from monitoring wells MW-1 through MW-3, MW-10 and recovery well RW-1 were reported to contain concentrations of MTBE ranging from 50  $\mu\text{g/L}$  in monitoring well MW-3 to 18,000  $\mu\text{g/L}$  in monitoring well MW-2. Utilizing the August 30, 1999 ground water analytical data, a benzene isoconcentration map was constructed and is included as Figure 4. Cumulative ground water analytical results for TPH as gasoline, BTEX and MTBE are summarized in Table 1. A copy of the certified laboratory analytical report with chain-of-custody documentation is provided in Enclosure C.

### **Remediation System Status**

The ground water treatment system consists of a submersible pump which pumps water from recovery well RW-1 into a 1,000-gallon influent tank that gravity feeds into a diffused aeration tank (DAT) where hydrocarbons are stripped off the groundwater. Two 200-pound vapor phase granular activated carbon (GAC) columns abate the vapors. The ground water is then pumped through two 200-pound aqueous phase GAC columns and into a 50 gallon LEL tank prior to discharge to the sewer. The ground water treatment system was restarted on June 24, 1999 for a period of three hours. After laboratory analytical results confirmed that the system was in compliance with permit conditions mandated by the Oro Loma Sanitary District (Permit No. 018), the system was restarted again on July 28, 1999. As of September 22, 1999, the ground water treatment system has processed a total of 1,222,742 gallons of ground water to the sewer. The system has processed a total of 38,310 gallons of ground water since the system was restarted on June 24, 1999. Cumulative totals for ground water treated and discharged to the sewer are summarized in Table 2. Cumulative analytical results for the ground water treatment system are summarized in Table 3. Copies of analytical results for the ground water treatment system are included in Enclosure D.

The air sparging system injects air into the ground water through air sparging wells AS-1 through AS-3. Locations of the air sparging wells are illustrated on Figure 2. The purpose of the air sparging system is to increase the dissolved oxygen content in the ground water that enhances the rate of biodegradation in the ground water. The SVE system is not currently operating but is expected to be restarted once the blower has been replaced.

Mr. Terrence A. Fox  
Ultramar Inc.  
October 21, 1999  
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**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 a copy of this report be forwarded to:

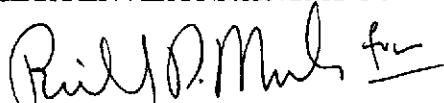
Mr. Steven Ritchie  
California Regional Water Quality Control Board  
San Francisco Bay Region  
1515 Clay Street, Suite 1400  
Oakland, CA 94612

Ms. Eva Chu  
Alameda County  
Environmental Health Department  
470 27th Street, Room 322  
Oakland, CA 94612

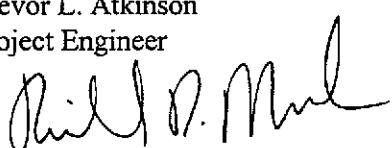
If you have any questions, please contact Richard Munsch at (916) 638-2164.

Sincerely,

**DELTA ENVIRONMENTAL CONSULTANTS, INC.**



Trevor L. Atkinson  
Project Engineer



Richard D. Munsch  
Project Manager



Steven W. Meeks, P.E.  
California Registered Civil Engineer No. C057461



TLA (LRP018.936)  
Enclosures

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
MW-1	02/18/92	43.67	16.42	27.25	NS	NS	NS	NS	NS	NS	
	05/14/92		17.28	26.39	NS	NS	NS	NS	NS	NS	
	05/15/92		NM	NC	2,000	47	1,200	400	41,000	NA	
	08/27/92		19.48	24.19	NS	NS	NS	NS	NS	NS	
	08/28/92		NM	NC	3,800	54	850	970	110,000	NA	
	11/19/92		20.57	23.10	200	<5.0	90	140	3,600	NA	
	02/03/93		15.91	27.76	180	22	79	130	3,000	NA	
	06/23/93		16.21	27.46	2,400	74	650	510	12,000	NA	No free product or sheen
	09/22/93		17.85	25.82	3,000	290	1,100	1,200	23,000	NA	No free product or sheen
	01/24/94		17.91	25.76	2,400	280	1,100	1,700	18,000	NA	
	04/07/94		16.94	26.73	4,200	820	1,600	2,100	20,000	NA	No free product or sheen
	06/07/94		17.20	26.47	1,800	510	1,100	1,600	26,000	NA	No free product or sheen
	09/28/94		18.73	24.94	1,700	210	970	870	18,000	NA	No free product or sheen
	12/14/94		17.56	26.11	4,400	2,400	2,300	4,300	31,000	NA	Product sheen
	03/15/95		14.92	28.75	830	310	840	1,200	17,000	NA	Product sheen
	06/13/95		15.38	28.29	1,300	99	1,500	1,100	22,000	NA	No free product or sheen
	09/28/95		16.75	26.92	580	<25	780	410	8,800	NA	No free product or sheen
	12/28/95		17.28	26.39	4.9	<1.3	<1.3	290	4,800	74	No free product or sheen
	01/30/96		NM	NC	17	7.1	20	45	1,500	63	Not measured
	03/12/96		14.13	29.54	<0.5	<0.5	<0.5	<0.5	110	44	No free product or sheen
	06/11/96		14.90	28.77	48	0.9	37	26	600	75	No free product or sheen
	10/02/96		16.31	27.36	16	<0.5	6	0.92	210	11	No free product or sheen
	01/28/97		12.99	30.68	<0.5	<0.5	<0.5	<0.5	150	160	No free product or sheen
	05/20/97		15.28	28.39	<2.5	<2.5	<2.5	<2.5	680	640	No free product or sheen
	08/18/97		16.74	26.93	<2.5	<2.5	<2.5	<2.5	<250	540	No free product or sheen
	09/29/97		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	11/05/97		17.45	26.22	2.8	<2.5	<2.5	<2.5	<250	400/390 <sup>b</sup>	No free product or sheen
	03/31/98		12.47	31.20	260	13	110	150	3,300	7,900	No free product or sheen
	05/26/98		13.69	29.98	NS	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	120	<10	39	55	7,800	9,300	No free product or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
MW-1 (Cont.)	08/19/98	43.67	14.58	29.09	12	<2.5	6.0 <sup>c</sup>	3.8 <sup>c</sup>	<250 <sup>c</sup>	2,200	No free product or sheen
	11/17/98		15.39	28.28	8.3	<2.5	9.2	7.6	860	4,200	No free product or sheen
	02/18/99		13.52	30.15	2.7	<2.5	<2.5	3.9	310	4,200	No free product or sheen
	06/24/99		15.02	28.65	10	<2.5	12	6.5	860	3,400	No free product or sheen
	08/30/99		15.87	27.80	2.0	<0.5	3.9	2.0	140	2,800	No free product or sheen

**TABLE 1**  
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Beacon Station No. 721  
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San Lorenzo, California

Monitoring Well	Date	Top of Riser Elevation (ft)	Depth to Water (ft)	Ground Water Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
MW-2	02/18/92	43.09	16.65	26.44	<0.5	<0.5	1.9	<0.5	1,600	NA	
	05/14/92		16.64	26.45	1.2	1	1.3	<0.5	740	NA	
	08/27/92		16.61	26.28	6.5	1.1	0.6	<0.5	1,400	NA	
	11/19/92		19.91	23.18	<0.5	<0.5	2.7	<0.5	360	NA	
	02/03/93		15.23	27.86	1.2	1.6	4.5	6.4	590	NA	
	06/23/93		15.55	27.54	<0.5	<0.5	0.52	0.5	160	NA	No free product or sheen
	09/22/93		17.22	25.87	<0.5	0.59	1.2	0.59	290	NA	No free product or sheen
	01/24/94		17.20	25.89	<0.5	<0.5	0.68	<0.5	330	NA	
	04/07/94		16.26	26.83	<0.5	<0.5	<0.5	4.4	490	NA	No free product or sheen
	06/07/94		16.46	26.63	<0.5	<0.5	1.5	<0.5	550	NA	No free product or sheen
	09/28/94		18.06	25.03	<0.5	<0.5	<0.5	<0.5	190	NA	No free product or sheen
	12/14/94		16.86	26.23	7.2	0.84	<0.5	<0.5	1,400	NA	No free product or sheen
	03/15/95		14.08	29.01	39	<0.5	0.53	<0.5	730	NA	No free product or sheen
	06/13/95		14.67	28.42	8.3	<0.5	<0.5	<0.5	750 <sup>a</sup>	NA	No free product or sheen
	09/28/95		16.07	27.02	<0.5	<0.5	<0.5	<0.5	670 <sup>a</sup>	NA	No free product or sheen
	12/28/95		16.46	26.63	9.5	<5.0	<5.0	5.2	3,100	4,600	No free product or sheen
	03/12/96		13.11	29.98	<1.3	<1.3	<1.3	<1.3	710	3,200	No free product or sheen
	06/11/96		14.14	28.95	1.6	<1.3	<1.3	<1.3	1,900 <sup>a</sup>	5,100	No free product or sheen
	10/02/96		15.71	27.38	<2.5	<2.5	<2.5	<2.5	2,800	7,900	No free product or sheen
	01/28/97		12.05	31.04	<0.5	<0.5	<0.5	<0.5	130	210	No free product or sheen
	05/20/97		14.65	28.44	120	16	<2.5	4.0	1,400	390	No free product or sheen
	08/18/97		16.00	27.09	<2.5	<2.5	<2.5	<2.5	<250	2,000	No free product or sheen
	09/29/97		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	11/05/97		16.75	26.34	<2.5	<2.5	<2.5	<2.5	<250	2,900/2,900 <sup>b</sup>	No free product or sheen
	03/31/98		11.54	31.55	<0.5	<0.5	<0.5	<0.5	<10,000	85,000	No free product or sheen
	05/26/98		12.78	30.31	NS	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	<500	<500	<500	<500	<50,000	97,000	No free product or sheen
	08/19/98		14.40	28.69	<0.5	<0.5	<0.5	<0.5	210	22,000	No free product or sheen
	11/17/98		15.18	27.91	<0.5	<0.5	<0.5	<0.5	<50	17,000	No free product or sheen
	02/18/99		14.07	29.02	<0.5	<0.5	<0.5	<0.5	<50	13,000	No free product or sheen
	06/24/99		14.70	28.39	<15	<0.5	<0.5	<0.5	180	39,000	No free product or sheen
	08/30/99		15.46	27.63	<25	<25	<25	<25	<2,500	18,000	No free product or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
MW-3	02/18/92	43.10	16.89	26.21	NS	NS	NS	NS	NS	NS	
	05/14/92		16.60	26.50	NS	NS	NS	NS	NS	NS	
	05/15/92		NM	NC	6,300	5,900	1,700	6,100	160,000	NA	
	08/27/92		18.96	24.14	NS	NS	NS	NS	NS	NS	
	08/28/92		NM	NC	2,500	40,000	6,700	44,000	1,300,000	NA	
	11/18/92		20.38	23.01	NS	NS	NS	NS	NS	NS	
	11/19/92		NM	NC	NS	NS	NS	NS	NS	NS	
	02/03/93		15.43	27.67	7,200	11,000	2,900	13,000	82,000	NA	
	06/23/93		15.67	27.43	3,200	5,300	2,500	9,100	61,000	NA	Product sheen
	09/22/93		17.20	25.90	12,000	14,000	3,900	18,000	94,000	NA	No free product or sheen
	01/24/94		17.35	25.75	14,000	17,000	4,200	14,000	110,000	NA	
	04/07/94		14.48	28.62	6,500	1,800	1,700	4,100	28,000	NA	No free product or sheen
	06/07/94		13.37	29.73	6,400	2,300	1,500	3,500	27,000	NA	Product sheen
	09/28/94		18.05	25.05	7,400	4,300	1,500	4,600	40,000	NA	No free product or sheen
	12/14/94		16.92	26.18	17,000	21,000	3,900	22,000	140,000	NA	Product sheen
	03/15/95		14.22	28.88	4,900	1,900	1,800	7,100	58,000	NA	Product sheen
	06/13/95		14.49	28.61	7,200	2,900	1,200	4,600	44,000	NA	Product sheen
	09/28/95		15.17	27.93	5,600	2,100	1,900	6,900	30,000	NA	No free product or sheen
	12/28/95		15.45	27.65	32	5.8	18	4,700	16,000	360	No free product or sheen
	01/30/96		NM	NC	850	800	190	1,700	8,700	430	Not measured
	03/12/96		11.35	31.75	48	64	5.3	630	2,400	97	No free product or sheen
	06/11/96		Dry	Dry	NS	NS	NS	NS	NS	NS	Dry
	10/02/96		Dry	Dry	NS	NS	NS	NS	NS	NS	Dry
	01/28/97		Dry	Dry	NS	NS	NS	NS	NS	NS	Dry
	05/20/97		Dry	Dry	NS	NS	NS	NS	NS	NS	Plugged at 14 feet
	07/10/97		NM	NC	<0.50	<0.50	<0.50	4.8	300	40	Not measured
	08/18/97		16.05	27.05	480	8.4	100	230	3,600	170	No free product or sheen
	09/29/97		NM	NC	740	8.6	160	240	3500	210	Not measured
	11/05/97		16.78	26.32	870	15	180	210	4,100	240/210 <sup>b</sup>	No free product or sheen
	03/31/98		11.55	31.55	1,800	600	410	1,400	12,000	510	No free product or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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

Monitoring Well	Date	Top of Riser	Depth to Water	Ground Water		Ethyl-benzene	Total Xylenes	TPH as gasoline	MTBE	Comments
		Elevation (ft)	(ft)	Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-3 (Cont.)	05/26/98	43.10	12.80	30.30	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	1,500	400	280	870	6,500	480
	08/19/98		14.27	28.83	130	11	24	60	1,400	140
	11/17/98		15.11	27.99	48	3.5	9.9	14	510	120
	02/18/99		13.30	29.80	67	28	24	81	690	88
	06/24/99		14.44	28.66	27	21	8.6	32	540	61
	08/30/99		15.05	28.05	12	12	3.2	13	250	50

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
MW-4	02/18/92	44.66	18.51	26.15	<0.5	<0.5	12	21	5,100	NA	
	05/14/92		18.22	26.44	<0.5	5.6	1.8	2.2	4,600	NA	
	08/27/92		20.47	24.19	NS	NS	NS	NS	NS	NS	
	08/28/92		NM	NC	6.6	1.3	1.6	3.1	1,700	NA	
	11/19/92		21.58	23.08	<0.5	<0.5	<0.5	<0.5	400	NA	
	02/03/93		16.98	27.68	<0.5	<0.5	<0.5	<0.5	1,100	NA	
	06/23/93		17.23	27.43	<0.5	<0.5	<0.5	<0.5	120	NA	No free product or sheen
	09/22/93		18.83	25.83	<0.5	<0.5	<0.5	<0.5	110	NA	No free product or sheen
	01/24/94		18.86	25.80	<0.5	<0.5	<0.5	<0.5	260	NA	
	04/07/94		17.90	26.76	<0.5	<0.5	<0.5	<0.5	430	NA	No free product or sheen
	06/07/94		18.08	26.58	<0.5	<0.5	<0.5	<0.5	150	NA	No free product or sheen
	09/28/94		19.70	24.96	<0.5	<0.5	<0.5	<0.5	75	NA	No free product or sheen
	12/14/94		18.55	26.11	<0.5	<0.5	<0.5	<0.5	160	NA	No free product or sheen
	03/15/95		16.14	28.52	<0.5	<0.5	<0.5	<0.5	500	NA	No free product or sheen
	06/13/95		16.41	28.25	<0.5	<0.5	<0.5	<0.5	210 <sup>a</sup>	NA	No free product or sheen
	09/28/95		17.88	26.78	<0.5	<0.5	<0.5	<0.5	140 <sup>a</sup>	NA	No free product or sheen
	12/28/95		17.81	26.85	<0.5	<0.5	<0.5	<0.5	510 <sup>a</sup>	<5.0	No free product or sheen
	03/12/96		14.77	29.89	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	06/11/96		15.88	28.78	<0.5	<0.5	<0.5	<0.5	50 <sup>a</sup>	<5.0	No free product or sheen
	10/02/96		17.40	27.26	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	01/28/97		14.11	30.55	<0.5	<0.5	<0.5	<0.5	270 <sup>a</sup>	<5.0	No free product or sheen
	05/20/97		16.24	28.42	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	08/18/97		17.59	27.07	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	09/29/97		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	11/05/97		18.24	26.42	<0.5	<0.5	<0.5	<0.5	<50	<5.0/<0.5 <sup>b</sup>	No free product or sheen
	03/31/98		13.61	31.05	<0.5	<0.5	<0.5	<0.5	110	<5.0	No free product or sheen
	05/26/98		14.78	29.88	NS	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	<0.5	<0.5	<0.5	<0.5	94	<5.0	No free product or sheen
	08/19/98		16.15	28.51	<0.5 <sup>c</sup>	<0.5 <sup>c</sup>	<0.5 <sup>c</sup>	<0.5 <sup>c</sup>	120 <sup>c</sup>	46 <sup>c</sup>	No free product or sheen
	11/17/98		16.93	27.73	1.3	<0.5	<0.5	<0.5	<50	780	No free product or sheen
	02/18/99		15.30	29.36	8.2	<0.5	<0.5	<0.5	130	240	No free product or sheen
	06/24/99		16.35	28.31	<1.0	<0.5	<0.5	<0.5	<50	2,100	No free product or sheen
	08/30/99		17.12	27.54	NS	NS	NS	NS	NS	NS	Not sampled

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
MW-5	02/18/92	43.79	17.37	26.42	<0.5	<0.5	<0.5	<0.5	<50	NA	
	05/14/92		17.29	26.50	<0.5	<0.05	<0.5	<0.5	<50	NA	
	08/27/92		22.18	21.61	<0.5	<0.5	<0.5	<0.5	<50	NA	
	11/19/92		20.68	23.11	<0.5	<0.5	<0.5	<0.5	<50	NA	
	02/03/93		15.91	27.88	3.0	2.7	8.0	9.9	55	NA	
	06/23/93		16.24	27.55	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	09/22/93		17.93	25.86	0.66	1.1	<0.5	0.6	<50	NA	No free product or sheen
	01/24/94		17.82	25.97	<0.5	<0.5	<0.5	<0.5	<50	NA	
	04/07/94		16.91	26.88	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	06/07/94		17.10	26.69	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	09/28/94		18.73	25.06	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	12/14/94		17.53	26.26	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	03/15/95		14.96	28.83	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	06/13/95		15.30	28.49	<0.5	0.52	<0.5	<0.5	<50	NA	No free product or sheen
	09/28/95		16.74	27.05	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	12/28/95		15.10	28.69	<0.5	<0.5	<0.5	<0.5	120	<5.0	No free product or sheen
	03/12/96		13.67	30.12	<0.5	<0.5	<0.5	<0.5	<50	9	No free product or sheen
	06/11/96		14.88	28.91	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	10/02/96		16.42	27.37	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	01/28/97		12.83	30.96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	05/20/97		15.33	28.46	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	08/18/97		16.69	27.10	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	09/29/97		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	11/05/97		17.37	26.42	<0.5	<0.5	<0.5	<0.5	<50	<5.0/<0.5 <sup>b</sup>	No free product or sheen
	03/31/98		12.40	31.39	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	05/26/98		13.62	30.17	NS	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	08/19/98		15.19	28.60	<0.5	<0.5	<0.5	<0.5	<50	7	No free product or sheen
	11/17/98		15.89	27.90	<0.5	<0.5	<0.5	<0.5	<50	6	No free product or sheen
	02/18/99		14.23	29.56	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	06/24/99		15.29	28.50	NS	NS	NS	NS	NS	NS	Not sampled
	08/30/99		16.07	27.72	NS	NS	NS	NS	NS	NS	Not sampled

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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

Monitoring Well	Date	Top of Riser	Depth to Water	Ground Water		Ethyl-benzene	Total Xylenes	TPH as gasoline	MTBE	Comments
		Elevation (ft)	(ft)	Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	(µg/L)	(µg/L)	(µg/L)	
MW-6	02/18/92	42.47	15.87	26.60	4.8	<0.5	<0.5	<0.5	370	NA
	05/14/92		16.04	26.43	<0.5	<0.5	<0.5	<0.5	120	NA
	08/27/92		18.17	24.30	1.2	<0.5	<0.5	<0.5	<50	NA
	11/19/92		19.30	23.17	1.3	<0.5	1	1.1	66	NA
	02/03/93		14.60	27.87	1.9	2.6	23	12	100	NA
	06/23/93		15.00	27.47	<0.5	<0.5	<0.5	<0.5	<50	NA
	09/22/93		16.66	25.81	2.2	3.8	0.53	2.7	81	NA
	01/24/94		16.52	25.95	<0.5	<0.5	<0.5	<0.5	98	NA
	04/07/94		15.70	26.77	0.71	<0.5	<0.5	<0.5	150	NA
	06/07/94		15.88	26.59	<0.5	<0.5	<0.5	<0.5	180	NA
	09/28/94		17.51	24.96	<0.5	<0.5	<0.5	<0.5	100	NA
	12/14/94		16.27	26.20	<0.5	<0.5	<0.5	<0.5	140	NA
	03/15/95		13.52	28.95	<0.5	<0.5	<0.5	<0.5	110	NA
	06/13/95		13.96	28.51	<0.5	0.87	<0.5	<0.5	150 <sup>a</sup>	NA
	09/28/95		15.61	26.86	0.78	<0.5	<0.5	<0.5	<50	NA
	12/28/95		15.54	26.93	<0.5	<0.5	<0.5	6.3	410	70
	01/30/96		NM	NC	1.0	<0.5	<0.5	11	81	46
	03/12/96		11.88	30.59	<0.5	<0.5	<0.5	<0.5	<50	7
	06/11/96		13.52	28.95	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	10/02/96		15.10	27.37	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	01/28/97		11.18	31.29	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	05/20/97		14.00	28.47	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	08/18/97		15.54	26.93	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	09/29/97		NM	NC	NS	NS	NS	NS	NS	Not measured
	11/05/97		16.25	26.22	<0.5	<0.5	<0.5	<0.5	<50	<5.0/2.8 <sup>b</sup>
	03/31/98		10.60	31.87	<0.5	<0.5	<0.5	<0.5	<50	<5.0
	05/26/98		12.01	30.46	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	<0.5	<0.5	<0.5	<0.5	<50	No free product or sheen
	08/19/98		13.60	28.87	<0.5	<0.5	<0.5	<0.5	<50	No free product or sheen
	11/17/98		14.53	27.94	<0.5	<0.5	<0.5	<0.5	<50	No free product or sheen
	02/18/99		12.39	30.08	<0.5	<0.5	<0.5	<0.5	<50	No free product or sheen
	06/24/99		13.89	28.58	NS	NS	NS	NS	NS	Not sampled
	08/30/99		14.75	27.72	NS	NS	NS	NS	NS	Not sampled

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
MW-7	02/18/92	41.54	15.51	26.03	16	<0.5	10	16	670	NA	
	05/14/92		15.41	26.13	44	<0.5	38	88	1,500	NA	
	08/27/92		17.45	24.09	400	5.8	290	1,400	23,000	NA	
	11/19/92		18.54	23.00	29	<0.5	10	53	330	NA	
	02/03/93		14.10	27.44	200	<0.5	110	480	2,000	NA	
	06/23/93		14.33	27.21	20	<0.5	16	16	280	NA	No free product or sheen
	09/22/93		15.92	25.62	71	2.2	33	210	860	NA	No free product or sheen
	01/24/94		16.07	25.47	61	<1.3	10	160	900	NA	
	04/07/94		15.10	26.44	53	<0.5	7.1	49	630	NA	
	06/07/94		15.16	26.38	55	<0.5	14	24	730	NA	No free product or sheen
	09/28/94		16.82	24.72	21	<0.5	2.3	3.1	300	NA	No free product or sheen
	12/14/94		15.75	25.79	19	<0.5	3.3	32	430	NA	No free product or sheen
	03/15/95		14.00	27.54	0.88	<0.5	<0.5	<0.5	70	NA	No free product or sheen
	06/13/95		13.44	28.10	7.3	0.79	7.6	8.9	190	NA	No free product or sheen
	09/28/95		14.84	26.70	1.5	<0.5	1.2	0.84	60	NA	No free product or sheen
	12/28/95		14.55	26.99	<0.5	<0.5	0.91	0.69	60	10	No free product or sheen
	03/12/96		11.88	29.66	<0.5	<0.5	<0.5	<0.5	<50	11	No free product or sheen
	06/11/96		13.52	28.58	<0.5	<0.5	<0.5	<0.5	79	16	No free product or sheen
	10/02/96		14.50	27.04	<0.5	<0.5	<0.5	<0.5	<50	26	No free product or sheen
	01/28/97		11.08	30.46	<0.5	<0.5	<0.5	<0.5	<50	13	No free product or sheen
	05/20/97		13.46	28.08	<0.5	0.85	<0.5	<0.5	78	40	No free product or sheen
	08/18/97		14.95	26.59	<0.5	<0.5	<0.5	<0.5	<50	18	No free product or sheen
	09/29/97		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	11/05/97		15.43	26.11	<0.5	<0.5	<0.5	<0.5	<50	8.9/8.0 <sup>b</sup>	No free product or sheen
	03/31/98		10.25	31.29	<0.5	<0.5	<0.5	1.3	<5.0	6	No free product or sheen
	05/26/98		11.45	30.09	NS	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	<0.5	<0.5	<0.5	<0.5	<50	10	No free product or sheen
	08/19/98		13.08	28.46	<0.5	<0.5	<0.5	<0.5	<50	27	No free product or sheen
	11/17/98		13.93	27.61	<0.5	<0.5	<0.5	<0.5	<50	30	No free product or sheen
	02/18/99		12.16	29.38	<0.5	<0.5	<0.5	<0.5	51	22	
	06/24/99		13.35	28.19	NS	NS	NS	NS	NS	NS	Not sampled
	08/30/99		14.23	27.31	NS	NS	NS	NS	NS	NS	Not sampled

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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

Monitoring Well	Date	Top of Riser Elevation	Depth to Water	Ground Water Elevation	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH as gasoline	MTBE	Comments
		(ft)	(ft)	(ft)	( $\mu\text{g/L}$ )						
MW-8	02/18/92	42.26	16.57	25.69	<0.5	<0.5	9.5	<0.5	1,200	NA	
	05/14/92		16.24	26.02	<0.5	<0.5	<0.5	<0.5	130	NA	
	08/27/92		18.28	23.98	<0.5	<0.5	<0.5	<0.5	140	NA	
	11/19/92		19.32	22.94	<0.5	<0.5	2.0	<0.5	320	NA	
	02/03/93		14.87	27.39	<0.5	<0.5	<0.5	<0.5	<50	NA	
	06/23/93		15.18	27.08	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	09/22/93		18.79	23.47	<0.5	0.67	<0.5	<0.5	<50	NA	No free product or sheen
	01/24/94		17.06	25.20	<0.5	<0.5	<0.5	<0.5	290	NA	
	04/07/94		15.95	26.31	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	06/07/94		15.10	27.16	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	09/28/94		17.63	24.63	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	12/14/94		16.66	25.60	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	03/15/95		14.30	27.96	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	06/13/95		14.37	27.89	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	09/28/95		15.62	26.64	NS	NS	NS	NS	NS	NA	No free product or sheen
	12/28/95		15.62	26.64	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	03/12/96		12.75	29.51	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	06/11/96		13.94	28.32	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	10/02/96		15.41	26.85	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	01/28/97		12.30	29.96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	05/20/97		14.42	27.84	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	08/18/97		16.16	26.10	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	09/29/97		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	11/05/97		16.25	26.01	<0.5	<0.5	<0.5	<0.5	<50	<5.0/<0.5 <sup>b</sup>	No free product or sheen
	03/31/98		11.49	30.77	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	05/26/98		12.60	29.66	NS	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	08/19/98		14.15	28.11	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free Product or sheen
	11/17/98		14.98	27.28	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	02/18/99		13.41	28.85	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	06/24/99		14.35	27.91	NS	NS	NS	NS	NS	NS	Not sampled
	08/30/99		15.16	27.10	NS	NS	NS	NS	NS	NS	Not sampled

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
MW-9	02/18/92	44.94	18.87	26.07	<0.5	<0.5	<0.5	<0.5	<50	NA	
	05/14/92		18.55	26.39	<0.5	<0.5	<0.5	<0.5	<50	NA	
	08/27/92		20.80	24.14	<0.5	<0.5	<0.5	<0.5	<50	NA	
	11/19/92		21.90	23.04	<0.5	<0.5	<0.5	1.3	<50	NA	
	02/03/93		17.25	27.69	<0.5	<0.5	<0.5	<0.5	<50	NA	
	06/23/93		17.61	27.33	<0.5	<0.5	<0.5	<0.5	<50	NA	
	09/22/93		19.18	25.76	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	01/24/94		19.17	25.77	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	04/07/94		18.23	26.71	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	06/07/94		18.40	26.54	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	09/28/94		20.01	24.93	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	12/14/94		18.88	26.06	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	03/15/95		16.24	28.70	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	06/13/95		16.75	28.19	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	09/28/95		18.04	26.90	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	12/28/95		17.87	27.07	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	03/12/96		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	06/11/96		16.26	28.68	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	10/02/96		17.74	27.20	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	01/28/97		14.51	30.43	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	05/20/97		16.73	28.21	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	08/18/97		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	09/29/97		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	11/05/97		18.61	26.33	<0.5	<0.5	<0.5	<0.5	<50	<5.0/<0.5 <sup>b</sup>	No free product or sheen
	03/31/98		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	05/26/98		15.28	29.66	NS	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	08/19/98		16.55	28.39	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	11/17/98		17.32	27.62	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	02/18/99		15.74	29.20	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	06/24/99		16.73	28.21	NS	NS	NS	NS	NS	NS	Not sampled
	08/30/99		17.48	27.46	NS	NS	NS	NS	NS	NS	Not sampled

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
MW-10	02/18/92	42.34	16.63	25.71	1.10	57	440	53	18,000	NA	
	05/14/92		15.25	27.09	NS	NS	NS	NS	NS	NS	
	05/15/92		NM	NC	24	9.8	97	<0.5	8,500	NA	
	08/27/92		18.35	23.99	NS	NS	NS	NS	NS	NS	
	08/29/92		NM	NC	20	2.8	40	3.5	9,600	NA	
	11/19/92		19.43	22.91	36	21	330	31	5,700	NA	
	02/03/93		15.01	27.33	15	4.6	36	9.6	2,200	NA	
	06/23/93		15.30	27.04	21	24	540	45	8,100	NA	No free product or sheen
	09/22/93		16.90	25.44	22	17	350	16	6,200	NA	No free product or sheen
	01/24/94		NM	NC	NS	NS	NS	NS	NS	NA	Not measured
	04/07/94		15.97	26.37	6.4	2.9	150	4.7	4,000	NA	No free product or sheen
	06/07/94		16.04	26.30	5.6	<2.5	150	5.7	6,700	NA	No free product or sheen
	09/28/94		17.69	24.65	2.2	2.6	110	44	5,700	NA	No free product or sheen
	12/14/94		16.65	25.69	<1.3	<1.3	77	27	3,500	NA	No free product or sheen
	03/15/95		14.08	28.26	<5.0	6.7	150	23	7,200	NA	No free product or sheen
	06/13/95		14.49	27.85	9	48	610	130	8,400	NA	No free product or sheen
	09/28/95		15.81	26.53	22	17	360	24	6,300	NA	No free product or sheen
	12/28/95		15.46	26.88	4.4	5.6	340	11	5,000	37	No free product or sheen
	03/12/96		12.62	29.72	1.4	5.9	41	73	4,500	120	No free product or sheen
	06/11/96		14.40	27.94	<5.0	25	350	81	7,500	<25	No free product or sheen
	10/02/96		15.47	26.87	18	<2.5	<2.5	<2.5	2,600	<25	No free product or sheen
	01/28/97		15.69	26.65	5.9	<2.5	29	19	2,800	<25	No free product or sheen
	05/20/97		14.48	27.86	<20	34	290	74	6,000	<100	No free product or sheen
	08/18/97		15.91	26.43	<20	7.7	94	15	5,900	<50	No free product or sheen
	09/29/97		NM	NC	NS	NS	NS	NS	NS	NS	Not measured
	11/05/97		16.32	26.02	1.1	0.86	47	1.6	5,400	<50/2.3 <sup>b</sup>	No free product or sheen
	03/31/98		12.25	30.09	56	180	1,400	3,700	20,000	250	No free product or sheen
	05/26/98		12.97	29.37	NS	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	76	200	1,600	3,900	16,000	190	No free product or sheen
	08/19/98		14.27	28.07	95	160	1,300	1,700	14,000	<100	No free product or sheen
	11/17/98		15.08	27.26	82	64	590	150	7500	290	No free product or sheen
	02/18/99		13.61	28.73	41	16	270	79	4,700	<100	No free product or sheen
	06/24/99		14.50	27.84	27	74	280	160	9,400	300	No free product or sheen
	08/30/99		15.26	27.08	15	33	160	33	8,500	290	No free product or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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

Monitoring Well	Date	Top of Riser	Depth to Water	Ground Water		Ethyl-benzene	Total Xylenes	TPH as gasoline	MTBE	Comments	
		Elevation (ft)	(ft)	Elevation (ft)	Benzene ( $\mu\text{g/L}$ )	Toluene ( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )	( $\mu\text{g/L}$ )		
MW-11	02/18/92	45.00	17.00	28.00	<0.5	<0.5	<0.5	2,400	NA		
	05/14/92		19.02	25.98	<0.5	1.9	1.3	1,600	NA		
	08/27/92		21.13	23.87	15	2	0.6	1.2	2,100	NA	
	11/19/92		17.91	27.09	<0.5	<0.5	<0.5	490	NA		
	02/03/92		17.91	27.09	<0.5	<0.5	0.55	<0.5	500	NA	
	06/23/93		18.14	26.86	<0.5	<0.5	<0.5	350	NA	No free product or sheen	
	09/22/93		19.63	25.37	<0.5	0.65	<0.5	0.71	200	NA	No free product or sheen
	01/24/94		19.79	25.21	<0.5	<0.5	<0.5	450	NA		
	04/07/94		18.78	26.22	<0.5	<0.5	<0.5	500	NA	No free product or sheen	
	06/07/94		18.88	26.12	<0.5	<0.5	<0.5	560	NA	No free product or sheen	
	09/28/94		20.45	24.55	<0.5	<0.5	<0.5	600	NA	No free product or sheen	
	12/14/94		19.45	25.55	<0.5	<0.5	<0.5	340	NA	No free product or sheen	
	03/15/95		17.32	27.68	<0.5	<0.5	<0.5	340	NA	No free product or sheen	
	06/13/95		17.43	27.57	<0.5	<0.5	<0.5	210 <sup>a</sup>	NA	No free product or sheen	
	09/28/95		18.67	26.33	4.1	0.5	<0.5	93	NA	No free product or sheen	
	12/28/95		18.31	26.69	<0.5	<0.5	<0.5	380 <sup>a</sup>	<5.0	No free product or sheen	
	03/12/96		15.89	29.11	<0.5	<0.5	<0.5	110	<5.0	No free product or sheen	
	06/11/96		16.98	28.02	<0.5	<0.5	<0.5	400 <sup>a</sup>	<5.0	No free product or sheen	
	10/02/96		18.20	26.80	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen	
	01/28/97		12.53	32.47	<0.5	<0.5	<0.5	110 <sup>a</sup>	<5.0	No free product or sheen	
	05/20/97		17.36	27.64	<0.5	<0.5	<0.5	330	<5.0	No free product or sheen	
	08/18/97		18.84	26.16	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen	
	09/29/97		NM	NC	NS	NS	NS	NS	NS	Not measured	
	11/05/97		NM	NC	NS	NS	NS	NS	NS	Not measured	
	03/31/98		15.39	29.61	<0.5	2.8	12	16	460	<5.0	No free product or sheen
	05/26/98		16.25	28.75	NS	NS	NS	NS	NS	No free product or sheen	
	05/28/98		NM	NC	14	24	88	75	1,100	24	No free product or sheen
	08/19/98		17.30	27.70	16	9.6	69	17	1,200	6	No free product or sheen
	11/17/98		18.05	26.95	15	4.4	14	<0.5	580	21	No free product or sheen
	02/18/99		16.87	28.13	8.0	<0.5	1.4	<0.5	390	44	No free product or sheen
	06/24/99		17.50	27.50	4.6	<0.5	0.66	<0.5	610	59	No free product or sheen
	08/30/99		18.19	26.81	NS	NS	NS	NS	NS	Not sampled	

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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)	Benzene (µg/L)	Toluene (µg/L)	Ethyl-benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Comments
RW-1	05/14/92	43.17	16.88	26.29	NS	NS	NS	NS	NS	NS	
	05/15/92		NM	NC	270	62	29	140	790	NA	
	08/27/92		19.05	24.12	1,300	200	68	810	24,000	NA	
	11/19/92		21.11	22.07	NS	NS	NS	NS	NS	NS	
	02/03/92		15.48	27.69	71	35	22	110	620	NA	
	06/23/93		28.25	14.92	30	33	9.8	35	220	NA	No free product or sheen
	09/22/93		17.83	25.34	800	400	170	910	4,100	NA	No free product or sheen
	01/24/94		24.00	19.17	33	6	6.9	23	190	NA	
	04/07/94		16.05	27.12	110	57	32	260	1,500	NA	No free product or sheen
	06/07/94		16.00	27.17	130	51	45	180	1,700	NA	No free product or sheen
	09/28/94		18.35	24.82	54	9.2	12	29	350	NA	No free product or sheen
	12/14/94		19.50	23.67	6.8	2.1	1.2	3.4	79	NA	No free product or sheen
	03/15/95		17.00	26.17	NS	NS	NS	NS	NS	NS	No free product or sheen
	04/10/95		NM	NC	54	11	11	69	410	NA	Not measured
	06/13/95		14.95	28.22	1,600	780	340	1,400	8,200	NA	No free product or sheen
	09/28/95		27.63	15.54	<0.5	<0.5	<0.5	<0.5	<50	NA	No free product or sheen
	12/28/95		14.54	28.63	<0.5	<0.5	<0.5	<0.5	<50	<5.0	No free product or sheen
	03/12/96		11.02	32.15	<0.5	<0.5	<0.5	<0.5	86	110	No free product or sheen
	06/11/96		14.52	28.65	38	11	4.7	50	230	68	No free product or sheen
	10/02/96		15.53	27.64	68	29	14	75	360	47	No free product or sheen
	01/28/97		12.59	30.58	0.77	<0.5	<0.5	<0.5	<50	9	No free product or sheen
	05/20/97		14.85	28.32	<0.5	<0.5	<0.5	<0.5	<50	32	No free product or sheen
	08/18/97		16.19	26.98	25	<0.5	<0.5	3.6	220	170	No free product or sheen
	09/29/97		NM	NC	240	2.8	51	55	900	230	Not measured
	11/05/97		16.95	26.22	340	3.2	59	78	1,300	240/220 <sup>b</sup>	No free product or sheen
	03/31/98		11.85	31.32	450	130	200	940	4,100	4,100	No free product or sheen

**TABLE 1**  
**GROUND WATER MONITORING DATA**

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

Monitoring Well	Date	Top of Riser	Depth to Water	Ground Water		Ethyl-benzene	Total Xylenes	TPH as gasoline	MTBE	Comments
		Elevation (ft)	(ft)	Elevation (ft)	Benzene (µg/L)	Toluene (µg/L)	(µg/L)	(µg/L)	(µg/L)	
RW-1 (cont)	05/26/98	43.17	13.13	30.04	NS	NS	NS	NS	NS	No free product or sheen
	05/28/98		NM	NC	830	210	170	720	17,000	No free product or sheen
	08/19/98		14.70	28.47	20	<2.5	7.1	15	540	No free product or sheen
	11/17/98		15.54	27.63	7.8	<2.5	5.6	<2.5	630	No free product or sheen
	02/18/99		13.75	29.42	6.7	1.6	3.2	15	180	No free product or sheen
	06/24/99		14.96	28.21	<0.5	<0.5	<0.5	<0.5	<50	No free product or sheen
	08/30/99		15.75	27.42	<0.5	<0.5	<0.5	<0.5	<50	No free product or sheen

<sup>a</sup> Product is not typical gasoline.

<sup>b</sup> MTBE by EPA Method 8020/EPA Method 8260.

<sup>c</sup> Constituents by EPA Method 8260.

Top of Riser Elevations = Elevations surveyed by Aegis Environmental and are assumed relative to mean sea level.

TPH = Total petroleum hydrocarbons.

MTBE = Methyl tertiary butyl ether.

µg/L = Micrograms per liter.

NS = Not sampled.

NM = Not measured.

NC = Not calculated.

NA = Not analyzed.

Note: Aegis Environmental, Inc. collected data prior to June 23, 1993.

**TABLE 2**  
**VOLUME OF GROUND WATER TREATED**

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

Date	Totalizer Reading (gallons)	Change in Totalizer Reading (gallons)	Total Discharge (gallons)	Average Flow Rate (gallons per Minute)
06/21/93	2,120	NA	2,120	NA
07/14/93	117,367	115,247	117,367	3.48
08/14/93	210,470	93,103	210,470	2.09
09/22/93	255,241	44,771	255,241	0.80
01/24/94	399,520	144,279	399,520	0.81
03/31/94	460,075	60,555	460,075	0.64
06/21/94	597,663	137,588	597,663	1.17
09/28/94	662,894	65,231	662,894	0.46
12/14/94	723,160	60,266	723,160	0.54
03/15/95	902,621	179,461	902,621	1.37
06/30/95	929,056	26,435	929,056	0.17
09/26/95	1,018,150	89,094	1,018,150	0.70
12/06/95	1,053,866	35,716	1,053,866	0.35
01/30/96	1,067,852	13,986	1,067,852	0.18
01/30/96 <sup>a</sup>	0	NA	1,067,852	NA
03/19/96	8,900	8,900	1,076,752	0.13
06/27/96	107,780	98,880	1,175,632	0.69
09/18/96	108,910	1,130	1,176,762	0.01
10/22/96	116,540	7,630	1,184,392	0.16
06/24/99	116,580	40	1,184,432	0.00
07/26/99	117,170	590	1,185,022	0.01
07/27/99	120,840	3,670	1,188,692	2.55
07/28/99	121,030	190	1,188,882	0.13
07/29/99	121,270	240	1,189,122	0.17
07/30/99	121,490	220	1,189,342	0.15
08/02/99	121,840	350	1,189,692	0.08
08/09/99	141,910	20,070	1,209,762	1.99
08/26/99	149,647	7,737	1,217,499	0.32
08/30/99	150,380	733	1,218,232	0.13
09/07/99	152,000	1,620	1,219,852	0.14
09/22/99	154,890	2,890	1,222,742	0.13

<sup>a</sup> Flow totalizer replaced on January 30, 1996

**TABLE 3**  
**CUMMULATIVE GROUND WATER SYSTEM ANALYTICAL RESULTS**

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

Sample ID	Date	Benzene	Toluene	Ethyl-benzene	Total Xylenes	TPH as gasoline	MTBE	Priority Pollutant	Phenols & Cyanide		pH (µg/L)	C.O.D.	T.S.S. (mg/L)
		(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)	(µg/L)		(µg/L)	(µg/L)			
Effluent	05/28/93	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Effluent	10/01/93	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Effluent	01/24/94	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Effluent	04/07/94	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Effluent	05/18/94	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Influent	12/14/94	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Mid-Carbon Effluent	12/14/94	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
	12/14/94	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Influent	03/22/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Mid-Carbon Effluent	03/22/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
	03/22/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Influent	04/10/95	3.9	0.57	0.65	5.5	<50	NA	NA	NA	NA	NA	NA	NA
Mid-Carbon Effluent	04/10/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
	04/10/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Effluent	07/28/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
Mid-Carbon Effluent	08/10/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
	08/10/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA
	08/10/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA	NA

**TABLE 3**  
**CUMMULATIVE GROUND WATER SYSTEM ANALYTICAL RESULTS**

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

Sample ID	Date							Priority				
		Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Pollutant Metals (µg/L)	Phenols & Cyanide (µg/L)	pH (µg/L)	C.O.D.	T.S.S. (mg/L)
Influent	09/14/95	<0.5	<0.5	<0.5	<0.5	490 <sup>a</sup>	NA	NA	NA	NA	NA	NA
Mid-Carbon	09/14/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Effluent	09/14/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Influent	12/06/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Mid-Carbon	12/06/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Effluent	12/06/95	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Influent	01/30/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Mid-Carbon	01/30/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Effluent	01/30/96	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Influent	02/27/96	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Mid-Carbon	02/27/96	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Effluent	02/27/96	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Influent	03/12/96	<0.5	<0.5	<0.5	<0.5	<50	5.3	NA	NA	NA	NA	NA
Mid-Carbon	03/12/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Effluent	03/12/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Influent	04/16/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Mid-Carbon	04/16/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Effluent	04/16/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Influent	05/07/96	<0.5	<0.5	<0.5	<0.5	<50	7.9	NA	NA	NA	NA	NA
Mid-Carbon	05/07/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Effluent	05/07/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA

**TABLE 3**  
**CUMMULATIVE GROUND WATER SYSTEM ANALYTICAL RESULTS**

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

Sample ID	Date							Priority Pollutant	Phenols &			T.S.S. (mg/L)
		Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)		Metals (µg/L)	Cyanide (µg/L)	pH (µg/L)	
Influent	06/11/96	2.4	0.57	5.9	2.8	190	610	NA	NA	NA	NA	NA
Mid-Carbon	06/11/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Effluent	06/11/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Influent	09/18/96	<0.5	<0.5	<0.5	<0.5	<50	11	NA	NA	NA	NA	NA
Mid-Carbon	09/18/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Effluent	09/18/96	<0.5	<0.5	<0.5	<0.5	<50	<5.0	NA	NA	NA	NA	NA
Influent	06/24/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
DAT Effluent	06/24/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Mid-Carbon	06/24/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Effluent	06/24/99	<0.5	<0.5	<0.5	<0.5	<50	NA	0.0037 <sup>a</sup>	ND	8.9	NA	NA
Influent	07/26/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Influent	07/27/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Influent	07/28/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Influent	08/02/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
DAT Effluent	08/02/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Mid-Carbon	08/02/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Effluent	08/02/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA

**TABLE 3**  
**CUMMULATIVE GROUND WATER SYSTEM ANALYTICAL RESULTS**

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

Sample ID	Date							Priority				T.S.S. (mg/L)
		Benzene (µg/L)	Toluene (µg/L)	Ethyl- benzene (µg/L)	Total Xylenes (µg/L)	TPH as gasoline (µg/L)	MTBE (µg/L)	Pollutant	Phenols & Metals (µg/L)	Cyanide (µg/L)	pH (µg/L)	
Effluent	08/30/99	NA	NA	NA	NA	NA	NA	NA	NA	7.9	<1.0	2.6
Influent	09/07/99	<0.5	<0.5	<0.5	<0.5	91	NA	NA	NA	NA	NA	NA
DAT Effluent	09/07/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Mid-Carbon	09/07/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA
Effluent	09/07/99	<0.5	<0.5	<0.5	<0.5	<50	NA	NA	NA	NA	NA	NA

<sup>a</sup> Not typical gasoline.

<sup>b</sup> Arsenic

Priority Pollutant Metals = Arsenic, cadmium, copper, lead, mercury, nickel, selenium, silver, total chromium & zinc.

TPH = Total petroleum hydrocarbons

MTBE = Methyl tertiary butyl ether.

µg/L = Micrograms per liter.

NA = Not analyzed.

ND = Not detected

C.O.D. = Chemical oxygen demand.

T.S.S. = Total Suspended Solids.

Note: The ground water treatment system using an air stripper was shut down in October 1996, and was restarted with a Diffused Aeration Tank on June 24, 1999.

T.3 S.

R.2 W.

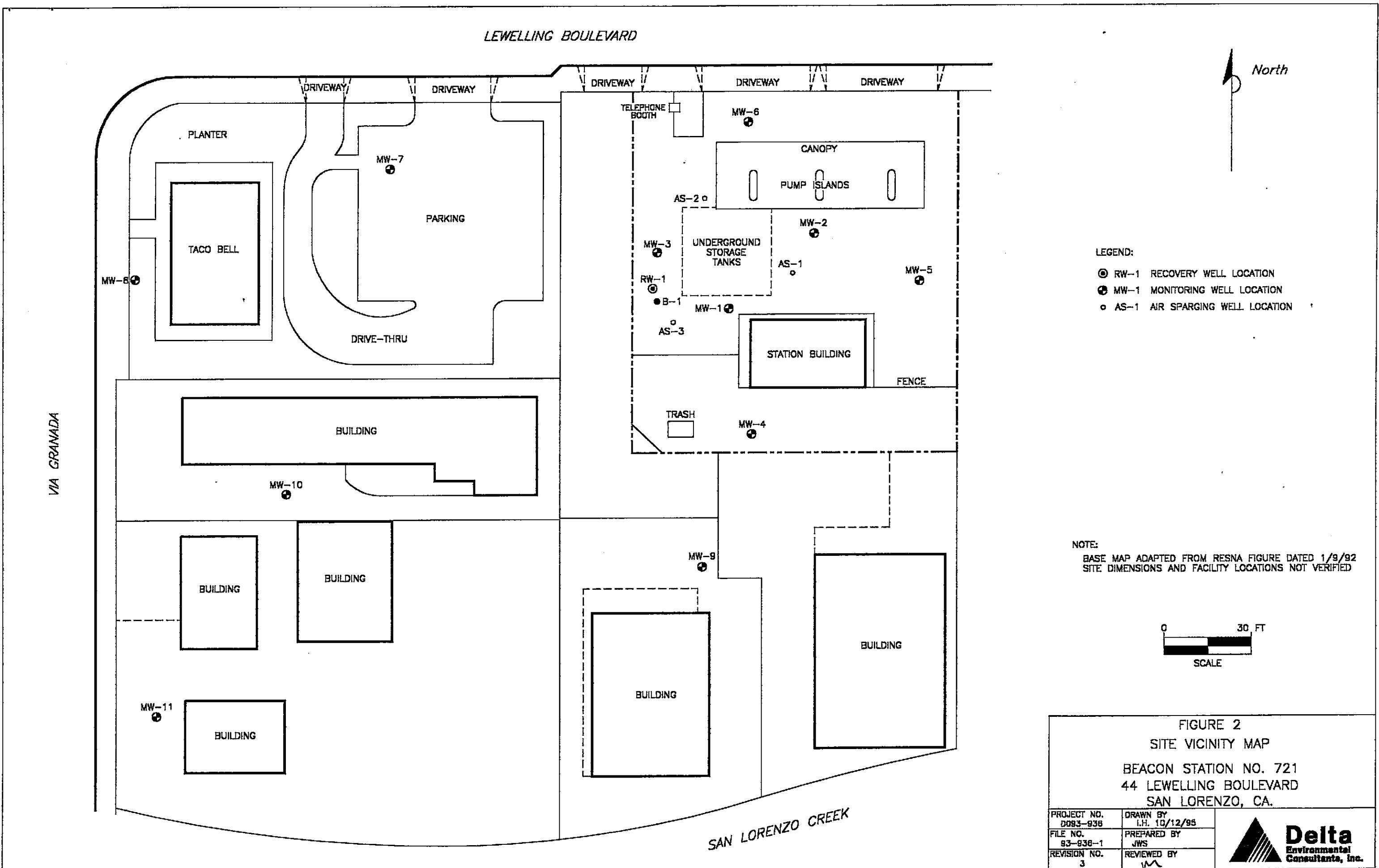


QUADRANGLE LOCATION

0 2000 FT  
SCALE 1 : 24,000

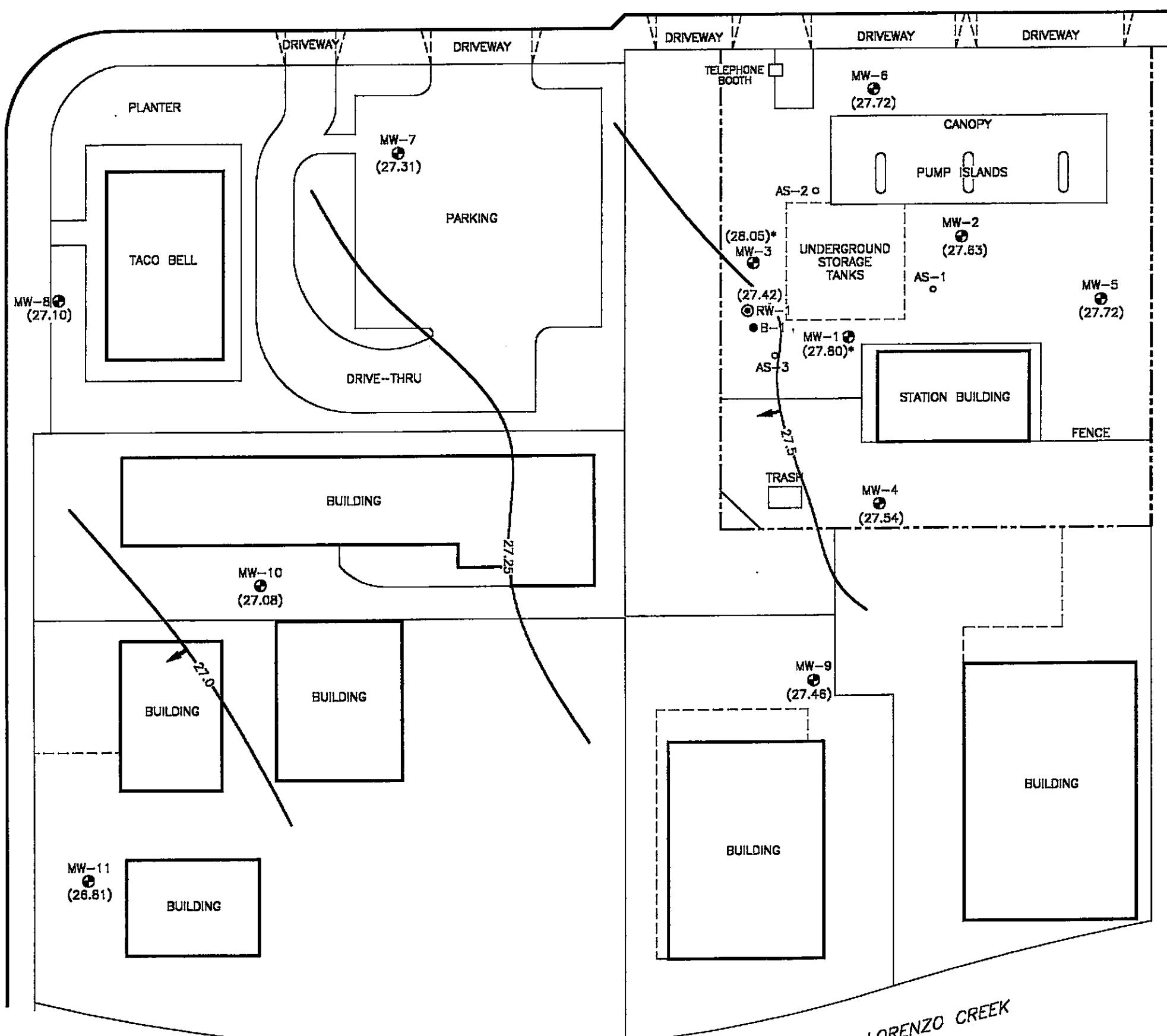
FIGURE 1	
SITE LOCATION MAP	
BEACON STATION NO. 721	
PROJECT NO.	DRAWN BY 40-93-936 I.H. 11/2/82
FILE NO.	PREPARED BY TMG
REVISION NO.	REVIEWED BY 1 11/6 1982

 Delta Environmental Consultants, Inc.



LEWELLING BOULEVARD

VIA GRANADA



North

LEGEND:

- RW-1 RECOVERY WELL LOCATION
- MW-1 MONITORING WELL LOCATION
- AS-1 AIR SPARGING WELL LOCATION
- (27.42) GROUND WATER ELEVATION ASSUMED RELATIVE TO MEAN SEA LEVEL.
- 27.0 WATER TABLE CONTOUR ASSUMED RELATIVE TO MEAN SEA LEVEL
- ← GROUND WATER FLOW DIRECTION
- \* MONITORING WELLS MW-1 AND MW-3 WERE NOT USED IN CONTOUR CONSTRUCTION

NOTE:

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



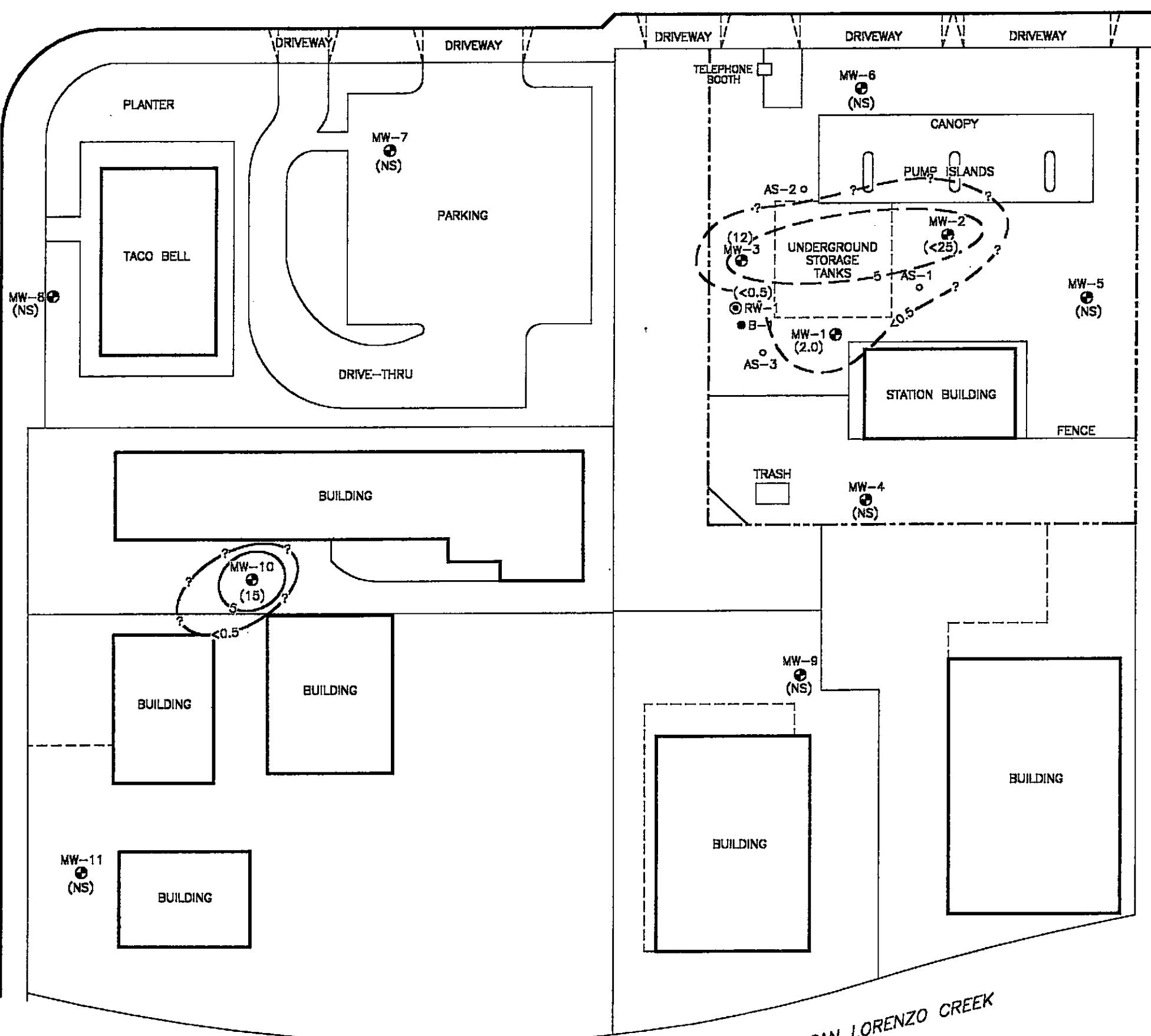
FIGURE 3  
GROUND WATER ELEVATION CONTOUR MAP  
8/30/99  
BEACON STATION NO. 721  
44 LEWELLING BOULEVARD  
SAN LORENZO, CA.

PROJECT NO. D093-936	DRAWN BY TLA 10/12/99
FILE NO. 93-936-1	PREPARED BY TLA
REVISION NO. 1	REVIEWED BY MURRY



LEWELLING BOULEVARD

VIA GRANADA



North

LEGEND:

- RW-1 RECOVERY WELL LOCATION
- MW-1 MONITORING WELL LOCATION
- AS-1 AIR SPARGING WELL LOCATION

(2.0) BENZENE CONCENTRATION IN MICROGRAMS PER LITER ( $\mu\text{g}/\text{L}$ )

— 5 — BENZENE ISOCONCENTRATION IN  $\mu\text{g}/\text{L}$

NS NOT SAMPLED

NOTE:

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



FIGURE 4  
DISSOLVED BENZENE ISOCONCENTRATION MAP  
8/30/99  
BEACON STATION NO. 721  
44 LEWELLING BOULEVARD  
SAN LORENZO, CA.

PROJECT NO. D093-936	DRAWN BY TLA 10/12/99	Reviewed by MRC
FILE NO. 93-936-1	PREPARED BY TLA	
REVISION NO. 1	REVIEWED BY	



## **QUALITY ASSURANCE PLAN**

This section describes the field and analytical procedures to be followed throughout the investigation.

### **General Sample Collection and Handling Procedures**

Proper collection and handling are essential to ensure the quality of a sample. Each sample is collected in a suitable container, preserved correctly for the intended analysis and stored, prior to analysis, for no longer than the maximum allowable holding time. Details on the procedures for collection and handling of samples used on this project can be found in this section.

#### **Water Sample Collection for Volatile Organic Analyses**

For volatile organic analyses (VOA), the water sample is decanted into each VOA vial in such a manner that there is no meniscus at the top of the vial. A cap is quickly secured to the top of the vial. The vial is inverted and gently tapped to see if air bubbles are present. If none are present, the vial is labeled and refrigerated according to soil and water sample labeling and preservation.

#### **Water Sample Labeling and Preservation**

Label information includes a unique sample identification number, job identification number, date, and time. After labeling, all soil and water samples are placed in a Ziploc® type bag and placed in an ice chest cooled to approximately 4° Celsius. Upon arriving at Delta's office, the samples are transferred to a locked refrigerator cooled to approximately 4° Celsius. Chemical preservation is controlled by the required analysis and is noted on the chain of custody form.

Upon recovery, the sample container is sealed to minimize the potential of volatilization and cross-contamination prior to chemical analysis. Soil sampling tubes are typically closed at each end with Teflon® sheeting and plastic caps. The sample is then placed in a Ziploc® type bag and sealed. The sample is labeled and refrigerated at approximately 4° Celsius for delivery, under strict chain-of-custody, to the analytical laboratory.

### **Sample Identification and Chain-of-Custody Procedures**

Sample identification and chain-of-custody procedures document sample possession from the time of collection to ultimate disposal. Each sample container submitted for analysis has a label affixed to identify the job number, sampler, date and time of sample collection, and a sample number unique to that sample. This information, in addition to a description of the sample, field measurements made, sampling methodology, names of on-site personnel, and any other pertinent field observations, is recorded on the borehole log or in the field records. A California-certified laboratory analyzes samples.

A chain-of-custody form is used to record possession of the sample from time of collection to its arrival at the laboratory. When the samples are shipped, the person in custody of them relinquishes the samples by signing the chain-of-custody form and noting the time. The sample-control officer at the laboratory verifies sample integrity and confirms that the samples are collected in the proper containers, preserved correctly, and contain adequate volumes for analysis.

If these conditions are met, each sample is assigned a unique log number for identification throughout analysis and reporting. The log number is recorded on the chain-of-custody form and in the legally required logbook, maintained by the laboratory, in the laboratory. The sample description, date received, client's name, and other relevant information is also recorded.

**ENCLOSURE B**

Alameda County Health Care Services Agency  
Letter Dated January 19, 1999

ALAMEDA COUNTY  
HEALTH CARE SERVICES

AGENCY

DAVID J. KEARS, Agency Director



RECEIVED

JAN 25 1999

StID 1497

January 19, 1999

Mr. Terrence Fox  
Ultramar  
PO Box 466  
Hanford, CA 93232-0406

ENVIRONMENTAL HEALTH SERVICES

1131 Harbor Bay Parkway, Suite 250  
Alameda, CA 94502-6577  
(510) 567-6700  
(510) 337-9335 (FAX)

RE: Groundwater Sampling Frequency at 44 Lewelling Blvd, San Lorenzo, CA

Dear Mr. Fox:

I have completed review of Delta Environmental's January 1999 *Quarterly Groundwater Monitoring Report, Fourth Quarter 1998* prepared for the above referenced site. Groundwater from well MW-2 continues to exhibit elevated levels of MTBE (up to 17,000 ppb). Ultramar is planning to restart the vapor extraction system in the first quarter of 1999 to reduce the MTBE levels.

Once the remediation system is operation, please keep me apprised of the effectiveness of MTBE removal from soil and groundwater. At this time, it is appropriate to reduce the groundwater sampling frequency of the various monitoring wells as follows:

- discontinue sampling of wells MW-5, MW-6, MW-8, and MW-9;
- semi-annual sampling of wells MW-4, and MW-11;
- annual sampling of well MW-7; and,
- quarterly sampling of wells MW-1, MW-2, MW-3 and MW-10.

If you have any questions, I can be reached at (510) 567-6762.

eva chu  
Hazardous Materials Specialist

**Delta Environmental Consultants, Inc.**  
**SITE SAMPLING / VISIT CHECKLIST**

SITE NAME:	BEACON STATION NO. 721	PROJECT NUMBER:	D093-936
ADDRESS:	44 LEWELLING BLVD (SAN LORENZO, CA)	TIME ARRIVED AT SITE:	0500
DATE:	8/30/99	TIME DEPARTED FROM SITE:	0900

WELLS SAMPLED: MW-1, 2, 3, 4\*, 7\*\*, 10, 11\* & RW-1  
SAMPLING ORDER: MW-3, 2, 10, RW-1  
SAMPLING PARAMETERS: BTEX, TPHg & MTBE (4 X 40 mL VOA) : EPA METHOD 8020  
SAMPLING NOTES: \* SAMPLE MW-4 & MW-11 SEMIANNUALLY (2<sup>ND</sup> & 4<sup>TH</sup> QUARTERS ONLY)  
SAMPLING NOTES: \*\* SAMPLE MW-7 ANNUALLY (4<sup>TH</sup> QUARTER ONLY)

WATER LEVEL DATA SHEETS ATTACHED:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
FIELD SAMPLING DATA SHEETS ATTACHED:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
** NUMBER OF SAMPLING SHEETS:	5	
TEMPORARY STORAGE OF WASTE ON SITE:	YES <input type="checkbox"/>	NO <input checked="" type="checkbox"/>
CHAIN OF CUSTODY COPIES ATTACHED:	YES <input checked="" type="checkbox"/>	NO <input type="checkbox"/>
DATE & TIME SAMPLES SHIPPED:	8/30/99 1005	
CARRIER SAMPLES WERE SHIPPED BY:	MWM / DELTA	

ANY PROBLEMS / COMMENTS:
totalizer: 150,380
0810 Sampled effluent ; pH = 7.8



**Delta**  
Environmental  
Consultants, Inc.



**Delta Environmental Consultants, Inc.**

## GROUND WATER LEVEL DATA

SITE NAME: BEACON STATION NO. 721	PROJECT NUMBER: D093-936
ADDRESS: 44 LEWELLING BLVD (SAN LORENZO, CA)	RECORDED BY: MW Morgan
DATE: 8/30/99	MEASURING DEVICE: SLOPE INDICATOR



Delta Environmental Consultants, Inc.

## FIELD RECORD OF WATER SAMPLING

SAMPLE ID:	MW-1	SITE NAME:	BEACON STATION NO. 721
DEPTH OF WELL (FT):	31.20	DELTA JOB NUMBER:	D093-936
DEPTH TO GROUND WATER (FT):	15.87	ADDRESS:	44 LEWELLING BLVD (SAN LORENZO, CA)
CASING WATER LEVEL (FT):	15.33	DATE/ SAMPLER INITIALS:	8/30/99 JL

CASING DIAMETER (INCHES):  2  4  6  8  10  12

(CIRCLE ONE)

PURGING PRIOR TO SAMPLING

CHECK BOX IF PURGING NOT REQUIRED 

PURGING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: \_\_\_\_\_

## PURGE VOLUME CALCULATIONS:

CASING DIAMETER	CASING WATER LEVEL (DEPTH OF WELL - DEPTH TO GW)	MULTIPLY BY	THREE CASING VOLUMES (GALLONS)
2 INCH	15.33	X 0.5 =	8 gal
4 INCH		X 2.0 =	
6 INCH		X 4.4 =	

DATE PURGED:		START TIME:		END TIME:	
--------------	--	-------------	--	-----------	--

TIME	TEMP (°F)	pH UNITS	SPEC COND.	GALLONS REMOVED	SAMPLE APPEARANCE COMMENTS
22.1	15.5	7.8	800		0
22.4	22.5	7.8	813		4
22.9	22.5	7.6	940		9

RECORD OF SAMPLING

CHECK BOX IF SAMPLES NOT COLLECTED 

SAMPLING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: \_\_\_\_\_

DATE SAMPLED:	8/30/99	TIME:	051802	COMMENTS:
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SAMPLE ID	CONTAINER TYPES	ANALYSIS	COMMENTS
MW-1	4 X 40mL VOA	BTEX, TPHg, MTBE	EPA METHOD 8020



Delta Environmental Consultants, Inc.

## FIELD RECORD OF WATER SAMPLING

SAMPLE ID:	MW-2	SITE NAME:	BEACON STATION NO. 721
DEPTH OF WELL (FT):	33.30	DELTA JOB NUMBER:	D093-936
DEPTH TO GROUND WATER (FT):	15.46	ADDRESS:	44 LEWELLING BLVD (SAN LORENZO, CA)
CASING WATER LEVEL (FT):	17.84	DATE/ SAMPLER INITIALS:	8/30/99 NL

CASING DIAMETER (INCHES):  2  4  6  8  10  12

PURGING PRIOR TO SAMPLING

CHECK BOX IF PURGING NOT REQUIRED 

PURGING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: \_\_\_\_\_

## PURGE VOLUME CALCULATIONS:

CASING DIAMETER	CASING WATER LEVEL (DEPTH OF WELL - DEPTH TO GW)	MULTIPLY BY	THREE CASING VOLUMES (GALLONS)
2 INCH	17.84	X 0.5 =	9 gal
4 INCH		X 2.0 =	
6 INCH		X 4.4 =	

DATE PURGED:		START TIME:		END TIME:	
--------------	--	-------------	--	-----------	--

TIME	TEMP (°F)	pH UNITS	SPEC COND.	GALLONS REMOVED	SAMPLE APPEARANCE/ COMMENTS
23.7	7.9	689	0		
22.5	7.8	633	4		
22.3	7.7	634	9		

RECORD OF SAMPLING

CHECK BOX IF SAMPLES NOT COLLECTED 

SAMPLING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: \_\_\_\_\_

DATE SAMPLED:	8/30/99	TIME:	0719	COMMENTS:
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SAMPLE ID	CONTAINER TYPES	ANALYSIS	COMMENTS
MW-2	4 X 40mL VOA	BTEX, TPHg, MTBE	EPA METHOD 8020



Delta Environmental Consultants, Inc.

## FIELD RECORD OF WATER SAMPLING

SAMPLE ID:	<del>MW-3</del> MW-3	SITE NAME:	BEACON STATION NO. 721
DEPTH OF WELL (FT):	29.30	DELTA JOB NUMBER:	D093-936
DEPTH TO GROUND WATER (FT):	15.05	ADDRESS:	44 LEWELLING BLVD (SAN LORENZO, CA)
CASING WATER LEVEL (FT):	14.25	DATE/ SAMPLER INITIALS:	8/30/99 nl

CASING DIAMETER (INCHES):  2  4  6  8  10  12

PURGING PRIOR TO SAMPLING

CHECK BOX IF PURGING NOT REQUIRED 

PURGING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: \_\_\_\_\_

## PURGE VOLUME CALCULATIONS:

CASING DIAMETER	CASING WATER LEVEL (DEPTH OF WELL - DEPTH TO GW)	MULTIPLY BY	THREE CASING VOLUMES (GALLONS)
2 INCH	14.25	X 0.5 =	7.5 gal
4 INCH		X 2.0 =	
6 INCH		X 4.4 =	

DATE PURGED:		START TIME:		END TIME:	
--------------	--	-------------	--	-----------	--

TIME	TEMP (°F)	pH UNITS	SPEC COND.	GALLONS REMOVED	SAMPLE APPEARANCE/ COMMENTS
19.6	<del>75</del>	7.0	<del>350</del> 750	0	
21.2	<del>75</del>	7.0	<del>350</del> 821	4	
22.0	<del>75</del>	7.0	<del>350</del> 824	7	

RECORD OF SAMPLING

CHECK BOX IF SAMPLES NOT COLLECTED 

SAMPLING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: \_\_\_\_\_

DATE SAMPLED:	8/30/99	TIME:	0640	COMMENTS:
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SAMPLE ID:	CONTAINER TYPES	ANALYSIS	COMMENTS
MW-3	4 X 40mL VOA	BTEX, TPHg, MTBE	EPA METHOD 8020



Delta Environmental Consultants, Inc.

## FIELD RECORD OF WATER SAMPLING

SAMPLE ID:	MW-10	SITE NAME:	BEACON STATION NO. 721
DEPTH OF WELL (FT):	29.50	DELTA JOB NUMBER:	D093-936
DEPTH TO GROUND WATER (FT):	15.26	ADDRESS:	44 LEWELLING BLVD (SAN LORENZO, CA)
CASING WATER LEVEL (FT):	14.24	DATE/ SAMPLER INITIALS:	8/30/99 nl

CASING DIAMETER (INCHES):  2  4  6  8  10  12

PURGING PRIOR TO SAMPLING

CHECK BOX IF PURGING NOT REQUIRED 

PURGING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: \_\_\_\_\_

## PURGE VOLUME CALCULATIONS:

CASING DIAMETER	CASING WATER LEVEL (DEPTH OF WELL - DEPTH TO GW)	MULTIPLY BY	THREE CASING VOLUMES (GALLONS)
2 INCH	14.24	X 0.5 =	7 gal
4 INCH		X 2.0 =	
6 INCH		X 4.4 =	

DATE PURGED:		START TIME:		END TIME:	
--------------	--	-------------	--	-----------	--

TIME	TEMP (°F)	DH UNITS	SPEC COND.	GALLONS REMOVED	SAMPLE APPEARANCE/ COMMENTS
	23.1	7.0	812	0	
	23.1	7.0	821	4	
	23.7	7.0	825	7	

RECORD OF SAMPLING

CHECK BOX IF SAMPLES NOT COLLECTED 

SAMPLING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: \_\_\_\_\_

DATE SAMPLED:	8/30/99	TIME:	0739	COMMENTS:
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SAMPLE ID:	CONTAINER TYPES:	ANALYSIS:	COMMENTS
MW-10	4 X 40mL VOA	BTEX, TPHg, MTBE	EPA METHOD 8020



Delta Environmental Consultants, Inc.

## FIELD RECORD OF WATER SAMPLING

SAMPLE ID:	RW-1	SITE NAME:	BEACON STATION NO. 721
DEPTH OF WELL (FT):	29.50	DELTA JOB NUMBER:	D093-936
DEPTH TO GROUND WATER (FT):	15.75	ADDRESS:	44 LEWELLING BLVD (SAN LORENZO, CA)
CASING WATER LEVEL (FT):	13.75	DATE/ SAMPLER INITIALS:	8/30/99 ~L

CASING DIAMETER (INCHES):  2  4  6  8  10  12

## PURGING PRIOR TO SAMPLING

CHECK BOX IF PURGING NOT REQUIRED 

## PURGING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: \_\_\_\_\_

## PURGE VOLUME CALCULATIONS:

CASING DIAMETER	CASING WATER LEVEL (DEPTH OF WELL - DEPTH TO GW)	MULTIPLY BY	THREE CASING VOLUMES (GALLONS)
2 INCH		X 0.5 =	
4 INCH		X 2.0 =	
6 INCH	13.75	X 4.4 =	60 gal

DATE PURGED:		START TIME:		END TIME:	
--------------	--	-------------	--	-----------	--

TIME	TEMP (°F)	pH UNITS	SPEC COND.	GALLONS REMOVED	SAMPLE APPEARANCE/ COMMENTS

## RECORD OF SAMPLING

CHECK BOX IF SAMPLES NOT COLLECTED 

## SAMPLING METHOD (CHECK ONE):

CENTRIFUGAL PUMP  SUBMERSIBLE PUMP  BAILER  OTHER: Sample Port

DATE SAMPLED:	8/30/99	TIME:	0804	COMMENTS:
---------------	---------	-------	------	-----------

SAMPLE ID	CONTAINER TYPES	ANALYSIS	COMMENTS
RW-1	4 X 40mL VOA	BTEX, TPHg, MTBE	EPA METHOD 8020

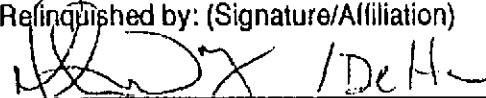


Ultramar Inc.

## CHAIN OF CUSTODY REPORT

BEACON

Beacon Station No. 721	Sampler (Print Name) Martin Morgan	ANALYSES				Date 8/30/99	Form No. 1 of 1
Project No. D093-936	Sampler (Signature)					Kiff Lab 5302974800	
Project Location San Lorenzo, CA	Affiliation Delta Env. Cons.					Standard TAT	
Sample No./Identification	Date	Time	Lab No.	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers
MW-1	8/30/99	0702		X X	X		4
MW-2	8/30/99	0719		X X	X		4
MW-3	8/30/99	0640		X X	X		4
MW-10	8/30/99	0739		X X	X		4
RW-1	8/30/99	0804		X X	X		4
Effluent	8/30/99	0810			X		1

Relinquished by: (Signature/Affiliation) 	Date 8/30/99	Time 1005	Received by: (Signature/Affiliation)	Date	Time
Relinquished by: (Signature/Affiliation)					
Relinquished by: (Signature/Affiliation)					

Relinquished by: (Signature/Affiliation)	Date	Time	Received by: (Signature/Affiliation)	Date	Time

Report To: Richard Munch 916 638 2085	Bill to: ULTRAMAR INC. 525 West Third Street Hanford, CA 93230 Attention: Terry Fox	WHITE: Return to Client with Report	YELLOW: Laboratory Copy	PINK: Originator Copy	32-8003 1/90
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**ENCLOSURE D**

Ground Water Sample Laboratory Report

SEP-14-99 TUE 09:03

KIFF ANALYTICAL

FAX NO. 5302974803

P. 01/05



Report Number : 14847

Date : 09/14/99

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

Subject : 6 Water Samples  
Project Name : Beacon 721  
Project Number : D093-936

Dear Mr. Munsch,

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

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

  
Joel Kiff

SEP-14-99 TUE 09:03

KIFF ANALYTICAL

FAX NO. 5302974803

P. 02/05



Report Number : 14847  
 Date : 09/14/99

Project Name : Beacon 721

Project Number : D093-936

Sample : MW-1

Matrix : Water

Sample Date : 08/30/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	2.0	0.50	ug/L	EPA 8020	09/11/99
Toluene	< 0.50	0.50	ug/L	EPA 8020	09/11/99
Ethylbenzene	3.9	0.50	ug/L	EPA 8020	09/11/99
Total Xylenes	2.0	0.50	ug/L	EPA 8020	09/11/99
Methyl-t-butyl ether	2800	50	ug/L	EPA 8020	09/08/99
TPH as Gasoline	140	50	ug/L	M EPA 8015	09/11/99
aaa-Trifluorotoluene (8020 Surrogate)	104		% Recovery	EPA 8020	09/08/99
aaa-Trifluorotoluene (Gasoline Surrogate)	97.5		% Recovery	M EPA 8015	09/08/99

Sample : MW-2

Matrix : Water

Sample Date : 08/30/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 25	25	ug/L	EPA 8020	09/08/99
Toluene	< 25	25	ug/L	EPA 8020	09/08/99
Ethylbenzene	< 25	25	ug/L	EPA 8020	09/08/99
Total Xylenes	< 25	25	ug/L	EPA 8020	09/08/99
Methyl-t-butyl ether	18000	250	ug/L	EPA 8020	09/08/99
TPH as Gasoline	< 2500	2500	ug/L	M EPA 8015	09/08/99
aaa-Trifluorotoluene (8020 Surrogate)	105		% Recovery	EPA 8020	09/08/99
aaa-Trifluorotoluene (Gasoline Surrogate)	97.5		% Recovery	M EPA 8015	09/08/99

Approved By: Joel Kiff

SEP-14-99 TUE 09:04

KIFF ANALYTICAL

FAX NO. 5302974803

P. 03/05



Report Number : 14847  
 Date : 09/14/99

Project Name : Beacon 721

Project Number : D093-936

Sample : MW-3

Matrix : Water

Sample Date :08/30/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	12	0.50	ug/L	EPA 8020	09/05/99
Toluene	12	0.50	ug/L	EPA 8020	09/05/99
Ethylbenzene	3.2	0.50	ug/L	EPA 8020	09/05/99
Total Xylenes	13	0.50	ug/L	EPA 8020	09/05/99
Methyl-t-butyl ether	50	5.0	ug/L	EPA 8020	09/05/99
TPH as Gasoline	250	50	ug/L	M EPA 8015	09/05/99
aaa-Trifluorotoluene (8020 Surrogate)	99.5		% Recovery	EPA 8020	09/05/99
aaa-Trifluorotoluene (Gasoline Surrogate)	96.6		% Recovery	M EPA 8015	09/05/99

Sample : MW-10

Matrix : Water

Sample Date :08/30/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	15	2.5	ug/L	EPA 8020	09/05/99
Toluene	33	2.5	ug/L	EPA 8020	09/05/99
Ethylbenzene	160	2.5	ug/L	EPA 8020	09/05/99
Total Xylenes	33	2.5	ug/L	EPA 8020	09/05/99
Methyl-t-butyl ether	290	25	ug/L	EPA 8020	09/05/99
TPH as Gasoline	8500	250	ug/L	M EPA 8015	09/05/99
aaa-Trifluorotoluene (8020 Surrogate)	105		% Recovery	EPA 8020	09/05/99
aaa-Trifluorotoluene (Gasoline Surrogate)	101		% Recovery	M EPA 8015	09/05/99

Approved By: Joel Kiff

SEP-14-99 TUE 09:04

KIFF ANALYTICAL

FAX NO. 5302974803

P. 04/05



Report Number : 14847

Date : 09/14/99

Project Name : Beacon 721

Project Number : D093-936

Sample : RW-1

Matrix : Water

Sample Date : 08/30/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8020	09/09/99
Toluene	< 0.50	0.50	ug/L	EPA 8020	09/09/99
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8020	09/09/99
Total Xylenes	< 0.50	0.50	ug/L	EPA 8020	09/09/99
Methyl-t-butyl ether	79	5.0	ug/L	EPA 8020	09/09/99
TPH as Gasoline	< 50	50	ug/L	M EPA 8015	09/09/99
aaa-Trifluorotoluene (8020 Surrogate)	104		% Recovery	EPA 8020	09/09/99
aaa-Trifluorotoluene (Gasoline Surrogate)	96.7		% Recovery	M EPA 8015	09/09/99

Approved By: Joel Kiff

SEP-03-99 FRI 04:49 PM ALPHA ANALYTICAL LABORATORY FAX NO. 11312

P. 01/04



Alpha Analytical Laboratories Inc.

860 Waugh Lane, H-1, Ukiah, California 95482

e-mail: clientservices@alpha-labs.com • Phone: (707) 468-0401 • Fax: (707) 468-5267

**CHEMICAL EXAMINATION REPORT**

Page 1 of 2

Kiff Analytical  
720 Olive Drive Suite D  
Davis, CA 95616  
Attn: Joel Kiff

Date Printed  
09/03/99

Project Name: Beacon 721

Order Number	Receipt Date/Time	Client	Client P.O.	Send via	Project No.
A99083106	08/31/99 11:25AM	KIFFLAB	14847	MAIL	B093-936

METHOD	EXTRACTED	TEST DATE	RESULT	UNITS	PQL
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order A99083106 consisted of 1 Samples and 3 Tests.

Sample 1 Effluent	Sampled By:	Sampled: 08/30/99	08:10		
Sample Type: Aqueous					
pH	150.1	08/31/99	7.9	pH	-
Chemical Oxygen Demand	410.2	09/02/99	ND	mg/L	1.0
Total Suspended Solids	160.2	09/02/99	2.6	mg/L	1.0

PQL = Practical Quantitation Limit

ND = None Detected

Bruce L. Gove  
Laboratory Director

Date Printed: 09/03/99

14847

5  
2/6**KIFF ANALYTICAL SUBCONTRACT FORM**

Please mail results to :

Please fax to :

JOEL KIFF  
**KIFF ANALYTICAL**  
 720 OLIVE DRIVE, SUITE D  
 DAVIS, CA 95616

530-297-4803

Subcontract Lab:

**Alpha Analytical**  
 860 Waugh Lane, H-1  
 Ukiah, CA 95482

707-468-0401

Account No.: KIFFLAB

**PROJECT NAME : Beacon 721****PROJECT NUMBER: D093-936**

Sample	Matrix	Sampled	Tests	Due	Container	Sampling Time
effluent	WA	08/30/99	pH	A99-0831-06 -1	09/06/99	0810
effluent	WA	08/30/99	Chemical Oxygen Demand		09/06/99	

Add TSS per  
 Mary @ Kiff  
 8/31/99 - 14:37

Relinquished by: Mary AabitDate/Time: 083099/1757 Received by: \_\_\_\_\_

Relinquished by: \_\_\_\_\_

Date/Time: 8/31/99 11:10 Received by: Sandi Simmons

Relinquished by: \_\_\_\_\_

Date/Time: \_\_\_\_\_ Received by: \_\_\_\_\_

AN



**Ultramar Inc.**  
**CHAIN OF CUSTODY REPORT**

**BEACON**

Beacon Station No. 721	Sampler (Print Name) Martin Morgan			ANALYSES			Date 8/30/99	Form No. 1 of 1
Project No. D093-936	Sampler (Signature)							
Project Location San Lorenzo, CA	Affiliation Delta Env. Cons.						REMARKS	
Sample No./Identification MW-1	Date 8/30/99	Time 0702	Lab No. 14847-01	BTEX	TPH (diesel gas)	SS/COD/PH		
MW-2	8/30/99	0719	-02	XX	X	MTBE		
MW-3	8/30/99	0640	-03	XX	X			
MW-10	8/30/99	0739	-04	XX	X			
RW-1	8/30/99	0804	-05	XX	X			
effluent	8/30/99	0810	-06		X			
Relinquished by: (Signature/Affiliation) <i>[Signature]</i> /Delta		Date 8/30/99	Time 1005	Received by: (Signature/Affiliation)			Date 8/30/99	Time
Relinquished by: (Signature/Affiliation)		Date	Time	Received by: (Signature/Affiliation)			Date	Time
Relinquished by: (Signature/Affiliation)		Date	Time	Received by: (Signature/Affiliation)			Date 8/30/99	Time 1005
Report To: Richard Marshall 916 638 2085			Bill to: <b>ULTRAMAR INC.</b> 525 West Third Street Hanford, CA 93230 Attention: <i>Terry Fox</i>					

WHITE: Return to Client with Report

YELLOW: Laboratory Copy

PINK: Originator Copy

528003 100

**ENCLOSURE E**

Ground Water Treatment System Analytical Results



Report Number : 14677

Date : 08/05/99

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

Subject : 4 Water Samples  
Project Name : Beacon 721  
Project Number : D093-936

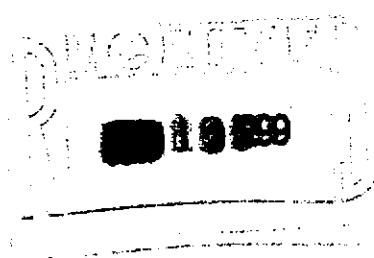
Dear Mr. Munsch,

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

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".  
Joel Kiff





Report Number : 14677

Date : 08/05/99

Project Name : Beacon 721

Project Number : D093-936

Sample : Effluent

Matrix : Water

Sample Date : 08/02/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Toluene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Total Xylenes	< 0.50	0.50	ug/L	EPA 8020	08/03/99
TPH as Gasoline	< 50	50	ug/L	M EPA 8015	08/03/99
aaa-Trifluorotoluene (8020 Surrogate)	102		% Recovery	EPA 8020	08/03/99
aaa-Trifluorotoluene (Gasoline Surrogate)	94.9		% Recovery	M EPA 8015	08/03/99

Sample : Mid

Matrix : Water

Sample Date : 08/02/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Toluene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Total Xylenes	< 0.50	0.50	ug/L	EPA 8020	08/03/99
TPH as Gasoline	< 50	50	ug/L	M EPA 8015	08/03/99
aaa-Trifluorotoluene (8020 Surrogate)	103		% Recovery	EPA 8020	08/03/99
aaa-Trifluorotoluene (Gasoline Surrogate)	95.9		% Recovery	M EPA 8015	08/03/99

Approved By: Joel Kiff



Report Number : 14677

Date : 08/05/99

Project Name : Beacon 721

Project Number : D093-936

Sample : DAT effluent

Matrix : Water

Sample Date : 08/02/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Toluene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Total Xylenes	< 0.50	0.50	ug/L	EPA 8020	08/03/99
TPH as Gasoline	< 50	50	ug/L	M EPA 8015	08/03/99
aaa-Trifluorotoluene (8020 Surrogate)	100		% Recovery	EPA 8020	08/03/99
aaa-Trifluorotoluene (Gasoline Surrogate)	92.8		% Recovery	M EPA 8015	08/03/99

Sample : Influent

Matrix : Water

Sample Date : 08/02/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Toluene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8020	08/03/99
Total Xylenes	< 0.50	0.50	ug/L	EPA 8020	08/03/99
TPH as Gasoline	< 50	50	ug/L	M EPA 8015	08/03/99
aaa-Trifluorotoluene (8020 Surrogate)	103		% Recovery	EPA 8020	08/03/99
aaa-Trifluorotoluene (Gasoline Surrogate)	93.2		% Recovery	M EPA 8015	08/03/99

Approved By: Joel Kiff



ultramar INC.  
CHAIN OF CUSTODY REPORT

BEACON

14677

Beacon Station No.	Sampler (Print Name)	ANALYSES			Date	Form No. /	
Project No.	Sampler (Signature)	BTEX	TPH (gasoline)	TPH (diesel)	8/2/99	of 1	
Project Location	Affiliation				No. of Containers		
721	Martin Morgan					Kiff Lab	
D093-936						530 297 4800	
San Lorenzo, CA	Dalton Env. Cons					Standard TAT	
Sample No./Identification	Date	Time	Lab No.		REMARKS		
effluent	8/2/99	0454		XX	2	-0	
M.d	8/2/99	0456		XX	2	-0	
DAT effluent	8/2/99	0458		XX	2	-0	
Infuent	8/2/99	0500		XX	2	-0	
Relinquished by: (Signature/Affiliation)	Date	Time	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:	Bill to:			Andrea Christensen KIFF			
Richard Munsch 916 638 2085	ULTRAMAR INC. 525 West Third Street Hanford, CA 93230 Attention: Terry FOX			8/2/99 1545			

WHITE: Return to Client with Report

YELLOW: Laboratory Copy

PINK: Originator Copy

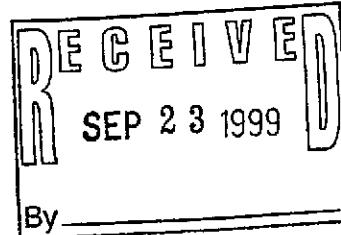


Report Number : 14894

Date : 09/20/99

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

Subject : 4 Water Samples  
Project Name : Beacon 721  
Project Number : D093-936



Dear Mr. Munsch,

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

Kiff Analytical is certified by the State of California (# 2236). If you have any questions regarding procedures or results, please call me at 530-297-4800.

Sincerely,

A handwritten signature in black ink, appearing to read "Joel Kiff".

Joel Kiff



Report Number : 14894

Date : 09/20/99

Project Name : Beacon 721

Project Number : D093-936

Sample : Effluent

Matrix : Water

Sample Date : 09/07/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/15/99
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/15/99
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/15/99
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/15/99
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/15/99
Toluene - d8 (Surr)	98.1		% Recovery	EPA 8260B	09/15/99
4-Bromofluorobenzene (Surr)	107		% Recovery	EPA 8260B	09/15/99

Sample : Mid

Matrix : Water

Sample Date : 09/07/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/16/99
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/16/99
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/16/99
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/16/99
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/16/99
Toluene - d8 (Surr)	96.4		% Recovery	EPA 8260B	09/16/99
4-Bromofluorobenzene (Surr)	108		% Recovery	EPA 8260B	09/16/99

Approved By:   
Joel Kiff



Report Number : 14894

Date : 09/20/99

Project Name : Beacon 721

Project Number : D093-936

Sample : DAT effluent

Matrix : Water

Sample Date : 09/07/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/15/99
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/15/99
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/15/99
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/15/99
TPH as Gasoline	< 50	50	ug/L	EPA 8260B	09/15/99
Toluene - d8 (Surr)	99.7		% Recovery	EPA 8260B	09/15/99
4-Bromofluorobenzene (Surr)	102		% Recovery	EPA 8260B	09/15/99

Sample : Influent

Matrix : Water

Sample Date : 09/07/99

Parameter	Measured Value	Method Reporting Limit	Units	Analysis Method	Date Analyzed
Benzene	< 0.50	0.50	ug/L	EPA 8260B	09/14/99
Toluene	< 0.50	0.50	ug/L	EPA 8260B	09/14/99
Ethylbenzene	< 0.50	0.50	ug/L	EPA 8260B	09/14/99
Total Xylenes	< 0.50	0.50	ug/L	EPA 8260B	09/14/99
TPH as Gasoline	91	50	ug/L	EPA 8260B	09/14/99
Toluene - d8 (Surr)	101		% Recovery	EPA 8260B	09/14/99
4-Bromofluorobenzene (Surr)	105		% Recovery	EPA 8260B	09/14/99

Approved By: Joel Kiff

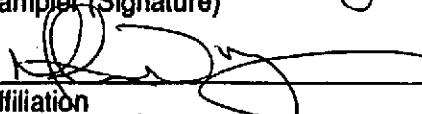
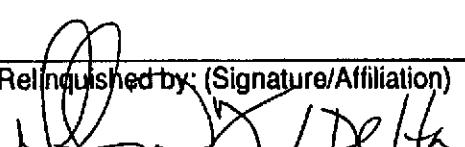


Ultramar Inc.

BEACON

## CHAIN OF CUSTODY REPORT

14894

Beacon Station No. 721	Sampler (Print Name) Martin Morgan	ANALYSES			Date 9/7/99	Form No. 1 of 1
Project No. D093-936	Sampler (Signature) 	BTEX	TPH (gasoline)	TPH (diesel)	No. of Containers	Kiff Lab 530 297 4800
Project Location San Lorenzo, CA	Affiliation Delta Env. Cons.					Standard TAT
Sample No./Identification	Date	Time	Lab No.			REMARKS
effluent	9/7/99	1036	-01	XX	2	
Mid	9/7/99	1038	-02	XX	2	
DAT effluent	9/7/99	1040	-03	XX	2	
Influent	9/7/99	1042	-04	XX	2	
Relinquished by: (Signature/Affiliation)  / Delta	Date	Time	Received by: (Signature/Affiliation)  / KIFF		Date 9/8/99	Time 1002
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: Richard Munsch 916 638 2085	Bill to: ULTRAMAR INC. 525 West Third Street Hanford, CA 93230 Attention: Terry Fox					