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TRANSMITTAL OF ADDITIONAL GROUNDWATER INVESTIGATION RESULTS AND QUARTERLY GROUNDWATER MONITORING DATA UNION PACIFIC RAILROAD YARD SACRAMENTO, CALIFORNIA

DAMES & MOORE

February 1992
Project No. 00173-072-044

DAMES & MOORE A PROFESSIONAL LIMITED PARTNERSHIP
8801 FOLSOM BLVD., SUITE 200, SACRAMENTO, CALIFORNIA 95826
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February 21, 1992

Mr. Val L. Siebal
Region 1, Department of Toxic Substances Control
California Environmental Protection Agency
10151 Croydon Way, Suite 3
Sacramento, CA 95827

Attention: Mr. James L. Tjosvold, Chief
Sacramento Responsible Party Unit
Site Mitigation Branch

Re: Transmittal of Additional Groundwater Investigation Results and Quarterly Groundwater Monitoring Data
Union Pacific Railroad
Sacramento, California
Job No. 00173-072-044

Dear Mr. Tjosvold:

Union Pacific Railroad Company (UPRR) has requested that Dames & Moore transmit the results of recent additional groundwater investigations and quarterly groundwater monitoring. Included in this data transmittal are:

- Third (August 1991) and Fourth (November/December 1991) quarter groundwater monitoring analytical laboratory results;
- Well completion logs and geophysical logs for monitoring wells MW-36, MW-37 and MW-38;
- Slug test results for monitoring wells MW-34, MW-35, MW-39, MW-40, MW-41, MW-42 and MW-43; and
- Shallow groundwater contour map, December 1991.

If you have any questions or require further information, please contact us.

Very truly yours,

DAMES & MOORE

Timothy K. Parker
Project Manager

Enclosures

cc: Distribution List

SAC32.008

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SACRAMENTO, CALIFORNIA
JOB NUMBER 00173-072-044
TRANSMITTAL OF ADDITIONAL GROUNDWATER INVESTIGATION RESULTS AND QUARTERLY GROUNDWATER MONITORING DATA
FEBRUARY 1992

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TRANSMITTAL OF ADDITIONAL GROUNDWATER INVESTIGATION RESULTS AND QUARTERLY GROUNDWATER MONITORING DATA UNION PACIFIC RAILROAD YARD SACRAMENTO, CALIFORNIA

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TABLE 1
GROUNDWATER ELEVATION DATA, 1988-1991
(Elevations in feet from mean sea level datum)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

DATE	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-11	MW-12	MW-13
02/19/88	0	-0.85	-0.61	-3.50	-3.37	-3.64	-5.73	-5.40	---	---	---
03/02/88	-0.02	-0.92	-0.62	-3.49	-3.44	-3.70	-4.83	-4.21	---	---	---
04/14-15-16/88	0.04	-1.22	-1.26	-3.71	-3.70	-3.96	-5.07	-4.47	---	---	---
07/15/88	-0.32	-2.24	-2.39	-4.50	-4.62	-4.85	-5.86	-5.24	---	---	---
08/19/88	-0.53	*	-2.97	-4.94	-5.05	-5.28	-6.25	-5.64	---	---	---
01/06/89	-1.92	*	-2.50	-5.42	-5.44	-5.68	-6.76	-6.16	---	---	---
10/09/89	-1.52	-2.83	-2.68	-5.43	-5.46	-5.72	-6.85	-6.21	-4.99	-5.63	-5.48
02/21/90	-1.29	-1.22	-0.24	-4.12	-4.20	-4.50	-5.83	-5.10	-3.48	-4.47	-4.21
06/15/90	-0.86	-1.99	-2.01	-4.66	-4.61	-4.90	-6.07	-5.44	-4.20	-4.93	-4.73
09/20/90	-1.89	-3.76	-4.05	-6.14	-6.15	-6.40	-7.47	-6.85	-5.74	-6.38	-6.18
02/05/91	-3.18	-3.85	-3.81	-6.60	-6.57	-6.84	-7.94	-7.37	-6.04	-6.82	-6.69
04/22/91	-2.05	-2.37	-2.22	-5.12	-5.07	-5.37	-6.59	-5.93	-4.64	-5.38	-5.18
07/30/91	-2.40	-3.98	-4.14	-6.43	-6.47	-6.73	-7.79	-7.17	-6.01	-6.65	-6.47
12/27/91	-3.82	-5.04	-5.20	-7.47	-7.41	-7.67	-8.72	-8.15	-7.05	-7.66	-7.53

DATE	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23	MW-24
10/09/89	-5.55	-5.56	-5.56	-6.03	-6.09	-6.77	-6.85	-6.43	-6.41	-6.10	-6.10
02/21/90	-4.31	-4.29	-4.29	-4.82	-4.95	-5.82	-5.91	-5.35	-5.33	-4.96	-4.94
06/15/90	-4.80	-4.79	-4.79	-5.28	-5.36	-6.05	-6.12	-5.64	-5.62	-5.30	-5.27
09/20/90	-6.26	-6.26	-6.25	-6.69	-6.76	-7.37	-7.45	-7.07	-7.04	-6.77	-6.75
02/05/91	-6.76	-6.71	-6.71	-7.23	-7.29	-7.97	-8.03	-7.55	-7.53	-7.22	-7.18
04/22/91	-5.27	-5.22	-5.23	-5.77	-5.85	-6.57	-6.65	-6.13	-6.13	-5.80	-5.77
07/30/91	-6.53	-6.57	-6.55	-7.00	-7.06	-7.70	-7.76	-7.38	-7.35	-7.09	-7.07
12/27/91	-7.60	-7.57	-7.57	-8.02	-8.08	-8.69	-8.76	-8.33	-8.32	-8.04	-8.02

TABLE 1 (Continued)
GROUNDWATER ELEVATION DATA, 1988-1991
(Elevations in feet from mean sea level datum)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

DATE	MW-25	MW-26	MW-27	MW-28	MW-29	MW-30	MW-31	MW-32	MW-33	MW-34	MW-35
10/09/89	-7.47	-7.46	-7.46	---	---	---	---	---	---	---	---
02/21/90	-6.55	-6.55	-6.54	-5.35	-5.01	-5.07	---	---	---	---	---
06/15/90	-6.70	-6.70	-6.69	-5.66	-5.34	-5.37	-5.51	-6.04	-4.21	---	---
09/20/90	-8.05	-8.05	-8.04	-7.04	-6.73	-6.76	-6.88	-7.34	-5.75	---	---
02/05/91	-8.55	-8.55	-8.53	-7.59	-7.31	-7.40	-7.48	-7.93	-7.04	---	---
04/22/91	-7.26	-7.27	-7.25	-6.16	-5.86	-5.90	-6.02	-6.57	-4.63	---	---
07/30/91	-8.39	-8.38	-8.37	-7.32	-7.04	-7.07	-7.19	-7.66	-6.01	-8.34	-8.30
12/27/91	-9.29	-9.30	-9.29	-8.33	-8.10	-8.13	-8.26	-8.70	-7.06	-9.38	-9.39

DATE	MW-36	MW-37	MW-38	MW-39	MW-40	MW-41	MW-42	MW-43
07/30/91	---	---	---	-13.73	-7.83	-6.66	-5.07	-4.24
12/27/91	-10.71	-10.91	-13.05	-14.67	-7.66	-7.66	-6.13	-5.30

* Lock-on well cover was vandalized, rendering well inaccessible.

TABLE 2
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-01	03/03/88	4.0	--	--	--
	09/20/89	--	--	--	--
	05/10/90	9.0	--	--	--
	09/05/90	--	--	--	--
	01/21/91	--	--	--	--
	04/22/91	--	5.0	130.0	--
MW-02	03/03/88	3.0	--	--	--
	09/20/89	--	--	--	--
	05/17/90	1.0	--	20.0	--
	09/11/90	--	--	--	--
	01/22/91	--	--	--	--
	04/22/91	4.0	5.7	140.0	--
	08/01/91	--	--	--	--
	11/07/91	--	--	--	--
MW-03	03/03/88	4.0	--	--	--
	09/20/89	--	--	--	16.0
	02/13/90	NA	NA	NA	20.0
	05/10/90	9.0	--	--	20.0
	09/05/90	--	--	--	--
	01/22/91	--	--	--	--
	04/23/91	--	1.5	--	--
	08/01/91	--	--	--	--
MW-04	03/03/88	6.0	--	140.0	--
	09/20/89	--	--	34.0	12.0
	02/15/90	NA	NA	NA	10.0
	05/23/90	--	4.5	99.0	--
	09/18/90	--	--	71.0	--
	05/01/91	6.1	--	11.0	--
	02/05/91	--	33.0	200.0	--
	8/14/91	5.0	--	--	--
	11/07/91	5.0	--	--	--

TABLE 2 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-05	03/04/88	--	10.0	--	--
	09/20/89	9.3	--	159.0	--
	05/17/90	2.0	--	70.0	--
	09/12/90	--	14.0	--	--
	01/22/91	--	11.0	100.0	--
	04/23/91	--	7.2	81.0	--
	08/12/91	--	--	--	--
	11/13/91	--	--	--	--
MW-06	03/04/88	5.0	--	--	--
	09/20/89	--	7.1	39.0	--
	05/17/90	2.0	--	100.0	--
	09/11/90	--	21.0	42.0	--
	01/24/91	7.0	15.0	--	--
	04/23/91	5.8	5.4	40.0	--
	08/12/91	--	--	120.0	1.0
	11/13/91	--	7.0	110.0	--
MW-07	03/04/88	4.0	10.0	50.0	--
	09/15/89	--	5.0	405.0	--
	05/23/90	--	111.0	215.0	10.0
	09/07/90	--	15.0	250.0	--
	01/30/91	7.0	200.0	200.0	--
	04/26/91	--	18.0	130.0	--
	08/07/91	--	14.0	150.0	--
	11/13/91	--	15.0	140.0	--

TABLE 2 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (μg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-08	03/03/88	--	--	--	--
	09/20/89	--	--	--	--
	02/13/90	NA	NA	NA	30.0
	05/23/90	--	--	12.0	24.0
	09/13/90	--	--	--	--
	01/30/91	6.0	--	--	70.0
	04/26/91	--	8.8	29.0	--
	08/12/91	--	--	--	--
	11/11/91	--	--	--	--
MW-11	09/06/89	9.7	27.0	160.0	57.0
	02/15/90	NA	NA	NA	20.0
	05/18/90	--	47.6	76.0	--
	09/17/90	--	47.0	55.0	--
	01/30/91	--	200.0	--	--
	04/26/91	--	38.0	32.0	--
	08/15/91	--	25.0	--	--
	11/07/91	--	19.0	--	--
MW-12	09/11/89	28.0	18.0	15.0	--
	02/15/90	NA	NA	NA	--
	05/22/90	--	10.0	51.0	15.0
	09/18/90	--	10.0	71.0	--
	02/04/91	--	50.0	200.0	--
	05/01/91	--	6.6	78.0	--
	08/15/91	--	5.0	--	--
	11/07/91	--	--	--	--

TABLE 2 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-13	09/13/89	18.0	--	14.0	--
	02/15/90	NA	NA	NA	--
	05/25/90	30.0	--	10.0	--
	09/18/90	36.0	--	--	--
	02/05/91	20.0	--	100.0	--
	04/30/91	33.0	--	7.0	--
	08/07/91	40.0	--	--	1.0
	11/07/91	38.0	--	--	--
MW-14	09/13/89	--	--	169.0	--
	02/15/90	NA	NA	NA	--
	05/22/90	--	16.0	174.0	--
	09/18/90	--	13.0	160.0	--
	02/04/91	--	21.0	300.0	--
	05/01/91	--	37.0	98.0	--
	08/14/91	6.0	36.0	--	--
	11/22/91	--	16.0	--	--
MW-15	09/07/89	6.0	--	--	--
	02/07/90	NA	NA	NA	30.0
	05/16/90	4.0	30.0	70.0	--
	09/14/90	5.0	--	52.0	--
	01/24/91	--	12.0	--	--
	04/25/91	--	11.0	51.0	--
	08/05/91	--	18.0	--	--
	11/05/91	--	7.0	--	--

TABLE 2 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-16	09/07/89	6.0	--	--	--
	02/07/90	NA	NA	NA	30.0
	05/16/90	2.0	--	--	--
	09/14/90	--	10.0	--	--
	01/24/91	7.0	11.0	--	--
	04/25/91	--	5.7	20.0	--
	08/13/91	5.0	5.0	--	--
	11/07/91	--	--	--	--
MW-17	09/21/89	--	--	--	--
	02/07/90	NA	NA	NA	30.0
	05/18/90	--	7.2	67.0	12.0
	09/13/90	--	--	50.0	--
	01/25/91	7.0	9.0	200.0	--
	04/29/91	--	6.9	170.0	--
	08/06/91	--	5.0	170.0	--
	11/05/91	--	--	--	--
MW-18	09/21/89	--	--	10.0	--
	02/07/90	NA	NA	NA	40.0
	05/18/90	--	5.5	13.0	21.0
	09/13/90	--	--	--	--
	01/25/91	6.0	7.0	--	--
	04/29/91	--	6.5	24.0	--
	08/13/91	6.0	6.0	--	--
	11/05/91	--	--	--	--

TABLE 2 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-19	09/14/89	--	--	14.0	--
	02/13/90	NA	NA	NA	20.0
	05/14/90	8.0	--	60.0	50.0
	09/07/90	--	--	45.0	--
	01/24/91	10.0	--	--	--
	04/29/91	--	16.0	69.0	--
	08/05/91	--	5.0	--	--
	11/11/91	--	--	120.0	--
MW-20	09/14/89	--	--	--	--
	02/13/90	NA	NA	NA	--
	05/14/90	8.0	--	--	40.0
	09/07/90	--	--	--	--
	01/24/91	7.0	--	--	--
	04/29/91	--	15.0	5.3	--
	08/14/91	6.0	8.0	--	--
	11/11/91	--	--	--	--
MW-21	09/08/89	8.4	--	15.0	--
	05/15/90	6.0	--	380.0	40.0
	09/07/90	--	29.0	300.0	--
	01/23/91	5.0	7.0	300.0	--
	04/25/91	--	8.4	310.0	--
	08/07/91	--	--	190.0	--
	11/11/91	--	--	400.0	--
MW-22	09/08/89	24.0	--	17.0	--
	05/15/90	9.0	--	--	20.0
	09/07/90	--	--	--	--
	01/23/91	--	--	--	--
	04/25/91	--	6.9	--	--
	08/14/91	6.0	--	--	--
	11/11/91	--	--	--	--

TABLE 2 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (μg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-23	09/08/89	9.7	--	--	--
	05/15/90	3.0	--	450.0	30.0
	09/06/90	--	--	250.0	--
	01/23/91	--	--	400.0	--
	04/23/91	--	6.5	360.0	--
	08/02/91	--	7.0	250.0	--
	11/11/91	--	--	180.0	--
MW-24	09/08/89	15.0	--	--	--
	05/15/90	5.0	--	420.0	30.0
	09/06/90	--	--	110.0	--
	01/23/91	--	--	100.0	2.0
	04/24/91	--	2.9	240.0	--
	08/01/91	--	--	300.0	--
	11/13/91	--	--	130.0	--
MW-25	09/11/89	11.0	--	--	--
	05/16/90	3.0	--	200.0	--
	09/12/90	--	11.0	130.0	--
	01/29/91	8.0	10.0	300.0	--
	04/24/91	--	--	240.0	--
	08/02/91	--	9.0	210.0	--
	11/13/91	--	7.0	250.0	--
MW-26	09/11/89	11.0	--	--	--
	05/16/90	--	--	200.0	--
	09/12/90	--	--	260.0	--
	01/29/91	--	--	300.0	--
	04/24/91	--	8.0	240.0	--
	08/13/91	--	6.0	250.0	--
	11/13/91	--	--	750.0	--

TABLE 2 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-27	09/15/89	--	19.0	--	--
	05/21/90	--	--	67.0	23.3
	09/17/90	--	--	49.0	--
	01/29/91	--	8.0	--	--
	04/24/91	--	6.1	38.0	--
	08/13/91	--	--	--	1.0
	11/13/91	--	--	--	--
MW-28	02/15/90	NA	NA	NA	--
	05/25/90	--	4.4	26.0	16.0
	09/19/90	--	49.0	52.0	--
	02/01/91	--	10.0	--	1.0
	04/30/91	--	6.0	32.0	--
	08/13/91	--	5.0	--	2.0
	11/05/91	--	--	--	--
MW-29	02/15/90	NA	NA	NA	20.0
	05/25/90	--	--	15.0	--
	09/06/90	--	--	--	--
	02/01/91	--	--	--	10.0
	04/30/91	--	3.0	58.0	--
	08/15/91	--	--	--	--
	11/05/91	--	--	--	--
MW-30	02/15/90	NA	NA	NA	20.0
	05/24/90	5.0	--	174.0	63.0
	09/05/90	--	--	190.0	--
	02/04/91	--	--	200.0	2.0
	04/30/91	--	7.9	130.0	--
	08/15/91	--	8.0	--	--
	11/05/91	--	6.0	--	--

TABLE 2 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (μg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-31	05/24/90	9.0	--	201.0	30.0
	09/19/90	--	--	200.0	--
	02/01/91	--	--	200.0	1.0
	05/01/91	--	13.0	73.0	--
	08/15/91	--	21.0	--	--
	11/22/91	--	16.0	--	--
MW-32	05/24/90	--	7.4	169.0	10.0
	09/19/90	--	--	120.0	--
	02/01/91	--	40.0	200.0	4.0
	05/01/91	--	12.0	65.0	--
	08/16/91	--	--	--	--
	11/22/91	--	--	--	--
MW-33	05/18/90	--	--	17.0	35.0
	09/14/90	--	--	--	--
	01/30/91	8.0	200.0	--	--
	04/30/91	--	3.5	56.0	--
	08/07/91	--	5.0	--	1.0
	11/05/91	--	--	--	--
MW-34	07/02/91	--	7.0	300.0	--
	08/16/91	--	6.0	230.0	--
	11/13/91	--	--	190.0	--
MW-35	07/02/91	--	5.0	--	--
	08/08/91	6.0	9.0	--	--
	11/13/91	--	--	--	--
MW-36	12/12/91	--	--	--	--
MW-37	12/12/91	--	--	--	--
MW-38	12/12/91	--	--	--	--
MW-39	06/28/91	10.0	17.0	--	1.0
	08/06/91	--	17.0	--	--
	11/13/91	--	--	--	--

TABLE 2 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS - DETECTIONS ONLY (μg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni*	Pb
MCL		50	50	NE	50
Background Concentration		0 - 20	1 - 20	1 - 12	<1 - 9
MW-40	06/28/91	5.0	4.0	--	--
	08/15/91	--	7.0	--	--
	11/22/91	--	5.0	--	--
MW-41	06/28/91	15.0	5.0	--	--
	08/12/91	7.0	--	--	--
	11/05/91	6.0	6.0	--	--
MW-42	06/28/91	8.0	--	200.0	1.0
	08/08/91	--	10.0	190.0	--
	11/07/91	--	--	160.0	--
MW-43	06/28/91	10.0	--	200.0	--
	08/16/91	--	--	220.0	--
	11/07/91	--	--	160.0	--

* Although no MCL exists for Nickel, the DHS-Applied Action Level (AAL) which is solely health risk based, is 400 μg/l.
MCL Maximum Contaminant Level for drinking water, EPA or DHS, whichever is more stringent.
NE None exists.
-- Not detected.
NA Not analyzed.
Background Concentration - Values were obtained from Johnson, 1985 (see references).

For duplicate sample analyses, the highest measured value is recorded.

TABLE 3
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1.750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-01	03/03/88	--	--	--	--	--	--	--	--	--	0.8	--	--	--	--	--
	09/20/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/10/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	09/05/90	--	--	--	--	--	--	--	--	--	1	--	--	--	--	--
	01/21/91	--	--	--	--	--	--	--	--	--	0.80	--	--	--	N/A	N/A
MW-02	03/03/88	--	--	--	--	--	--	--	--	--	0.6	--	--	--	280	--
	09/20/89	--	1.4	--	--	--	--	--	--	--	--	--	--	--	--	50*
	05/17/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/11/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/22/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	04/22/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	08/01/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	11/07/91+	8.4	1.2	8.3	--	--	--	--	--	--	--	--	--	--	N/A	N/A
MW-03	03/03/88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/20/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/10/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	09/05/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	01/22/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	08/01/91	--	--	--	--	--	--	--	--	NA	--	--	--	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1,750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-04	03/03/88	11	4.5	6	1.5	22	--	12	130	42	--	--	--	--	1100	300
	09/20/89	210	--	--	--	--	--	7.1	--	120	--	--	--	--	--	3000
	02/15/90	190	3.5	7.5	2.1	5.3	--	12	250	46	--	--	5.7	--	N/A	N/A
	05/23/90	130	4.9	2.1	6.3	4.1	--	5.8	5.5	45	--	--	4.9	--	--	650
	09/18/90	98	4.1	2.7	4.3	2.4	--	6	30	38	--	--	4.5	--	--	--
	02/05/91	17	--	--	--	1.2	--	6	45	16	--	--	4.2	--	N/A	N/A
	05/01/91	580	--	24	12	--	--	11	15	93	--	--	.89	--	N/A	N/A
	08/14/91	--	0.6	13.0	2.5	--	--	13.0	27.0	--	--	--	1.4	--	N/A	N/A
	11/07/91	1200	26.0	8.7	26.0	--	--	19.0	40.0	--	--	--	--	--	N/A	N/A
MW-05	03/04/88	--	--	--	--	--	--	--	--	--	4.9	--	--	--	--	--
	09/20/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	60
	05/17/90	--	--	--	--	--	--	--	--	--	2.6	--	--	--	--	--
	09/12/90	--	--	--	--	--	--	--	--	--	2.3	--	--	--	--	--
	08/12/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
MW-06	03/04/88	--	--	--	--	--	--	--	--	--	0.6	--	--	--	--	--
	09/20/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/17/90	--	--	--	--	--	--	--	--	--	1.5	--	--	--	N/A	N/A
	09/11/90	--	--	--	--	--	--	--	--	--	2.0	--	--	--	--	--
	08/12/91	--	--	--	--	--	--	--	--	--	6.2	--	--	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1.750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-07	03/04/88	--	--	--	--	25	--	15	17	1.6	1.9	--	1	--	--	--
	09/15/89	--	--	--	--	26	--	15	0.5	3.1	1.1	--	1.1	--	--	50
	02/07/90	--	--	--	--	11	--	9.9	58	--	2.6	--	0.6	--	N/A	N/A
	05/17/90	--	--	--	--	9.7	--	9.2	8.1	--	3	--	--	--	--	--
	09/07/90	--	--	--	--	6.4	--	6.1	19	--	2.5	--	--	--	--	--
	01/30/91	N/A	N/A	N/A	N/A	5.1	--	4.3	15	--	2.6	--	--	--	N/A	N/A
	04/26/91	N/A	N/A	N/A	N/A	4.6	--	4.5	11	--	3.0	--	--	--	N/A	N/A
	08/07/91	--	--	--	--	8.1	--	12.0	28.0	--	4.1	--	--	--	N/A	N/A
MW-08	03/03/88	--	--	--	--	--	--	0.9	--	--	--	0.8	--	--	--	--
	09/20/89	--	2.5	--	--	--	--	--	--	--	--	1.5	--	--	--	--
	05/23/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/13/90	--	--	--	--	0.6	--	--	3.8	--	--	--	--	--	--	--
	01/30/91	N/A	N/A	N/A	N/A	--	--	--	1.8	--	--	--	--	--	N/A	N/A
	04/26/91	N/A	N/A	N/A	N/A	--	--	--	1.8	--	--	3.2	--	--	N/A	N/A
	08/12/91	--	--	--	--	--	--	--	9.6	--	--	21.0	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	0.7	--	--	2.5	--	--	5.3	--	--	N/A	N/A
MW-11	09/06/89	--	6	--	--	--	--	0.8	--	--	5.1	--	1.7	--	600	120
	02/15/90	--	--	--	--	--	--	--	8.3	--	0.6	--	0.5	--	N/A	N/A
	05/18/90	--	--	--	--	--	--	3.2	--	--	--	0.7	4.2	--	--	--
	09/17/90	--	--	--	--	1.7	--	6.2	18	--	--	--	2.4	--	--	--
	01/30/91	N/A	N/A	N/A	N/A	2.8	--	16.0	46	--	--	--	2.5	--	N/A	N/A
	04/26/91	N/A	N/A	N/A	N/A	4.5	--	19.0	62	--	--	--	3.5	--	N/A	N/A
	08/15/91	--	--	--	--	1.8	--	11.0	--	--	--	--	2.0	--	N/A	N/A
	11/07/91	N/A	N/A	N/A	N/A	1.0	--	7.2	9.9	0.6	--	--	1.1	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1,750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-12	09/11/89	--	2.2	--	--	--	--	1.3	--	--	6.4	--	4.0	--	--	70
	10/13/89	0.8	--	--	--	--	--	4.9	26.3	--	4.5	--	5.7	--	N/A	N/A
	02/15/90	--	--	--	--	--	--	9.6	62	--	1.4	--	9.0	--	N/A	N/A
	05/22/90	--	--	--	--	--	--	9.2	1.4	--	0.6	--	9.4	--	--	--
	09/18/90	--	--	--	--	0.88	--	10.0	24.0	--	--	--	12.0	--	--	--
	02/04/91	--	--	--	--	--	--	15.0	47.0	--	--	--	14.0	--	N/A	N/A
	05/01/91	N/A	N/A	N/A	N/A	--	--	12.0	52.0	--	--	--	15.0	--	N/A	N/A
	08/15/91	--	0.6	--	--	0.7	--	13.0	27.0	--	--	--	15.0	--	N/A	N/A
	11/07/91	--	--	--	--	1.4	--	15.0	28.0	--	--	--	13.0	--	N/A	N/A
MW-13	09/13/89	5,700	343	147	--	--	0.8	13.2	--	360	--	--	0.6	--	3100	51000
	11/02/89	6,700	210	88	50	--	--	20.0	24.0	270	--	--	--	--	N/A	N/A
	02/15/90	10,500	400	1600	150	--	--	40.0	55.0	200	--	--	--	--	N/A	N/A
	05/25/90	12,000	250	530	1200	--	--	35.0	1.8	250	--	--	--	--	2400	46000
	09/18/90	7,300	310	620	410	--	--	27.0	15.0	210	--	--	--	--	--	12000
	02/05/91	10,000	390	600	--	0.6	--	36.0	25.0	96	--	--	--	--	N/A	N/A
	04/30/91	7,900	260	520	340	0.5	--	17.0	14.0	120	--	--	--	--	N/A	N/A
	08/7/91	11,000	440	760	450	1.1	--	24.0	9.6	108	--	--	1.5	--	N/A	N/A
	11/07/91	41,000	1,600	3,900	180	--	--	160.0	210.0	--	--	--	--	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1.750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-14	09/13/89	--	12.3	--	--	22.0	7.1	9.4	15.1	3.7	2.5	--	5.6	--	--	100
	11/02/89	--	--	--	--	20.0	6.3	9.3	75.0	7.7	2.5	--	4.7	--	N/A	N/A
	02/15/90	3.6	--	0.6	--	8.9	1.1	9.6	380.0	1.0	--	--	8.0	--	N/A	N/A
	05/22/90	2.2	--	--	--	4.1	--	5.8	11.0	1.4	--	--	5.9	--	--	--
	09/18/90	--	--	--	--	2.3	--	5.0	47.0	--	--	--	5.7	--	--	--
	02/04/91	--	--	--	--	1.3	--	4.4	47.0	--	--	--	6.2	--	N/A	N/A
	05/01/91	--	--	--	--	0.88	--	3.1	18.0	--	--	--	4.9	--	N/A	N/A
	08/14/91	0.7	--	--	--	1.6	--	4.8	50.0	--	--	0.6	9.7	--	N/A	N/A
	11/22/91	--	--	--	--	1.9	--	6.3	150.0	1.5	--	--	5.6	--	N/A	N/A
MW-15	09/07/89	--	--	--	--	--	--	--	--	--	--	2.2	--	--	--	--
	02/07/90	--	--	--	--	0.5	--	--	5.8	--	--	2.8	--	--	N/A	N/A
	05/16/90	--	--	--	--	--	--	--	--	--	--	3.5	--	--	N/A	N/A
	09/14/90	--	--	--	--	1.1	--	--	0.58	--	--	6.2	--	--	--	--
	01/24/91	N/A	N/A	N/A	N/A	0.7	--	--	1.2	--	--	--	6.8	--	N/A	N/A
	04/25/91	N/A	N/A	N/A	N/A	0.53	--	--	0.82	--	--	--	6.7	--	N/A	N/A
	08/05/91	--	--	--	--	--	--	--	--	--	--	7.8	--	--	N/A	N/A
	11/05/91	N/A	N/A	N/A	N/A	1.3	--	--	2.1	--	--	12.0	--	--	N/A	N/A
MW-16	09/07/89	--	3.9	--	--	0.8	--	0.7	--	--	0.5	--	--	--	--	--
	02/07/90	--	--	--	--	2	--	1.8	29	--	--	--	--	--	N/A	N/A
	05/16/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	09/14/90	--	--	--	--	1.3	--	--	2.3	--	--	--	--	--	--	--
	01/24/91	N/A	N/A	N/A	N/A	--	--	--	2.6	--	--	--	--	--	N/A	N/A
	04/25/91	N/A	N/A	N/A	N/A	0.83	--	--	2.8	--	--	--	--	--	N/A	N/A
	08/13/91	--	--	--	--	1.5	--	--	8.3	--	--	--	--	--	N/A	N/A
	11/07/91	N/A	N/A	N/A	N/A	1.6	--	--	5.7	--	--	--	--	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1.750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-17	09/21/89	--	1.3	--	--	1.1	--	0.5	--	--	2.6	--	0.7	--	--	--
	02/07/90	--	--	--	--	0.8	--	0.6	36	--	--	--	0.5	--	N/A	N/A
	05/18/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/13/90	--	--	--	--	--	--	--	4.0	--	--	--	--	--	--	--
	01/25/91	--	--	--	--	--	--	--	3.0	--	--	--	--	--	N/A	N/A
	04/29/91	--	--	--	--	--	--	--	3.8	--	--	--	--	--	N/A	N/A
	08/06/91	--	--	--	--	--	--	--	3.7	--	--	--	--	--	N/A	N/A
	11/05/91	N/A	N/A	N/A	N/A	0.6	--	--	2.8	--	--	--	--	--	N/A	N/A
MW-18	09/21/89	--	1.3	--	--	1.9	0.8	3.4	0.5	--	1.5	--	9.4	--	--	50
	11/02/89	--	--	--	--	6.9	1	7.8	92	--	0.5	--	13	--	N/A	N/A
	02/07/90	--	--	--	--	4	--	4.8	230	--	--	--	8.1	--	N/A	N/A
	05/18/90	--	--	--	--	2.4	--	2.8	3.2	--	--	1	10	--	--	--
	09/13/90	--	--	--	--	3.3	--	3.9	19.0	--	--	--	4.4	--	--	--
	01/25/91	--	--	--	--	0.90	--	1.4	22.0	--	--	--	2.9	--	N/A	N/A
	04/29/91	--	--	--	--	0.94	--	1.1	20.0	--	--	--	2.3	--	N/A	N/A
	08/13/91	--	--	--	--	1.5	--	1.2	18.0	--	--	--	3.8	--	N/A	N/A
	11/05/91	N/A	N/A	N/A	N/A	2.2	3.8	2.0	18.0	--	--	--	--	--	N/A	N/A
MW-19	09/14/89	--	--	--	--	--	--	--	--	--	0.9	1	--	--	--	--
	05/18/90	--	--	--	--	--	--	--	--	--	--	1.4	--	--	N/A	N/A
	09/07/90	--	--	--	--	--	--	--	6.8	--	--	1.5	--	--	--	--
	01/24/91	N/A	N/A	N/A	N/A	--	--	--	5.9	--	--	--	1.7	--	N/A	N/A
	04/29/91	N/A	N/A	N/A	N/A	--	--	--	4.2	--	--	--	1.9	--	N/A	N/A
	08/05/91	--	--	--	--	--	--	--	2.4	--	--	3.2	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	--	--	--	3.7	--	--	2.8	--	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1,750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-20	09/14/89	--	--	--	--	0.7	--	--	--	--	--	--	--	--	--	--
	05/14/90	--	--	--	--	1.4	--	0.9	--	--	--	--	--	--	N/A	N/A
	09/07/90	--	--	--	--	0.92	--	--	9.6	--	--	--	--	--	--	--
	01/24/91	N/A	N/A	N/A	N/A	--	--	--	9.8	--	--	--	--	--	N/A	N/A
	04/29/91	N/A	N/A	N/A	N/A	--	--	--	8.9	--	--	--	--	--	N/A	N/A
	08/14/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	0.7	--	--	11.0	--	--	--	--	--	N/A	N/A
MW-21	09/08/89	--	--	--	--	--	--	--	--	--	1.6	--	--	--	--	--
	05/15/90	--	--	--	--	--	--	0.6	--	--	4.2	--	--	--	N/A	N/A
	09/07/90	--	--	--	--	--	--	--	2.1	--	1.9	--	--	--	--	--
	01/23/91	N/A	N/A	N/A	N/A	--	--	--	0.8	--	2.4	--	--	--	N/A	N/A
	04/25/91	N/A	N/A	N/A	N/A	--	--	--	4.7	--	2.5	--	--	--	N/A	N/A
	08/07/91	--	--	--	--	--	--	--	0.9	--	5.1	--	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	--	--	--	--	--	4.8	--	--	--	N/A	N/A
MW-22	09/08/89	--	--	--	--	--	--	--	--	--	3	--	--	--	--	--
	02/07/90	--	--	--	--	--	--	--	--	--	0.9	--	--	--	N/A	N/A
	05/15/90	--	--	--	--	--	--	--	--	--	5	--	--	--	N/A	N/A
	09/07/90	--	--	--	--	--	--	--	--	--	2.6	--	--	--	--	--
	01/23/91	N/A	N/A	N/A	N/A	--	--	--	--	--	5.2	--	--	--	N/A	N/A
	04/25/91	N/A	N/A	N/A	N/A	--	--	--	--	--	4.8	--	--	--	N/A	N/A
	08/14/91	--	--	--	--	--	--	--	--	--	3.9	--	--	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1.750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-23	09/08/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/15/90	--	--	--	--	--	--	1.3	--	--	10	--	--	--	N/A	N/A
	09/06/90	--	--	--	--	--	--	0.88	0.5	--	4.2	--	--	--	--	--
	04/23/91	N/A	N/A	N/A	N/A	--	--	--	0.67	--	3.0	--	--	--	N/A	N/A
	08/02/91	--	--	--	--	--	--	--	--	--	3.1	--	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	--	--	--	--	--	4.6	0.7	--	--	N/A	N/A
MW-24	09/08/89	--	--	--	--	--	--	--	--	--	2.8	--	--	--	--	--
	05/15/90	--	--	--	--	--	--	--	--	--	11	--	--	--	N/A	N/A
	09/06/90	--	--	--	--	--	--	--	--	--	4.1	--	--	--	--	--
	09/06/90	--	--	--	--	--	--	--	--	--	4.1	--	--	--	--	--
	08/11/91	--	--	--	--	--	--	--	--	--	3.2	--	--	--	N/A	N/A
MW-25	09/11/89	--	4.1	--	--	--	--	1	--	--	0.9	--	--	--	--	--
	02/07/90	--	--	--	--	--	--	1.3	7.6	--	1.1	--	--	--	N/A	N/A
	05/16/90	--	--	--	--	--	--	1.3	--	--	1.1	--	--	--	--	--
	09/12/90	--	--	--	--	--	--	1.5	3.1	--	1.3	--	--	--	--	--
	01/29/91	N/A	N/A	N/A	N/A	--	--	1.3	2.3	--	1.1	--	--	--	N/A	N/A
	04/24/91	N/A	N/A	N/A	N/A	--	--	2.1	2.5	--	1.4	--	--	--	N/A	N/A
	08/02/91	--	--	--	--	0.6	--	3.0	5.8	--	1.6	--	--	--	N/A	N/A
MW-26	09/11/89	--	--	--	--	--	--	1	--	--	2.6	--	--	--	--	50
	02/07/90	--	--	--	--	--	--	3.2	14	--	1.3	--	--	--	N/A	N/A
	05/16/90	--	--	--	--	--	--	1.6	--	--	1.1	--	--	--	--	--
	09/12/90	--	--	--	--	--	--	2.1	5	--	1.6	--	--	--	--	--
	01/29/91	N/A	N/A	N/A	N/A	--	--	1.6	3.6	--	1	--	--	--	N/A	N/A
	04/24/91	N/A	N/A	N/A	N/A	--	--	2.4	3.4	--	1.4	--	--	--	N/A	N/A
	08/13/91	--	--	--	--	0.6	--	4.0	8.1	--	1.5	--	--	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1.750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-27	09/15/89	--	--	--	--	--	--	--	--	--	5.5	--	--	--	--	--
	05/21/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/17/90	--	--	--	--	--	--	--	0.99	--	1.1	--	--	--	--	--
	01/29/91	N/A	N/A	N/A	N/A	--	--	--	--	--	0.7	--	--	--	N/A	N/A
	04/24/91	N/A	N/A	N/A	N/A	--	--	--	1.1	--	1.4	--	--	--	N/A	N/A
	08/13/91	--	--	--	--	--	--	--	--	--	0.9	--	--	--	N/A	N/A
MW-28	02/15/90	--	--	--	--	--	--	5.8	1	--	0.7	--	--	--	N/A	--
	05/21/90	--	--	--	--	--	--	9.5	--	--	--	--	--	--	--	--
	09/19/90	--	--	--	--	--	--	9	4	--	--	--	--	--	--	--
	02/01/91	--	--	--	--	--	--	13.0	4.3	--	--	--	--	--	N/A	N/A
	04/30/91	--	--	--	--	--	--	8.1	3.9	--	--	--	--	--	N/A	N/A
	08/13/91	--	--	--	--	--	--	13.0	--	--	--	--	--	--	N/A	N/A
	11/05/91	--	--	--	--	--	--	14.0	9.4	--	--	--	--	--	N/A	N/A
MW-29	02/15/90	--	--	--	--	8.5	--	10	190	22	1.8	--	0.9	--	N/A	50
	04/23/90	--	--	--	--	5	--	14	72	16	1.2	--	0.87	--	N/A	N/A
	05/25/90	6.2	--	--	--	4.6	--	4.1	8.6	14	--	--	--	--	--	--
	09/06/90	--	--	--	--	3.2	--	4.4	38	11	1.3	--	0.76	1.3	--	--
	02/01/91	--	--	--	--	--	--	1.9	33	4.7	--	--	--	--	N/A	N/A
	04/30/91	--	--	--	--	--	--	2.4	16	6.6	0.57	--	--	0.68	N/A	N/A
	08/07/91	--	--	--	--	1.3	--	4.5	29.0	11.0	0.9	--	0.9	1.0	N/A	N/A
	11/05/91	--	--	--	--	1.4	--	3.7	21.0	7.1	1.0	--	0.8	1.1	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1.750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-30	02/15/90	--	--	--	--	4.5	2.3	18	820	--	1.5	--	4.8	--	N/A	60
	04/23/90	1.1	--	--	--	30.0	--	12	470	31	--	--	8.2	--	N/A	N/A
	05/24/90	2.4	--	--	--	22.0	3	19	48	4.8	1.1	--	6.8	--	--	60
	09/05/90	1.2	--	--	--	14.0	--	11	150	--	--	--	--	--	--	--
	02/04/91	--	--	--	--	6.3	--	8.2	160	--	--	--	--	--	N/A	N/A
	04/30/91	--	--	--	--	5.9	--	9.0	75	--	--	--	--	--	N/A	N/A
	08/15/91	--	--	--	--	4.4	--	6.8	84.0	--	--	--	6.4	--	N/A	N/A
	11/05/91	--	--	--	--	8.5	--	11.0	88.0	--	--	--	9.4	--	N/A	N/A
MW-31	05/24/90	1.1	--	--	--	39	2.7	22	54	0.6	1.7	--	10.0	--	--	60
	09/19/90	0.63	--	--	--	20	--	15	160	--	--	--	7.6	--	--	--
	02/01/91	--	--	--	--	--	--	7.6	150	--	--	--	--	--	N/A	N/A
	05/01/91	--	--	--	--	5.9	--	12	110	--	--	--	7.3	--	N/A	N/A
	08/15/91	--	--	--	--	6.2	--	10.0	120	--	--	--	6.6	--	N/A	N/A
	11/22/91	--	--	--	--	6.3	--	17.0	140	--	--	0.62	9.3	--	N/A	N/A
MW-32	05/24/90	--	--	--	--	20	0.9	21	45	--	0.9	0.6	13.0	--	--	60
	09/19/90	--	--	--	--	15	--	18	180	--	--	--	11.0	--	--	--
	02/01/91	--	--	--	--	--	--	6.1	130	--	--	--	5.0	--	N/A	N/A
	05/01/91	--	--	--	--	6.4	--	11	160	--	--	--	11.0	--	N/A	N/A
	08/16/91	--	--	--	--	5.2	--	7.5	140	--	--	--	8.8	--	N/A	N/A
	11/22/91	--	--	--	--	4.0	--	7.4	88	--	--	--	8.9	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1.750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-33	05/18/90	--	--	--	--	17.0	--	8.1	38	--	--	--	1.4	--	--	--
	09/14/90	--	--	--	--	10.0	--	--	120	--	--	--	--	--	--	--
	01/30/91	--	--	--	--	3.4	--	2.0	31	--	--	--	--	--	N/A	N/A
	04/30/91	--	--	--	--	2.4	--	2.1	33	--	--	--	--	--	N/A	N/A
	08/07/91	--	--	--	--	6.7	--	5.4	85	--	--	--	1.0	--	N/A	N/A
	11/05/91	--	--	--	--	8.1	--	6.2	100	--	--	--	--	--	N/A	N/A
MW-34	07/02/91	--	--	--	--	17.0	1.3	17.0	470	--	1.2	--	15	--	N/A	N/A
	08/16/91	--	--	--	--	24.0	--	20.0	510	--	--	--	--	--	N/A	N/A
	12/12/91	0.9	--	--	--	18.0	1.1	28.0	318	1.7	2.3	1.4	26.0	--	N/A	N/A
MW-35	07/02/91	--	--	--	--	6.8	--	4.8	220	--	0.7	--	3.8	--	N/A	N/A
	08/08/91	--	--	--	--	40.0	--	41.0	880	--	--	--	19.0	--	N/A	N/A
	12/12/91	--	--	--	--	2.6	--	2.8	92.0	--	1.9	0.7	2.6	--	N/A	N/A
MW-36	12/12/91	--	--	--	--	15.0	--	12.0	290	1.6	3.4	0.7	8.8	1.4	N/A	N/A
MW-37	12/12/91	--	--	--	--	1.0	--	3.6	9.3	7.1	4.6	0.6	0.6	1.3	N/A	N/A
MW-38	12/12/91	--	--	--	--	13.0	--	9.1	260	4.0	4.2	--	8.6	2.2	N/A	N/A
MW-39	06/28/91	--	--	--	--	0.6	--	--	0.7	2.9	4.0	--	--	1.8	N/A	N/A
	08/06/91	--	--	--	--	0.6	--	1.0	1.0	2.1	3.3	--	--	2.4	N/A	N/A
	12/12/91	--	--	--	--	1.0	--	1.2	3.2	2.5	4.9	0.6	--	2.4	N/A	N/A
MW-40	06/28/91	--	--	--	--	4.0	--	19	110	--	--	--	46.0	--	N/A	N/A
	08/15/91	--	--	--	--	3.8	--	15.0	140	--	--	--	30.0	--	N/A	N/A
	11/22/91	--	--	--	--	2.4	--	12.0	95	--	--	--	27.0	--	N/A	N/A
MW-41	06/28/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	08/12/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	11/05/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A

TABLE 3 (Continued)
SUMMARY GROUNDWATER ANALYTICAL RESULTS
ORGANIC COMPOUNDS - DETECTIONS ONLY (µg/l)
UNION PACIFIC SACRAMENTO YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL	DATE SAMPLED	B	T	X	E	1,1,1 -TCA	1,1,2 -TCA	1,1- DCA	1,1- DCE	1,2- DCA	CHLORO FORM	PCE	TCE	CCL_4	TPH	TPH/ Gas
		MCL/AL														
		1	100*	1.750	680	200	32	5*	6	0.5	100	5	5	0.5	NE	NE
MW-42	06/28/91	--	--	--	--	11	--	110	340	--	2.0	--	4.0	--	N/A	N/A
	08/08/91	6.3	--	--	--	42.0	8.1	370	1500	--	8.7	--	19.0	--	N/A	N/A
	11/07/91	1.2	--	--	--	6.9	1.9	69.0	270	--	1.4	1.1	3.9	--	N/A	N/A
MW-43	06/28/91	--	--	--	--	--	--	330	33	--	--	--	--	--	N/A	N/A
	08/16/91	--	--	--	--	--	--	200	21.0	--	--	--	--	--	N/A	N/A
	11/07/91	--	--	--	--	--	2.0	170	30.0	1.9	--	0.6	2.5	--	N/A	N/A

CCL_4 - Carbon Tetrachloride
MCL - Maximum Contaminant Level, Drinking Water Standard, EPA or DHS (whichever is more stringent)
AL - Drinking Water Action Level recommended by DHS, Listed in the absence of an MCL
* - Indicates DHS - AL
+ - Detections of Benzene, Toulene, and Xylene appear to be due to field contamination. Analysis duplicate of sample showed no detections.
-- - Not Detected
N/A - Not Analyzed

TABLE 4
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-03	FB-04	MW-01	MW-01	MW-02	MW-02	MW-02
DATE		08/13/91	08/15/91	01/21/91	04/22/91	01/22/91	04/22/91	08/01/91
QA	MCL	FIELD	FIELD					
	ug/L	BLANK	BLANK					
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
CHROMIUM	50	< 5.0	< 5.0	< 100.0	5.0	< 100.0	5.7	< 5.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	2.0	< 1.0	< 70.0	< 5.0	< 70.0	< 5.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	< 100.0	< 100.0	130.0	< 100.0	140.0	< 100.0

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-02	MW-02	MW-03	MW-03	MW-03	MW-04	MW-04
DATE		11/07/91	11/07/91	01/22/91	04/23/91	08/01/91	02/05/91	05/01/91
QA	MCL ug/L		DUPLICATE SAMPLE					
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	6.1
CHROMIUM	50	< 5.0	< 5.0	< 100.0	1.5	< 5.0	33.0	< 1.0
IRON	-	-	-	-	-	-	-	< 100.0
LEAD	50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 5.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	< 100.0	< 100.0	< 5.0	< 100.0	200.0	11.0

All units reported as ug/L (ppb)

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TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-04	MW-04	MW-05	MW-05	MW-05	MW-05	MW-06
DATE		08/14/91	11/07/91	01/22/91	04/23/91	08/12/91	11/13/91	01/24/91
QA	MCL ug/L							
ARSENIC	50	5.0	5.0	< 5.0	< 5.0	< 5.0	< 5.0	7.0
CHROMIUM	50	< 5.0	< 5.0	11.0	7.2	< 5.0	< 5.0	15.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	< 1.0	< 70.0	< 5.0	< 1.0	< 1.0	< 70.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	< 100.0	100.0	81.0	< 100.0	< 100.0	< 100.0

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-08	MW-08	MW-08	MW-08	MW-11	MW-11	MW-11
DATE		01/30/91	04/26/91	08/12/91	11/11/91	01/30/91	04/26/91	08/15/91
QA	MCL ug/L							
ARSENIC	50	6.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
CHROMIUM	50	< 100.0	8.8	< 5.0	< 5.0	200.0	38.0	25.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	70.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	29.0	< 100.0	< 100.0	< 100.0	32.0	< 100.0

All units reported as ug/L (ppb)

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TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-11	MW-12	MW-12	MW-12	MW-12	MW-12	MW-13
DATE		11/07/91	02/04/91	02/04/91	05/01/91	08/15/91	11/07/91	02/05/91
QA	MCL ug/L			DUPLICATE SAMPLE				
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	20.0
CHROMIUM	50	19.0	50.0	< 100.0	6.6	5.0	< 5.0	< 100.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	< 1.0	< 150.0	< 5.0	< 1.0	< 1.0	< 150.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	200.0	100.0	78.0	< 100.0	< 100.0	100.0

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA	MCL ug/L	MW-14 11/22/91	MW-15 01/24/91	MW-15 04/25/91	MW-15 04/25/91 DUPLICATE SAMPLE	MW-15 08/05/91	MW-15 11/05/91	MW-16 01/24/91
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	7.0
CHROMIUM	50	16.0	12.0	11.0	11.0	18.0	7.0	11.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	< 1.0	< 5.0	< 5.0	< 1.0	< 1.0	< 70.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	< 100.0	51.0	45.0	< 100.0	< 100.0	< 100.0

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-16	MW-16	MW-16	MW-17	MW-17	MW-17	MW-17
DATE		04/25/91	08/13/91	11/07/91	01/25/91	04/29/91	08/06/91	11/05/91
QA	MCL ug/L							
ARSENIC	50	< 5.0	5.0	< 5.0	7.0	< 5.0	< 5.0	< 5.0
CHROMIUM	50	5.7	5.0	< 5.0	9.0	6.9	5.0	< 5.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	20.0	< 100.0	< 100.0	200.0	170.0	170.0	< 100.0

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE		MW-18 01/25/91	MW-18 04/29/91	MW-18 08/13/91	MW-18 11/05/91	MW-19 01/24/91	MW-19 04/29/91	MW-19 04/29/91 DUPLICATE
QA	MCL ug/L							SAMPLE
ARSENIC	50	6.0	< 5.0	6.0	< 5.0	10.0	< 5.0	< 5.0
CHROMIUM	50	7.0	6.5	6.0	< 5.0	< 100.0	16.0	7.4
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0	< 5.0	< 5.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	24.0	< 100.0	< 100.0	< 100.0	69.0	67.0

All units reported as ug/L (ppb)

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TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-19	MW-19	MW-20	MW-20	MW-20	MW-20	MW-21
DATE		08/05/91	11/11/91	01/24/91	04/29/91	08/14/91	11/11/91	01/23/91
QA	MCL ug/L							
ARSENIC	50	< 5.0	< 5.0	7.0	< 5.0	6.0	< 5.0	5.0
CHROMIUM	50	5.0	< 5.0	< 100.0	15.0	8.0	< 5.0	7.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	120.0	< 100.0	5.3	< 100.0	< 100.0	300.0

All units reported as ug/L (ppb)

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TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-21	MW-21	MW-21	MW-22	MW-22	MW-22	MW-22
DATE		04/25/91	08/07/91	11/11/91	01/23/91	04/25/91	08/14/91	11/11/91
QA	MCL ug/L							
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	6.0	< 5.0
CHROMIUM	50	8.4	< 5.0	< 5.0	< 100.0	6.9	< 5.0	< 5.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 10.0	< 1.0	< 1.0	< 1.0	< 5.0	< 1.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	310.0	190.0	400.0	< 100.0	9.6	< 100.0	< 100.0

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-23	MW-23	MW-23	MW-23	MW-24	MW-24	MW-24
DATE		01/23/91	04/23/91	08/02/91	11/11/91	01/23/91	04/24/91	08/01/91
QA	MCL ug/L							
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
CHROMIUM	50	< 100.0	6.5	7.0	< 5.0	< 100.0	2.9	< 5.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	< 5.0	< 1.0	< 1.0	2.0	< 5.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	400.0	360.0	250.0	180.0	100.0	240.0	300.0

All units reported as ug/L (ppb)

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TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-24	MW-25	MW-25	MW-25	MW-25	MW-26	MW-26
DATE		11/13/91	01/29/91	04/24/91	08/02/91	11/13/91	01/29/91	04/24/91
QA	MCL ug/L							
ARSENIC	50	< 5.0	8.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
CHROMIUM	50	< 5.0	10.0	0.0	9.0	7.0	< 100.0	8.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	< 70.0	< 5.0	< 1.0	< 1.0	< 70.0	< 5.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	130.0	300.0	240.0	210.0	250.0	300.0	240.0

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-29	MW-30	MW-30	MW-30	MW-30	MW-31	MW-31
DATE		11/05/91	02/04/91	04/30/91	08/15/91	11/05/91	02/01/91	02/01/91
QA	MCL ug/L							DUPLICATE SAMPLE
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
CHROMIUM	50	< 5.0	< 100.0	7.9	8.0	6.0	< 100.0	< 100.0
IRON	-	-	-	< 100.0	-	-	-	-
LEAD	50	< 1.0	2.0	< 5.0	< 1.0	< 1.0	1.0	< 150.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	200.0	130.0	< 100.0	< 100.0	200.0	200.0

All units reported as ug/L (ppb)

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< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-31 05/01/91	MW-31 08/15/91	MW-31 11/22/91	MW-32 02/01/91	MW-32 05/01/91	MW-32 05/01/91 DUPLICATE SAMPLE	MW-32 08/16/91
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
CHROMIUM	50	13.0	21.0	16.0	40.0	11.0	12.0	< 5.0
IRON	-	< 100.0	-	-	-	< 100.0	-	-
LEAD	50	< 5.0	< 1.0	< 1.0	4.0	< 10.0	< 5.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	73.0	< 100.0	< 100.0	200.0	65.0	63.0	< 100.0

All units reported as ug/L (ppb)

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TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE		MW-34 08/16/91	MW-34 08/16/91	MW-34 11/13/91	MW-34 11/13/91	MW-35 07/02/91	MW-35 08/08/91	MW-35 11/13/91
QA	MCL ug/L		DUPLICATE SAMPLE		DUPLICATE SAMPLE			
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	6.0	< 5.0
CHROMIUM	50	6.0	< 5.0	< 5.0	< 5.0	5.0	9.0	< 5.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	230.0	170.0	190.0	200.0	< 100.0	< 100.0	< 100.0

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-36	MW-37	MW-38	MW-39	MW-39	MW-39	MW-39
DATE		12/12/91	12/12/91	12/12/91	06/28/91	08/06/91	08/06/91	11/13/91
QA	MCL ug/L						DUPLICATE SAMPLE	
ARSENIC	50	< 5.0	< 5.0	< 5.0	10.0	< 5.0	< 5.0	< 5.0
CHROMIUM	50	< 5.0	< 5.0	< 5.0	17.0	17.0	13.0	< 5.0
IRON	-	-	-	-	50.0	-	-	-
LEAD	50	< 1.0	< 1.0	< 1.0	1.0	< 1.0	< 1.0	< 1.0
MANGANESE	-	-	-	-	< 20.0	-	-	-
NICKEL	400	< 100.0	< 100.0	< 100.0	< 100.0	< 100.0	< 100.0	< 100.0

All units reported as ug/L (ppb)

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< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE		MW-40 06/28/91	MW-40 08/15/91	MW-40 08/15/91	MW-40 11/22/91	MW-40 11/22/91	MW-41 06/28/91	MW-41 08/12/91
QA	MCL ug/L			DUPLICATE SAMPLE		DUPLICATE SAMPLE		
ARSENIC	50	5.0	< 5.0	< 5.0	< 5.0	< 5.0	15.0	7.0
CHROMIUM	50	4.0	7.0	6.0	5.0	< 5.0	5.0	< 5.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	< 100.0	< 100.0	< 100.0	< 100.0	< 100.0	< 100.0

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE		MW-41	MW-42	MW-42	MW-42	MW-42	MW-42	MW-43
QA	MCL ug/L	11/05/91	06/28/91	06/28/91 DUPLICATE SAMPLE	08/08/91	11/07/91	11/07/91 DUPLICATE SAMPLE	06/28/91
ARSENIC	50	6.0	< 5.0	8.0	< 5.0	< 5.0	< 5.0	10.0
CHROMIUM	50	6.0	< 1.0	< 1.0	10.0	< 5.0	< 5.0	< 1.0
IRON	-	-	-	-	-	-	-	< 50.0
LEAD	50	< 1.0	1.0	1.0	< 1.0	< 1.0	1.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	4000.0
NICKEL	400	< 100.0	200.0	200.0	190.0	160.0	130.0	200.0

All units reported as ug/L (ppb)

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< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-43	MW-43	RB-01	RB-01	RB-01	RB-02	RB-02
DATE		08/16/91	11/07/91	06/28/91	08/01/91	11/05/91	08/05/91	11/07/91
QA	MCL ug/L			RINSATE BLANK	RINSATE BLANK	RINSATE BLANK	RINSATE BLANK	RINSATE BLANK
ARSENIC	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
CHROMIUM	50	< 5.0	< 5.0	2.0	< 5.0	< 5.0	< 5.0	< 5.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	220.0	160.0	< 100.0	< 100.0	< 100.0	< 100.0	< 100.0

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 4 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-03	RB-03	RB-04	RB-04	RB-04	RB-05	TB-03
DATE		08/12/91	11/11/91	08/13/91	11/13/91	11/22/91	08/15/91	08/07/91
QA	MCL	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	TRAVEL
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	CONTROL
ARSENIC	50	< 5.0	< 5.0	5.0	< 5.0	< 5.0	< 5.0	-
CHROMIUM	50	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
IRON	-	-	-	-	-	-	-	-
LEAD	50	2.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	-
MANGANESE	-	-	-	-	-	-	-	-
NICKEL	400	< 100.0	< 100.0	< 100.0	< 100.0	< 100.0	< 100.0	-

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."

TABLE 5
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
VOLATILE ORGANICS (METHOD 624)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	FB-02 08/12/91 FIELD BLANK	FB-04 11/22/91 FIELD BLANK	MW-05 08/12/91	MW-06 08/12/91	MW-08 08/12/91	MW-14 11/22/91	MW-31 11/22/91	MW-32 11/22/91
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.90	6.30	4.00
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.30	17.00	7.40
1,1-DICHLOROETHENE	6.0	7.20	< 0.20	< 0.20	< 0.20	9.60	150.00	140.00	88.00
1,2-DICHLOROBENZENE	600.0*	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BENZENE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROFORM	100.0	23.00	6.70	< 0.50	6.20	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 5 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
VOLATILE ORGANICS (METHOD 624)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-02	FB-04	MW-05	MW-06	MW-08	MW-14	MW-31	MW-32
DATE		08/12/91	11/22/91	08/12/91	08/12/91	08/12/91	11/22/91	11/22/91	11/22/91
QA	MCL ug/L	FIELD BLANK	FIELD BLANK						
CHLOROMETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0*	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	0.50	21.00	< 0.50	0.62	< 0.50
TOLUENE	2000.0*	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	0.50	5.60	9.30	8.90
TRICHLOROFLUOROMETHANE	150.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
XYLENE	1750.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 5 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
VOLATILE ORGANICS (METHOD 624)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA	MCL ug/L	MW-34 07/02/91	MW-35 07/02/91	MW-35 08/08/91	MW-40 11/22/91	MW-40 11/22/91 DUPLICATE SAMPLE	MW-41 08/12/91	MW-42 08/08/91	RB-03 08/12/91 RINSATE BLANK
1,1,1-TRICHLOROETHANE	200.0	17.00	6.80	40.00	2.40	2.20	< 0.50	42.00	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	1.30	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	8.10	< 0.50
1,1-DICHLOROETHANE	5.0	17.00	4.80	41.00	12.00	13.00	< 0.50	370.00	< 0.50
1,1-DICHLOROETHENE	6.0	470.00	220.00	880.00	95.00	89.00	< 0.20	1500.00	< 0.20
1,2-DICHLOROBENZENE	600.0*	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BENZENE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	6.30	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROFORM	100.0	1.20	0.70	< 0.50	< 0.50	< 0.50	< 0.50	8.70	11.00

All units reported as ug/L (ppb)

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TABLE 5 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
VOLATILE ORGANICS (METHOD 624)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-34 07/02/91	MW-35 07/02/91	MW-35 08/08/91	MW-40 11/22/91	MW-40 11/22/91 DUPLICATE SAMPLE	MW-41 08/12/91	MW-42 08/08/91	RB-03 08/12/91 RINSATE BLANK
CHLOROMETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0*	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	2000.0*	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	15.00	3.80	19.00	27.00	26.00	< 0.50	19.00	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
XYLENE	1750.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
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* = Proposed MCL

TABLE 5 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
VOLATILE ORGANICS (METHOD 624)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-04	TB-04	TB-05
DATE		11/22/91	08/12/91	11/22/91
QA	MCL	RINSATE	TRAVEL	TRAVEL
	ug/L	BLANK	CONTROL	CONTROL
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.20	< 0.20	< 0.20
1,2-DICHLOROBENZENE	600.0*	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50
BENZENE	1.0	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	1.10	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 0.50	< 0.50	< 0.50
CHLOROFORM	100.0	6.80	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 5 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
VOLATILE ORGANICS (METHOD 624)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-04	TB-04	TB-05
DATE		11/22/91	08/12/91	11/22/91
QA	MCL	RINSATE	TRAVEL	TRAVEL
	ug/L	BLANK	CONTROL	CONTROL
CHLOROMETHANE	-	< 0.50	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680.0	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0*	< 0.50	0.50	0.53
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50
TOLUENE	2000.0*	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 0.50	< 0.50	< 0.50
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00
XYLENE	1750.0	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-01	FB-01	FB-01	FB-02	FB-02	FB-03	FB-03	FB-03
DATE		04/24/91	08/05/91	11/05/91	04/26/91	11/07/91	04/30/91	08/13/91	11/11/91
QA	MCL	FIELD	FIELD	FIELD	FIELD	FIELD	FIELD	FIELD	FIELD
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 1.00	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 1.00	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DIBROMOETHANE	-	< 2.00	-	-	< 2.00	-	< 2.00	-	-
1,2-DICHLOROBENZENE	600.0 *	-	< 0.50	< 0.50	-	< 0.50	-	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 1.00	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 1.00	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	-	< 0.50	< 0.50	-	< 0.50	-	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	-	< 0.50	< 0.50	-	< 0.50	-	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 1.00	< 0.50	0.80	< 1.00	0.80	< 1.00	< 0.50	< 0.50
BROMOFORM	100.0	< 5.00	< 0.50	< 0.50	< 5.00	< 0.50	< 5.00	< 0.50	< 0.50
BROMOMETHANE	-	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 2.00	< 0.50	< 0.50	< 2.00	< 0.50	< 2.00	< 0.50	< 0.50
CHLOROETHANE	-	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	1.20	5.90	< 0.50	5.80	< 0.50	2.60	3.80

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
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* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-01	FB-01	FB-01	FB-02	FB-02	FB-03	FB-03	FB-03
DATE		04/24/91	08/05/91	11/05/91	04/26/91	11/07/91	04/30/91	08/13/91	11/11/91
QA	MCL ug/L	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK
CHLOROMETHANE	-	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00	< 5.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	-	< 0.50	< 0.50	-	< 0.50	-	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 2.00	< 0.50	< 0.50	< 2.00	< 0.50	< 2.00	< 0.50	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	< 0.50	-	-	< 0.50	-	< 0.50	-	-
DIBROMOCHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 1.00	< 0.50	< 0.50
FREON 113	-	< 1.00	-	-	< 1.00	-	< 1.00	-	-
METHYLENE CHLORIDE	5.0 *	< 5.00	< 0.50	5.40	< 5.00	0.60	< 5.00	< 0.50	1.20
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	-	< 0.50	< 0.50	-	< 0.50	-	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 1.00	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	-	< 1.00	< 1.00	-	< 1.00	-	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-04	FB-04	FB-10	MW-01	MW-02	MW-02	MW-02	MW-02
DATE		05/01/91	08/15/91	12/12/91	01/21/91	01/22/91	04/22/91	08/01/91	11/07/91
QA	MCL ug/L	FIELD BLANK	FIELD BLANK	FIELD BLANK					
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	-	-	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DIBROMOETHANE	-	< 2.00	-	-	-	-	< 2.00	-	-
1,2-DICHLOROBENZENE	600.0 *	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 1.00	< 0.50	1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
BROMOFORM	100.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
BROMOMETHANE	-	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50
CHLOROETHANE	-	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00
CHLOROFORM	100.0	5.60	3.10	12.00	0.80	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-04	FB-04	FB-10	MW-01	MW-02	MW-02	MW-02	MW-02
DATE		05/01/91	08/15/91	12/12/91	01/21/91	01/22/91	04/22/91	08/01/91	11/07/91
QA	MCL ug/L	FIELD BLANK	FIELD BLANK	FIELD BLANK					
CHLOROMETHANE	-	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	< 0.50	-	-	-	-	< 0.50	-	-
DIBROMOCHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
FREON 113	-	< 1.00	-	-	-	-	< 1.00	-	-
METHYLENE CHLORIDE	5.0 *	< 5.00	< 0.50	1.00	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	0.60	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	-	< 1.00	< 1.00	< 1.00	< 1.00	-	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-02	MW-03	MW-03	MW-04	MW-04	MW-04	MW-04	MW-07
DATE		11/07/91	01/22/91	08/01/91	02/05/91	05/01/91	08/14/91	11/07/91	01/30/91
QA	MCL	DUPLICATE							
	ug/L	SAMPLE							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	1.20	< 0.50	< 1.00	< 5.00	5.10
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 5.00	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 5.00	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	-	< 0.50	6.00	11.00	13.00	19.00	4.30
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	45.00	15.00	27.00	40.00	15.00
1,2-DIBROMOETHANE	-	-	-	-	-	< 2.00	-	-	-
1,2-DICHLOROBENZENE	600.0 *	< 0.50	< 0.50	< 0.50	< 0.50	-	< 1.00	< 5.00	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	16.00	93.00	< 1.00	< 5.00	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 5.00	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 1.00	< 5.00	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	-	< 1.00	< 5.00	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 5.00	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 1.00	< 5.00	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 2.00	< 10.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 5.00	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 1.00	< 5.00	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 2.00	< 10.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 5.00	2.60

All units reported as ug/L (ppb)

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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-02	MW-03	MW-03	MW-04	MW-04	MW-04	MW-04	MW-07
DATE		11/07/91	01/22/91	08/01/91	02/05/91	05/01/91	08/14/91	11/07/91	01/30/91
QA	MCL ug/L	DUPLICATE SAMPLE							
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 2.00	< 10.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	-	1.00	< 5.00	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 1.00	< 5.00	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	-	-	-	0.77	-	-	-
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 5.00	< 0.50
FREON 113	-	-	-	-	-	< 1.00	-	-	-
METHYLENE CHLORIDE	5.0 *	0.60	< 0.50	< 0.50	< 0.50	< 5.00	< 1.00	20.00	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 5.00	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	< 0.50	< 0.50	-	< 1.00	< 5.00	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 5.00	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	4.20	0.89	1.40	< 5.00	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	< 1.00	-	< 2.00	< 10.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 10.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-07	MW-07	MW-08	MW-08	MW-08	MW-11	MW-11	MW-11
DATE		04/26/91	08/07/91	01/30/91	04/26/91	11/11/91	01/30/91	04/26/91	08/15/91
QA	MCL ug/L								
1,1,1-TRICHLOROETHANE	200.0	4.60	8.10	< 0.50	< 0.50	0.70	2.80	4.50	1.80
1,1,2,2-TETRACHLOROETHANE	1.0	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50
1,1-DICHLOROETHANE	5.0	4.50	12.00	< 0.50	< 0.50	< 0.50	16.00	19.00	11.00
1,1-DICHLOROETHENE	6.0	11.00	28.00	1.80	1.80	2.50	46.00	62.00	< 0.50
1,2-DIBROMOETHANE	-	< 2.00	-	-	< 2.00	-	-	< 2.00	-
1,2-DICHLOROBENZENE	600.0 *	-	< 0.50	< 0.50	-	< 0.50	< 0.50	-	< 0.50
1,2-DICHLOROETHANE	0.5	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50
1,2-DICHLOROPROPANE	5.0	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50
1,3-DICHLOROBENZENE	-	-	< 0.50	< 0.50	-	< 0.50	< 0.50	-	< 0.50
1,4-DICHLOROBENZENE	5.0	-	< 0.50	< 0.50	-	< 0.50	< 0.50	-	< 0.50
BROMODICHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50
BROMOFORM	100.0	< 5.00	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 5.00	< 0.50
BROMOMETHANE	-	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 2.00	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 2.00	< 0.50
CHLOROETHANE	-	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00
CHLOROFORM	100.0	3.00	4.10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-07	MW-07	MW-08	MW-08	MW-08	MW-11	MW-11	MW-11
DATE		04/26/91	08/07/91	01/30/91	04/26/91	11/11/91	01/30/91	04/26/91	08/15/91
QA	MCL ug/L								
CHLOROMETHANE	-	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	-	< 0.50	< 0.50	-	< 0.50	< 0.50	-	0.60
CIS-1,3-DICHLOROPROPENE	-	< 2.00	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 2.00	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	< 0.50	-	-	< 0.50	-	-	1.10	-
DIBROMOCHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50
FREON 113	-	< 1.00	-	-	< 1.00	-	-	< 1.00	-
METHYLENE CHLORIDE	5.0 *	< 5.00	< 0.50	< 0.50	< 5.00	2.10	< 0.50	< 5.00	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	3.20	3.70	5.30	< 0.50	0.59	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	-	< 0.50	< 0.50	-	< 0.50	< 0.50	-	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.50	3.50	2.00
TRICHLOROFLUOROMETHANE	150.0	-	< 1.00	< 1.00	-	< 1.00	< 1.00	-	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA	MCL ug/L	MW-11 11/07/91	MW-12 02/04/91	MW-12 02/04/91 DUPLICATE SAMPLE	MW-12 05/01/91	MW-12 08/15/91	MW-12 11/07/91	MW-12R 02/04/91 RINSATE BLANK	MW-13 02/05/91
1,1,1-TRICHLOROETHANE	200.0	1.00	< 0.50	< 0.50	0.55	0.70	1.40	< 0.50	0.60
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	7.20	13.00	15.00	12.00	13.00	15.00	< 0.50	36.00
1,1-DICHLOROETHENE	6.0	9.90	47.00	52.00	39.00	27.00	28.00	< 0.50	25.00
1,2-DIBROMOETHANE	-	-	-	-	< 2.00	-	-	-	-
1,2-DICHLOROBENZENE	600.0 *	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	0.60	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	96.00
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.00	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-11 11/07/91	MW-12 02/04/91	MW-12 02/04/91 DUPLICATE SAMPLE	MW-12 05/01/91	MW-12 08/15/91	MW-12 11/07/91	MW-12R 02/04/91 RINSATE BLANK	MW-13 02/05/91
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	-	< 0.50	0.50	< 0.50	3.80
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	-	-	< 0.50	-	-	-	-
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50
FREON 113	-	-	-	-	< 1.00	-	-	-	-
METHYLENE CHLORIDE	5.0 *	1.30	< 0.50	< 0.50	< 5.00	< 0.50	2.10	< 0.50	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	1.10	14.00	15.00	13.00	15.00	13.00	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	-	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA	MCL ug/L	MW-13 04/30/91	MW-13 08/07/91	MW-13 08/07/91 DUPLICATE SAMPLE	MW-13 11/07/91	MW-14 02/04/91	MW-14 05/01/91	MW-14 08/14/91	MW-15 01/24/91
1,1,1-TRICHLOROETHANE	200.0	< 0.50	1.10	1.10	< 50.00	1.30	0.88	1.60	0.70
1,1,2,2-TETRACHLOROETHANE	1.0	< 1.00	< 0.50	< 0.50	< 50.00	< 0.50	< 1.00	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 1.00	< 0.50	< 0.50	< 50.00	< 0.50	< 1.00	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	17.00	24.00	28.00	160.00	4.40	3.10	4.80	< 0.50
1,1-DICHLOROETHENE	6.0	14.00	9.60	12.00	210.00	47.00	18.00	50.00	1.20
1,2-DIBROMOETHANE	-	< 2.00	-	-	-	-	< 2.00	-	-
1,2-DICHLOROBENZENE	600.0 *	-	< 0.50	< 0.50	< 50.00	< 0.50	-	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	120.00	108.00	133.00	< 50.00	< 0.50	< 1.00	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 1.00	1.70	1.50	< 50.00	< 0.50	< 1.00	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	-	< 0.50	< 0.50	< 50.00	< 0.50	-	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	-	< 0.50	< 0.50	< 50.00	< 0.50	-	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	< 50.00	< 0.50	< 1.00	< 0.50	< 0.50
BROMOFORM	100.0	< 5.00	< 0.50	< 0.50	< 50.00	< 0.50	< 5.00	< 0.50	< 0.50
BROMOMETHANE	-	< 5.00	< 1.00	< 1.00	< 100.00	< 1.00	< 5.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 50.00	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 2.00	< 0.50	< 0.50	< 50.00	< 0.50	< 2.00	< 0.50	< 0.50
CHLOROETHANE	-	< 5.00	< 1.00	< 1.00	< 100.00	< 1.00	< 5.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 50.00	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA	MCL ug/L	MW-13 04/30/91	MW-13 08/07/91	MW-13 08/07/91 DUPLICATE SAMPLE	MW-13 11/07/91	MW-14 02/04/91	MW-14 05/01/91	MW-14 08/14/91	MW-15 01/24/91
CHLOROMETHANE	-	< 5.00	< 1.00	< 1.00	320.00	< 1.00	< 5.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	-	13.00	9.50	< 50.00	< 0.50	-	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 2.00	< 0.50	< 0.50	< 50.00	< 0.50	< 2.00	< 0.50	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	3.50	-	-	-	-	< 0.50	-	-
DIBROMOCHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	< 50.00	< 0.50	< 1.00	< 0.50	< 0.50
FREON 113	-	< 1.00	-	-	-	-	< 1.00	-	-
METHYLENE CHLORIDE	5.0 *	< 5.00	< 0.50	< 0.50	230.00	< 0.50	< 5.00	< 0.50	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 50.00	< 0.50	< 0.50	0.60	6.80
TRANS-1,2-DICHLOROETHENE	10.0	-	< 0.50	< 0.50	< 50.00	< 0.50	-	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 1.00	< 0.50	< 0.50	< 50.00	< 0.50	< 1.00	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	1.50	0.70	< 50.00	6.20	4.90	9.70	< 0.50
TRICHLOROFLUOROMETHANE	150.0	-	< 1.00	< 1.00	< 100.00	< 1.00	-	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 100.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-15 04/25/91	MW-15 04/25/91 DUPLICATE SAMPLE	MW-15 08/05/91	MW-15 11/05/91	MW-16 01/24/91	MW-16 04/25/91	MW-16 08/13/91	MW-16 11/07/91
1,1,1-TRICHLOROETHANE	200.0	< 0.50	0.53	< 0.50	1.30	< 0.50	0.83	1.50	1.60
1,1,2,2-TETRACHLOROETHANE	1.0	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	0.75	0.82	< 0.50	2.10	2.60	2.80	8.30	5.70
1,2-DIBROMOETHANE	-	< 2.00	< 2.00	-	-	-	< 2.00	-	-
1,2-DICHLOROBENZENE	600.0 *	-	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	-	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	-	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
BROMOFORM	100.0	< 5.00	< 5.00	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50
BROMOMETHANE	-	< 5.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 2.00	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50
CHLOROETHANE	-	< 5.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-15 04/25/91	MW-15 04/25/91 DUPLICATE SAMPLE	MW-15 08/05/91	MW-15 11/05/91	MW-16 01/24/91	MW-16 04/25/91	MW-16 08/13/91	MW-16 11/07/91
CHLOROMETHANE	-	< 5.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	-	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 2.00	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	< 0.50	< 0.50	-	-	-	< 0.50	-	-
DIBROMOCHLOROMETHANE	100.0	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
FREON 113	-	< 1.00	< 1.00	-	-	-	< 1.00	-	-
METHYLENE CHLORIDE	5.0 *	< 5.00	< 5.00	< 0.50	4.10	< 0.50	< 5.00	< 0.50	1.10
TETRACHLOROETHENE	5.0	6.10	6.70	7.80	12.00	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	-	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	-	-	< 1.00	< 1.00	< 1.00	-	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-17 01/25/91	MW-17 04/29/91	MW-17 08/06/91	MW-17 11/05/91	MW-17R 01/25/91 RINSATE BLANK	MW-18 01/25/91	MW-18 04/29/91	MW-18 08/13/91
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	0.60	< 0.50	0.90	0.94	1.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.40	1.10	1.20
1,1-DICHLOROETHENE	6.0	3.00	3.80	3.70	2.80	< 0.50	22.00	20.00	18.00
1,2-DIBROMOETHANE	-	-	< 2.00	-	-	-	-	< 2.00	-
1,2-DICHLOROBENZENE	600.0 *	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
BROMOFORM	100.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
BROMOMETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50
CHLOROETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	1.30	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-17 01/25/91	MW-17 04/29/91	MW-17 08/06/91	MW-17 11/05/91	MW-17R 01/25/91 RINSATE BLANK	MW-18 01/25/91	MW-18 04/29/91	MW-18 08/13/91
CHLOROMETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	< 0.50	-	-	-	-	< 0.50	-
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
FREON 113	-	-	< 1.00	-	-	-	-	< 1.00	-
METHYLENE CHLORIDE	5.0 *	< 0.50	< 5.00	< 0.50	4.30	< 0.50	< 0.50	< 5.00	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.90	2.30	3.80
TRICHLOROFLUOROMETHANE	150.0	< 1.00	-	< 1.00	< 1.00	< 1.00	< 1.00	-	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-18 11/05/91	MW-19 01/24/91	MW-19 04/29/91	MW-19 04/29/91 DUPLICATE SAMPLE	MW-19 08/05/91	MW-19 11/11/91	MW-20 01/24/91	MW-20 04/29/91
1,1,1-TRICHLOROETHANE	200.0	2.20	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.51
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,1,2-TRICHLOROETHANE	32.0	3.80	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,1-DICHLOROETHANE	5.0	2.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	18.00	5.90	4.20	4.20	2.40	3.70	9.80	8.90
1,2-DIBROMOETHANE	-	-	-	< 2.00	< 2.00	-	-	-	< 2.00
1,2-DICHLOROBENZENE	600.0 *	< 0.50	< 0.50	-	-	< 0.50	< 0.50	< 0.50	-
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	-	-	< 0.50	< 0.50	< 0.50	-
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	-	-	< 0.50	< 0.50	< 0.50	-
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
BROMOFORM	100.0	< 0.50	< 0.50	< 5.00	< 5.00	< 0.50	< 0.50	< 0.50	< 5.00
BROMOMETHANE	-	< 1.00	< 1.00	< 5.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00
CHLOROETHANE	-	< 1.00	< 1.00	< 5.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA	MCL ug/L	MW-18 11/05/91	MW-19 01/24/91	MW-19 04/29/91	MW-19 04/29/91 DUPLICATE SAMPLE	MW-19 08/05/91	MW-19 11/11/91	MW-20 01/24/91	MW-20 04/29/91
CHLOROMETHANE	-	< 1.00	< 1.00	< 5.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 0.50	-	-	< 0.50	< 0.50	< 0.50	-
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00
CIS/TRANS-1,2-DICHLOROETHENE	-	-	-	< 0.50	< 0.50	-	-	-	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
FREON 113	-	-	-	< 1.00	< 1.00	-	-	-	< 1.00
METHYLENE CHLORIDE	5.0 *	5.00	< 0.50	< 5.00	< 5.00	< 0.50	1.60	< 0.50	< 5.00
TETRACHLOROETHENE	5.0	< 0.50	1.70	1.90	1.60	3.20	2.80	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	-	-	< 0.50	< 0.50	< 0.50	-
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	-	-	< 1.00	< 1.00	< 1.00	-
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-20	MW-20	MW-21	MW-21	MW-21	MW-21	MW-22	MW-22
DATE		08/14/91	11/11/91	01/23/91	04/25/91	08/07/91	11/11/91	01/23/91	04/25/91
QA	MCL ug/L								
1,1,1-TRICHLOROETHANE	200.0	< 0.50	0.70	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	-	0.74	< 0.50	< 0.50	-	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	11.00	< 0.80	4.70	0.90	< 0.50	< 0.50	< 0.50
1,2-DIBROMOETHANE	-	-	-	-	< 2.00	-	-	-	< 2.00
1,2-DICHLOROBENZENE	600.0 *	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 5.00
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00
CHLOROFORM	100.0	< 0.50	< 0.50	2.40	2.50	5.10	4.80	5.20	4.80

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-20	MW-20	MW-21	MW-21	MW-21	MW-21	MW-22	MW-22
DATE		08/14/91	11/11/91	01/23/91	04/25/91	08/07/91	11/11/91	01/23/91	04/25/91
QA	MCL ug/L								
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00
CIS/TRANS-1,2-DICHLOROETHENE	-	-	-	-	< 0.50	-	-	-	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
FREON 113	-	-	-	-	< 1.00	-	-	-	< 1.00
METHYLENE CHLORIDE	5.0 *	< 0.50	1.80	< 0.50	< 5.00	< 0.50	2.00	< 0.50	< 5.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	-	< 1.00	< 1.00	< 1.00	-
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-22	MW-23	MW-23	MW-23	MW-24	MW-25	MW-25	MW-25
DATE		08/14/91	04/23/91	08/02/91	11/11/91	08/01/91	01/29/91	04/24/91	08/02/91
QA	MCL ug/L								
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.60
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	0.67	< 0.50	< 0.50	< 0.50	1.30	2.10	3.00
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.30	2.50	5.80
1,2-DIBROMOETHANE	-	-	< 2.00	-	-	-	-	< 2.00	-
1,2-DICHLOROBENZENE	600.0 *	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
BROMOFORM	100.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
BROMOMETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50
CHLOROETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00
CHLOROFORM	100.0	3.90	3.00	3.10	4.60	3.20	1.10	1.40	1.60

All units reported as ug/L (ppb)

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* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-22	MW-23	MW-23	MW-23	MW-24	MW-25	MW-25	MW-25
DATE		08/14/91	04/23/91	08/02/91	11/11/91	08/01/91	01/29/91	04/24/91	08/02/91
QA	MCL ug/L								
CHLOROMETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	< 0.50	-	-	-	-	< 0.50	-
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
FREON 113	-	-	< 1.00	-	-	-	-	< 1.00	-
METHYLENE CHLORIDE	5.0 *	< 0.50	< 5.00	< 0.50	3.00	< 0.50	< 0.50	< 5.00	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	0.70	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	-	< 1.00	< 1.00	< 1.00	< 1.00	-	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-26 01/29/91	MW-26 04/24/91	MW-26 08/13/91	MW-27 01/29/91	MW-27 04/24/91	MW-27 08/13/91	MW-27R 01/29/91 RINSATE BLANK	MW-28 02/01/91
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	0.60	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	1.60	2.40	4.00	< 0.50	< 0.50	< 0.50	< 0.50	13.00
1,1-DICHLOROETHENE	6.0	3.60	3.40	8.10	< 0.50	1.10	< 0.50	< 0.50	4.30
1,2-DIBROMOETHANE	-	-	< 2.00	-	-	< 2.00	-	-	-
1,2-DICHLOROBENZENE	600.0 *	< 0.50	-	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	-	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	-	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 5.00	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 2.00	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	1.00	1.40	1.50	0.70	1.40	0.90	2.20	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-26 01/29/91	MW-26 04/24/91	MW-26 08/13/91	MW-27 01/29/91	MW-27 04/24/91	MW-27 08/13/91	MW-27R 01/29/91 RINSATE BLANK	MW-28 02/01/91
CHLOROMETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	-	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 2.00	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	< 0.50	-	-	< 0.50	-	-	-
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50
FREON 113	-	-	< 1.00	-	-	< 1.00	-	-	-
METHYLENE CHLORIDE	5.0 *	< 0.50	< 5.00	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	-	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	-	< 1.00	< 1.00	-	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-28	MW-28	MW-28	MW-28R	MW-29	MW-29	MW-29	MW-29
DATE		04/30/91	08/13/91	11/05/91	02/01/91	02/01/91	04/30/91	08/07/91	11/05/91
QA	MCL ug/L				RINSATE BLANK				
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	1.00	1.30	1.40
1,1,2,2-TETRACHLOROETHANE	1.0	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	8.10	13.00	14.00	< 0.50	1.90	2.40	4.50	3.70
1,1-DICHLOROETHENE	6.0	3.90	< 0.50	9.40	< 0.50	33.00	16.00	29.00	21.00
1,2-DIBROMOETHANE	-	< 2.00	-	-	-	-	< 2.00	-	-
1,2-DICHLOROBENZENE	600.0 *	-	< 0.50	< 0.50	< 0.50	< 1.00	-	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 1.00	< 0.50	< 0.50	< 0.50	4.70	6.60	11.00	7.10
1,2-DICHLOROPROPANE	5.0	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	-	< 0.50	< 0.50	< 0.50	< 1.00	-	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	-	< 0.50	< 0.50	< 0.50	< 1.00	-	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50
BROMOFORM	100.0	< 5.00	< 0.50	< 0.50	< 0.50	< 1.00	< 5.00	< 0.50	< 0.50
BROMOMETHANE	-	< 5.00	< 1.00	< 1.00	< 1.00	< 2.00	< 5.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	0.68	1.00	1.10
CHLOROBENZENE	30.0	< 2.00	< 0.50	< 0.50	< 0.50	< 1.00	< 2.00	< 0.50	< 0.50
CHLOROETHANE	-	< 5.00	< 1.00	< 1.00	< 1.00	< 2.00	< 5.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	3.00	< 1.00	0.57	0.90	1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-28	MW-28	MW-28	MW-28R	MW-29	MW-29	MW-29	MW-29
DATE		04/30/91	08/13/91	11/05/91	02/01/91	02/01/91	04/30/91	08/07/91	11/05/91
QA	MCL ug/L				RINSATE BLANK				
CHLOROMETHANE	-	< 5.00	< 1.00	< 1.00	< 1.00	< 2.00	< 5.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	-	< 0.50	< 0.50	< 0.50	< 1.00	-	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 2.00	< 0.50	< 0.50	< 0.50	< 1.00	< 2.00	< 0.50	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	< 0.50	-	-	-	-	< 0.50	-	-
DIBROMOCHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50
FREON 113	-	< 1.00	-	-	-	-	< 1.00	-	-
METHYLENE CHLORIDE	5.0 *	< 5.00	< 0.50	4.50	< 0.50	< 1.00	< 5.00	< 0.50	5.60
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	-	< 0.50	< 0.50	< 0.50	< 1.00	-	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	0.90	0.80
TRICHLOROFLUOROMETHANE	150.0	-	< 1.00	< 1.00	< 1.00	< 2.00	-	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 2.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-30	MW-30	MW-30	MW-30	MW-31	MW-31	MW-31	MW-31
DATE		02/04/91	04/30/91	08/15/91	11/05/91	02/01/91	02/01/91	05/01/91	08/15/91
QA	MCL						DUPLICATE		
	ug/L						SAMPLE		
1,1,1-TRICHLOROETHANE	200.0	6.30	5.90	4.40	8.50	< 5.00	< 5.00	5.90	6.20
1,1,2,2-TETRACHLOROETHANE	1.0	< 2.50	< 1.00	< 2.50	< 2.50	< 5.00	< 5.00	< 1.00	< 2.50
1,1,2-TRICHLOROETHANE	32.0	< 2.50	< 1.00	< 2.50	< 2.50	< 5.00	< 5.00	< 1.00	< 2.50
1,1-DICHLOROETHANE	5.0	8.20	9.00	6.80	11.00	7.60	7.70	12.00	10.00
1,1-DICHLOROETHENE	6.0	160.00	75.00	84.00	88.00	150.00	150.00	110.00	120.00
1,2-DIBROMOETHANE	-	-	< 2.00	-	-	-	-	< 2.00	-
1,2-DICHLOROBENZENE	600.0 *	< 2.50	-	< 2.50	< 2.50	< 5.00	< 5.00	-	< 2.50
1,2-DICHLOROETHANE	0.5	< 2.50	< 1.00	< 2.50	< 2.50	< 5.00	< 5.00	< 1.00	< 2.50
1,2-DICHLOROPROPANE	5.0	< 2.50	< 1.00	< 2.50	< 2.50	< 5.00	< 5.00	< 1.00	< 2.50
1,3-DICHLOROBENZENE	-	< 2.50	-	< 2.50	< 2.50	< 5.00	< 5.00	-	< 2.50
1,4-DICHLOROBENZENE	5.0	< 2.50	-	< 2.50	< 2.50	< 5.00	< 5.00	-	< 2.50
BROMODICHLOROMETHANE	100.0	< 2.50	< 1.00	< 2.50	< 2.50	< 5.00	< 5.00	< 1.00	< 2.50
BROMOFORM	100.0	< 2.50	< 5.00	< 2.50	< 2.50	< 5.00	< 5.00	< 5.00	< 2.50
BROMOMETHANE	-	< 5.00	< 5.00	< 5.00	< 5.00	< 10.00	< 10.00	< 5.00	< 5.00
CARBON TETRACHLORIDE	0.5	< 2.50	< 0.50	< 2.50	< 2.50	< 5.00	< 5.00	< 0.50	< 2.50
CHLOROBENZENE	30.0	< 2.50	< 2.00	< 2.50	< 2.50	< 5.00	< 5.00	< 2.00	< 2.50
CHLOROETHANE	-	< 5.00	< 5.00	< 5.00	< 5.00	< 10.00	< 10.00	< 5.00	< 5.00
CHLOROFORM	100.0	< 2.50	< 0.50	< 2.50	< 2.50	< 5.00	< 5.00	< 0.50	< 2.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-30	MW-30	MW-30	MW-30	MW-31	MW-31	MW-31	MW-31
DATE		02/04/91	04/30/91	08/15/91	11/05/91	02/01/91	02/01/91	05/01/91	08/15/91
QA	MCL						DUPLICATE		
	ug/L						SAMPLE		
CHLOROMETHANE	-	< 5.00	< 5.00	< 5.00	< 5.00	< 10.00	< 10.00	< 5.00	< 5.00
CIS-1,2-DICHLOROETHENE	6.0	< 2.50	-	< 2.50	< 2.50	< 5.00	< 5.00	-	< 2.50
CIS-1,3-DICHLOROPROPENE	-	< 2.50	< 2.00	< 2.50	< 2.50	< 5.00	< 5.00	< 2.00	< 2.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	< 0.50	-	-	-	-	< 0.50	-
DIBROMOCHLOROMETHANE	100.0	< 2.50	< 1.00	< 2.50	< 2.50	< 5.00	< 5.00	< 1.00	< 2.50
FREON 113	-	-	< 1.00	-	-	-	-	< 1.00	-
METHYLENE CHLORIDE	5.0 *	< 2.50	< 5.00	< 2.50	32.00	< 5.00	< 5.00	< 5.00	< 2.50
TETRACHLOROETHENE	5.0	< 2.50	< 0.50	< 2.50	< 2.50	< 5.00	< 5.00	< 0.50	< 2.50
TRANS-1,2-DICHLOROETHENE	10.0	< 2.50	-	< 2.50	< 2.50	< 5.00	< 5.00	-	< 2.50
TRANS-1,3-DICHLOROPROPENE	-	< 2.50	< 1.00	< 2.50	< 2.50	< 5.00	< 5.00	< 1.00	< 2.50
TRICHLOROETHENE	5.0	2.80	5.80	6.40	9.40	< 5.00	< 5.00	7.30	6.60
TRICHLOROFLUOROMETHANE	150.0	< 5.00	-	< 5.00	< 5.00	< 10.00	< 10.00	-	< 5.00
VINYL CHLORIDE	0.5	< 5.00	< 1.00	< 5.00	< 5.00	< 10.00	< 10.00	< 1.00	< 5.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-32 02/01/91	MW-32 05/01/91	MW-32 05/01/91 DUPLICATE SAMPLE	MW-32 08/16/91	MW-33 01/30/91	MW-33 04/30/91	MW-33 04/30/91 DUPLICATE SAMPLE	MW-33 08/07/91
1,1,1-TRICHLOROETHANE	200.0	< 5.00	6.40	5.90	5.20	3.40	2.30	2.40	6.70
1,1,2,2-TETRACHLOROETHANE	1.0	< 5.00	< 1.00	< 1.00	< 2.50	< 2.50	< 1.00	< 1.00	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 5.00	< 1.00	< 1.00	< 2.50	< 2.50	< 1.00	< 1.00	< 0.50
1,1-DICHLOROETHANE	5.0	6.10	11.00	11.00	7.50	< 2.50	2.00	2.10	5.40
1,1-DICHLOROETHENE	6.0	130.00	160.00	130.00	140.00	120.00	31.00	33.00	85.00
1,2-DIBROMOETHANE	-	-	< 2.00	< 2.00	-	-	< 2.00	< 2.00	-
1,2-DICHLOROBENZENE	600.0 *	< 5.00	-	-	< 2.50	< 2.50	-	-	< 0.50
1,2-DICHLOROETHANE	0.5	< 5.00	< 1.00	< 1.00	< 2.50	< 2.50	< 1.00	< 1.00	< 0.50
1,2-DICHLOROPROPANE	5.0	< 5.00	< 1.00	< 1.00	< 2.50	< 2.50	< 1.00	< 1.00	< 0.50
1,3-DICHLOROBENZENE	-	< 5.00	-	-	< 2.50	< 2.50	-	-	< 0.50
1,4-DICHLOROBENZENE	5.0	< 5.00	-	-	< 2.50	< 2.50	-	-	< 0.50
BROMODICHLOROMETHANE	100.0	< 5.00	< 1.00	< 1.00	< 2.50	< 2.50	< 1.00	< 1.00	< 0.50
BROMOFORM	100.0	< 5.00	< 5.00	< 5.00	< 2.50	< 2.50	< 5.00	< 5.00	< 0.50
BROMOMETHANE	-	< 10.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 5.00	< 0.50	< 0.50	< 2.50	< 2.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 5.00	< 2.00	< 2.00	< 2.50	< 2.50	< 2.00	< 2.00	< 0.50
CHLOROETHANE	-	< 10.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 1.00
CHLOROFORM	100.0	< 5.00	< 0.50	< 0.50	< 2.50	< 2.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-32 02/01/91	MW-32 05/01/91	MW-32 05/01/91 DUPLICATE SAMPLE	MW-32 08/16/91	MW-33 01/30/91	MW-33 04/30/91	MW-33 04/30/91 DUPLICATE SAMPLE	MW-33 08/07/91
CHLOROMETHANE	-	< 10.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 5.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 5.00	-	-	< 2.50	< 2.50	-	-	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 5.00	< 2.00	< 2.00	< 2.50	< 2.50	< 2.00	< 2.00	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	< 0.50	< 0.50	-	-	< 0.50	< 0.50	-
DIBROMOCHLOROMETHANE	100.0	< 5.00	< 1.00	< 1.00	< 2.50	< 2.50	< 1.00	< 1.00	< 0.50
FREON 113	-	-	< 1.00	< 1.00	-	-	< 1.00	< 1.00	-
METHYLENE CHLORIDE	5.0 *	< 5.00	< 5.00	< 5.00	< 2.50	< 2.50	< 5.00	< 5.00	< 0.50
TETRACHLOROETHENE	5.0	< 5.00	< 0.50	< 0.50	< 2.50	< 2.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 5.00	-	-	< 2.50	< 2.50	-	-	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 5.00	< 1.00	< 1.00	< 2.50	< 2.50	< 1.00	< 1.00	< 0.50
TRICHLOROETHENE	5.0	5.00	11.00	11.00	8.80	< 2.50	< 0.50	< 0.50	1.00
TRICHLOROFLUOROMETHANE	150.0	< 10.00	-	-	< 5.00	< 5.00	-	-	< 1.00
VINYL CHLORIDE	0.5	< 10.00	< 1.00	< 1.00	< 5.00	< 5.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-33 11/05/91	MW-34 08/16/91	MW-34 08/16/91 DUPLICATE SAMPLE	MW-34 12/12/91	MW-35 12/12/91	MW-36 12/12/91	MW-37 12/12/91	MW-38 12/12/91
1,1,1-TRICHLOROETHANE	200.0	8.10	24.00	22.00	18.00	2.60	15.00	1.00	< 13.00
1,1,2,2-TETRACHLOROETHANE	1.0	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 2.50	< 20.00	< 20.00	1.10	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	6.20	20.00	< 20.00	28.00	2.80	12.00	3.60	9.10
1,1-DICHLOROETHENE	6.0	100.00	510.00	200.00	318.00	92.00	290.00	9.30	260.00
1,2-DIBROMOETHANE	-	-	-	-	-	-	-	-	-
1,2-DICHLOROBENZENE	600.0 *	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 2.50	< 20.00	< 20.00	1.70	< 0.50	1.60	7.10	4.00
1,2-DICHLOROPROPANE	5.0	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 5.00	< 40.00	< 40.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	1.40	1.30	2.20
CHLOROBENZENE	30.0	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 5.00	< 40.00	< 40.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 2.50	< 20.00	< 20.00	2.30	1.90	3.40	4.60	4.20

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-33 11/05/91	MW-34 08/16/91	MW-34 08/16/91 DUPLICATE SAMPLE	MW-34 12/12/91	MW-35 12/12/91	MW-36 12/12/91	MW-37 12/12/91	MW-38 12/12/91
CHLOROMETHANE	-	< 5.00	< 40.00	< 40.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 2.50	< 20.00	< 20.00	0.60	< 0.50	< 0.50	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	-	-	-	-	-	-	-
DIBROMOCHLOROMETHANE	100.0	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
FREON 113	-	-	-	-	-	-	-	-	-
METHYLENE CHLORIDE	5.0 *	33.00	< 20.00	< 20.00	5.00	4.90	3.20	1.90	2.40
TETRACHLOROETHENE	5.0	< 2.50	< 20.00	< 20.00	1.40	0.70	0.70	0.60	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 2.50	< 20.00	< 20.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 2.50	< 20.00	< 20.00	26.00	2.60	8.80	0.60	8.60
TRICHLOROFLUOROMETHANE	150.0	< 5.00	< 40.00	< 40.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 5.00	< 40.00	< 40.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-39 06/28/91	MW-39 08/06/91	MW-39 08/06/91 DUPLICATE SAMPLE	MW-39 12/12/91	MW-40 06/28/91	MW-40 08/15/91	MW-40 08/15/91 DUPLICATE SAMPLE	MW-41 06/28/91
1,1,1-TRICHLOROETHANE	200.0	0.60	0.60	0.50	1.00	4.00	3.80	4.00	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	1.00	1.00	1.20	19.00	15.00	15.00	< 0.50
1,1-DICHLOROETHENE	6.0	0.70	1.00	1.20	3.20	110.00	140.00	150.00	< 0.50
1,2-DIBROMOETHANE	-	-	-	-	-	-	-	-	-
1,2-DICHLOROBENZENE	600.0 *	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
1,2-DICHLOROETHANE	0.5	2.90	2.10	2.00	2.50	< 1.00	< 2.50	< 2.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
BROMOMETHANE	-	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 0.50
CARBON TETRACHLORIDE	0.5	1.80	2.40	2.30	2.40	< 1.00	< 2.50	< 2.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
CHLOROETHANE	-	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 0.50
CHLOROFORM	100.0	4.00	3.30	3.20	4.90	< 1.00	< 2.50	< 2.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-39 06/28/91	MW-39 08/06/91	MW-39 08/06/91 DUPLICATE SAMPLE	MW-39 12/12/91	MW-40 06/28/91	MW-40 08/15/91	MW-40 08/15/91 DUPLICATE SAMPLE	MW-41 06/28/91
CHLOROMETHANE	-	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 0.50
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	-	-	-	-	-	-	-
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
FREON 113	-	-	-	-	-	-	-	-	-
METHYLENE CHLORIDE	5.0 *	< 0.50	< 0.50	< 0.50	1.30	< 1.00	< 2.50	< 2.50	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	0.60	< 1.00	< 2.50	< 2.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 2.50	< 2.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	46.00	30.00	32.00	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 0.50
VINYL CHLORIDE	0.5	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 5.00	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L	MW-41 11/05/91	MW-42 06/28/91	MW-42 06/28/91 DUPLICATE SAMPLE	MW-42 11/07/91	MW-42 11/07/91 DUPLICATE SAMPLE	MW-43 06/28/91	MW-43 08/16/91	MW-43 11/07/91
1,1,1-TRICHLOROETHANE	200.0	< 0.50	11.00	11.00	6.90	6.50	< 5.00	< 10.00	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 2.00	< 2.00	1.90	< 0.50	< 5.00	< 10.00	2.00
1,1-DICHLOROETHANE	5.0	< 0.50	110.00	110.00	69.00	66.00	330.00	200.00	170.00
1,1-DICHLOROETHENE	6.0	< 0.50	330.00	340.00	270.00	250.00	33.00	21.00	30.00
1,2-DIBROMOETHANE	-	-	-	-	-	-	-	-	-
1,2-DICHLOROBENZENE	600.0 *	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 2.00	< 2.00	< 0.50	0.60	< 5.00	< 10.00	1.90
1,2-DICHLOROPROPANE	5.0	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
BROMOFORM	100.0	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
BROMOMETHANE	-	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 5.00	< 20.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
CHLOROETHANE	-	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 5.00	< 20.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 2.00	2.00	1.40	1.50	< 5.00	< 10.00	< 0.50

All units reported as ug/L (ppb)

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* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-41	MW-42	MW-42	MW-42	MW-42	MW-43	MW-43	MW-43
DATE		11/05/91	06/28/91	06/28/91	11/07/91	11/07/91	06/28/91	08/16/91	11/07/91
QA	MCL ug/L			DUPLICATE SAMPLE		DUPLICATE SAMPLE			
CHLOROMETHANE	-	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 5.00	< 20.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	2.60
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	-	-	-	-	-	-	-
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
FREON 113	-	-	-	-	-	-	-	-	-
METHYLENE CHLORIDE	5.0 *	3.80	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 2.00	< 2.00	1.10	1.00	< 5.00	< 10.00	0.60
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 2.00	< 2.00	< 0.50	< 0.50	< 5.00	< 10.00	< 0.50
TRICHLOROETHENE	5.0	< 0.50	4.00	3.00	3.90	3.60	< 5.00	< 10.00	2.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 5.00	< 20.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 2.00	< 2.00	< 1.00	< 1.00	< 5.00	< 20.00	5.60

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* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-01	RB-01	RB-01	RB-01	RB-02	RB-02	RB-02	RB-03
DATE		04/24/91	06/28/91	08/01/91	11/05/91	04/26/91	08/05/91	11/07/91	04/30/91
QA	MCL	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00
1,1,2-TRICHLOROETHANE	32.0	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DIBROMOETHANE	-	< 2.00	-	-	-	< 2.00	-	-	< 2.00
1,2-DICHLOROBENZENE	600.0 *	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	-
1,2-DICHLOROETHANE	0.5	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00
1,2-DICHLOROPROPANE	5.0	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00
1,3-DICHLOROBENZENE	-	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	-
1,4-DICHLOROBENZENE	5.0	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	-
BROMODICHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	0.70	< 1.00	< 0.50	0.70	< 1.00
BROMOFORM	100.0	< 5.00	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 5.00
BROMOMETHANE	-	< 5.00	< 0.50	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 5.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 2.00
CHLOROETHANE	-	< 5.00	< 0.50	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 5.00
CHLOROFORM	100.0	< 0.50	5.30	3.60	5.20	< 0.50	4.80	4.80	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-01	RB-01	RB-01	RB-01	RB-02	RB-02	RB-02	RB-03
DATE		04/24/91	06/28/91	08/01/91	11/05/91	04/26/91	08/05/91	11/07/91	04/30/91
QA	MCL	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK
CHLOROMETHANE	-	< 5.00	< 0.50	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 5.00
CIS-1,2-DICHLOROETHENE	6.0	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	-
CIS-1,3-DICHLOROPROPENE	-	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 2.00
CIS/TRANS-1,2-DICHLOROETHENE	-	< 0.50	-	-	-	< 0.50	-	-	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00
FREON 113	-	< 1.00	-	-	-	< 1.00	-	-	< 1.00
METHYLENE CHLORIDE	5.0 *	< 5.00	< 0.50	< 0.50	5.10	< 5.00	< 0.50	0.60	< 5.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	-
TRANS-1,3-DICHLOROPROPENE	-	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 1.00
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	-	< 0.50	< 1.00	< 1.00	-	< 1.00	< 1.00	-
VINYL CHLORIDE	0.5	< 1.00	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-03	RB-04	RB-04	RB-05	RB-10	TB-01	TB-01	TB-01
DATE		11/11/91	05/01/91	08/13/91	08/15/91	12/12/91	01/23/91	04/23/91	06/28/91
QA	MCL ug/L	RINSATE BLANK	RINSATE BLANK	RINSATE BLANK	RINSATE BLANK	RINSATE BLANK	FIELD BLANK	TRAVEL CONTROL	TRAVEL CONTROL
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DIBROMOETHANE	-	-	< 2.00	-	-	-	-	< 2.00	-
1,2-DICHLOROBENZENE	600.0 *	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 1.00	< 0.50	< 0.50	0.80	< 0.50	< 1.00	< 0.50
BROMOFORM	100.0	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50
BROMOMETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50
CHLOROETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 0.50
CHLOROFORM	100.0	3.40	3.80	3.00	3.10	8.00	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

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* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-03	RB-04	RB-04	RB-05	RB-10	TB-01	TB-01	TB-01
DATE		11/11/91	05/01/91	08/13/91	08/15/91	12/12/91	01/23/91	04/23/91	06/28/91
QA	MCL	RINSATE	RINSATE	RINSATE	RINSATE	RINSATE	FIELD	TRAVEL	TRAVEL
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK	BLANK	CONTROL	CONTROL
CHLOROMETHANE	-	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 1.00	< 5.00	< 0.50
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50
CIS/TRANS-1,2-DICHLOROETHENE	-	-	< 0.50	-	-	-	-	< 0.50	-
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
FREON 113	-	-	< 1.00	-	-	-	-	< 1.00	-
METHYLENE CHLORIDE	5.0 *	1.30	< 5.00	< 0.50	< 0.50	1.20	< 0.50	< 5.00	< 0.50
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	0.70	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	-	< 0.50	< 0.50	< 0.50	< 0.50	-	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	-	< 1.00	< 1.00	< 1.00	< 1.00	-	< 0.50
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 0.50

All units reported as ug/L (ppb)

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TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-01	TB-01	TB-02	TB-02	TB-02	TB-02	TB-03	TB-03
DATE		08/01/91	11/05/91	01/24/91	04/24/91	08/05/91	11/07/91	02/01/91	04/25/91
QA	MCL	TRAVEL	TRAVEL	FIELD	TRAVEL	TRAVEL	TRAVEL	FIELD	TRAVEL
	ug/L	CONTROL	CONTROL	BLANK	CONTROL	CONTROL	CONTROL	BLANK	CONTROL
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DIBROMOETHANE	-	-	-	-	< 2.00	-	-	-	< 2.00
1,2-DICHLOROBENZENE	600.0 *	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 5.00	< 0.50	< 0.50	< 0.50	< 5.00
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00
CHLOROFORM	100.0	< 0.50	< 0.50	1.60	< 0.50	< 0.50	< 0.50	2.50	< 0.50

All units reported as ug/L (ppb)

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* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-01	TB-01	TB-02	TB-02	TB-02	TB-02	TB-03	TB-03
DATE		08/01/91	11/05/91	01/24/91	04/24/91	08/05/91	11/07/91	02/01/91	04/25/91
QA	MCL	TRAVEL	TRAVEL	FIELD	TRAVEL	TRAVEL	TRAVEL	FIELD	TRAVEL
	ug/L	CONTROL	CONTROL	BLANK	CONTROL	CONTROL	CONTROL	BLANK	CONTROL
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00	< 5.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 2.00	< 0.50	< 0.50	< 0.50	< 2.00
CIS/TRANS-1,2-DICHLOROETHENE	-	-	-	-	< 0.50	-	-	-	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
FREON 113	-	-	-	-	< 1.00	-	-	-	< 1.00
METHYLENE CHLORIDE	5.0 *	< 0.50	4.70	< 0.50	< 5.00	< 0.50	1.20	< 0.50	< 5.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	< 0.50	-	< 0.50	< 0.50	< 0.50	-
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 1.00	< 0.50	< 0.50	< 0.50	< 1.00
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00	-	< 1.00	< 1.00	< 1.00	-
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-03	TB-03	TB-04	TB-05	TB-05	TB-06	TB-06	TB-07
DATE		08/07/91	11/11/91	04/26/91	04/29/91	08/13/91	04/30/91	08/15/91	05/01/91
QA	MCL	TRAVEL	TRAVEL	TRAVEL	TRAVEL	TRAVEL	TRAVEL	TRAVEL	TRAVEL
	ug/L	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 1.00	< 0.50	< 1.00
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 1.00	< 0.50	< 1.00
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DIBROMOETHANE	-	-	-	< 2.00	< 2.00	-	< 2.00	-	< 2.00
1,2-DICHLOROBENZENE	600.0 *	< 0.50	< 0.50	-	-	< 0.50	-	< 0.50	-
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 1.00	< 0.50	< 1.00
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 1.00	< 0.50	< 1.00
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	-	-	< 0.50	-	< 0.50	-
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	-	-	< 0.50	-	< 0.50	-
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 1.00	< 0.50	< 1.00
BROMOFORM	100.0	< 0.50	< 0.50	< 5.00	< 5.00	< 0.50	< 5.00	< 0.50	< 5.00
BROMOMETHANE	-	< 1.00	< 1.00	< 5.00	< 5.00	< 1.00	< 5.00	< 1.00	< 5.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 2.00	< 2.00	< 0.50	< 2.00	< 0.50	< 2.00
CHLOROETHANE	-	< 1.00	< 1.00	< 5.00	< 5.00	< 1.00	< 5.00	< 1.00	< 5.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

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* = Proposed MCL

TABLE 6 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-03	TB-03	TB-04	TB-05	TB-05	TB-06	TB-06	TB-07
DATE		08/07/91	11/11/91	04/26/91	04/29/91	08/13/91	04/30/91	08/15/91	05/01/91
QA	MCL	TRAVEL	TRAVEL	TRAVEL	TRAVEL	TRAVEL	TRAVEL	TRAVEL	TRAVEL
	ug/L	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL	CONTROL
CHLOROMETHANE	-	< 1.00	< 1.00	< 5.00	< 5.00	< 1.00	< 5.00	< 1.00	< 5.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 0.50	-	-	< 0.50	-	< 0.50	-
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 2.00	< 2.00	< 0.50	< 2.00	< 0.50	< 2.00
CIS/TRANS-1,2-DICHLOROETHENE	-	-	-	< 0.50	< 0.50	-	< 0.50	-	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 1.00	< 0.50	< 1.00
FREON 113	-	-	-	< 1.00	< 1.00	-	< 1.00	-	< 1.00
METHYLENE CHLORIDE	5.0 *	< 0.50	2.70	< 5.00	< 5.00	< 0.50	< 5.00	< 0.50	< 5.00
TETRACHLOROETHENE	5.0	< 0.50	0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	-	-	< 0.50	-	< 0.50	-
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 1.00	< 1.00	< 0.50	< 1.00	< 0.50	< 1.00
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	1.00	< 1.00	-	-	< 1.00	-	< 1.00	-
VINYL CHLORIDE	0.5	1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

All units reported as ug/L (ppb)

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* = Proposed MCL

TABLE 7
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE			FB-01	FB-02	FB-03	FB-03	FB-04	FB-04	FB-10	MW-01
DATE			11/05/91	11/07/91	08/13/91	11/11/91	08/15/91	11/13/91	12/12/91	01/21/91
QA	MCL		FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	FIELD BLANK	
	ug/L									
1,2-DICHLOROBENZENE	600	*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BENZENE	1		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROBENZENE	30		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ETHYL BENZENE	680		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	2000	*	< 0.5	< 0.5	0.6	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
XYLENE	1750		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

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< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
* = Proposed MCL

TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA	MCL ug/L		MW-02 01/22/91	MW-02 04/22/91	MW-02 08/01/91	MW-02 11/07/91	MW-02 11/07/91 DUPLICATE SAMPLE	MW-03 01/22/91	MW-03 08/01/91	MW-04 02/05/91
1,2-DICHLOROBENZENE	600	*	< 0.5	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	-		< 0.5	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	5		< 0.5	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BENZENE	1		< 0.5	< 0.5	< 0.5	8.4	< 0.5	< 0.5	< 0.5	17.0
CHLOROBENZENE	30		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ETHYL BENZENE	680		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	2000	*	< 0.5	< 0.5	< 0.5	1.2	< 0.5	< 0.5	< 0.5	< 0.5
XYLENE	1750		< 0.5	< 1.0	< 0.5	8.3	< 0.5	< 0.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
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MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA		MCL ug/L	MW-04 05/01/91	MW-04 08/14/91	MW-04 11/07/91	MW-07 08/07/91	MW-11 08/15/91	MW-12 02/04/91	MW-12 02/04/91 DUPLICATE SAMPLE	MW-12 08/15/91
1,2-DICHLOROBENZENE		600 *	< 10.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE		-	< 10.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE		5	< 10.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BENZENE		1	580.0	< 0.5	1200.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROBENZENE		30	< 5.0	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ETHYL BENZENE		680	12.0	2.5	26.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE		2000 *	< 5.0	0.6	26.0	< 0.5	< 0.5	< 0.5	< 0.5	0.6
XYLENE		1750	24.0	13.0	8.7	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

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* = Proposed MCL

TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA	MCL ug/L		MW-12 11/07/91	MW-12R 02/04/91 RINSATE BLANK	MW-13 02/05/91	MW-13 04/30/91	MW-13 08/07/91	MW-13 08/07/91 DUPLICATE SAMPLE	MW-13 11/07/91	MW-14 02/04/91
1,2-DICHLOROBENZENE	600	*	< 0.5	< 0.5	< 200.0	< 10.0	< 250.0	< 250.0	< 50.0	< 0.5
1,3-DICHLOROBENZENE	-		< 0.5	< 0.5	< 200.0	< 10.0	< 250.0	< 250.0	< 50.0	< 0.5
1,4-DICHLOROBENZENE	5		< 0.5	< 0.5	< 200.0	< 10.0	< 250.0	< 250.0	< 50.0	< 0.5
BENZENE	1		< 0.5	< 0.5	10000.0	7900.0	11000.0	8900.0	41000.0	< 0.5
CHLOROBENZENE	30		< 0.5	< 0.5	< 200.0	< 5.0	< 250.0	< 250.0	< 50.0	< 0.5
ETHYL BENZENE	680		< 0.5	< 0.5	< 200.0	340.0	450.0	390.0	180.0	< 0.5
TOLUENE	2000	*	< 0.5	< 0.5	390.0	260.0	440.0	360.0	1600.0	< 0.5
XYLENE	1750		< 0.5	< 0.5	600.0	520.0	760.0	660.0	3900.0	< 0.5

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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE			MW-18	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23	MW-24
DATE			04/29/91	08/13/91	08/05/91	08/14/91	08/07/91	08/14/91	08/02/91	08/01/91
QA	MCL ug/L									
1,2-DICHLOROBENZENE	600	*	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	-		< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	5		< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BENZENE	1		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROBENZENE	30		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ETHYL BENZENE	680		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	2000	*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
XYLENE	1750		< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE			MW-25	MW-26	MW-27	MW-28	MW-28	MW-28	MW-28	MW-29
DATE			08/02/91	08/13/91	08/13/91	02/01/91	04/30/91	08/13/91	11/05/91	02/01/91
QA	MCL ug/L									
1,2-DICHLOROBENZENE	600	*	< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	-		< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	5		< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 0.5	< 0.5
BENZENE	1		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROBENZENE	30		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ETHYL BENZENE	680		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	2000	*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
XYLENE	1750		< 0.5	< 0.5	< 0.5	< 0.5	< 1.0	< 0.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE			MW-29	MW-29	MW-29	MW-30	MW-30	MW-30	MW-30	MW-31
DATE			04/30/91	08/07/91	11/05/91	02/04/91	04/30/91	08/15/91	11/05/91	02/01/91
QA	MCL ug/L									
1,2-DICHLOROBENZENE	600	*	< 1.0	< 0.5	< 0.5	< 0.5	< 1.0	< 2.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	-		< 1.0	< 0.5	< 0.5	< 0.5	< 1.0	< 2.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	5		< 1.0	< 0.5	< 0.5	< 0.5	< 1.0	< 2.5	< 0.5	< 0.5
BENZENE	1		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5
CHLOROBENZENE	30		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5
ETHYL BENZENE	680		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5
TOLUENE	2000	*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 2.5	0.8	< 0.5
XYLENE	1750		< 1.0	< 0.5	< 0.5	< 0.5	< 1.0	< 2.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
MCL = California Department of Health Services (DHS) Maximum Contaminant Level (primary), Title 22 of the California Code of Regulations, Division 4, Chapter 15, "Domestic Water Quality and Monitoring."
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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L		MW-31 02/01/91 DUPLICATE SAMPLE	MW-31 05/01/91	MW-31 08/15/91	MW-32 02/01/91	MW-32 05/01/91	MW-32 05/01/91 DUPLICATE SAMPLE	MW-32 08/16/91	MW-33 01/30/91
1,2-DICHLOROBENZENE	600	*	< 0.5	< 1.0	< 2.5	< 0.5	< 1.0	< 1.0	< 2.5	< 2.0
1,3-DICHLOROBENZENE	-		< 0.5	< 1.0	< 2.5	< 0.5	< 1.0	< 1.0	< 2.5	< 2.0
1,4-DICHLOROBENZENE	5		< 0.5	< 1.0	< 2.5	< 0.5	< 1.0	< 1.0	< 2.5	< 2.0
BENZENE	1		< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	< 2.0
CHLOROBENZENE	30		< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	< 2.0
ETHYL BENZENE	680		< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	< 2.0
TOLUENE	2000	*	< 0.5	< 0.5	< 2.5	< 0.5	< 0.5	< 0.5	< 2.5	< 2.0
XYLENE	1750		< 0.5	< 1.0	< 2.5	< 0.5	< 1.0	< 1.0	< 2.5	< 2.0

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L		MW-33 04/30/91	MW-33 04/30/91 DUPLICATE SAMPLE	MW-33 08/07/91	MW-33 11/05/91	MW-34 08/16/91	MW-34 08/16/91 DUPLICATE SAMPLE	MW-34 11/13/91	MW-34 11/13/91 DUPLICATE SAMPLE
1,2-DICHLOROBENZENE	600	*	< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	-		< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	5		< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BENZENE	1		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.9	1.0
CHLOROBENZENE	30		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ETHYL BENZENE	680		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	2000	*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
XYLENE	1750		< 1.0	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MCL ug/L		MW-35 11/13/91	MW-36 12/12/91	MW-37 12/12/91	MW-38 12/12/91	MW-39 06/28/91	MW-39 08/06/91	MW-39 08/06/91 DUPLICATE SAMPLE	MW-39 11/13/91
1,2-DICHLOROBENZENE	600	*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BENZENE	1		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROBENZENE	30		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ETHYL BENZENE	680		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	2000	*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
XYLENE	1750		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE / QA	MCL ug/L		MW-40 06/28/91	MW-40 08/15/91	MW-40 08/15/91 DUPLICATE SAMPLE	MW-41 06/28/91	MW-41 11/05/91	MW-42 06/28/91	MW-42 06/28/91 DUPLICATE SAMPLE	MW-42 11/07/91
1,2-DICHLOROBENZENE	600	*	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5
1,3-DICHLOROBENZENE	-		< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5
1,4-DICHLOROBENZENE	5		< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5
BENZENE	1		< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 2.0	< 2.0	1.2
CHLOROBENZENE	30		< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5
ETHYL BENZENE	680		< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5
TOLUENE	2000	*	< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5
XYLENE	1750		< 1.0	< 0.5	< 0.5	< 0.5	< 0.5	< 2.0	< 2.0	< 0.5

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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-42	MW-43	MW-43	MW-43	RB-01	RB-02	RB-02	RB-03
DATE		11/07/91	06/28/91	08/16/91	11/07/91	11/05/91	08/05/91	11/07/91	11/11/91
QA	MCL ug/L	DUPLICATE SAMPLE				RINSATE BLANK	RINSATE BLANK	RINSATE BLANK	RINSATE BLANK
1,2-DICHLOROBENZENE	600 *	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	-	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	5	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BENZENE	1	1.2	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROBENZENE	30	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ETHYL BENZENE	680	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	2000 *	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	0.5
XYLENE	1750	< 0.5	< 5.0	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

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TABLE 7 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
AROMATIC HYDROCARBON COMPOUNDS (METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE			RB-04	RB-04	RB-05	TB-01	TB-03
DATE			08/13/91	11/13/91	08/15/91	11/05/91	08/07/91
QA	MCL		RINSATE	RINSATE	RINSATE	TRAVEL	TRAVEL
	ug/L		BLANK	BLANK	BLANK	CONTROL	CONTROL
1,2-DICHLOROBENZENE	600	*	< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,3-DICHLOROBENZENE	-		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
1,4-DICHLOROBENZENE	5		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
BENZENE	1		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
CHLOROBENZENE	30		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
ETHYL BENZENE	680		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5
TOLUENE	2000	*	< 0.5	< 0.5	< 0.5	0.8	< 0.5
XYLENE	1750		< 0.5	< 0.5	< 0.5	< 0.5	< 0.5

All units reported as ug/L (ppb)

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< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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TABLE 8
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
GENERAL PARAMETERS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	QA	TEMPERATURE	EC-F	pH-F	DISSOLVED OXYGEN	REDOX POTENTIAL	EC-L	pH-L	TDS
			degrees C	umhos/cm		ug/L (ppb)	mv	umhos/cm	units	ug/L (ppb)
MW-01	01/21/91		18.30000	468.00	6.93	-	-	-	-	-
MW-01	04/22/91		19.20000	478.00	7.08	-	114.0	-	-	-
MW-02	01/22/91		18.30000	659.00	7.03	-	-	-	-	-
MW-02	04/22/91		20.30000	595.00	6.88	-	477.0	-	-	-
MW-02	08/01/91		20.06000	884.00	7.44	-	-	-	-	-
MW-02	11/08/91		19.70000	534.00	6.65	-	-	-	-	-
MW-03	01/22/91		17.40000	446.00	7.23	-	-	-	-	-
MW-03	03/23/91		15.80000	408.00	6.06	14000	203.0	-	-	-
MW-03	08/01/91		19.11000	551.00	7.83	-	-	-	-	
MW-04	02/05/91		19.10000	890.00	7.30	-	-	-	-	-
MW-04	05/01/91		19.90000	954.00	6.74	1000	210.0	928	8.5	556000
MW-04	08/14/91		20.94000	1335.00	7.04	-	-	-	-	-
MW-04	11/08/91		20.20000	747.00	6.89	-	-	-	-	-
MW-05	01/22/91		18.70000	1150.00	7.17	-	-	-	-	-
MW-05	04/23/91		18.00000	1090.00	6.45	7200	573.0	-	-	-
MW-05	08/12/91		19.56000	1371.00	7.11	-	-	-	-	-
MW-05	11/13/91		19.10000	862.00	7.26	-	-	-	-	-
MW-06	01/24/91		18.00000	1218.00	-	-	-	-	-	-
MW-06	04/23/91		18.70000	727.00	7.30	9200	545.0	-	-	-
MW-06	08/12/91		20.11000	2103.00	7.33	-	-	-	-	-

QA = Samples taken as part of the quality assurance program.
- = Parameter not analyzed.
TDS = Total dissolved solids.
EC-F = Electroconductivity recorded in the field. EC-L = Electroconductivity measured in the lab.
pH-F = pH as recorded in the field. pH-L = pH as measured in the laboratory.

TABLE 8 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
GENERAL PARAMETERS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	QA	TEMPERATURE	EC-F	pH-F	DISSOLVED OXYGEN	REDOX POTENTIAL	EC-L	pH-L	TDS
			degrees C	umhos/cm		ug/L (ppb)	mv	umhos/cm	units	ug/L (ppb)
MW-06	11/13/91		18.80000	1243.00	7.18	-	-	-	-	-
MW-07	01/30/91		18.50000	965.00	7.09	-	-	-	-	-
MW-07	04/26/91		19.60000	1051.00	7.05	5200	600.0	-	-	-
MW-07	08/07/91		18.83000	1266.00	6.87	-	-	-	-	-
MW-07	11/13/91		19.70000	718.00	7.40	-	-	-	-	-
MW-08	01/30/91		18.90000	897.00	6.96	-	-	-	-	-
MW-08	04/26/91		19.20000	1067.00	6.94	2900	355.0	-	-	-
MW-08	08/12/91		20.44000	1972.00	7.06	-	-	-	-	-
MW-08	11/11/91		20.20000	999.00	7.11	-	-	-	-	-
MW-11	01/30/91		18.70000	1060.00	7.32	-	-	-	-	-
MW-11	04/26/91		19.70000	1152.00	7.23	-	525.0	-	-	-
MW-11	08/15/91		20.11000	1412.00	7.27	-	-	-	-	-
MW-11	11/07/91		20.80000	962.00	7.56	-	-	-	-	-
MW-12	02/04/91		18.80000	1163.00	7.45	-	-	-	-	-
MW-12	02/04/91	D	18.80000	1163.00	7.45	-	-	-	-	-
MW-12	05/01/91		19.00000	1227.00	6.91	1300	364.0	-	-	-
MW-12	08/15/91		19.72000	1530.00	7.21	-	-	-	-	-
MW-12	11/07/91		20.60000	9.00	7.39	-	-	-	-	-
MW-13	02/05/91		19.00000	815.00	7.09	-	-	-	-	-
MW-13	04/30/91		19.80000	898.00	6.60	1900	145.0	932	7.0	698000

QA = Samples taken as part of the quality assurance program.
- = Parameter not analyzed.
TDS = Total dissolved solids.
EC-F = Electroconductivity recorded in the field. EC-L = Electroconductivity measured in the lab.
pH-F = pH as recorded in the field. pH-L = pH as measured in the laboratory.

TABLE 8 (cont.)

1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS

GENERAL PARAMETERS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

SAMPLE	DATE	QA	TEMPERATURE	EC-F	pH-F	DISSOLVED OXYGEN	REDOX POTENTIAL	EC-L	pH-L	TDS
			degrees C	umhos/cm		ug/L (ppb)	mv	umhos/cm	units	ug/L (ppb)
MW-13	08/07/91		19.67000	1158.00	6.98	-	-	-	-	-
MW-13	11/07/91		20.60000	761.00	6.79	-	-	-	-	-
MW-14	02/04/91		19.20000	1031.00	7.33	-	-	-	-	-
MW-14	05/01/91		19.40000	1091.00	7.13	3800	368.0	1200	7.4	809000
MW-14	08/14/91		21.28000	1415.00	7.12	-	-	-	-	-
MW-14	11/22/91		19.61111	1445.00	7.30	-	-	-	-	-
MW-15	01/24/91		19.10000	938.00	-	-	-	-	-	-
MW-15	04/25/91		19.40000	1139.00	6.81	1700	436.0	-	-	-
MW-15	08/05/91		21.06000	1550.00	7.12	-	-	-	-	-
MW-15	11/06/91		20.20000	600.00	6.97	-	-	-	-	-
MW-16	01/24/91		18.80000	986.00	-	-	-	-	-	-
MW-16	04/25/91		19.30000	1113.00	6.97	2400	430.0	-	-	-
MW-16	08/13/91		20.72000	1547.00	7.69	-	-	-	-	-
MW-16	11/07/91		20.90000	1008.00	7.17	-	-	-	-	-
MW-17	01/25/91		19.30000	735.00	7.08	-	-	-	-	-
MW-17	04/29/91		20.10000	776.00	7.16	1900	565.0	-	-	-
MW-17	08/06/91		20.28000	1032.00	7.33	-	-	-	-	-
MW-17	11/06/91		20.40000	432.00	7.03	-	-	-	-	-
MW-18	01/25/91		18.90000	894.00	6.88	-	-	-	-	-
MW-18	04/29/91		19.90000	960.00	7.11	2700	470.0	-	-	-

QA = Samples taken as part of the quality assurance program.

- = Parameter not analyzed.

TDS = Total dissolved solids.

EC-F = Electroconductivity recorded in the field. EC-L = Electroconductivity measured in the lab.

pH-F = pH as recorded in the field. pH-L = pH as measured in the laboratory.

TABLE 8 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
GENERAL PARAMETERS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	QA	TEMPERATURE	EC-F	pH-F	DISSOLVED OXYGEN	REDOX POTENTIAL	EC-L	pH-L	TDS
			degrees C	umhos/cm		ug/L (ppb)	mv	umhos/cm	units	ug/L (ppb)
MW-18	08/13/91		20.89000	1184.00	7.00	-	-	-	-	-
MW-18	11/06/91		20.40000	503.00	7.10	-	-	-	-	-
MW-19	01/24/91		19.20000	820.00	-	-	-	-	-	-
MW-19	04/29/91		20.10000	994.00	7.13	1700	377.0	-	-	-
MW-19	08/05/91		19.89000	1322.00	6.85	-	-	-	-	-
MW-19	11/11/91		20.70000	924.00	7.43	-	-	-	-	-
MW-20	01/24/91		19.00000	955.00	-	-	-	-	-	-
MW-20	04/29/91		19.70000	1072.00	7.07	3500	372.0	-	-	-
MW-20	08/14/91		20.50000	1284.00	7.02	-	-	-	-	-
MW-20	11/11/91		20.20000	966.00	7.48	-	-	-	-	-
MW-21	01/23/91		18.00000	969.00	7.26	-	-	-	-	-
MW-21	04/25/91		19.20000	832.00	7.02	5800	590.0	-	-	-
MW-21	08/07/91		18.39000	929.00	7.07	-	-	-	-	-
MW-21	11/11/91		19.00000	748.00	7.26	-	-	-	-	-
MW-22	01/23/91		18.00000	973.00	7.30	-	-	-	-	-
MW-22	04/25/91		18.90000	861.00	6.96	3500	545.0	-	-	-
MW-22	08/14/91		20.50000	947.00	7.31	-	-	-	-	-
MW-22	11/12/91		20.40000	683.00	7.44	-	-	-	-	-
MW-23	01/23/91		19.10000	1158.00	7.02	-	-	-	-	-
MW-23	04/23/91		19.20000	1147.00	7.10	8500	570.0	-	-	-

QA = Samples taken as part of the quality assurance program.
- = Parameter not analyzed.
TDS = Total dissolved solids.
EC-F = Electroconductivity recorded in the field. EC-L = Electroconductivity measured in the lab.
pH-F = pH as recorded in the field. pH-L = pH as measured in the laboratory.

TABLE 8 (cont.)

1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS

GENERAL PARAMETERS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

SAMPLE	DATE	QA	TEMPERATURE	EC-F	pH-F	DISSOLVED OXYGEN	REDOX POTENTIAL	EC-L	pH-L	TDS
			degrees C	umhos/cm		ug/L (ppb)	mv	umhos/cm	units	ug/L (ppb)
MW-23	08/02/91		19.00000	1372.00	7.57	-	-	-	-	-
MW-23	11/12/91		19.90000	938.00	7.27	-	-	-	-	-
MW-24	01/23/91		19.00000	1077.00	7.01	-	-	-	-	-
MW-24	04/24/91		19.00000	1121.00	6.65	2400	472.0	-	-	-
MW-24	08/01/91		19.28000	1339.00	7.04	-	-	-	-	-
MW-24	11/13/91		18.80000	909.00	7.01	-	-	-	-	-
MW-25	01/29/91		19.10000	1088.00	7.08	-	-	-	-	-
MW-25	04/24/91		19.80000	1281.00	6.89	5800	590.0	-	-	-
MW-25	08/02/91		19.89000	1662.00	8.09	-	-	-	-	-
MW-25	11/13/91		20.70000	1093.00	7.31	-	-	-	-	-
MW-26	01/29/91		19.40000	1095.00	6.98	-	-	-	-	-
MW-26	04/24/91		19.20000	1226.00	6.89	5200	486.0	-	-	-
MW-26	08/13/91		20.67000	1566.00	7.23	-	-	-	-	-
MW-26	11/13/91		21.20000	916.00	7.31	-	-	-	-	-
MW-27	01/29/91		18.40000	1225.00	6.90	-	-	-	-	-
MW-27	04/24/91		19.90000	1060.00	6.81	1900	535.0	-	-	-
MW-27	08/13/91		20.11000	1347.00	7.17	-	-	-	-	-
MW-27	11/13/91		21.10000	1018.00	7.29	-	-	-	-	-
MW-28	02/01/91		18.60000	1040.00	7.24	-	-	-	-	-
MW-28	04/30/91		19.90000	1207.00	7.08	1600	535.0	-	-	-

QA = Samples taken as part of the quality assurance program.

- = Parameter not analyzed.

TDS = Total dissolved solids.

EC-F = Electroconductivity recorded in the field. EC-L = Electroconductivity measured in the lab.

pH-F = pH as recorded in the field. pH-L = pH as measured in the laboratory.

TABLE 8 (cont.)

1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS

GENERAL PARAMETERS

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

SAMPLE	DATE	QA	TEMPERATURE	EC-F	pH-F	DISSOLVED OXYGEN	REDOX POTENTIAL	EC-L	pH-L	TDS
			degrees C	umhos/cm		ug/L (ppb)	mv	umhos/cm	units	ug/L (ppb)
MW-28	08/13/91		19.17000	1483.00	7.30	-	-	-	-	-
MW-28	11/05/91		20.10000	973.00	7.27	-	-	-	-	-
MW-29	02/01/91		19.50000	772.00	7.07	-	-	-	-	-
MW-29	04/30/91		20.40000	810.00	7.03	1800	470.0	847	7.4	564000
MW-29	08/07/91		20.22000	1028.00	7.13	-	-	-	-	-
MW-29	11/05/91		20.10000	408.00	7.25	-	-	-	-	-
MW-30	02/04/91		19.60000	945.00	7.13	-	-	-	-	-
MW-30	04/30/91		20.40000	1046.00	6.97	1800	403.0	1060	7.4	763000
MW-30	08/15/91		19.89000	1202.00	7.08	-	-	-	-	-
MW-30	11/06/91		19.90000	498.00	6.92	-	-	-	-	-
MW-31	02/01/91		19.00000	963.00	7.10	-	-	-	-	-
MW-31	02/01/91	D	19.00000	963.00	7.10	-	-	-	-	-
MW-31	05/01/91		20.30000	1048.00	6.84	800	543.0	1080	7.2	724000
MW-31	08/15/91		20.78000	1258.00	7.12	-	-	-	-	-
MW-31	11/22/91		20.38889	1281.00	7.00	-	-	-	-	-
MW-32	02/01/91		19.00000	978.00	7.08	-	-	-	-	-
MW-32	05/01/91		19.70000	963.00	6.81	1000	553.0	1020	7.2	641000
MW-32	08/16/91		19.89000	1150.00	7.04	-	-	-	-	-
MW-32	11/22/91		20.05556	1172.00	7.15	-	-	-	-	-
MW-33	01/30/91		19.20000	6.46	7.02	-	-	-	-	-

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TDS = Total dissolved solids.

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pH-F = pH as recorded in the field. pH-L = pH as measured in the laboratory.

TABLE 8 (cont.)
1991 MONITORING WELL GROUNDWATER ANALYSIS RESULTS
GENERAL PARAMETERS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	QA	TEMPERATURE	EC-F	pH-F	DISSOLVED OXYGEN	REDOX POTENTIAL	EC-L	pH-L	TDS
			degrees C	umhos/cm		ug/L (ppb)	mv	umhos/cm	units	ug/L (ppb)
MW-33	04/30/91		19.40000	521.00	6.87	2100	3.5	533	7.5	421000
MW-33	08/07/91		19.94000	832.00	6.92	-	-	-	-	-
MW-33	11/06/91		19.60000	612.00	7.05	-	-	-	-	-
MW-34	08/16/91		20.06000	1267.00	7.19	-	-	-	-	-
MW-34	11/14/91		19.40000	748.00	7.22	-	-	-	-	-
MW-35	08/08/91		19.17000	1005.00	7.30	-	-	-	-	-
MW-35	11/14/91		18.10000	578.00	7.36	-	-	-	-	-
MW-39	06/28/91		-	-	-	-	-	-	-	431000
MW-39	08/06/91		18.56000	874.00	7.36	-	-	-	-	-
MW-39	11/14/91		17.30000	567.00	7.58	-	-	-	-	-
MW-40	08/15/91		20.33000	1530.00	7.25	-	-	-	-	-
MW-40	11/22/91		18.77778	1507.00	7.38	-	-	-	-	-
MW-41	08/12/91		19.83000	952.00	7.76	-	-	-	-	-
MW-41	11/05/91		19.80000	655.00	7.75	-	-	-	-	-
MW-42	08/08/91		20.11000	1477.00	6.33	-	-	-	-	-
MW-42	11/08/91		20.60000	850.00	6.58	-	-	-	-	-
MW-43	06/28/91		-	-	-	-	-	-	-	2950000
MW-43	08/16/91		20.67000	4520.00	7.00	-	-	-	-	-
MW-43	11/08/91		19.70000	2700.00	6.90	-	-	-	-	-

QA = Samples taken as part of the quality assurance program.
- = Parameter not analyzed.
TDS = Total dissolved solids.
EC-F = Electroconductivity recorded in the field. EC-L = Electroconductivity measured in the lab.
pH-F = pH as recorded in the field. pH-L = pH as measured in the laboratory.

Figures

Attachment

1

one

ATTACHMENT 1

AUGUST 1991 GROUNDWATER MONITORING ANALYTICAL LABORATORY REPORTS

ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX (707) 763-4065

Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey #
UPRR/Sacramento
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914175
Date Collected: 08/01/91
Date Received: 08/05/91
Date Analyzed: 08/09/91
Date Reported: 08/22/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
29091	RB-01 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
29092	MW-2 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
29093	MW-3 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
29095	MW-23 WATER		CA STLC LEVEL	
	NI	0.25 mg/L	20	0.10 mg/L
29096	MW-24 WATER		CA STLC LEVEL	
	NI	0.30 mg/L	20	0.10 mg/L
29097	MW-25 WATER		CA STLC LEVEL	
	NI	0.21 mg/L	20	0.10 mg/L
29098	MB WATER			
	NI	ND		0.10 mg/L
29099	MBS WATER			
	NI	0.51 mg/L		0.10 mg/L
29100	MX WATER			
	NI	ND		0.10 mg/L

THIS REPORT HAS BEEN REVIEWED
AND APPROVED FOR RELEASE.
DLF

ENVIRONMENTAL AND
INDUSTRIAL HYGIENE SERVICES

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914175

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
29101	MS WATER		
	NI	0.51 mg/L	0.10 mg/L
29102	MSD WATER		
	NI	0.53 mg/L	0.10 mg/L

ND=Not Detected
NOTE: MBS, MS AND MSD WERE SPIKED AT 0.500 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914175
Date Collected: 08/01/91
Date Analyzed: 08/19/91
Date Received: 08/05/91
Date Reported: 08/22/91

ASSAY:
ARSENIC (EPA 7060),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST
CHROMIUM (EPA 7191),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
29091	RB-01	AS	ND	5.0	0.005
		PB	ND	5.0	0.001
		CR	ND	560	0.005
29092	MW-2	AS	ND	5.0	0.005
		PB	ND	5.0	0.001
		CR	ND	560	0.005
29093	MW-3	AS	ND	5.0	0.005
		PB	ND	5.0	0.001
		CR	ND	560	0.005
29095	MW-23	AS	ND	5.0	0.005
		PB	ND	5.0	0.001
		CR	0.007	560	0.005
29096	MW-24	AS	ND	5.0	0.005
		PB	ND	5.0	0.001
		CR	ND	560	0.005
29097	MW-25	AS	ND	5.0	0.005
		PB	ND	5.0	0.001
		CR	0.009	560	0.005

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914175

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
29098	MB	AS	ND		0.005
		PB	ND		0.001
		CR	ND		0.005
				SPIKE LEVELS	
29099	MBS	AS	0.024	0.025 mg/L	0.005
		PB	0.010	0.010 mg/L	0.001
		CR	0.029	0.025 mg/L	0.005
29100	MX	AS	ND		0.005
		PB	0.001		0.001
		CR	0.007		0.005
				SPIKE LEVELS	
29101	MS	AS	0.026	0.025 mg/L	0.005
		PB	0.007	0.010 mg/L	0.001
		CR	0.028	0.025 mg/L	0.005
				SPIKE LEVELS	
29102	MSD	AS	0.028	0.025 mg/L	0.005
		PB	0.007	0.010 mg/L	0.001
		CR	0.030	0.025 mg/L	0.005

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/01/91
Date Extracted: 08/13/91
Date Analyzed: 08/13/91

Laboratory Job No.: 914175
Date Received: 08/05/91
Date Reported: 08/22/91

ASSAY:
PURGEABLES IN WATER (EPA 5030/601)

COMPOUNDS:	LAB#	29091	DET.	29092	DET.	29093	DET.
	SMP#	RB-01	LIM.	MW-2	LIM.	MW-3	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		3.6	0.5	ND	0.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914175

COMPOUNDS:	LAB#	29094	DET.	29095	DET.	29096	DET.
	SMP#	TB-01	LIM.	MW-23	LIM.	MW-24	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	3.1	0.5	3.2	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914175

COMPOUNDS:	LAB#	29097	DET.	29098	DET.	29099	DET.
	SMP#	MW-25	LIM.	MB	LIM.	MBS	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		1.6	0.5	ND	0.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	6.2	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		3.0	0.5	ND	0.5	5.6	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		5.8	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		0.6	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	ND	0.5	5.1	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914175

COMPOUNDS:	LAB#	29100	DET.	29101	DET.	29102	DET.
	SMP#	MX	LIM.	MS	LIM.	MSD	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	ND	0.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	5.2	0.5	5.0	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	5.0	0.5	4.2	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	4.3	0.5	4.8	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

NOTE: MBS, MS AND MSD WERE SPIKED AT 5.0 ug/L.

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/01/91
Date Extracted: 08/13/91
Date Analyzed: 08/13/91

Laboratory Job No.: 914175
Date Received: 08/05/91
Date Reported: 08/22/91

ASSAY:
PURGEABLE AROMATICS IN WATER (EPA 5030/602)

COMPOUNDS:	LAB#	29092	DET.	29093	DET.	29095	DET.	29096	DET.
	SMP#	MW-2	LIM.	MW-3	LIM.	MW-23	LIM.	MW-24	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

COMPOUNDS:	LAB#	29097	DET.	29098	DET.	29099	DET.	29100	DET.
	SMP#	MW-25	LIM.	MB	LIM.	MBS	LIM.	MX	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	9.2	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	9.8	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	11	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914175

COMPOUNDS:	LAB#	29101	DET.	29102	DET.
	SMP#	MS	LIM.	MSD	LIM.
	dil.	1		1	
PURGEABLES		ug/L		ug/L	
BENZENE		4.0	0.5	4.4	0.5
CHLOROBENZENE		4.9	0.5	4.9	0.5
1,2-DICHLOROBENZENE		5.2	0.5	5.2	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5

NOTE: MBS WAS SPIKED AT 10.0 ug/L.

MS AND MSD WERE SPIKED AT 5.0 ug/L.

CULAB
ONMENTAL SERVICES

ghway, Petaluma, CA 94952
4, Petaluma, CA. 94975-8024
7) 763-8245 FAX: (707) 763-4065

Quote #1451

Gary Dickerson

RECEIVED
D&M LABORATORIES
1991 AUG -7 AM 11:56

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Name Dames + Moore Phone (916) 387-8800
s 8801 Folsom Blvd #200
State, Zip Sacramento, CA 95826
ient's or Representative's Signature Gary Dickerson
(signature authorizes the work and terms listed below)

91-4228

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pick up samples.

PROJ. NO.	PROJECT NAME
00177-064 -044	UPRR Sac.

SAMPLERS (Signature) Gary Dickerson

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	601	602	As (7060)	Ni (6010)	Cr (7191)	Pb (7421)	REMARKS	LAB USE ONLY LAB NO.
TB-02	7/30/91				TB-02	1	X							
MW-15	8/6/91	16:10		/	MW-15	5	X	X	X	X			As (7060)	
FB-01	8/6/91	16:25		/	FB-01	2	X						Ni (6010)	
MW-39	8/6/91	11:50		/	MW-39	5	X	X	X	X			Cr (7104)	
MW-52	"	11:50		/	MW-52	5	X	X	X	X			Pb (7421)	
MW-17	"	13:45		/	MW-17	5	X	X	X	X				
MW-19	"	14:50		/	MW-19	5	X	X	X	X				
RB-02	V	15:30		/	RB-02	3	X		X	X				

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	General Remarks:
Gary Dickerson	8/6/91	18:20	V.O. Wilson Log 8/7/91 12:45	Send Results to Sac office: Attn: Mark Fiksen
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	
				Please return ice chest + Blue Ice.
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	

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Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey # UPRR-SACTO.
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914228
Date Collected: 08/05/91
Date Analyzed: 08/13/91
Date Received: 08/07/91
Date Reported: 08/27/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
29462	MW-15 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
29464	MW-39 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
29465	MW-52 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
29466	MW-17 WATER		CA STLC LEVEL	
	NI	0.17 mg/L	20	0.10 mg/L
29467	MW-19 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
29468	RB-02 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
29469	MB WATER			
	NI	ND		0.10 mg/L
29470	MBS WATER		SPIKE LEVEL	
	NI	0.50 mg/L	0.50 mg/L	0.10 mg/L
29471	MX WATER			
	NI	ND		0.10 mg/L

THIS REPORT HAS BEEN REVIEWED
AND APPROVED FOR RELEASE.
TF

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914228

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
29472	MS WATER		SPIKE LEVEL	
	NI	0.46 mg/L	0.50 mg/L	0.10 mg/L
29473	MSD WATER		SPIKE LEVEL	
	NI	0.47 mg/L	0.50 mg/L	0.10 mg/L

ND=Not Detected

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914228
Date Collected: 08/05/91
Date Analyzed: 08/22/91
Date Received: 08/07/91
Date Reported: 08/27/91

ASSAY:
ARSENIC (EPA 7060),3020 ACID DIGEST
CHROMIUM (EPA 7191),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
29462	MW-15	AS	ND	5.0	0.005
		CR	0.018	560	0.005
		PB	ND	5.0	0.001
29464	MW-39	AS	ND	5.0	0.005
		CR	0.017	560	0.005
		PB	ND	5.0	0.001
29465	MW-52	AS	ND	5.0	0.005
		CR	0.013	560	0.005
		PB	ND	5.0	0.001
29466	MW-17	AS	ND	5.0	0.005
		CR	0.005	560	0.005
		PB	ND	5.0	0.001
29467	MW-19	AS	ND	5.0	0.005
		CR	0.005	560	0.005
		PB	ND	5.0	0.001
29468	RB-02	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001

D&M LABORATORIES
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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914228

LABNO	SMPLNO	COMPOUND	FOUND mg/L		DET.LIM. mg/L
29469	MB	AS	ND		0.005
		CR	ND		0.005
		PB	ND		0.001
				SPIKE LEVELS	
29470	MBS	AS	0.022	0.025 mg/L	0.005
		CR	0.025	0.025 mg/L	0.005
		PB	0.010	0.010 mg/L	0.001
29471	MX	AS	ND		0.005
		CR	0.013		0.005
		PB	ND		0.001
				SPIKE LEVELS	
29472	MS	AS	0.024	0.025 mg/L	0.005
		CR	0.040	0.025 mg/L	0.025
		PB	0.009	0.010 mg/L	0.001
29473	MSD	AS	0.024	0.025 mg/L	0.005
		CR	0.039	0.025 mg/L	0.025
		PB	0.009	0.010 mg/L	0.001

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/05/91
Date Extracted: 08/17/91
Date Analyzed: 08/17/91

Laboratory Job No.: 914228
Date Received: 08/07/91
Date Reported: 08/27/91

ASSAY:
PURGEABLES IN WATER (EPA 5030/601)

COMPOUNDS:	LAB#	29461	DET.	29462	DET.	29463	DET.
	SMP#	TB-02	LIM.	MW-15	LIM.	FB-01	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	ND	0.5	1.2	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	7.8	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

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FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914228

COMPOUNDS:	LAB#	29464	DET.	29465	DET.	29466	DET.
	SMP#	MW-39	LIM.	MW-52	LIM.	MW-17	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		2.4	0.5	2.3	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		3.3	0.5	3.2	0.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		1.0	0.5	1.0	0.5	ND	0.5
1,2-DICHLOROETHANE		2.1	0.5	2.0	0.5	ND	0.5
1,1-DICHLOROETHENE		1.0	0.5	1.2	0.5	3.7	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		0.6	0.5	0.5	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914228

COMPOUNDS:	LAB#	29467	DET.	29468	DET.	29469	DET.
	SMP#	MW-19	LIM.	RB-02	LIM.	MB	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	4.8	0.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		2.4	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		3.2	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914228

COMPOUNDS:	LAB#	29470	DET.	29471	DET.	29472	DET.
	SMP#	MBS	LIM.	MX	LIM.	MS	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	ND	0.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		4.6	0.5	ND	0.5	4.6	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		4.3	0.5	ND	0.5	4.7	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	3.9	0.5	3.8	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		3.9	0.5	ND	0.5	4.6	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/05/91
Date Extracted: 08/17/91
Date Analyzed: 08/17/91

Laboratory Job No.: 914228
Date Received: 08/07/91
Date Reported: 08/27/91

ASSAY:
PURGEABLE AROMATICS IN WATER (EPA 5030/602)

COMPOUNDS:	LAB#	29462	DET.	29464	DET.	29465	DET.	29466	DET.
	SMP#	MW-15	LIM.	MW-39	LIM.	MW-52	LIM.	MW-17	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

COMPOUNDS:	LAB#	29467	DET.	29468	DET.	29469	DET.	29470	DET.
	SMP#	MW-19	LIM.	RB-02	LIM.	MB	LIM.	MBS	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	ND	0.5	1.9	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	2.1	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	2.7	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914228

COMPOUNDS:	LAB#	29471	DET.	29472	DET.	29473	DET.
	SMP#	MX	LIM.	MS	LIM.	MSD	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	5.1	0.5	4.5	0.5
CHLOROBENZENE		ND	0.5	4.8	0.5	4.6	0.5
1,2-DICHLOROBENZENE		ND	0.5	6.1	0.5	6.5	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5

NOTE: MBS WAS SPIKED AT 2.0 ug/L.

MS AND MSD WERE SPIKED AT 5.0 ug/L.

ACCULAB ENVIRONMENTAL SERVICES
3700 Lakeville Highway, Petaluma, CA 94952
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Telephone: (707) 763-8245 FAX: (707) 763-4065

Quote # 1451

Gary Dickerson

RECEIVED
D&M LABORATORIES
1991 AUG -8 AM 10:51

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name Dames & Moore Phone (916) 387-0800
Address 8801 Folsom Blvd. #200
City, State, Zip Sacramento, CA 95826
Client's or Representative's Signature Gary Dickerson
(signature authorizes the work and terms listed below)

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pick up samples.

91-42244

PROJ. NO. 00173-064 -044 | PROJECT NAME UPRR Sac

SAMPLERS (Signature) Gary Dickerson

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	601	602	As(7060), Cr(7191), Pb(7421)	Wi(6010)			REMARKS	LAB USE ONLY LAB NO.
TB-03	7/30/91			/	TB-03	1		x						
MW-21	8/7/91	9:15		-	MW-21	5	x	x	x	x				
MW-7	|	10:15		-	MW-7	5	x	x	x	x				
MW-13	|	11:50		/	MW-13	5	x	x	x	x			As(7060)	
MW-50	|	11:59		/	MW-50	5	x	x	x	x			Cr(7191)	
MW-29	|	13:00		-	MW-29	5	x	x	x	x			Wi(6010)	
MW-33	↓	14:45		/	MW-33	5	x	x	x	x			Pb(7421)	

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	LOG: 8/8/91
Gary Dickerson	8/7/91	16:15	V.D. Wilson	12:00
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	

General Remarks:
Send Results to Sac. Office
Attn. Mark Eisen

Please Return ice chest:

CLIENT COPY

D&M LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

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FAX (707) 763-4065

Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey #
UPRR/Sacramento
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244
Date Collected: 08/07/91
Date Received: 08/08/91
Date Analyzed: 08/22/91
Date Reported: 09/03/91

ASSAY:
ARSENIC (EPA 7060),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	DET.LIM. mg/L
29584	MW-21	AS	ND	0.005
29585	MW-7	AS	ND	0.005
29586	MW-13	AS	0.04	0.01
29587	MW-50	AS	0.06	0.01
29588	MW-29	AS	ND	0.005
29589	MW-33	AS	ND	0.005
29590	MB	AS	ND	0.005
29591	MBS	AS	0.023	0.005
29592	MX	AS	ND	0.005
29593	MS	AS	0.023	0.005
29594	MSD	AS	0.024	0.005

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.025 mg/L.

THIS REPORT HAS BEEN REVIEWED
AND APPROVED FOR RELEASE.

D&M LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244
Date Collected: 08/07/91
Date Analyzed: 08/13/91
Date Received: 08/08/91
Date Reported: 09/03/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
29584	MW-21 WATER NI	0.19 mg/L	0.10 mg/L
29585	MW-7 WATER NI	0.15 mg/L	0.10 mg/L
29586	MW-13 WATER NI	ND	0.10 mg/L
29587	MW-50 WATER NI	ND	0.10 mg/L
29588	MW-29 WATER NI	ND	0.10 mg/L
29589	MW-33 WATER NI	ND	0.10 mg/L
29590	MB WATER NI	ND	0.10 mg/L
29591	MBS WATER NI	0.50 mg/L	0.10 mg/L
29592	MX WATER NI	ND	0.10 mg/L
29593	MS WATER NI	0.46 mg/L	0.10 mg/L

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
29594	MSD WATER NI	0.47 mg/L	0.10 mg/L

ND=Not Detected

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.50 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244
Date Collected: 08/07/91
Date Received: 08/08/91
Date Analyzed: 08/22/91
Date Reported: 09/03/91

ASSAY:
CHROMIUM (EPA 7191),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L		DET.LIM. mg/L
29584	MW-21	CR	ND		0.005
		PB	ND		0.001
29585	MW-7	CR	0.014		0.005
		PB	ND		0.001
29586	MW-13	CR	ND		0.005
		PB	0.001		0.001
29587	MW-50	CR	ND		0.005
		PB	ND		0.001
29588	MW-29	CR	ND		0.005
		PB	ND		0.001
29589	MW-33	CR	0.005		0.005
		PB	0.001		0.001
29590	MB	CR	ND		0.005
		PB	ND		0.001
				SPIKE LEVELS	
29591	MBS	CR	0.025	0.025 mg/L	0.005
		PB	0.010	0.010 mg/L	0.001

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244

LABNO	SMPLNO	COMPOUND	FOUND mg/L		DET.LIM. mg/L
29592	MX	CR	0.013		0.005
		PB	ND		0.001
				SPIKE LEVELS	
29593	MS	CR	0.040	0.025 mg/L	0.025
		PB	0.009	0.010 mg/L	0.001
29594	MSD	CR	0.040	0.025 mg/L	0.025
		PB	0.009	0.010 mg/L	0.001

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/07/91
Date Extracted: 08/19/91
Date Analyzed: 08/19/91

Laboratory Job No.: 914244
Date Received: 08/08/91
Date Reported: 09/03/91

ASSAY:
PURGEABLES IN WATER (EPA 5030/601)

COMPOUNDS:	LAB#	29583	DET.	29584	DET.	29585	DET.
	SMP#	TB-03	LIM.	MW-21	LIM.	MW-7	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	5.1	0.5	4.1	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	ND	0.5	12	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	0.9	0.5	28	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	8.1	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244

COMPOUNDS:	LAB#	* 29586	DET.	* 29587	DET.	29588	DET.
	SMP#	MW-13	LIM.	MW-50	LIM.	MW-29	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	1.0	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	ND	0.5	0.9	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE	**	24	10.0	** 28	10.0	4.5	0.5
1,2-DICHLOROETHANE	**	108	10.0	** 133	10.0	11	0.5
1,1-DICHLOROETHENE		9.6	0.5	12	0.5	29	0.5
CIS-1,2-DICHLOROETHENE		13	0.5	9.5	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		1.7	0.5	1.5	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		1.1	0.5	1.1	0.5	1.3	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		1.5	0.5	0.7	0.5	0.9	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244

COMPOUNDS:	LAB#	29589	DET.	29590	DET.	29591	DET.
	SMP#	MW-33	LIM.	MB	LIM.	MBS	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	ND	0.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	10	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		5.4	0.5	ND	0.5	13	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE	**	85	5.0	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		6.7	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		1.0	0.5	ND	0.5	12	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244

COMPOUNDS:	LAB#	29592	DET.	29593	DET.	29594	DET.
	SMP#	MX	LIM.	MS	LIM.	MSD	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		5.1	0.5	4.0	0.5	5.8	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	4.4	0.5	4.5	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	4.8	0.5	5.3	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		0.9	0.5	0.8	0.5	0.9	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	5.1	0.5	5.2	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

* ANALYSES OF THESE SAMPLES WERE COMPLETED WITHIN HOLDING TIMES, HOWEVER REANALYSES AT THE DILUTIONS REQUIRED TO BRING THE ASTERISKED ANALYTES INTO LINEAR RANGE OF THE INSTRUMENT WERE OUTSIDE OF HOLDING TIMES.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244

** AMOUNT FOUND WAS QUANTITATED ON A REANALYSIS OF THE SAMPLE AT A DILUTION.

NOTE: MBS WAS SPIKED AT 10 ug/L. MS AND MSD WERE SPIKED AT 5.0 ug/L.

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/07/91
Date Extracted: 08/19/91
Date Analyzed: 08/19/91

Laboratory Job No.: 914244
Date Received: 08/08/91
Date Reported: 09/03/91

ASSAY:
PURGEABLE AROMATICS IN WATER (EPA 5030/602)

COMPOUNDS:	LAB#	29583	DET.	29584	DET.	29585	DET.	29586	DET.
	SMP#	TB-03	LIM.	MW-21	LIM.	MW-7	LIM.	MW-13	LIM.
	dil.	1		1		1		500	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	ND	0.5	11000	250
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	250
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	250
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	250
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	250
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	450	250
TOLUENE		ND	0.5	ND	0.5	ND	0.5	440	250
XYLENE		ND	0.5	ND	0.5	ND	0.5	760	250

COMPOUNDS:	LAB#	29587	DET.	29588	DET.	29589	DET.	29590	DET.
	SMP#	MW-50	LIM.	MW-29	LIM.	MW-33	LIM.	MB	LIM.
	dil.	500		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		8900	250	ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	250	ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	250	ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	250	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	250	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		390	250	ND	0.5	ND	0.5	ND	0.5
TOLUENE		360	250	ND	0.5	ND	0.5	ND	0.5
XYLENE		660	250	ND	0.5	ND	0.5	ND	0.5

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914244

COMPOUNDS:	LAB#	29591	DET.	29592	DET.	29593	DET.	29594	DET.
	SMP#	MBS	LIM.	MX	LIM.	MS	LIM.	MSD	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		13	0.5	ND	0.5	5.3	0.5	5.4	0.5
CHLOROBENZENE		10	0.5	ND	0.5	4.4	0.5	4.8	0.5
1,2-DICHLOROBENZENE		11	0.5	ND	0.5	5.1	0.5	5.4	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

NOTES: MBS WAS SPIKED AT 10 ug/L

MS AND MSD WERE SPIKED AT 5.0 ug/L

(*) Quote # 1451

Gary Dickenson

91-4348

AUG 10 1991

ACCULAB ENVIRONMENTAL SERVICES

ille Highway, Petaluma, CA 94952
308024, Petaluma, CA. 94975-8024
: (707) 763-8245 FAX: (707) 763-4065

SAMPLE CHAIN OF CUSTODY / WORK ORDER

's Name James + Moore Phone (916) 387-8000
ess 8681 Folsom Blvd #200
, State, Zip Sacramento, Ca 95828
lient's or Representative's Signature Gary Dickenson
(signature authorizes the work and terms listed below)

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pick up samples.

PROJ. NO. 00173-064 -044 | PROJECT NAME UP Sac.

SAMPLERS (Signature) Gary Dickenson

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CON-TAINERS	601	602	As (7060), Cr (7191), Pb (7421)				REMARKS	LAB USE ONLY LAB NO.
TB-04	7/31/91			/	TB-04	1	X							
FB-02	8/8/91	11:20		X	FB-02	2	X							
MW-42	8/8/91	10:45		/	MW-42	5	X	X	X	X			(*) Watch holding time.	
MW-35	8/8/91	9:45		X	MW-35	5	X	X	X	X			(*)	
MW-8	8/7/91	14:20		X	MW-8	5	X	X	X	X				
MW-6		12:55		X	MW-6	5	X	X	X	X				
MW-5		11:45		X	MW-5	5	X	X	X	X				
MW-41		10:40		X	MW-41	5	X	X	X	X				
RB-03	V	8:45		X	RB-03	5	X	X	X	X				

(*) As (7060), Cr (7191), Pb (7421)

RECEIVED
ACCULABORATORIES
1991 AUG 13 PM 11:41

Samples rec. in good Condition

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Gary Dickenson	8/12/91	16:00	Jane B Anderson
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)

General Remarks:
Send Results to Sac. office.
Attn: Mark Eisen

Please Return Ice Chest!

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Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey #
UPRR/Sacramento
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Date Collected: 08/12/91
Date Analyzed: 08/20/91

Laboratory Job No.: 914348
Date Received: 08/13/91
Date Reported: 09/03/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID		RESULTS	DET. LIM.
30140	MW-42 WATER	NI	0.19 mg/L	0.10 mg/L
30141	MW-35 WATER	NI	ND	0.10 mg/L
30142	MW-8 WATER	NI	ND	0.10 mg/L
30143	MW-6 WATER	NI	0.12 mg/L	0.10 mg/L
30144	MW-5 WATER	NI	ND	0.10 mg/L
30145	MW-41 WATER	NI	ND	0.10 mg/L
30146	RB-03 WATER	NI	ND	0.10 mg/L
30147	MB WATER	NI	ND	0.10 mg/L
30148	MBS WATER	NI	0.48 mg/L	0.10 mg/L

THIS REPORT HAS BEEN REVIEWED
AND APPROVED FOR RELEASE.
DLF

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
30149	MX WATER		
	NI	ND	0.10 mg/L
30150	MS WATER		
	NI	0.49 mg/L	0.10 mg/L
30151	MSD WATER		
	NI	0.50 mg/L	0.10 mg/L

ND=Not Detected

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.50 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348
Date Collected: 08/12/91
Date Received: 08/13/91
Date Analyzed: 08/23/91
Date Reported: 09/03/91

ASSAY:
LEAD (EPA 7421),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	DET.LIM. mg/L
30140	MW-42	PB	ND	0.001
30141	MW-35	PB	ND	0.001
30142	MW-8	PB	ND	0.001
30143	MW-6	PB	0.001	0.001
30144	MW-5	PB	ND	0.001
30145	MW-41	PB	ND	0.001
30146	RB-03	PB	0.002	0.001
30147	MB	PB	ND	0.001
30148	MBS	PB	0.010	0.001
30149	MX	PB	ND	0.001
30150	MS	PB	0.009	0.001
30151	MSD	PB	0.008	0.001

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.010 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348
Date Collected: 08/12/91
Date Analyzed: 08/27/91
Date Received: 08/13/91
Date Reported: 09/03/91

ASSAY:
ARSENIC (EPA 7060),3020 ACID DIGEST
CHROMIUM (EPA 7191),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L		DET.LIM. mg/L
30140	MW-42	AS	ND		0.005
		CR	0.010		0.005
30141	MW-35	AS	0.006		0.005
		CR	0.009		0.005
30142	MW-8	AS	ND		0.005
		CR	ND		0.005
30143	MW-6	AS	ND		0.005
		CR	ND		0.005
30144	MW-5	AS	ND		0.005
		CR	ND		0.005
30145	MW-41	AS	0.007		0.005
		CR	ND		0.005
30146	RB-03	AS	ND		0.005
		CR	ND		0.005
30147	MB	AS	ND		0.005
		CR	ND		0.005
				SPIKE LEVELS	
30148	MBS	AS	0.024	0.025 mg/L	0.005
		CR	0.027	0.025 mg/L	0.005

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FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348

LABNO	SMPLNO	COMPOUND	FOUND mg/L		DET.LIM. mg/L
30149	MX	AS	0.006		0.005
		CR	0.009		0.005
				SPIKE LEVELS	
30150	MS	AS	0.027	0.025 mg/L	0.005
		CR	0.032	0.025 mg/L	0.005
30151	MSD	AS	0.026	0.025 mg/L	0.005
		CR	0.037	0.025 mg/L	0.005

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348
Date Collected: 08/12/91
Date Analyzed: 08/23/91
Date Received: 08/13/91
Date Reported: 09/03/91

ASSAY:
PURGEABLES BY GC/MS (EPA 624)

COMPOUNDS:	LAB#	30138	DET.	30139	DET.	30140	DET.
	SMP#	TB-04	LIM.	FB-02	LIM.	MW-42	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	6.3	0.50
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	0.50	ND	0.50	ND	0.50
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
CHLOROFORM		ND	0.50	23	0.50	8.7	0.50
CHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	ND	0.50	*370	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		ND	0.20	7.2	0.20	*1500	0.20
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		ND	0.50	ND	0.50	ND	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50	42	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	8.1	0.50
TRICHLOROETHENE		ND	0.50	ND	0.50	19	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348

COMPOUNDS:	LAB#	30138	DET.	30139	DET.	30140	DET.
	SMP#	TB-04	LIM.	FB-02	LIM.	MW-42	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
TRICHLOROFLUOROMETHANE		ND	0.50	ND	0.50	ND	0.50
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0
XYLENES		ND	0.50	ND	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348

COMPOUNDS:	LAB#	30141	DET.	30142	DET.	30143	DET.
	SMP#	MW-35	LIM.	MW-8	LIM.	MW-6	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	ND	0.50
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	0.50	ND	0.50	ND	0.50
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
CHLOROFORM		ND	0.50	ND	0.50	6.2	0.50
CHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		41	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE	*	880	0.20	9.6	0.20	ND	0.20
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		ND	0.50	ND	0.50	ND	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	21	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		40	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		19	0.50	ND	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	0.50	ND	0.50	ND	0.50
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0
XYLENES		ND	0.50	ND	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348

COMPOUNDS:	LAB#	30144	DET.	30145	DET.	30146	DET.
	SMP#	MW-5	LIM.	MW-41	LIM.	RB-03	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	ND	0.50
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	0.50	ND	0.50	ND	0.50
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
CHLOROFORM		ND	0.50	ND	0.50	11	0.50
CHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		ND	0.20	ND	0.20	ND	0.20
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		ND	0.50	ND	0.50	ND	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	0.50	ND	0.50	ND	0.50
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0
XYLENES		ND	0.50	ND	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348

COMPOUNDS:	LAB#	30147	DET.	30148	DET.	30149	DET.
	SMP#	MB	LIM.	MBS	LIM.	MX	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	7.8	0.50	ND	0.50
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	0.50	ND	0.50	ND	0.50
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	8.4	0.50	ND	0.50
CHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
CHLOROFORM		ND	0.50	ND	0.50	ND	0.50
CHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		ND	0.20	7.6	0.20	ND	0.20
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		ND	0.50	ND	0.50	ND	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	7.4	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		ND	0.50	7.2	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	0.50	ND	0.50	ND	0.50
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0
XYLENES		ND	0.50	ND	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348

COMPOUNDS:	LAB#	30150	DET.	30151	DET.
	SMP#	MS	LIM.	MSD	LIM.
	DIL.	1		1	
PURGEABLES		ug/L		ug/L	
BENZENE		8.2	0.50	8.6	0.50
BROMODICHLOROMETHANE		ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50
BROMOMETHANE		ND	0.50	ND	0.50
CARBON TETRACHLORIDE		ND	0.50	ND	0.50
CHLOROBENZENE		8.8	0.50	9.2	0.50
CHLOROETHANE		ND	0.50	ND	0.50
CHLOROFORM		ND	0.50	ND	0.50
CHLOROMETHANE		ND	0.50	ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50
1,1-DICHLOROETHENE		8.0	0.20	8.0	0.20
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50
METHYLENE CHLORIDE		ND	0.50	ND	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50
TOLUENE		8.2	0.50	8.6	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50
TRICHLOROETHENE		7.4	0.50	7.6	0.50
TRICHLOROFLUOROMETHANE		ND	0.50	ND	0.50
VINYL CHLORIDE		ND	1.0	ND	1.0
XYLENES		ND	0.50	ND	0.50

NOTE: ND: NOT DETECTED

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914348

THE MATRIX SPIKE COMPOUNDS FOUND IN THE MBS, MS AND MSD SAMPLES WERE SPIKED AT THE FOLLOWING LEVELS:

10 ug/L

* THESE WERE CALCULATED FROM A 10 X DILUTION.

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Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey # UPRR-SACTO.
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391
Date Collected: 08/13/91
Date Analyzed: 08/20/91
Date Received: 08/15/91
Date Reported: 08/30/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
30427	MW-18 WATER NI	ND	0.10 mg/L
30429	MW-27 WATER NI	ND	0.10 mg/L
30430	MW-26 WATER NI	0.25 mg/L	0.10 mg/L
30431	MW-28 WATER NI	ND	0.10 mg/L
30432	FB-03 WATER NI	ND	0.10 mg/L
30433	MW-16 WATER NI	ND	0.10 mg/L
30434	MW-14 WATER NI	ND	0.10 mg/L
30435	MW-20 WATER NI	ND	0.10 mg/L
30436	RB-04 WATER NI	ND	0.10 mg/L

THIS REPORT HAS BEEN REVIEWED
AND APPROVED FOR RELEASE. DLF

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
30437	MW-22 WATER		
	NI	ND	0.10 mg/L
30438	MW-4 WATER		
	NI	ND	0.10 mg/L
30439	MB WATER		
	NI	ND	0.10 mg/L
30440	MBS WATER		
	NI	0.48 mg/L	0.10 mg/L
30441	MX WATER		
	NI	ND	0.10 mg/L
30442	MS WATER		
	NI	0.49 mg/L	0.10 mg/L
30443	MSD WATER		
	NI	0.50 mg/L	0.10 mg/L

ND=Not Detected

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.50 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391
Date Collected: 08/13/91
Date Received: 08/15/91
Date Analyzed: 08/27/91
Date Reported: 08/30/91

ASSAY:
ARSENIC (EPA 7060),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	DET.LIM. mg/L
30427	MW-18	AS	0.006	0.005
30429	MW-27	AS	ND	0.005
30430	MW-26	AS	ND	0.005
30431	MW-28	AS	ND	0.005
30432	FB-03	AS	ND	0.005
30433	MW-16	AS	0.005	0.005
30434	MW-14	AS	0.006	0.005
30435	MW-20	AS	0.006	0.005
30436	RB-04	AS	0.005	0.005
30437	MW-22	AS	0.006	0.005
30438	MW-4	AS	0.005	0.005
30439	MB	AS	ND	0.005
30440	MBS	AS	0.024	0.005
30441	MX	AS	0.005	0.005

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391

LABNO SMPLNO	COMPOUND	FOUND mg/L	DET.LIM. mg/L
30442 MS	AS	0.033	0.005
30443 MSD	AS	0.033	0.005

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.025 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391
Date Collected: 08/13/91
Date Analyzed: 08/24/91
Date Received: 08/15/91
Date Reported: 08/30/91

ASSAY:
CHROMIUM (EPA 7191),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	DET.LIM. mg/L
30427	MW-18	CR	0.006	0.005
		PB	ND	0.001
30429	MW-27	CR	ND	0.005
		PB	0.001	0.001
30430	MW-26	CR	0.006	0.005
		PB	ND	0.001
30431	MW-28	CR	0.005	0.005
		PB	0.002	0.001
30432	FB-03	CR	ND	0.005
		PB	0.002	0.001
30433	MW-16	CR	0.005	0.005
		PB	ND	0.001
30434	MW-14	CR	0.036	0.005
		PB	ND	0.001
30435	MW-20	CR	0.008	0.005
		PB	ND	0.001
30436	RB-04	CR	ND	0.005
		PB	ND	0.001

D&M LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391

LABNO	SMPLNO	COMPOUND	FOUND mg/L		DET.LIM. mg/L
30437	MW-22	CR	ND		0.005
		PB	ND		0.001
30438	MW-4	CR	ND		0.005
		PB	ND		0.001
30439	MB	CR	ND		0.005
		PB	ND		0.001
				SPIKE LEVELS	
30440	MBS	CR	0.024	0.025 mg/L	0.005
		PB	0.009	0.010 mg/L	0.001
30441	MX	CR	ND		0.005
		PB	0.001		0.001
				SPIKE LEVELS	
30442	MS	CR	0.030	0.025 mg/L	0.005
		PB	0.009	0.010 mg/L	0.001
30443	MSD	CR	0.031	0.025 mg/L	0.005
		PB	0.008	0.010 mg/L	0.001

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/13/91
Date Extracted: 08/27/91
Date Analyzed: 08/27/91

Laboratory Job No.: 914391
Date Received: 08/15/91
Date Reported: 08/30/91

ASSAY:
PURGEABLES IN WATER (EPA 5030/601)

COMPOUNDS:	LAB#	30427	DET.	30428	DET.	30429	DET.
	SMP#	MW-18	LIM.	TB-05	LIM.	MW-27	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	ND	0.5	0.9	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		1.2	0.5	ND	0.5	ND	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		18	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		1.5	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		3.8	0.5	ND	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391

COMPOUNDS:	LAB#	30430	DET.	30431	DET.	30432	DET.
	SMP#	MW-26	LIM.	MW-28	LIM.	FB-03	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		1.5	0.5	ND	0.5	2.6	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		4.0	0.5	13	0.5	ND	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		8.1	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		0.6	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391

COMPOUNDS:	LAB#	30433	DET.	30434	DET.	30435	DET.
	SMP#	MW-16	LIM.	MW-14	LIM.	MW-20	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	ND	0.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	4.8	0.5	ND	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		8.3	0.5	50	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	0.6	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		1.5	0.5	1.6	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	9.7	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391

COMPOUNDS:	LAB#	30436	DET.	30437	DET.	30438	DET.
	SMP#	RB-04	LIM.	MW-22	LIM.	MW-4	LIM.
	dil.	1		1		2	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	1.0
BROMOFORM		ND	0.5	ND	0.5	ND	1.0
BROMOMETHANE		ND	1.0	ND	1.0	ND	2.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	1.0
CHLOROBENZENE		ND	0.5	ND	0.5	ND	1.0
CHLOROETHANE		ND	1.0	ND	1.0	ND	2.0
CHLOROFORM		3.0	0.5	3.9	0.5	ND	1.0
CHLOROMETHANE		ND	1.0	ND	1.0	ND	2.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	1.0
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	1.0
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	1.0
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	1.0
1,1-DICHLOROETHANE		ND	0.5	ND	0.5	13	1.0
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	1.0
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	27	1.0
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	1.0	1.0
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	1.0
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	1.0
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	1.0
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	1.0
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	1.0
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	1.0
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	1.0
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	1.0
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	1.0
TRICHLOROETHENE		ND	0.5	ND	0.5	1.4	1.0
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	2.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	2.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391

COMPOUNDS:	LAB#	30439	DET.	30440	DET.	30441	DET.
	SMP#	MB	LIM.	MBS	LIM.	MX	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	ND	0.5	3.9	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	4.6	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	4.3	0.5	ND	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	5.6	0.5	ND	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391

COMPOUNDS:	LAB#	30442	DET.	30443	DET.
	SMP#	MS	LIM.	MSD	LIM.
	dil.	1		1	
PURGEABLES		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0
CHLOROFORM		4.7	0.5	4.9	0.5
CHLOROMETHANE		ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		4.3	0.5	4.4	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5
1,1-DICHLOROETHANE		3.9	0.5	3.3	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5
TRICHLOROETHENE		4.5	0.5	4.1	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0

NOTE: MBS, MS, AND MSD WERE SPIKED AT 5.0 ug/L.

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/13/91
Date Extracted: 08/27/91
Date Analyzed: 08/27/91

Laboratory Job No.: 914391
Date Received: 08/15/91
Date Reported: 08/30/91

ASSAY:
PURGEABLE AROMATICS IN WATER (EPA 5030/602)

COMPOUNDS:	LAB#	30427	DET.	30429	DET.	30430	DET.	30431	DET.
	SMP#	MW-18	LIM.	MW-27	LIM.	MW-26	LIM.	MW-28	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

COMPOUNDS:	LAB#	30432	DET.	30433	DET.	30434	DET.	30435	DET.
	SMP#	FB-03	LIM.	MW-16	LIM.	MW-14	LIM.	MW-20	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	0.7	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		0.6	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

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P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914391

COMPOUNDS:	LAB#	30436	DET.	30437	DET.	30438	DET.	30439	DET.
	SMP#	RB-04	LIM.	MW-22	LIM.	MW-4	LIM.	MB	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	2.5	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	0.6	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	13	0.5	ND	0.5

COMPOUNDS:	LAB#	30440	DET.	30441	DET.	30442	DET.	30443	DET.
	SMP#	MBS	LIM.	MX	LIM.	MS	LIM.	MSD	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		4.8	0.5	ND	0.5	4.2	0.5	4.2	0.5
CHLOROBENZENE		5.2	0.5	ND	0.5	4.6	0.5	4.2	0.5
1,2-DICHLOROBENZENE		4.6	0.5	ND	0.5	4.0	0.5	4.2	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

NOTE: MBS, MS, AND MSD WERE SPIKED AT 5.0 ug/L.

ACCULAB ENVIRONMENTAL SERVICES
3700 Lakeville Highway, Petaluma, CA 94952
P.O. Box 808024, Petaluma, CA. 94975-8024
Telephone: (707)763-8245 FAX: (707)763-4065

(*) Quote # 1451

Gary Dickenson

RECEIVED
O&M LAB
1991 AUG 19 9 58

AUG 23 1991

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name Dames + Moore Phone (916)387-6600
Address 8801 Folsom Blvd. #200
City, State, Zip Sacramento, CA 95826
Client's or Representative's Signature Gary Dickenson
(signature authorizes the work and terms listed below)

91-4433

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pick up samples.

PROJ. NO. 00173-064 -044 | PROJECT NAME UPRR Sac.
SAMPLERS (Signature) Gary Dickenson

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	601	602	As (7060) Cr (7191) Ni (6010) Pb (7421)			REMARKS	LAB USE ONLY LAB NO.
MW-12	8/15/91	9:00		✓	MW-12	5	X	X	X	X			
MW-30		10:15		✓	MW-30	5	X	X	X	X			
MW-11		11:15		✓	MW-11	5	X	X	X	X			
MW-31		12:20		✓	MW-31	5	X	X	X	X		As (7060)	
MW-40		13:40		✓	MW-40	5	X	X	X	X		Cr (7191)	
MW-53	↓	13:50		✓	MW-53	5	X	X	X	X		Ni (6010)	
												Pb (7421)	
RB-05	8/16/91	13:15		✓	RB-05	5	X	X	X	X			
FB-04		13:00		✓	FB-04	5	X	X	X	X			
MW-43		12:10		✓	MW-43	5	X	X	X	X			
MW-34		10:25		✓	MW-34	5	X	X	X	X			
MW-51		10:35		✓	MW-51	5	X	X	X	X			
MW-32	↓	9:05		✓	MW-32	5	X	X	X	X			
											✓		
TB-06	7/30/91				TB-06	1	X						

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	General Remarks:
Gary Dickenson	8/16/91	15:00	V.O. Wilson 8/19/91 11:00	Send results to Sec. office Attn: Mark Ebsen
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)	Please return ice chest + Blue Ice

CLIENT COPY

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FAX (707) 763-4065

Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey #
UPRR/Sacramento
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433
Date Collected: 08/15/91
Date Analyzed: 08/26/91
Date Received: 08/19/91
Date Reported: 09/03/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
30726	MW-12 WATER NI	ND	0.10 mg/L
30727	MW-30 WATER NI	ND	0.10 mg/L
30728	MW-11 WATER NI	ND	0.10 mg/L
30729	MW-31 WATER NI	ND	0.10 mg/L
30730	MW-40 WATER NI	ND	0.10 mg/L
30731	MW-53 WATER NI	ND	0.10 mg/L
30732	RB-05 WATER NI	ND	0.10 mg/L
30733	FB-04 WATER NI	ND	0.10 mg/L
30734	MW-43 WATER NI	0.22 mg/L	0.10 mg/L

THIS REPORT HAS BEEN REVIEWED AND APPROVED FOR RELEASE.
DF

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
30735	MW-34 WATER		
	NI	0.23 mg/L	0.10 mg/L
30736	MW-51 WATER		
	NI	0.17 mg/L	0.10 mg/L
30737	MW-32 WATER		
	NI	ND	0.10 mg/L
30739	MB WATER		
	NI	ND	0.10 mg/L
30740	MBS WATER		
	NI	0.50 mg/L	0.10 mg/L
30741	MX WATER		
	NI	0.22 mg/L	0.10 mg/L
30742	MS WATER		
	NI	0.71 mg/L	0.10 mg/L
30743	MSD WATER		
	NI	0.71 mg/L	0.10 mg/L

ND=Not Detected

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.5 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433
Date Collected: 08/15/91
Date Received: 08/19/91
Date Analyzed: 08/28/91
Date Reported: 09/03/91

ASSAY:
ARSENIC (EPA 7060),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	DET.LIM. mg/L
30726	MW-12	AS	ND	0.005
30727	MW-30	AS	ND	0.005
30728	MW-11	AS	ND	0.005
30729	MW-31	AS	ND	0.005
30730	MW-40	AS	ND	0.005
30731	MW-53	AS	ND	0.005
30732	RB-05	AS	ND	0.005
30733	FB-04	AS	ND	0.005
30734	MW-43	AS	ND	0.005
30735	MW-34	AS	ND	0.005
30736	MW-51	AS	ND	0.005
30737	MW-32	AS	ND	0.005
30739	MB	AS	ND	0.005
30740	MBS	AS	0.023	0.005

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

LABNO	SMPLNO	COMPOUND	FOUND mg/L	DET.LIM. mg/L
30741	MX	AS	ND	0.005
30742	MS	AS	0.025	0.005
30743	MSD	AS	0.026	0.005

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.025 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433
Date Collected: 08/15/91
Date Received: 08/19/91
Date Analyzed: 09/03/91
Date Reported: 09/03/91

ASSAY:
LEAD (EPA 7421),3020 ACID DIGEST
CHROMIUM (EPA 7191),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	DET.LIM. mg/L
30726	MW-12	PB	ND	0.001
		CR	0.005	0.005
30727	MW-30	PB	ND	0.001
		CR	0.008	0.005
30728	MW-11	PB	ND	0.001
		CR	0.025	0.005
30729	MW-31	PB	ND	0.001
		CR	0.021	0.005
30730	MW-40	PB	ND	0.001
		CR	0.007	0.005
30731	MW-53	PB	ND	0.001
		CR	0.006	0.005
30732	RB-05	PB	ND	0.001
		CR	ND	0.005
30733	FB-04	PB	ND	0.001
		CR	ND	0.005
30734	MW-43	PB	ND	0.001
		CR	ND	0.005

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

LABNO	SMPLNO	COMPOUND	FOUND mg/L		DET.LIM. mg/L
30735	MW-34	PB	ND		0.001
		CR	0.006		0.005
30736	MW-51	PB	0.001		0.001
		CR	ND		0.005
30737	MW-32	PB	ND		0.001
		CR	ND		0.005
30739	MB	PB	ND		0.001
		CR	ND		0.005
				SPIKE LEVELS	
30740	MBS	PB	0.010	0.010 mg/L	0.001
		CR	0.027	0.025 mg/L	0.005
30741	MX	PB	0.001		0.001
		CR	ND		0.005
				SPIKE LEVELS	
30742	MS	PB	0.010	0.010 mg/L	0.001
		CR	0.028	0.025 mg/L	0.005
30743	MSD	PB	0.011	0.010 mg/L	0.001
		CR	0.030	0.025 mg/L	0.005

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/15/91
Date Extracted: 08/28/91
Date Analyzed: 08/28/91

Laboratory Job No.: 914433
Date Received: 08/19/91
Date Reported: 09/03/91

ASSAY:
PURGEABLES IN WATER (EPA 5030/601)

COMPOUNDS:	LAB#	30726	DET.	30727	DET.	30728	DET.
	SMP#	MW-12	LIM.	MW-30	LIM.	MW-11	LIM.
	dil.	1		5		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	2.5	ND	0.5
BROMOFORM		ND	0.5	ND	2.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	5.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	2.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	2.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	5.0	ND	1.0
CHLOROFORM		ND	0.5	ND	2.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	5.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	2.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	2.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	2.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	2.5	ND	0.5
1,1-DICHLOROETHANE		13	0.5	6.8	2.5	11	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	2.5	ND	0.5
1,1-DICHLOROETHENE		27	0.5	84	2.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	2.5	0.6	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	2.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	2.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	2.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	2.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	2.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	2.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	2.5	ND	0.5
1,1,1-TRICHLOROETHANE		0.7	0.5	4.4	2.5	1.8	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	2.5	ND	0.5
TRICHLOROETHENE		15	0.5	6.4	2.5	2.0	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	5.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	5.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

COMPOUNDS:	LAB#	30729	DET.	30730	DET.	30731	DET.
	SMP#	MW-31	LIM.	MW-40	LIM.	MW-53	LIM.
	dil.	5		5		5	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	2.5	ND	2.5	ND	2.5
BROMOFORM		ND	2.5	ND	2.5	ND	2.5
BROMOMETHANE		ND	5.0	ND	5.0	ND	5.0
CARBON TETRACHLORIDE		ND	2.5	ND	2.5	ND	2.5
CHLOROBENZENE		ND	2.5	ND	2.5	ND	2.5
CHLOROETHANE		ND	5.0	ND	5.0	ND	5.0
CHLOROFORM		ND	2.5	ND	2.5	ND	2.5
CHLOROMETHANE		ND	5.0	ND	5.0	ND	5.0
DIBROMOCHLOROMETHANE		ND	2.5	ND	2.5	ND	2.5
1,4-DICHLOROBENZENE		ND	2.5	ND	2.5	ND	2.5
1,3-DICHLOROBENZENE		ND	2.5	ND	2.5	ND	2.5
1,2-DICHLOROBENZENE		ND	2.5	ND	2.5	ND	2.5
1,1-DICHLOROETHANE		10	2.5	15	2.5	15	2.5
1,2-DICHLOROETHANE		ND	2.5	ND	2.5	ND	2.5
1,1-DICHLOROETHENE		120	2.5	140	2.5	150	2.5
CIS-1,2-DICHLOROETHENE		ND	2.5	ND	2.5	ND	2.5
TRANS-1,2-DICHLOROETHENE		ND	2.5	ND	2.5	ND	2.5
1,2-DICHLOROPROPANE		ND	2.5	ND	2.5	ND	2.5
CIS-1,3-DICHLOROPROPENE		ND	2.5	ND	2.5	ND	2.5
TRANS-1,3-DICHLOROPROPENE		ND	2.5	ND	2.5	ND	2.5
METHYLENE CHLORIDE		ND	2.5	ND	2.5	ND	2.5
1,1,2,2-TETRACHLOROETHANE		ND	2.5	ND	2.5	ND	2.5
TETRACHLOROETHENE		ND	2.5	ND	2.5	ND	2.5
1,1,1-TRICHLOROETHANE		6.2	2.5	3.8	2.5	4.0	2.5
1,1,2-TRICHLOROETHANE		ND	2.5	ND	2.5	ND	2.5
TRICHLOROETHENE		6.6	2.5	30	2.5	32	2.5
TRICHLOROFLUOROMETHANE		ND	5.0	ND	5.0	ND	5.0
VINYL CHLORIDE		ND	5.0	ND	5.0	ND	5.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

COMPOUNDS:	LAB#	30732	DET.	30733	DET.	30734	DET.
	SMP#	RB-05	LIM.	FB-04	LIM.	MW-43	LIM.
	dil.	1		1		20	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	10
BROMOFORM		ND	0.5	ND	0.5	ND	10
BROMOMETHANE		ND	1.0	ND	1.0	ND	20
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	10
CHLOROBENZENE		ND	0.5	ND	0.5	ND	10
CHLOROETHANE		ND	1.0	ND	1.0	ND	20
CHLOROFORM		3.1	0.5	3.1	0.5	ND	10
CHLOROMETHANE		ND	1.0	ND	1.0	ND	20
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	10
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	10
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	10
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	10
1,1-DICHLOROETHANE		ND	0.5	ND	0.5	200	10
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	10
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	21	10
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	10
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	10
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	10
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	10
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	10
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	10
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	10
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	10
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	10
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	10
TRICHLOROETHENE		ND	0.5	ND	0.5	ND	10
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	20
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	20

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

COMPOUNDS:	LAB#	30735	DET.	30736	DET.	30737	DET.
	SMP#	MW-34	LIM.	MW-51	LIM.	MW-32	LIM.
	dil.	40		40		5	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	20	ND	20	ND	2.5
BROMOFORM		ND	20	ND	20	ND	2.5
BROMOMETHANE		ND	40	ND	40	ND	5.0
CARBON TETRACHLORIDE		ND	20	ND	20	ND	2.5
CHLOROBENZENE		ND	20	ND	20	ND	2.5
CHLOROETHANE		ND	40	ND	40	ND	5.0
CHLOROFORM		ND	20	ND	20	ND	2.5
CHLOROMETHANE		ND	40	ND	40	ND	5.0
DIBROMOCHLOROMETHANE		ND	20	ND	20	ND	2.5
1,4-DICHLOROBENZENE		ND	20	ND	20	ND	2.5
1,3-DICHLOROBENZENE		ND	20	ND	20	ND	2.5
1,2-DICHLOROBENZENE		ND	20	ND	20	ND	2.5
1,1-DICHLOROETHANE		20	20	ND	20	7.5	2.5
1,2-DICHLOROETHANE		ND	20	ND	20	ND	2.5
1,1-DICHLOROETHENE		510	20	200	20	140	2.5
CIS-1,2-DICHLOROETHENE		ND	20	ND	20	ND	2.5
TRANS-1,2-DICHLOROETHENE		ND	20	ND	20	ND	2.5
1,2-DICHLOROPROPANE		ND	20	ND	20	ND	2.5
CIS-1,3-DICHLOROPROPENE		ND	20	ND	20	ND	2.5
TRANS-1,3-DICHLOROPROPENE		ND	20	ND	20	ND	2.5
METHYLENE CHLORIDE		ND	20	ND	20	ND	2.5
1,1,2,2-TETRACHLOROETHANE		ND	20	ND	20	ND	2.5
TETRACHLOROETHENE		ND	20	ND	20	ND	2.5
1,1,1-TRICHLOROETHANE		24	20	22	20	5.2	2.5
1,1,2-TRICHLOROETHANE		ND	20	ND	20	ND	2.5
TRICHLOROETHENE		ND	20	ND	20	8.8	2.5
TRICHLOROFLUOROMETHANE		ND	40	ND	40	ND	5.0
VINYL CHLORIDE		ND	40	ND	40	ND	5.0

D&M LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

COMPOUNDS:	LAB#	30738	DET.	30739	DET.	30740	DET.
	SMP#	TB-06	LIM.	MB	LIM.	MBS	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.5	ND	0.5	ND	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	8.6	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	ND	0.5	4.4	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	ND	0.5	5.2	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

COMPOUNDS:	LAB#	30741	DET.	30742	DET.	30743	DET.
	SMP#	MX	LIM.	MS	LIM.	MSD	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
BROMOFORM		ND	0.5	ND	0.5	ND	0.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		3.1	0.5	2.9	0.5	3.1	0.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	5.1	0.5	5.0	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHANE		ND	0.5	4.2	0.5	4.2	0.5
1,2-DICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
CIS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,2-DICHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROPROPANE		ND	0.5	ND	0.5	ND	0.5
CIS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
TRANS-1,3-DICHLOROPROPENE		ND	0.5	ND	0.5	ND	0.5
METHYLENE CHLORIDE		ND	0.5	ND	0.5	ND	0.5
1,1,2,2-TETRACHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TETRACHLOROETHENE		ND	0.5	ND	0.5	ND	0.5
1,1,1-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
1,1,2-TRICHLOROETHANE		ND	0.5	ND	0.5	ND	0.5
TRICHLOROETHENE		ND	0.5	5.7	0.5	5.6	0.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

NOTES: MBS WAS SPIKED AS FOLLOWS: 1,1-DICHLOROETHANE 5.0 ug/L
1,3-DICHLOROBENZENE 10.0 ug/L
TRICHLOROETHENE 5.0 ug/L

MS AND MSD WERE SPIKED AT 5.0 ug/L

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L A B O R A T O R Y R E S U L T S

Date Collected: 08/15/91
Date Extracted: 08/28/91
Date Analyzed: 08/28/91

Laboratory Job No.: 914433
Date Received: 08/19/91
Date Reported: 09/03/91

ASSAY:
PURGEABLE AROMATICS IN WATER (EPA 5030/602)

COMPOUNDS:	LAB#	30726	DET.	30727	DET.	30728	DET.	30729	DET.
	SMP#	MW-12	LIM.	MW-30	LIM.	MW-11	LIM.	MW-31	LIM.
	dil.	1		5		1		5	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	2.5	ND	0.5	ND	2.5
CHLOROBENZENE		ND	0.5	ND	2.5	ND	0.5	ND	2.5
1,2-DICHLOROBENZENE		ND	0.5	ND	2.5	ND	0.5	ND	2.5
1,3-DICHLOROBENZENE		ND	0.5	ND	2.5	ND	0.5	ND	2.5
1,4-DICHLOROBENZENE		ND	0.5	ND	2.5	ND	0.5	ND	2.5
ETHYL BENZENE		ND	0.5	ND	2.5	ND	0.5	ND	2.5
TOLUENE		0.6	0.5	ND	2.5	ND	0.5	ND	2.5
XYLENE		ND	0.5	ND	2.5	ND	0.5	ND	2.5

COMPOUNDS:	LAB#	30730	DET.	30731	DET.	30732	DET.	30733	DET.
	SMP#	MW-40	LIM.	MW-53	LIM.	RB-05	LIM.	FB-04	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

COMPOUNDS:	LAB#	30734	DET.	30735	DET.	30736	DET.	30737	DET.
	SMP#	MW-43	LIM.	MW-34	LIM.	MW-51	LIM.	MW-32	LIM.
	dil.	1		1		1		5	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	2.5
CHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	2.5
1,2-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	2.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	2.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	2.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	2.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	2.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	2.5

COMPOUNDS:	LAB#	30739	DET.	30740	DET.	30741	DET.	30742	DET.
	SMP#	MB	LIM.	MBS	LIM.	MX	LIM.	MS	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.5	4.6	0.5	ND	0.5	5.9	0.5
CHLOROBENZENE		ND	0.5	9.6	0.5	ND	0.5	5.3	0.5
1,2-DICHLOROBENZENE		ND	0.5	8.4	0.5	ND	0.5	4.8	0.5
1,3-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
1,4-DICHLOROBENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
ETHYL BENZENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
TOLUENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5
XYLENE		ND	0.5	ND	0.5	ND	0.5	ND	0.5

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 914433

COMPOUNDS:	LAB#	30743	DET.
	SMP#	MSD	LIM.
	dil.	1	
PURGEABLES		ug/L	
BENZENE		5.4	0.5
CHLOROBENZENE		5.3	0.5
1,2-DICHLOROBENZENE		5.0	0.5
1,3-DICHLOROBENZENE		ND	0.5
1,4-DICHLOROBENZENE		ND	0.5
ETHYL BENZENE		ND	0.5
TOLUENE		ND	0.5
XYLENE		ND	0.5

NOTES: MBS WAS SPIKED AS FOLLOWS:

BENZENE	5.0 ug/L
CHLOROBENZENE	10.0 ug/L
1,2-DICHLOROBENZENE	10.0 ug/L

MS AND MSD WERE SPIKED AT 5.0 ug/L

Attachment

2

ATTACHMENT 2

NOVEMBER/DECEMBER 1991 GROUNDWATER MONITORING ANALYTICAL LABORATORY REPORTS

D&M Proj # 91-5704

ACCULAB ENVIRONMENTAL SERVICES
3700 Lakeville Highway, Petaluma, CA 94952
P.O. Box 808024, Petaluma, CA. 94975-8024
Telephone: (707)763-8245 FAX: (707)763-4065

NOV 12 ...

91 NOV -7 AM 10: 12

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name Dames & Moore Phone (916) 387-7532
Address 8801 Folsom Blvd #200
City, State, Zip Sacramento, CA 95826
Client's or Representative's Signature Nancy Dickenson
(signature authorizes the work and terms listed below)

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pick up samples.

PROJ. NO. 00173-064-044 PROJECT NAME UPRR Sac.
SAMPLERS (Signature) Nancy Dickenson

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	Pb, As, Cr, Ni 6010	602				REMARKS (method)	LAB USE ONLY LAB NO.
~~N/Sta~~												As (7060)	
MW-29	11/5/91	16:45		✓	MW-29	5	X	X	X			Pb (~~7421~~) (7421)	
MW-28		15:55		✓	MW-28	5	X	X	X			Ni (6010)	
MW-41		14:15		✓	MW-41	5	X	X	X			Cr (7191)	
RB-01	↓	11:45		✓	RB-01	5	X	X	X				
FB-01	11/6/91	15:00		✓	FB-01	4		X	X				
MW-33		14:30		✓	MW-33	5	X	X	X				
MW-18		13:40		✓	MW-18	3	X	X					
MW-15		12:05		✓	MW-15	3	X	X					
MW-17		11:00		✓	MW-17	~~3~~ 5	X	X					
MW-30		9:45		✓	MW-30	5	X	X	X				
TB-01					TB-01	1	X						

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Nancy Dickenson	11/6/91	18:00	Jane B Anderson
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)

General Remarks:
Please return ice chest and blue ice.
x Send results to Sac. office.
Attn. Mark Eisen

WHITE COPY

ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

3700 Lakeville Highway, Petaluma, CA 94954
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Telephone: (707) 763-8245
FAX (707) 763-4065

Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey #
UPRR/Sacramento
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704
Date Collected: 11/05/91
Date Received: 11/07/91
Date Analyzed: 11/13/91
Date Reported: 11/19/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
39876	MW-29 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
39877	MW-28 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
39878	MW-41 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
39879	RB-01 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
39881	MW-33 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
39882	MW-18 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
39883	MW-15 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
39884	MW-17 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
39885	MW-30 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L

THIS REPORT HAS BEEN REVIEWED AND APPROVED FOR RELEASE. DF

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
39887	MB WATER		
	NI	ND	0.10 mg/L
39888	MBS WATER		
	NI	0.52 mg/L	0.10 mg/L
39889	MX WATER		
	NI	ND	0.10 mg/L
39890	MS WATER		
	NI	0.48 mg/L	0.10 mg/L
39891	MSD WATER		
	NI	0.47 mg/L	0.10 mg/L

ND=Not Detected

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.50 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704
Date Collected: 11/05/91
Date Analyzed: 11/19/91
Date Received: 11/07/91
Date Reported: 11/19/91

ASSAY:
CHROMIUM (EPA 7191),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST
ARSENIC (EPA 7060),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
39876	MW-29	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
39877	MW-28	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
39878	MW-41	CR	0.006	560	0.005
		PB	ND	5.0	0.001
		AS	0.006	5.0	0.005
39879	RB-01	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
39881	MW-33	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
39882	MW-18	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
39883	MW-15	CR	0.007	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
39884	MW-17	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
39885	MW-30	CR	0.006	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
39887	MB	CR	ND		0.005
		PB	ND		0.001
		AS	ND		0.005
				SPIKE LEVELS	
39888	MBS	CR	0.021	0.025 mg/L	0.005
		PB	0.011	0.010 mg/L	0.001
		AS	0.022	0.025 mg/L	0.005
39889	MX	CR	0.006		0.005
		PB	ND		0.001
		AS	ND		0.005
				SPIKE LEVELS	
39890	MS	CR	0.028	0.025 mg/L	0.005
		PB	0.008	0.010 mg/L	0.001
		AS	0.026	0.025 mg/L	0.005
39891	MSD	CR	0.030	0.025 mg/L	0.005
		PB	0.008	0.010 mg/L	0.001
		AS	0.026	0.025 mg/L	0.005

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L A B O R A T O R Y R E S U L T S

Date Collected: 11/05/91
Date Extracted: 11/08/91
Date Analyzed: 11/08/91

Laboratory Job No.: 915704
Date Received: 11/07/91
Date Reported: 11/19/91

ASSAY:
PURGEABLES IN WATER (EPA 601)

COMPOUNDS:	LAB#	39876	DET.	39877	DET.	39878	DET.
	SMP#	MW-29	LIM.	MW-28	LIM.	MW-41	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		1.1	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		1.0	0.50	ND	0.50	ND	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		3.7	0.50	14	0.50	ND	0.50
1,2-DICHLOROETHANE		7.1	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		21	0.50	9.4	0.50	ND	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		5.6	0.50	4.5	0.50	3.8	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		1.4	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		0.8	0.50	ND	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704

COMPOUNDS:	LAB#	39879	DET.	39880	DET.	39881	DET.
	SMP#	RB-01	LIM.	FB-01	LIM.	MW-33	LIM.
	dil.	1		1		5	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		0.7	0.50	0.8	0.50	ND	2.5
BROMOFORM		ND	0.50	ND	0.50	ND	2.5
BROMOMETHANE		ND	1.0	ND	1.0	ND	5.0
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	2.5
CHLOROBENZENE		ND	0.50	ND	0.50	ND	2.5
CHLOROETHANE		ND	1.0	ND	1.0	ND	5.0
CHLOROFORM		5.2	0.50	5.9	0.50	ND	2.5
CHLOROMETHANE		ND	1.0	ND	1.0	ND	5.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	2.5
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	2.5
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	2.5
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	2.5
1,1-DICHLOROETHANE		ND	0.50	ND	0.50	6.2	2.5
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	2.5
1,1-DICHLOROETHENE		ND	0.50	ND	0.50	100	2.5
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	2.5
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	2.5
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	2.5
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	2.5
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	2.5
METHYLENE CHLORIDE		5.1	0.50	5.4	0.50	33 *	2.5
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	2.5
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	2.5
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50	8.1	2.5
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	2.5
TRICHLOROETHENE		ND	0.50	ND	0.50	ND	2.5
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	5.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	5.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704

COMPOUNDS:	LAB#	39882	DET.	39883	DET.	39884	DET.
	SMP#	MW-18	LIM.	MW-15	LIM.	MW-17	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.50	ND	0.50	ND	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		2.0	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		18	0.50	2.1	0.50	2.8	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		5.0	0.50	4.1	0.50	4.3	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	12	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		2.2	0.50	1.3	0.50	0.6	0.50
1,1,2-TRICHLOROETHANE		3.8	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704

COMPOUNDS:	LAB#	39885	DET.	39886	DET.	39887	DET.
	SMP#	MW-30	LIM.	TB-01	LIM.	MB	LIM.
	dil.	5		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	2.5	ND	0.50	ND	0.50
BROMOFORM		ND	2.5	ND	0.50	ND	0.50
BROMOMETHANE		ND	5.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	2.5	ND	0.50	ND	0.50
CHLOROBENZENE		ND	2.5	ND	0.50	ND	0.50
CHLOROETHANE		ND	5.0	ND	1.0	ND	1.0
CHLOROFORM		ND	2.5	ND	0.50	ND	0.50
CHLOROMETHANE		ND	5.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	2.5	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	2.5	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	2.5	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	2.5	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		11	2.5	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	2.5	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		88	2.5	ND	0.50	ND	0.50
CIS-1,2-DICHLOROETHENE		ND	2.5	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	2.5	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	2.5	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	2.5	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	2.5	ND	0.50	ND	0.50
METHYLENE CHLORIDE		32 *	2.5	4.7 **	0.50	4.5	0.50
1,1,2,2-TETRACHLOROETHANE		ND	2.5	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	2.5	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		8.5	2.5	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	2.5	ND	0.50	ND	0.50
TRICHLOROETHENE		9.4	2.5	ND	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	5.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	5.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704

COMPOUNDS:	LAB#	39888	DET.	39889	DET.	39890	DET.
	SMP#	MBS	LIM.	MX	LIM.	MS	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		5.1	0.50	ND	0.50	5.4	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.50	ND	0.50	ND	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		6.8	0.50	ND	0.50	5.5	0.50
1,2-DICHLOROBENZENE		6.5	0.50	ND	0.50	7.0	0.50
1,1-DICHLOROETHANE		5.1	0.50	ND	0.50	5.2	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		32 *	0.50	3.8	0.50	32 *	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		5.1	0.50	ND	0.50	5.6	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704

COMPOUNDS:	LAB#	39891		DET.
	SMP#	MSD		LIM.
	dil.	1		
PURGEABLES		ug/L		
BROMODICHLOROMETHANE		ND		0.50
BROMOFORM		ND		0.50
BROMOMETHANE		ND		1.0
CARBON TETRACHLORIDE		ND		0.50
CHLOROBENZENE		5.9		0.50
CHLOROETHANE		ND		1.0
CHLOROFORM		ND		0.50
CHLOROMETHANE		ND		1.0
DIBROMOCHLOROMETHANE		ND		0.50
1,4-DICHLOROBENZENE		ND		0.50
1,3-DICHLOROBENZENE		5.9		0.50
1,2-DICHLOROBENZENE		7.4		0.50
1,1-DICHLOROETHANE		5.3		0.50
1,2-DICHLOROETHANE		ND		0.50
1,1-DICHLOROETHENE		ND		0.50
CIS-1,2-DICHLOROETHENE		ND		0.50
TRANS-1,2-DICHLOROETHENE		ND		0.50
1,2-DICHLOROPROPANE		ND		0.50
CIS-1,3-DICHLOROPROPENE		ND		0.50
TRANS-1,3-DICHLOROPROPENE		ND		0.50
METHYLENE CHLORIDE		34	*	0.50
1,1,2,2-TETRACHLOROETHANE		ND		0.50
TETRACHLOROETHENE		ND		0.50
1,1,1-TRICHLOROETHANE		ND		0.50
1,1,2-TRICHLOROETHANE		ND		0.50
TRICHLOROETHENE		5.8		0.50
TRICHLOROFLUOROMETHANE		ND		1.0
VINYL CHLORIDE		ND		1.0

NOTES: MBS, MS AND MSD WERE SPIKED AT 5.0 ug/L

BECAUSE THE PRESENCE OF METHYLENE CHLORIDE IN SAMPLES IS AT THE SAME LEVEL AS SEEN IN THE BLANK, IT CAN BE ASSUMED THAT VALUES OF METHYLENE CHLORIDE ARE DUE TO LABORATORY CONTAMINATION.

* SAMPLES MW-33 AND MW-30 (39881 & 39885) SHOW HIGHER LEVELS OF METHYLENE CHLORIDE DUE TO MULTIPLICATION BY THE DILUTION FACTOR.

** SAMPLE TB-01 (39886) WAS NOT CONFIRMED DUE TO LACK OF SAMPLE (ONE VOA ONLY).

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L A B O R A T O R Y R E S U L T S

Date Collected: 11/05/91
Date Extracted: 11/12/91
Date Analyzed: 11/12/91

Laboratory Job No.: 915704
Date Received: 11/07/91
Date Reported: 11/19/91

ASSAY:
PURGEABLE AROMATICS IN WATER (EPA 602)

COMPOUNDS:	LAB#	39876	DET.	39877	DET.	39878	DET.	39879	DET.
	SMP#	MW-29	LIM.	MW-28	LIM.	MW-41	LIM.	RB-01	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
XYLENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50

COMPOUNDS:	LAB#	39880	DET.	39881	DET.	39885	DET.	39886	DET.
	SMP#	FB-01	LIM.	MW-33	LIM.	MW-30	LIM.	TB-01	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50	0.8 *	0.50
XYLENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915704

COMPOUNDS:	LAB#	39887	DET.	39888	DET.	39889	DET.	39890	DET.
	SMP#	MB	LIM.	MBS	LIM.	MX	LIM.	MS	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	3.8	0.50	ND	0.50	3.8	0.50
CHLOROBENZENE		ND	0.50	5.8	0.50	ND	0.50	5.7	0.50
1,2-DICHLOROBENZENE		ND	0.50	6.2	0.50	ND	0.50	5.8	0.50
1,3-DICHLOROBENZENE		ND	0.50	6.2	0.50	ND	0.50	5.9	0.50
1,4-DICHLOROBENZENE		ND	0.50	1.3	0.50	ND	0.50	1.1	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	1.7	0.50	ND	0.50	1.8	0.50
XYLENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50

COMPOUNDS:	LAB#	39891	DET.
	SMP#	MSD	LIM.
	dil.	1	
PURGEABLES		ug/L	
BENZENE		3.8	0.50
CHLOROBENZENE		5.7	0.50
1,2-DICHLOROBENZENE		5.9	0.50
1,3-DICHLOROBENZENE		5.9	0.50
1,4-DICHLOROBENZENE		1.0	0.50
ETHYL BENZENE		ND	0.50
TOLUENE		1.8	0.50
XYLENE		ND	0.50

NOTES: MBS, MS AND MSD WERE SPIKED AT 5.0 ug/L.

* UNABLE TO CONFIRM SAMPLE TB-01 (39886) DUE TO LACK OF SAMPLE (ONE VOA ONLY).

D&M LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

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Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey # UPRR SACTO.
Project/Release # 00173-001-044

L A B O R A T O R Y R E S U L T S

Date Collected: 11/07/91
Date Analyzed: 11/13/91

Laboratory Job No.: 915737
Date Received: 11/11/91
Date Reported: 11/27/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID		RESULTS		DET. LIM.
40211	MW-13	WATER		CA STLC LEVEL	
		NI	ND	20	0.10 mg/L
40212	MW-12	WATER		CA STLC LEVEL	
		NI	ND	20	0.10 mg/L
40213	MW-16	WATER		CA STLC LEVEL	
		NI	ND	20	0.10 mg/L
40214	MW-11	WATER		CA STLC LEVEL	
		NI	ND	20	0.10 mg/L
40215	RB-02	WATER		CA STLC LEVEL	
		NI	ND	20	0.10 mg/L
40216	MW-43	WATER		CA STLC LEVEL	
		NI	0.16 mg/L	20	0.10 mg/L
40217	MW-51	WATER		CA STLC LEVEL	
		NI	0.13 mg/L	20	0.10 mg/L
40218	MW-42	WATER		CA STLC LEVEL	
		NI	0.16 mg/L	20	0.10 mg/L
40219	MW-50	WATER		CA STLC LEVEL	
		NI	ND	20	0.10 mg/L

THIS REPORT HAS BEEN REVIEWED
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D&M LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

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FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915737

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
40220	MW-2 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
40221	MW-4 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
40224	MB WATER			
	NI	ND		0.10 mg/L
40225	MBS WATER			
	NI	0.52 mg/L		0.10 mg/L
40226	MX WATER			
	NI	ND		0.10 mg/L
40227	MS WATER			
	NI	0.48 mg/L		0.10 mg/L
40228	MSD WATER			
	NI	0.47 mg/L		0.10 mg/L

ND=Not Detected
NOTE: MBS, MS AND MSD WERE SPIKED AT 0.50 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915737
Date Collected: 11/07/91
Date Received: 11/11/91
Date Analyzed: 11/19/91
Date Reported: 11/27/91

ASSAY:
CHROMIUM (EPA 7191),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST
ARSENIC (EPA 7060),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
40211	MW-13	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	0.038	5.0	0.005
40212	MW-12	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40213	MW-16	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40214	MW-11	CR	0.019	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40215	RB-02	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40216	MW-43	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005

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Laboratory Job No.: 915737

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
40217	MW-51	CR	ND	560	0.005
		PB	0.001	5.0	0.001
		AS	ND	5.0	0.005
40218	MW-42	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40219	MW-50	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40220	MW-2	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40221	MW-4	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	0.005	5.0	0.005
40224	MB	CR	ND		0.005
		PB	ND		0.001
		AS	ND		0.005
				SPIKE LEVELS	
40225	MBS	CR	0.019	0.025 mg/L	0.005
		PB	0.010	0.010 mg/L	0.001
		AS	0.021	0.025 mg/L	0.005
40226	MX	CR	0.006		0.005
		PB	ND		0.001
		AS	ND		0.005
				SPIKE LEVELS	
40227	MS	CR	0.025	0.025 mg/L	0.005
		PB	0.006	0.010 mg/L	0.001
		AS	0.024	0.025 mg/L	0.005

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915737

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
40228	MSD	CR	0.029	0.025 mg/L	0.005
		PB	0.006	0.010 mg/L	0.001
		AS	0.022	0.025 mg/L	0.005

NOTE: LEAD MS AND MSD RECOVERIES ARE LOW DUE TO POSSIBLE MATRIX INTERFERENCE.

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L A B O R A T O R Y R E S U L T S

Date Collected: 11/07/91
Date Extracted: 11/13/91
Date Analyzed: 11/13/91

Laboratory Job No.: 915737
Date Received: 11/11/91
Date Reported: 11/27/91

ASSAY:
PURGEABLES IN WATER (EPA 601)

COMPOUNDS:	LAB#	40211	DET.	40212	DET.	40213	DET.
	SMP#	MW-13	LIM.	MW-12	LIM.	MW-16	LIM.
	dil.	100		1		1	
PURGEABLES		**	ug/L		ug/L		ug/L
BROMODICHLOROMETHANE		ND	50	ND	0.50	ND	0.50
BROMOFORM		ND	50	ND	0.50	ND	0.50
BROMOMETHANE		ND	100	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	50	ND	0.50	ND	0.50
CHLOROETHANE		ND	100	ND	1.0	ND	1.0
CHLOROFORM		ND	50	ND	0.50	ND	0.50
CHLOROMETHANE		320	100	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		160	50	15	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		210	50	28	0.50	5.7	0.50
CIS-1,2-DICHLOROETHENE		ND	50	0.5	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		230	50	2.1	0.50	1.1	0.50
1,1,2,2-TETRACHLOROETHANE		ND	50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		ND	50	1.4	0.50	1.6	0.50
1,1,2-TRICHLOROETHANE		ND	50	ND	0.50	ND	0.50
TRICHLOROETHENE		ND	50	13	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	100	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	100	ND	1.0	ND	1.0

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QUALITY CONTROL REPORT

In order to provide you with the means of assessing the quality of the data in our report, **D&M Laboratories** reports the results of Quality Control samples analyzed with your samples.

The Quality Control samples provide the following QC information:

The Method Blank (**MB**) monitors the level of contamination introduced by reagents or glassware. A minimum of one MB is run per batch of 20 samples or less.

The Method Blank Spike (**MBS**) measures the accuracy of analytical techniques and is not subject to matrix effects. A minimum of one MBS is run per batch of 20 samples or less.

The Matrix Spike (**MS**) measures the accuracy of the method for a matrix type. Due to the high variability within matrix types and the necessity of batching samples from varied sources, matrix spike information from one sample is not necessarily relevant to other samples on the batch. A minimum of two matrix spikes, MS and MSD, are run per batch of 20 samples or less. The sample selected for the matrix spike is designated **MX**.

The Matrix Spike Duplicate (**MSD**), along with the MS, is used to monitor the precision (**RPD**) of the method and to indicate possible non homogeneity of the sample matrix.

Equations used for determining percent recovery and relative percent difference (RPD) are as follows:

MBS % Recovery = MBS result / MBS spike level X 100
MS % Recovery = (MS - sample) / MS spike level X 100
RPD = | MS - MSD | / ((MS + MSD) / 2) X 100

We continue to strive to improve the quality of service to our clients. We welcome any questions or comments you may have about this information, or about **D&M Laboratories** in general. Please contact a Project Manager for further information.

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Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey # UPRR-SACTO.
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915760
Date Collected: 11/11/91
Date Received: 11/13/91
Date Analyzed: 11/20/91
Date Reported: 12/02/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
40410	MW-20 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
40411	MW-19 WATER		CA STLC LEVEL	
	NI	0.12 mg/L	20	0.10 mg/L
40412	MW-21 WATER		CA STLC LEVEL	
	NI	0.40 mg/L	20	0.10 mg/L
40413	MW-8 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
40414	MW-23 WATER		CA STLC LEVEL	
	NI	0.18 mg/L	20	0.10 mg/L
40415	MW-22 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
40417	RB-03 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
40419	MB WATER			
	NI	ND		0.10 mg/L
40420	MBS WATER			
	NI	0.50 mg/L		0.10 mg/L

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915760

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
40421	MX WATER NI	ND	0.10 mg/L
40422	MS WATER NI	0.52 mg/L	0.10 mg/L
40423	MSD WATER NI	0.48 mg/L	0.10 mg/L

ND=Not Detected

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.50 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915760
Date Collected: 11/11/91
Date Analyzed: 11/19/91
Date Received: 11/13/91
Date Reported: 12/02/91

ASSAY:
CHROMIUM (EPA 7191),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST
ARSENIC (EPA 7060),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
40410	MW-20	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40411	MW-19	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40412	MW-21	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40413	MW-8	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40414	MW-23	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40415	MW-22	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915760

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
40417	RB-03	CR	ND	560	0.005
		PB	ND	5.0	0.001
		AS	ND	5.0	0.005
40419	MB	CR	ND		0.005
		PB	ND		0.001
		AS	ND		0.005
				SPIKE LEVELS	
40420	MBS	CR	0.019	0.025 mg/L	0.005
		PB	0.010	0.010 mg/L	0.001
		AS	0.021	0.025 mg/L	0.005
40421	MX	CR	0.006		0.005
		PB	ND		0.001
		AS	ND		0.005
				SPIKE LEVELS	
40422	MS	CR	0.025	0.025 mg/L	0.005
		PB	0.006	0.010 mg/L	0.001
		AS	0.024	0.025 mg/L	0.005
40423	MSD	CR	0.029	0.025 mg/L	0.005
		PB	0.006	0.010 mg/L	0.001
		AS	0.022	0.025 mg/L	0.005

NOTE: MS AND MSD RECOVERIES ARE LOW DUE TO POSSIBLE MATRIX INTERFERENCE.

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L A B O R A T O R Y R E S U L T S

Date Collected: 11/11/91
Date Extracted: 11/25/91
Date Analyzed: 11/26/91

Laboratory Job No.: 915760
Date Received: 11/13/91
Date Reported: 12/02/91

ASSAY:
PURGEABLES IN WATER (EPA 601)

COMPOUNDS:	LAB#	40410	DET.	40411	DET.	40412	DET.
	SMP#	MW-20	LIM.	MW-19	LIM.	MW-21	LIM.
	dil.		1		1		1
PURGEABLES			ug/L		ug/L		ug/L
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.50	ND	0.50	4.8	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		11	0.50	3.7	0.50	ND	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		1.8	0.50	1.6	0.50	2.0	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	2.8	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		0.7	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915760

COMPOUNDS:	LAB#	40413	DET.	40414	DET.	40416	DET.
	SMP#	MW-8	LIM.	MW-23	LIM.	FB-03	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.50	4.6	0.50	3.8	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		2.5	0.50	ND	0.50	ND	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		2.1	0.50	3.0	0.50	1.2	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		5.3	0.50	0.7	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		0.7	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915760

COMPOUNDS:	LAB#	40417	DET.	40418	DET.	40419	DET.
	SMP#	RB-03	LIM.	TB-03	LIM.	MB	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		** ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		3.4	0.50	ND	0.50	ND	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		1.3	0.50	2.7	0.50	2.1	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	0.5	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915760

COMPOUNDS:	LAB#	40420	DET.	40421	DET.	40422	DET.
	SMP#	MBS	LIM.	MX	LIM.	MS	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		10	0.50	ND	0.50	8.2	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.50	3.4	0.50	3.0	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		11	0.50	ND	0.50	8.8	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		1.7	0.50	1.3	0.50	2.2	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		9.3	0.50	ND	0.50	7.2	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915760

COMPOUNDS:	LAB#	40423	DET.
	SMP#	MSD	LIM.
	dil.	1	
PURGEABLES		ug/L	
BROMODICHLOROMETHANE		ND	0.50
BROMOFORM		ND	0.50
BROMOMETHANE		ND	1.0
CARBON TETRACHLORIDE		ND	0.50
CHLOROBENZENE		9.8	0.50
CHLOROETHANE		ND	1.0
CHLOROFORM		2.9	0.50
CHLOROMETHANE		ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50
1,4-DICHLOROBENZENE		ND	0.50
1,3-DICHLOROBENZENE		ND	0.50
1,2-DICHLOROBENZENE		ND	0.50
1,1-DICHLOROETHANE		ND	0.50
1,2-DICHLOROETHANE		ND	0.50
1,1-DICHLOROETHENE		9.4	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50
1,2-DICHLOROPROPANE		ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50
METHYLENE CHLORIDE		1.9	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50
TETRACHLOROETHENE		ND	0.50
1,1,1-TRICHLOROETHANE		ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50
TRICHLOROETHENE		8.5	0.50
TRICHLOROFLUOROMETHANE		ND	1.0
VINYL CHLORIDE		ND	1.0

NOTES: MBS, MS AND MSD WERE SPIKED AT 10 ug/L WITH 1,1-DICHLOROETHENE, TRICHLOROETHENE AND CHLOROBENZENE.

** ALL SAMPLES EXCEPT #40418 (TB-03) WERE ANALYZED BY GC/MS (EPA 624).

SAMPLE #40418 (TB-03) WAS ANALYZED BY GC (EPA 601) AND WAS NOT CONFIRMED DUE TO INADEQUATE SAMPLE AMOUNT. PRESENCE OF METHYLENE CHLORIDE IS MOST LIKELY DUE TO LABORATORY CONTAMINATION.

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L A B O R A T O R Y R E S U L T S

Date Collected: 11/11/91
Date Extracted: 11/26/91
Date Analyzed: 11/26/91

Laboratory Job No.: 915760
Date Received: 11/13/91
Date Reported: 12/02/91

ASSAY:
PURGEABLE AROMATICS IN WATER (EPA 602)

COMPOUNDS:	LAB#	40416	DET.	40417	DET.	40419	DET.
	SMP#	FB-03	LIM.	RB-03	LIM.	MB	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	0.5	0.50	ND	0.50
XYLENE		ND	0.50	ND	0.50	ND	0.50

COMPOUNDS:	LAB#	40420	DET.	40421	DET.	40422	DET.	40423	DET.
	SMP#	MBS	LIM.	MX	LIM.	MS	LIM.	MSD	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		11	0.50	ND	0.50	8.9	0.50	10	0.50
CHLOROBENZENE		10	0.50	ND	0.50	8.2	0.50	9.8	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
TOLUENE		11	0.50	0.5	0.50	8.7	0.50	10	0.50
XYLENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50

NOTES: MBS, MS AND MSD WERE SPIKED AT 10 ug/L WITH BENZENE, CHLOROBENZENE AND TOLUENE.

SAMPLES WERE ANALYZED BY GC/MS (EPA 624).

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QUALITY CONTROL REPORT

In order to provide you with the means of assessing the quality of the data in our report, **D&M Laboratories** reports the results of Quality Control samples analyzed with your samples.

The Quality Control samples provide the following QC information:

The Method Blank (**MB**) monitors the level of contamination introduced by reagents or glassware. A minimum of one MB is run per batch of 20 samples or less.

The Method Blank Spike (**MBS**) measures the accuracy of analytical techniques and is not subject to matrix effects. A minimum of one MBS is run per batch of 20 samples or less.

The Matrix Spike (**MS**) measures the accuracy of the method for a matrix type. Due to the high variability within matrix types and the necessity of batching samples from varied sources, matrix spike information from one sample is not necessarily relevant to other samples on the batch. A minimum of two matrix spikes, MS and MSD, are run per batch of 20 samples or less. The sample selected for the matrix spike is designated **MX**.

The Matrix Spike Duplicate (**MSD**), along with the MS, is used to monitor the precision (**RPD**) of the method and to indicate possible non homogeneity of the sample matrix.

Equations used for determining percent recovery and relative percent difference (RPD) are as follows:

MBS % Recovery = MBS result / MBS spike level X 100
MS % Recovery = (MS - sample) / MS spike level X 100
RPD = | MS - MSD | / ((MS + MSD) / 2) X 100

We continue to strive to improve the quality of service to our clients. We welcome any questions or comments you may have about this information, or about **D&M Laboratories** in general. Please contact a Project Manager for further information.

Gary Dickenson

NOV 21 1991

91-5819

NOV 1 1991

ACCULAB ENVIRONMENTAL SERVICES
3700 Lakeville Highway, Petaluma, CA 94952
P.O. Box 808024, Petaluma, CA. 94975-8024
Telephone: (707)763-8245 FAX: (707)763-4065

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name Dames & Moore Phone (916) 387-7532
Address 8801 Folsom Blvd. #200
City, State, Zip Sacramento, CA 95826
Client's or Representative's Signature Gary Dickenson
(signature authorizes the work and terms listed below)

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fai to pick up samples.

PROJ. NO. 0c173-064-44 | PROJECT NAME UPRR Sac.

SAMPLERS (Signature) Gary Dickenson

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CON-TAINERS	601	602	As(7060) Pb(7421) V.(6010), Cr(7191)				REMARKS / LAB USE ONL LAB NO
MW-7	11/13/91	14:30		✓	MW-7	3	X		X	X			
MW-26		13:30		✓	MW-26	3	X		X	X			
MW-25		12:30		✓	MW-25	3	X		X	X			
MW-27		11:45		✓	MW-27	3	X		X	X			
MW-5		10:30		✓	MW-5	1			X	X			
MW-24		9:45		✓	MW-24	1			X	X			
MW-6		8:35		✓	MW-6	1			X	X			
MW-39	11/14/91	14:10		✓	MW-39	5	X	X	X	X			
MW-35		13:05		✓	MW-35 1 VOA broken	5	X	X	X	X			
MW-34		12:00		✓	MW-34	5	X	X	X	X			
MW-52		11:50		✓	MW-52	5	X	X	X	X			
TB-04		16:00		✓	TB-04	1	X						
RB-04		16:10		✓	RB-04	5	X	X	X	X			
FB-04		1605		✓	FB-04	4	X	X					

91 NOV 15 AM 10:06

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Gary Dickenson	11/14/91	16:20	
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)

General Remarks:
Send Results to: Mark Ekern

Please return ice chest + blue ice!

CLIENT COPY

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FAX (707) 763-4065

Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey # UPRR-SACTO
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915819
Date Collected: 11/13/91
Date Analyzed: 11/20/91
Date Received: 11/15/91
Date Reported: 12/04/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
41134	MW-7 WATER		CA STLC LEVEL	
	NI	0.14 mg/L	20	0.10 mg/L
41135	MW-26 WATER		CA STLC LEVEL	
	NI	0.75 mg/L	20	0.10 mg/L
41136	MW-25 WATER		CA STLC LEVEL	
	NI	0.25 mg/L	20	0.10 mg/L
41137	MW-27 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
41138	MW-5 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
41139	MW-24 WATER		CA STLC LEVEL	
	NI	0.13 mg/L	20	0.10 mg/L
41140	MW-6 WATER		CA STLC LEVEL	
	NI	0.11 mg/L	20	0.10 mg/L
41141	MW-39 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
41142	MW-35 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L

THIS REPORT HAS BEEN REVIEWED AND APPROVED FOR RELEASE. DE

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915819

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
41143	MW-34 WATER		CA STLC LEVEL	
	NI	0.19 mg/L	20	0.10 mg/L
41144	MW-52 WATER		CA STLC LEVEL	
	NI	0.20 mg/L	20	0.10 mg/L
41146	RB-04 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
41148	MB WATER			
	NI	ND		0.10 mg/L
41149	MBS WATER			
	NI	0.50 mg/L		0.10 mg/L
41150	MX WATER			
	NI	ND		0.10 mg/L
41151	MS WATER			
	NI	0.52 mg/L		0.10 mg/L
41152	MSD WATER			
	NI	0.48 mg/L		0.10 mg/L

ND=Not Detected

NOTE: MBS, MS AND MSD WERE SPIKED AT 0.50 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915819
Date Collected: 11/13/91
Date Received: 11/15/91
Date Analyzed: 12/03/91
Date Reported: 12/04/91

ASSAY:
ARSENIC (EPA 7060),3020 ACID DIGEST
CHROMIUM (EPA 7191),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST

MATRIX: WATER, CA EXTRACT

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
41134	MW-7	AS	ND	5.0	0.005
		CR	0.015	560	0.005
		PB	ND	5.0	0.001
41135	MW-26	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
41136	MW-25	AS	ND	5.0	0.005
		CR	0.007	560	0.005
		PB	ND	5.0	0.001
41137	MW-27	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
41138	MW-5	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
41139	MW-24	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915819

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
41140	MW-6	AS	ND	5.0	0.005
		CR	0.007	560	0.005
		PB	ND	5.0	0.001
41141	MW-39	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
41142	MW-35	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
41143	MW-34	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
41144	MW-52	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
41146	RB-04	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
41148	MB	AS	ND		0.005
		CR	ND		0.005
		PB	ND		0.001
				SPIKE LEVELS	
41149	MBS	AS	0.023	0.025 mg/L	0.005
		CR	0.021	0.025 mg/L	0.005
		PB	0.011	0.010 mg/L	0.001
41150	MX	AS	ND		0.005
		CR	ND		0.005
		PB	ND		0.001
				SPIKE LEVELS	
41151	MS	AS	0.028	0.025 mg/L	0.005
		CR	0.023	0.025 mg/L	0.005
		PB	0.009	0.010 mg/L	0.001

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915819

LABNO SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV		DET.LIM. mg/L
41152 MSD	AS	0.028	0.025	mg/L	0.005
	CR	0.031	0.025	mg/L	0.005
	PB	0.009	0.010	mg/L	0.001

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L A B O R A T O R Y R E S U L T S

Date Collected: 11/13/91
Date Extracted: 11/23/91
Date Analyzed: 11/23/91

Laboratory Job No.: 915819
Date Received: 11/15/91
Date Reported: 12/04/91

ASSAY:
PURGEABLE AROMATICS IN WATER (EPA 602)

COMPOUNDS:	LAB#	41141	DET.	41142	DET.	41143	DET.
	SMP#	MW-39	LIM.	MW-34	LIM.	MW-34	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	0.9	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50
XYLENE		ND	0.50	ND	0.50	ND	0.50

COMPOUNDS:	LAB#	41144	DET.	41146	DET.
	SMP#	MW-52	LIM.	RB-04	LIM.
	dil.	1		1	
PURGEABLES		ug/L		ug/L	
BENZENE		1.0	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50
XYLENE		ND	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915819

COMPOUNDS:	LAB#	41147	DET.	41148	DET.	41149	DET.	41150	DET.
	SMP#	FB-04	LIM.	MB	LIM.	MBS	LIM.	MX	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	4.4	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	4.8	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	4.7	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	4.8	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
XYLENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50

D&M LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

3700 Lakeville Highway, Petaluma, CA 94954
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Telephone: (707) 763-8245
FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915819

COMPOUNDS:	LAB#	41151	DET.	41152	DET.
	SMP#	MS	LIM.	MSD	LIM.
	dil.	1		1	
PURGEABLES		ug/L		ug/L	
BENZENE		4.1	0.50	3.6	0.50
CHLOROBENZENE		4.8	0.50	4.4	0.50
1,2-DICHLOROBENZENE		4.3	0.50	3.7	0.50
1,3-DICHLOROBENZENE		4.4	0.50	3.9	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50
XYLENE		ND	0.50	ND	0.50

NOTE: MBS, MS AND MSD WERE SPIKED AT 5.0 ug/L WITH BENZENE, CHLOROBENZENE, 1,2-DICHLOROBENZENE, AND 1,3-DICHLOROBENZENE.

EPA 601 DATA IS NOT PART OF THIS REPORT BECAUSE THE HOLDING TIMES WERE EXCEEDED.

ACCULAB ENVIRONMENTAL SERVICES
3700 Lakeville Highway, Petaluma, CA 94952
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Telephone: (707)763-8245 FAX: (707)763-4065

Larry Eichmann

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name Dames + Moore Phone (916) 367-7532
Address 8801 Folsom Blvd. #210
City, State, Zip Sacramento, CA 95826
Client's or Representative's Signature Larry Eichmann
(signature authorizes the work and terms listed below)

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fai to pick up samples.

PROJ. NO. 00173-064 -044
PROJECT NAME UPRR Sac.
SAMPLERS (Signature) Larry Eichmann

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CON-TAINERS	EDF	EDF	As (1600), Cr (3140), Ni (7520), Pb (7421)				REMARKS	LAB USE ONLY LAB NO
RE-04	11/2/91	14:45		V	RE-04	5	X	X	X	X				
MW-31		13:50		V	MW-31	5	X	X	X	X				
FB-04		13:20		V	FB-04	4	X	X						
MW-32		12:40		V	MW-32	5	X	X	X	X				
MW-14		11:45		V	MW-14	5	X	X	X	X				
MW-40		9:45		V	MW-40	5	X	X	X	X				
MW-53		9:55		V	MW-53	5	X	X	X	X				
TB-05				V	Trip blank	2	X							

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Larry Eichmann	11/2/91	15:50	
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)

General Remarks:
Send results to Mark Eisen:
Please return ice chest with blue ice.

FIELD COPY

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FAX (707) 763-4065

Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey # UPRR-SACTO.
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921
Date Collected: 11/22/91
Date Analyzed: 12/05/91
Date Received: 11/25/91
Date Reported: 12/13/91

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
42354	RB-04 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
42355	MW-31 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
42357	MW-32 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
42358	MW-14 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
42359	MW-40 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
42360	MW-53 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
42362	MB WATER			
	NI	ND		0.10 mg/L
42363	MBS WATER			
	NI	0.51 mg/L		0.10 mg/L
42364	MX WATER			
	NI	ND		0.10 mg/L

THIS REPORT HAS BEEN REVIEWED
AND APPROVED FOR RELEASE. DLF

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921

LABNO	SMPLNO-ID	RESULTS	DET. LIM.
42365	MS WATER		
	NI	0.50 mg/L	0.10 mg/L
42366	MSD WATER		
	NI	0.51 mg/L	0.10 mg/L

ND=Not Detected
NOTE: MBS, MS AND MSD WERE SPIKED AT 0.50 mg/L.

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921
Date Collected: 11/22/91
Date Analyzed: 12/11/91
Date Received: 11/25/91
Date Reported: 12/13/91

ASSAY:
ARSENIC (EPA 7060),3020 ACID DIGEST
CHROMIUM (EPA 7191),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
42354	RB-04	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
42355	MW-31	AS	ND	5.0	0.005
		CR	0.016	560	0.005
		PB	ND	5.0	0.001
42357	MW-32	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
42358	MW-14	AS	ND	5.0	0.005
		CR	0.016	560	0.005
		PB	ND	5.0	0.001
42359	MW-40	AS	ND	5.0	0.005
		CR	0.005	560	0.005
		PB	ND	5.0	0.001
42360	MW-53	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
42362	MB	AS	ND		0.005
		CR	ND		0.005
		PB	ND		0.001
				SPIKE LEVELS	
42363	MBS	AS	0.020	0.025 mg/L	0.005
		CR	0.021	0.025 mg/L	0.005
		PB	0.010	0.010 mg/L	0.001
42364	MX	AS	ND		0.005
		CR	ND		0.005
		PB	ND		0.001
				SPIKE LEVELS	
42365	MS	AS	0.025	0.025 mg/L	0.005
		CR	0.026	0.025 mg/L	0.005
		PB	0.011	0.010 mg/L	0.001
				SPIKE LEVELS	
42366	MSD	AS	0.024	0.025 mg/L	0.005
		CR	0.028	0.025 mg/L	0.005
		PB	0.010	0.010 mg/L	0.001

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921
Date Collected: 11/22/91
Date Analyzed: 12/06/91
Date Received: 11/25/91
Date Reported: 12/13/91

ASSAY:
PURGEABLES BY GC/MS(EPA624)

COMPOUNDS:	LAB#	42354	DET.	42355	DET.	42356	DET.
	SMP#	RB-04	LIM.	MW-31	LIM.	FB-04	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	ND	0.50
BROMODICHLOROMETHANE		1.1	0.50	ND	0.50	1.0	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	0.50	ND	0.50	ND	0.50
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
CHLOROFORM		6.8	0.50	ND	0.50	6.7	0.50
CHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	17	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		ND	0.20*140		2.0	ND	0.20
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		ND	0.50	ND	0.50	ND	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	0.62	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	6.3	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		ND	0.50	9.3	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921

COMPOUNDS:	LAB#	42354	DET.	42355	DET.	42356	DET.
	SMP#	RB-04	LIM.	MW-31	LIM.	FB-04	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
TRICHLOROFLUOROMETHANE		ND	0.50	ND	0.50	ND	0.50
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0
XYLENES		ND	0.50	ND	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921

COMPOUNDS:	LAB#	42357	DET.	42358	DET.	42359	DET.
	SMP#	MW-32	LIM.	MW-14	LIM.	MW-40	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	ND	0.50
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	0.50	ND	0.50	ND	0.50
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
CHLOROFORM		ND	0.50	ND	0.50	ND	0.50
CHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		7.4	0.50	6.3	0.50	12	0.50
1,2-DICHLOROETHANE		ND	0.50	1.5	0.50	ND	0.50
1,1-DICHLOROETHENE		*88	2.0	*150	1.0	*95	2.0
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		ND	0.50	ND	0.50	ND	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		4.0	0.50	1.9	0.50	2.4	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		8.9	0.50	5.6	0.50	27	0.50
TRICHLOROFLUOROMETHANE		ND	0.50	ND	0.50	ND	0.50
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0
XYLENES		ND	0.50	ND	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921

COMPOUNDS:	LAB#	42360	DET.	42361	DET.	42362	DET.
	SMP#	MW-53	LIM.	TB-05	LIM.	MB	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	ND	0.50
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	0.50	ND	0.50	ND	0.50
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
CHLOROFORM		ND	0.50	ND	0.50	ND	0.50
CHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		13	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		*89	2.0	ND	0.20	ND	0.20
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		ND	0.50	0.53	0.50	3.4	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50
1,1,1-TRICHLOROETHANE		2.2	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		26	0.50	ND	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	0.50	ND	0.50	ND	0.50
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0
XYLENES		ND	0.50	ND	0.50	ND	0.50

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921

COMPOUNDS:	LAB#	42363	DET.	42364	DET.	42365	DET.
	SMP#	MBS	LIM.	MX	LIM.	MS	LIM.
	DIL.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BENZENE		12	0.50	ND	0.50	9.7	0.50
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	0.50	ND	0.50	ND	0.50
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		11	0.50	ND	0.50	8.9	0.50
CHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
CHLOROFORM		ND	0.50	ND	0.50	ND	0.50
CHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		11	0.20	ND	0.20	8.6	0.20
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	0.97	0.50	1.0	0.50
METHYLENE CHLORIDE		3.1	0.50	2.0	0.50	2.2	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TOLUENE		11	0.50	3.3	0.50	12	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		12	0.50	ND	0.50	9.5	0.50
TRICHLOROFLUOROMETHANE		ND	0.50	ND	0.50	ND	0.50
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0
XYLENES		ND	0.50	6.6	0.50	7.0	0.50

ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 915921

COMPOUNDS:	LAB#	42366	DET.
	SMP#	MSD	LIM.
	DIL.	1	
PURGEABLES		ug/L	
BENZENE		11	0.50
BROMODICHLOROMETHANE		ND	0.50
BROMOFORM		ND	0.50
BROMOMETHANE		ND	0.50
CARBON TETRACHLORIDE		ND	0.50
CHLOROBENZENE		11	0.50
CHLOROETHANE		ND	0.50
CHLOROFORM		ND	0.50
CHLOROMETHANE		ND	0.50
DIBROMOCHLOROMETHANE		ND	0.50
1,2-DICHLOROBENZENE		ND	0.50
1,3-DICHLOROBENZENE		ND	0.50
1,4-DICHLOROBENZENE		ND	0.50
1,1-DICHLOROETHANE		ND	0.50
1,2-DICHLOROETHANE		ND	0.50
1,1-DICHLOROETHENE		12	0.20
TRANS-1,2-DICHLOROETHENE		ND	0.50
1,2-DICHLOROPROPANE		ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50
ETHYL BENZENE		1.1	0.50
METHYLENE CHLORIDE		2.9	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50
TETRACHLOROETHENE		ND	0.50
TOLUENE		14	0.50
1,1,1-TRICHLOROETHANE		ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50
TRICHLOROETHENE		11	0.50
TRICHLOROFLUOROMETHANE		ND	0.50
VINYL CHLORIDE		ND	1.0
XYLENES		7.2	0.50

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Laboratory Job No.: 915921

COMPOUNDS:	LAB#	42366	DET.
	SMP#	MSD	LIM.
	DIL.	1	
PURGEABLES		ug/L	

NOTE *: THE QUANTITY REPORTED IS FROM A RE-ANALYSIS OF THE SAMPLE AT A GREATER DILUTION.

NOTE: THE METHYLENE CHLORIDE IN SAMPLE TB-05 IS POSSIBLY FROM LAB CONTAMINATION.

NOTE: ND: NOT DETECTED

THE MATRIX SPIKE COMPOUNDS FOUND IN THE MBS, MS AND MSD SAMPLES WERE SPIKED AT THE FOLLOWING LEVELS:

5 COMPOUNDS AT 10 ug/L.

Gary Dickenson

91-6134

ACCULAB ENVIRONMENTAL SERVICES
3700 Lakeville Highway, Petaluma, CA 94952
P.O. Box 808024, Petaluma, CA, 94975-8024
Telephone: (707) 763-8245 FAX: (707) 763-4065

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name Dames + Moore Phone (916) 367-8800
Address 2801 Folsom Blvd. #200
City, State, Zip Sacramento CA 15826
Client's or Representative's Signature Gary Dickenson
(signature authorizes the work and terms listed below)

All samples remain the property of the client who is responsible for disposal. A disposal fee may be imposed if client fails to pick up samples.

PROJ. NO. 00173-064 -044
PROJECT NAME UPRR Sac.
SAMPLERS (Signature) Gary Dickenson

STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION	NO. OF CONTAINERS	601	602	As, Cr, Ni, Pb				REMARKS	LAB USE ONLY LAB NO.
MW-34	12/12/91	12:00		✓	MW-34	2	X						Please watch	
MW-35		11:15		✓	MW-35	2	X						the holding	
RB-10		10:40		✓	RB-10	2	X						times!	
MW-39	↓	13:00		✓	MW-39	2	X						Thanx	
MW-38	12/13/91	12:45		✓	MW-38	5	X	X	X					
FB-10		12:45		✓	FB-10	4	X	X						
MW-37		11:20		✓	MW-37	5	X	X	X					
MW-36		10:05		✓	MW-36	5	X	X	X					

Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
Gary Dickenson	12/13/91	15:35	
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)
	12-16-91	12:09	
Relinquished by: (Signature)	DATE	TIME	Received by: (Signature)

General Remarks:
Send results to sac. office
Attn: Mark Eisen
Please return icechest + blue ice !

LAB COPY

3700 Lakeville Highway, Petaluma, CA 94954
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Telephone: (707) 763-8245
FAX (707) 763-4065

Mark Eisen
Dames & Moore
8801 Folsom Blvd., Suite 200
Sacramento, CA 95826

Client Code: DAMM14
Survey # UPRR SAC
Project/Release # 00173-064-044

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 916134
Date Collected: 12/12/91
Date Received: 12/16/91
Date Analyzed: 12/26/91
Date Reported: 01/03/92

ASSAY:METAL SCAN BY ICP(EPA 6010)

LABNO	SMPLNO-ID	RESULTS		DET. LIM.
44243	MW-38 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
44245	MW-37 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
44246	MW-36 WATER		CA STLC LEVEL	
	NI	ND	20	0.10 mg/L
44247	MB WATER			
	NI	ND		0.10 mg/L
44248	MBS WATER			
	NI	0.51 mg/L		0.10 mg/L
44249	MX WATER			
	NI	ND		0.10 mg/L
44250	MS WATER			
	NI	0.51 mg/L		0.10 mg/L
44251	MSD WATER			
	NI	0.46 mg/L		0.10 mg/L

ND=Not Detected
NOTE: MBS, MS AND MSD WERE SPIKED AT 0.500 mg/L.

THIS REPORT HAS BEEN REVIEWI
AND APPROVED FOR RELEASE.
DL

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 916134
Date Collected: 12/12/91
Date Received: 12/16/91
Date Analyzed: 12/26/91
Date Reported: 01/03/92

ASSAY:
ARSENIC (EPA 7060),3020 ACID DIGEST
CHROMIUM (EPA 7191),3020 ACID DIGEST
LEAD (EPA 7421),3020 ACID DIGEST

MATRIX: WATER

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
44243	MW-38	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
44245	MW-37	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
44246	MW-36	AS	ND	5.0	0.005
		CR	ND	560	0.005
		PB	ND	5.0	0.001
44247	MB	AS	ND		0.005
		CR	ND		0.005
		PB	ND		0.001
				SPIKE LEVELS	
44248	MBS	AS	0.020	0.025 mg/L	0.005
		CR	0.022	0.025 mg/L	0.005
		PB	0.010	0.010 mg/L	0.001

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 916134

LABNO	SMPLNO	COMPOUND	FOUND mg/L	CA STLC LEV	DET.LIM. mg/L
44249	MX	AS	ND		0.005
		CR	0.011		0.005
		PB	ND		0.001
				SPIKE LEVELS	
44250	MS	AS	0.025	0.025 mg/L	0.005
		CR	0.037	0.025 mg/L	0.005
		PB	0.009	0.010 mg/L	0.001
				SPIKE LEVELS	
44251	MSD	AS	0.024	0.025 mg/L	0.005
		CR	0.039	0.025 mg/L	0.005
		PB	0.010	0.010 mg/L	0.001

DEKRA LABORATORIES
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L A B O R A T O R Y R E S U L T S

Date Collected: 12/12/91
Date Extracted: 12/19/91
Date Analyzed: 12/19/91

Laboratory Job No.: 916134
Date Received: 12/16/91
Date Reported: 01/03/92

ASSAY:
PURGEABLES IN WATER (EPA 601)

COMPOUNDS:	LAB#	44239	DET.	44240	DET.	44241	DET.
	SMP#	MW-34	LIM.	MW-35	LIM.	RB-10	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	0.8	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		2.3	0.50	1.9	0.50	8.0	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		28	0.50	2.8	0.50	ND	0.50
1,2-DICHLOROETHANE		1.7	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		318 *	2.50	92 *	2.50	ND	0.50
CIS-1,2-DICHLOROETHENE		0.6	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		5.0	0.50	4.9	0.50	1.2	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		1.4	0.50	0.7	0.50	0.7	0.50
1,1,1-TRICHLOROETHANE		18	0.50	2.6	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		1.1	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		26	0.50	2.6	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 916134

COMPOUNDS:	LAB#	44242	DET.	44243	DET.	44244	DET.
	SMP#	MW-39	LIM.	MW-38	LIM.	FB-10	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	1.0	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		2.4	0.50	2.2	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		4.9	0.50	4.2	0.50	12	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		1.2	0.50	9.1	0.50	ND	0.50
1,2-DICHLOROETHANE		2.5	0.50	4.0	0.50	ND	0.50
1,1-DICHLOROETHENE		3.2	0.50	260 *	2.50	ND	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		1.3	0.50	2.4	0.50	1.0	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		0.6	0.50	ND	0.50	0.6	0.50
1,1,1-TRICHLOROETHANE		1.0	0.50	13	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		ND	0.50	8.6	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 916134

COMPOUNDS:	LAB#	44245	DET.	44246	DET.	44247	DET.
	SMP#	MW-37	LIM.	MW-36	LIM.	MB	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		1.3	0.50	1.4	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		4.6	0.50	3.4	0.50	ND	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHANE		3.6	0.50	12	0.50	ND	0.50
1,2-DICHLOROETHANE		7.1	0.50	1.6	0.50	ND	0.50
1,1-DICHLOROETHENE		9.3	0.50	290 *	2.50	ND	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		1.9	0.50	3.2	0.50	ND	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		0.6	0.50	0.7	0.50	0.5	0.50
1,1,1-TRICHLOROETHANE		1.0	0.50	15	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		0.6	0.50	8.8	0.50	ND	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 916134

COMPOUNDS:	LAB#	44248	DET.	44249	DET.	44250	DET.
	SMP#	MBS	LIM.	MX	LIM.	MS	LIM.
	dil.	1		1		1	
PURGEABLES		ug/L		ug/L		ug/L	
BROMODICHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
BROMOFORM		ND	0.50	ND	0.50	ND	0.50
BROMOMETHANE		ND	1.0	ND	1.0	ND	1.0
CARBON TETRACHLORIDE		ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		9.0	0.50	ND	0.50	9.5	0.50
CHLOROETHANE		ND	1.0	ND	1.0	ND	1.0
CHLOROFORM		ND	0.50	ND	0.50	ND	0.50
CHLOROMETHANE		ND	1.0	ND	1.0	ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		9.6	0.50	ND	0.50	11	0.50
1,2-DICHLOROBENZENE		9.7	0.50	ND	0.50	9.9	0.50
1,1-DICHLOROETHANE		11	0.50	ND	0.50	11	0.50
1,2-DICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROPROPANE		ND	0.50	ND	0.50	ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50	ND	0.50	ND	0.50
METHYLENE CHLORIDE		6.3	0.50	ND	0.50	7.0	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TETRACHLOROETHENE		0.8	0.50	0.5	0.50	0.5	0.50
1,1,1-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50	ND	0.50	ND	0.50
TRICHLOROETHENE		12	0.50	ND	0.50	12	0.50
TRICHLOROFLUOROMETHANE		ND	1.0	ND	1.0	ND	1.0
VINYL CHLORIDE		ND	1.0	ND	1.0	ND	1.0

D&M LABORATORIES
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L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 916134

COMPOUNDS:	LAB#	44251	DET.
	SMP#	MSD	LIM.
	dil.	1	
PURGEABLES		ug/L	
BROMODICHLOROMETHANE		ND	0.50
BROMOFORM		ND	0.50
BROMOMETHANE		ND	1.0
CARBON TETRACHLORIDE		ND	0.50
CHLOROBENZENE		9.7	0.50
CHLOROETHANE		ND	1.0
CHLOROFORM		ND	0.50
CHLOROMETHANE		ND	1.0
DIBROMOCHLOROMETHANE		ND	0.50
1,4-DICHLOROBENZENE		ND	0.50
1,3-DICHLOROBENZENE		12	0.50
1,2-DICHLOROBENZENE		9.7	0.50
1,1-DICHLOROETHANE		12	0.50
1,2-DICHLOROETHANE		ND	0.50
1,1-DICHLOROETHENE		ND	0.50
CIS-1,2-DICHLOROETHENE		ND	0.50
TRANS-1,2-DICHLOROETHENE		ND	0.50
1,2-DICHLOROPROPANE		ND	0.50
CIS-1,3-DICHLOROPROPENE		ND	0.50
TRANS-1,3-DICHLOROPROPENE		ND	0.50
METHYLENE CHLORIDE		7.0	0.50
1,1,2,2-TETRACHLOROETHANE		ND	0.50
TETRACHLOROETHENE		0.5	0.50
1,1,1-TRICHLOROETHANE		ND	0.50
1,1,2-TRICHLOROETHANE		ND	0.50
TRICHLOROETHENE		13	0.50
TRICHLOROFLUOROMETHANE		ND	1.0
VINYL CHLORIDE		ND	1.0

NOTES: MBS, MS AND MSD WERE SPIKED AT 10 ug/L.

SPIKING COMPOUNDS ARE: CHLOROBENZENE, 1,2- and 1,3-DICHLOROBENZENE, 1,1-DICHLOROETHANE AND TRICHLOROETHENE.

D&M LABORATORIES
ENVIRONMENTAL AND INDUSTRIAL HYGIENE SERVICES

3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 916134

COMPOUNDS:	LAB# 44251	DET.
	SMP# MSD	LIM.
	dil. 1	
PURGEABLES	ug/L	

PRESENCE OF METHYLENE CHLORIDE AND TETRACHLOROETHENE MAY BE DUE TO LABORATORY CONTAMINATION.

* 1,1-DICHLOROETHENE WAS QUANTITATED FROM A SEPARATE ANALYSIS AT A DILUTION IN ORDER TO BE WITHIN LINEAR RANGE OF THE INSTRUMENT.

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FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Date Collected: 12/12/91
Date Extracted: 12/19/91
Date Analyzed: 12/19/91

Laboratory Job No.: 916134
Date Received: 12/16/91
Date Reported: 01/03/92

ASSAY:
PURGEABLE AROMATICS IN WATER (EPA 5030/602)

COMPOUNDS:	LAB#	44243	DET.	44244	DET.	44245	DET.	44246	DET.
	SMP#	MW-38	LIM.	FB-10	LIM.	MW-37	LIM.	MW-36	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
CHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,2-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,3-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
XYLENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50

COMPOUNDS:	LAB#	44247	DET.	44248	DET.	44249	DET.	44250	DET.
	SMP#	MB	LIM.	MBS	LIM.	MX	LIM.	MS	LIM.
	dil.	1		1		1		1	
PURGEABLES		ug/L		ug/L		ug/L		ug/L	
BENZENE		ND	0.50	8.3	0.50	ND	0.50	9.2	0.50
CHLOROBENZENE		ND	0.50	8.4	0.50	ND	0.50	9.4	0.50
1,2-DICHLOROBENZENE		ND	0.50	9.0	0.50	ND	0.50	10	0.50
1,3-DICHLOROBENZENE		ND	0.50	8.7	0.50	ND	0.50	9.8	0.50
1,4-DICHLOROBENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
ETHYL BENZENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
TOLUENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50
XYLENE		ND	0.50	ND	0.50	ND	0.50	ND	0.50

ENVIRONMENTAL AND
INDUSTRIAL HYGIENE SERVICES

3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
FAX (707) 763-4065

L A B O R A T O R Y R E S U L T S

Laboratory Job No.: 916134

COMPOUNDS:	LAB#	44251	DET.
	SMP#	MSD	LIM.
	dil.	1	
PURGEABLES		ug/L	
BENZENE		9.2	0.50
CHLOROBENZENE		9.4	0.50
1,2-DICHLOROBENZENE		10	0.50
1,3-DICHLOROBENZENE		10	0.50
1,4-DICHLOROBENZENE		ND	0.50
ETHYL BENZENE		ND	0.50
TOLUENE		ND	0.50
XYLENE		ND	0.50

NOTE: MBS, MS AND MSD WERE SPIKED AT 10 ug/L.

SPIKING COMPOUNDS ARE: BENZENE, CHLOROBENZENE, 1,2- and 1,3-DICHLOROBENZENE.

Attachment

3

ATTACHMENT 3

SLUG TEST RESULTS

Slug tests were conducted at seven well, MW-34, 35, 39, 40, 41, 42, and 43 located both on- and off-site from the Union Pacific Railroad's Sacramento Railyard. All of the wells are four-inch diameter PVC, blank casing and continuous wrap stainless steel screen (0.01 or 0.02 in slot size). The screened interval varies in depth from 37 feet to 116 feet below ground surface. Wells were slug tested following procedures outlined in the Off-site Groundwater Monitoring Well Installations Work Plan (Dames & Moore, 1991). Wells MW-34, 35, 39, 42, and 43 are screened in the shallow aquifer zone, while MW-40 is screened in the second aquifer zone and MW-41 is screened in the third aquifer zone.

Values of hydraulic conductivity (K) were determined using the Bouwer and Rice Method (1976) for fully or partially penetrating wells in an unconfined aquifer. Analyses were completed using computer software that utilizes regression based on the Bouwer and Rice Method. This method may also be applied to confined aquifers (Bouwer, 1989) and was used to analyze the data from MW-40 and 41. Results of the slug tests are shown in the attached summary table. The attached plots show changes in head versus time for each test. Estimated values of K range from 1.8×10^{-4} ft/sec (5.5×10^{-4} to 2.2×10^{-2} cm/sec).

The results of the slug tests show that the estimates of K vary by an order of magnitude. The lower estimates of K are for wells MW-42 and 43 which are screened in the finer material that overlies the sand channel while the estimates of K for the other five wells, either screened in the shallow zone or below the shallow zone, are fairly similar.

References

Bower, H., 1989, The Bouwer and Rice Slug Test - An Update, Groundwater, Vol. 27, No. 3., pgs. 304 - 309.

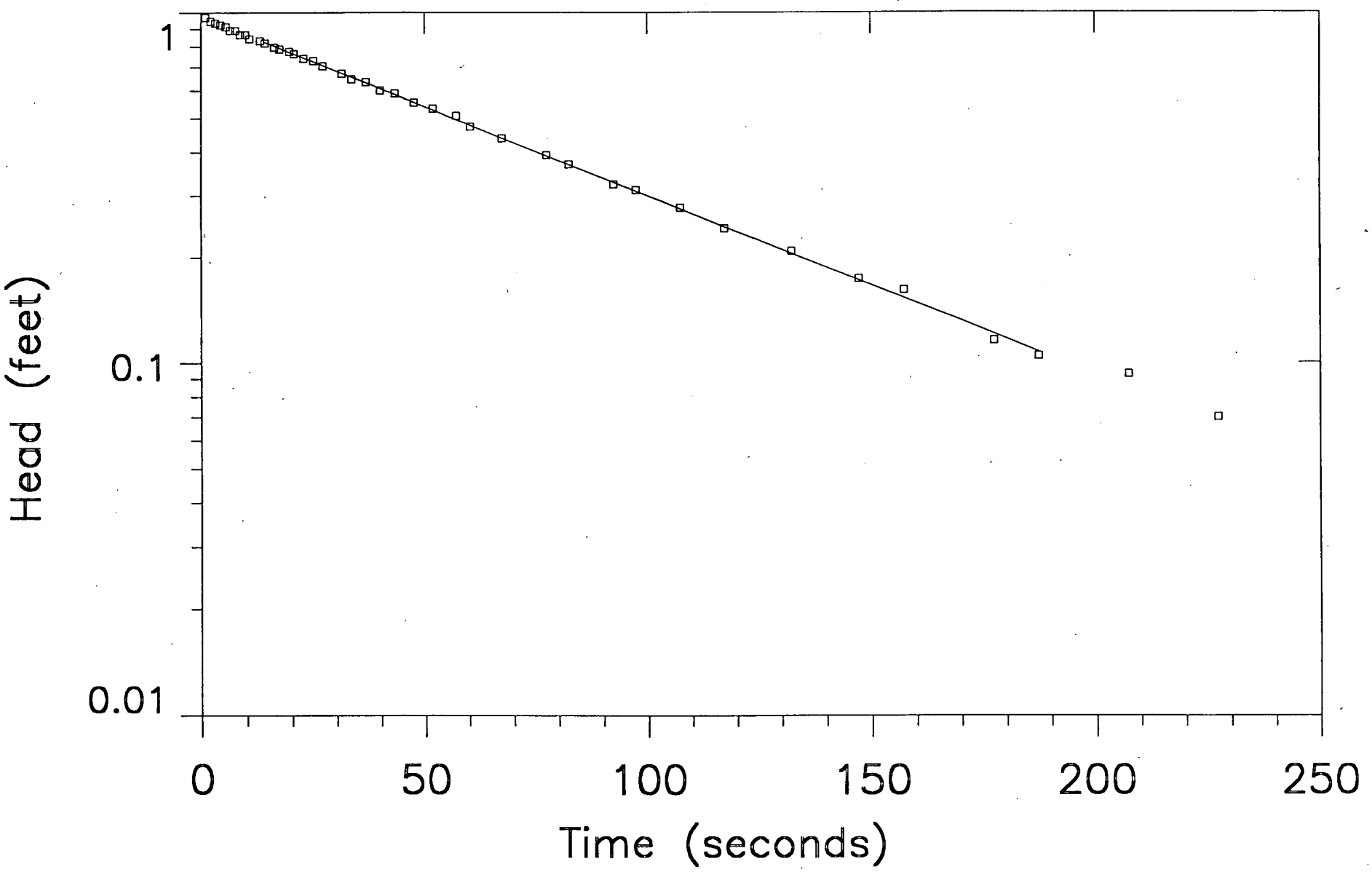
Bouwer, H. and R.C. Rice, 1976, A Slug Test for Determining Hydraulic Conductivity of Unconfirmed Aquifers with Completely or Partially Penetrating Wells, Water Resources Research, Vol. 12, No. 3, pps. 423-428.

SUMMARY OF SLUG TEST RESULTS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

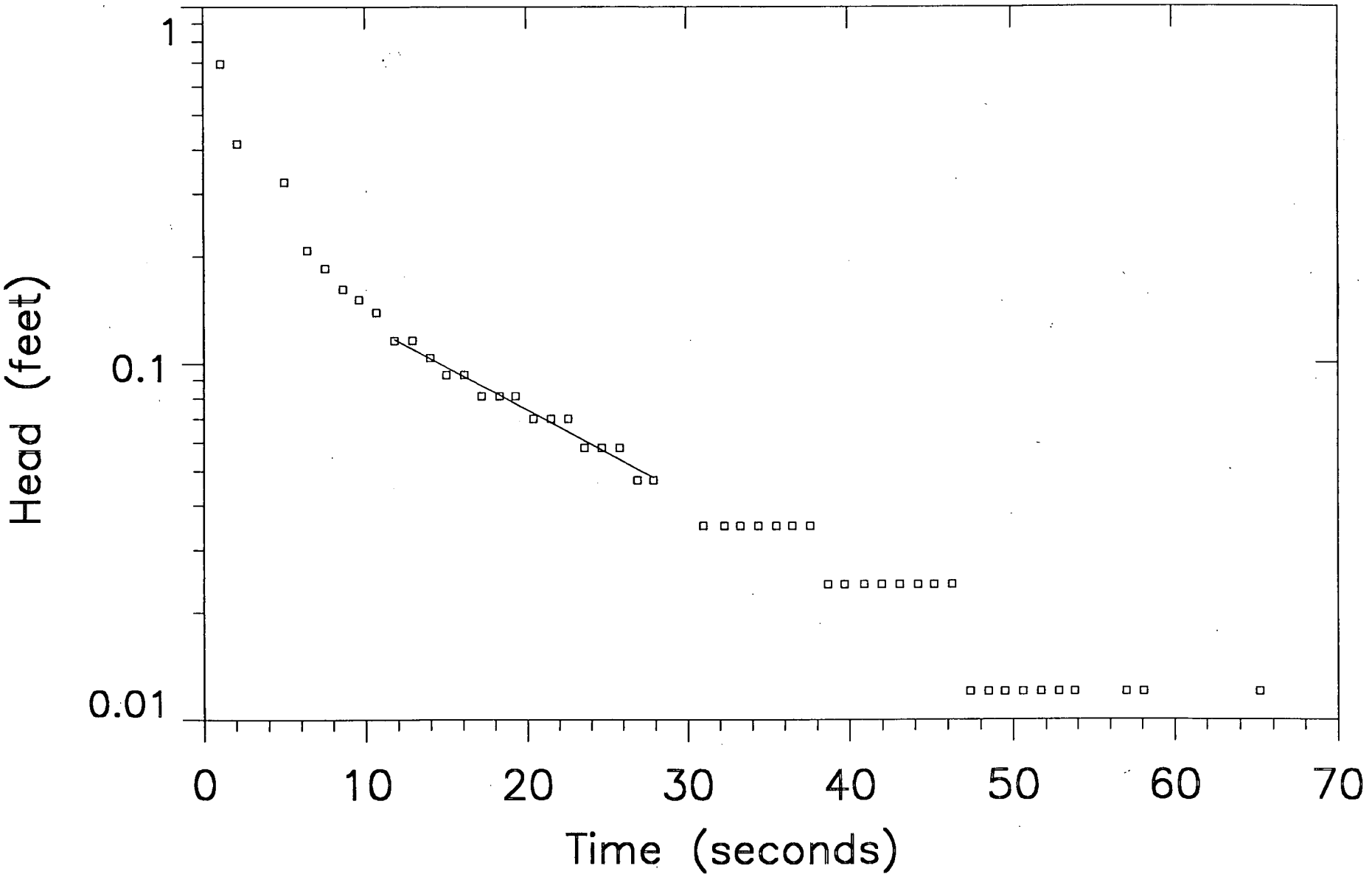
Well	Depth (ft)	Perforated Interval (ft)	Depth to[1] Water (ft)	Aquifer Thickness (ft)	Casing Radius (ft)	Borehole Radius (ft)	Hydraulic Conductivity (ft/sec)	
							Falling Head	Rising Head
MW-34	62	56-61	33.0	25	0.167	0.42	—	9.1×10^{-5}
MW-35	44	27-42	33.1	25	0.167	0.42	2.0×10^{-4}	1.3×10^{-4}
MW-39	49	33-48	38.2	15	0.167	0.42	6.8×10^{-5}	7.2×10^{-4}
MW-40	83	72.5-82.5	33.1	10	0.167	0.42	—	2.8×10^{-4}
MW-41	115.5	104.5-114.5	32.2	10	0.167	0.42	3.1×10^{-4}	—
MW-42	37	20.5-35.5	29.4	25	0.167	0.42	3.1×10^{-5}	3.8×10^{-5}
MW-43	37	20-35	27.8	25	0.167	0.42	1.7×10^{-5}	1.8×10^{-5}

[1] Measured from top of PVC casing.

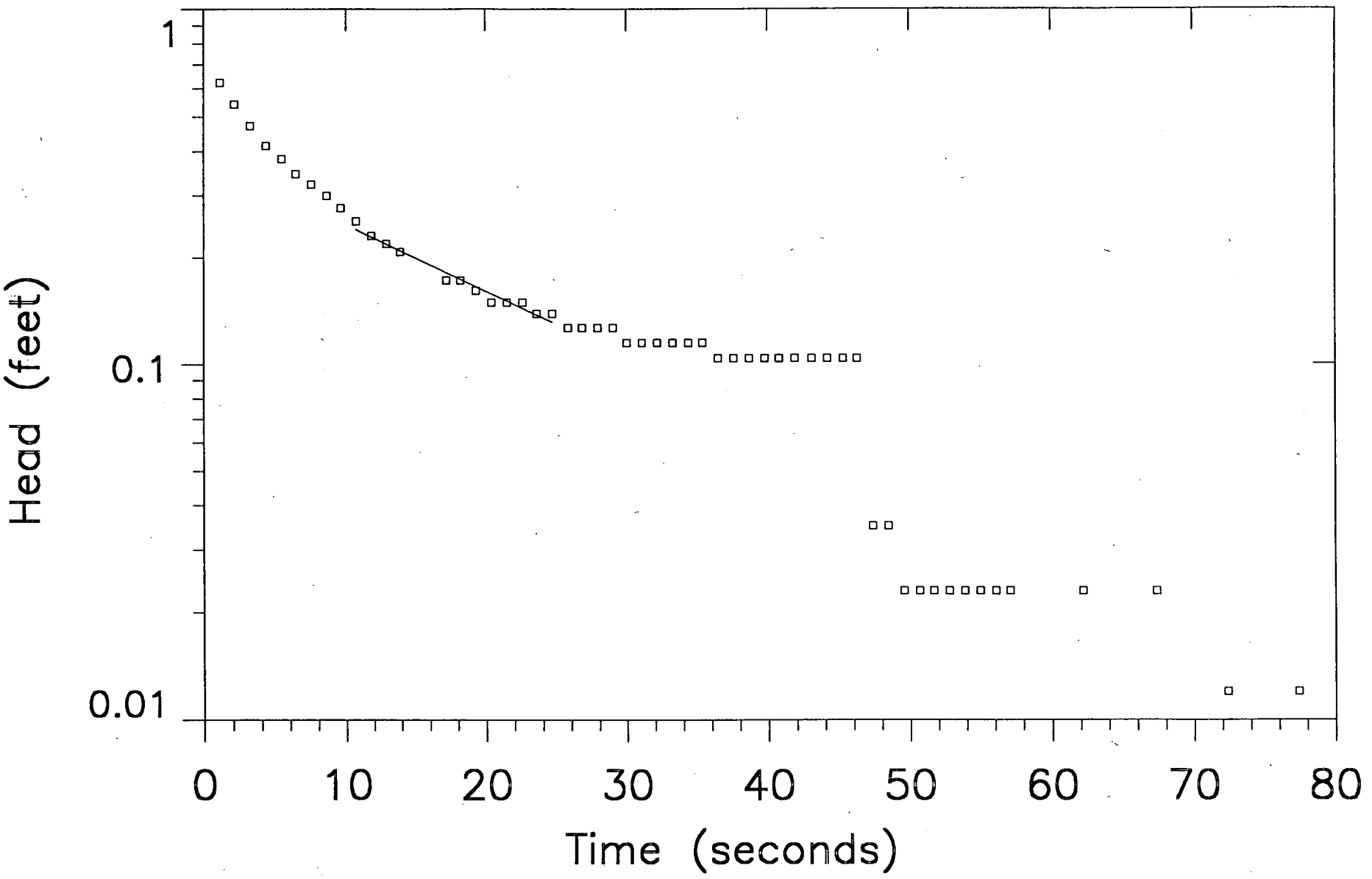
MW34RH



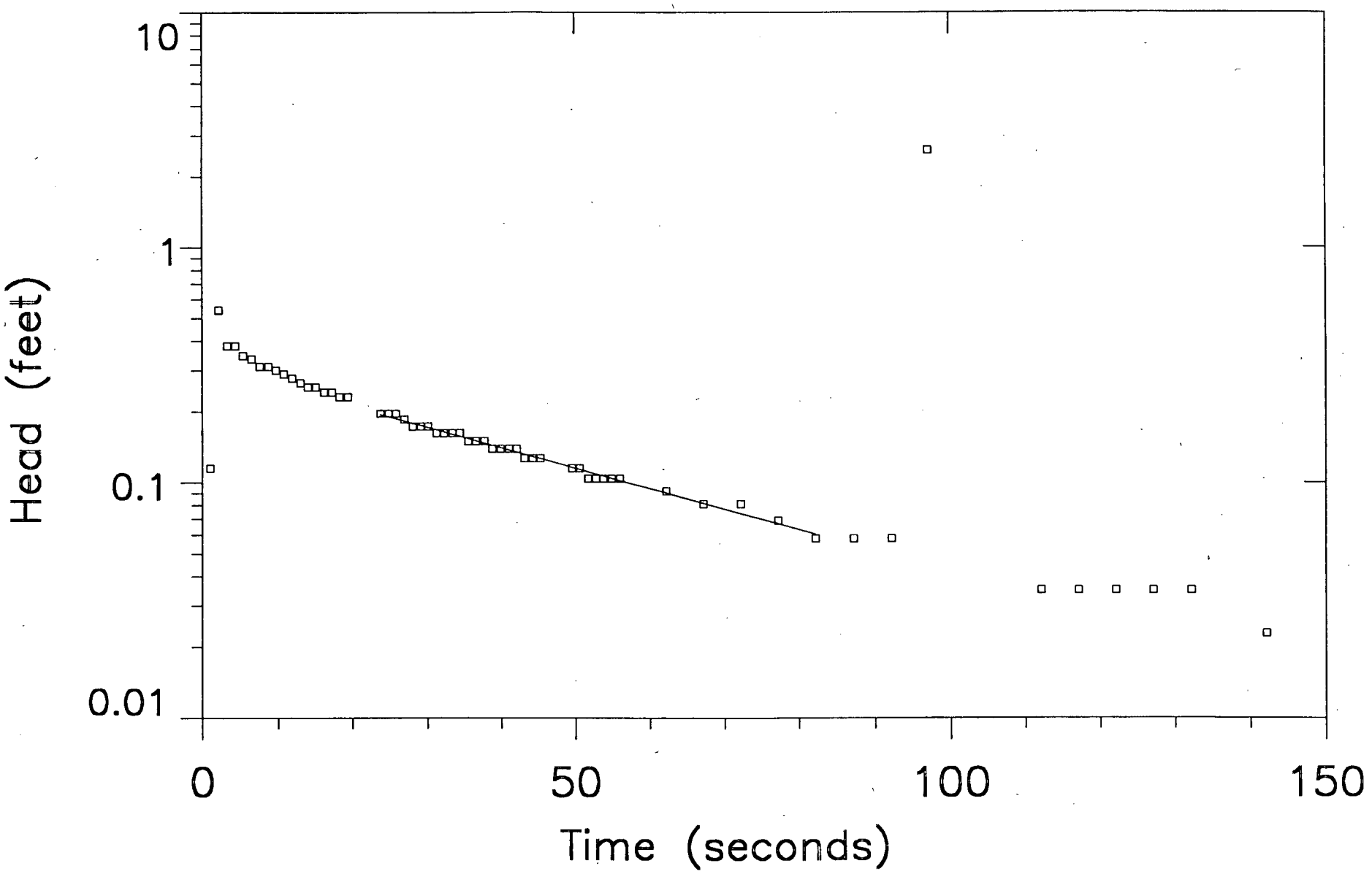
MW35FH



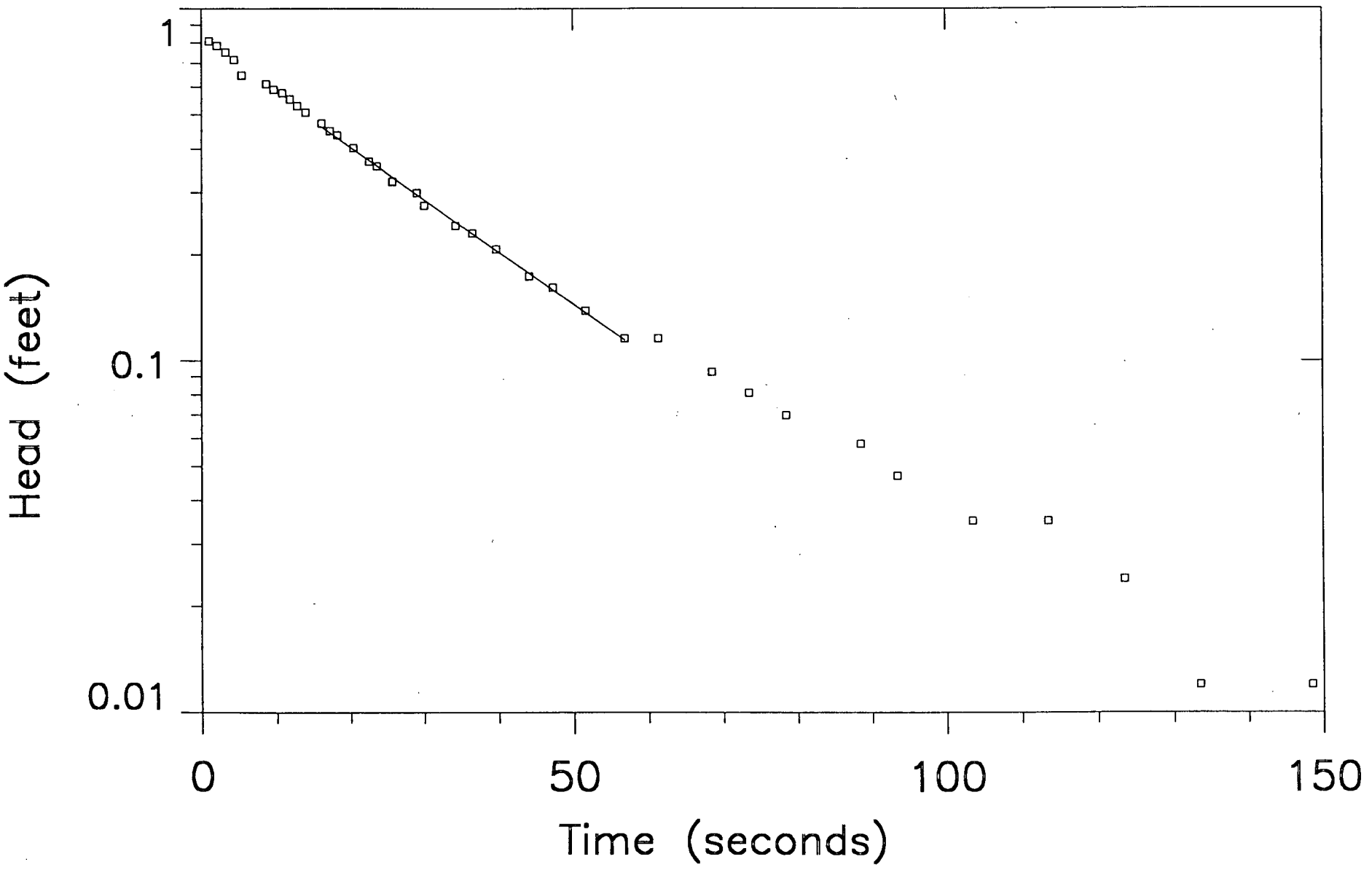
MW35RH



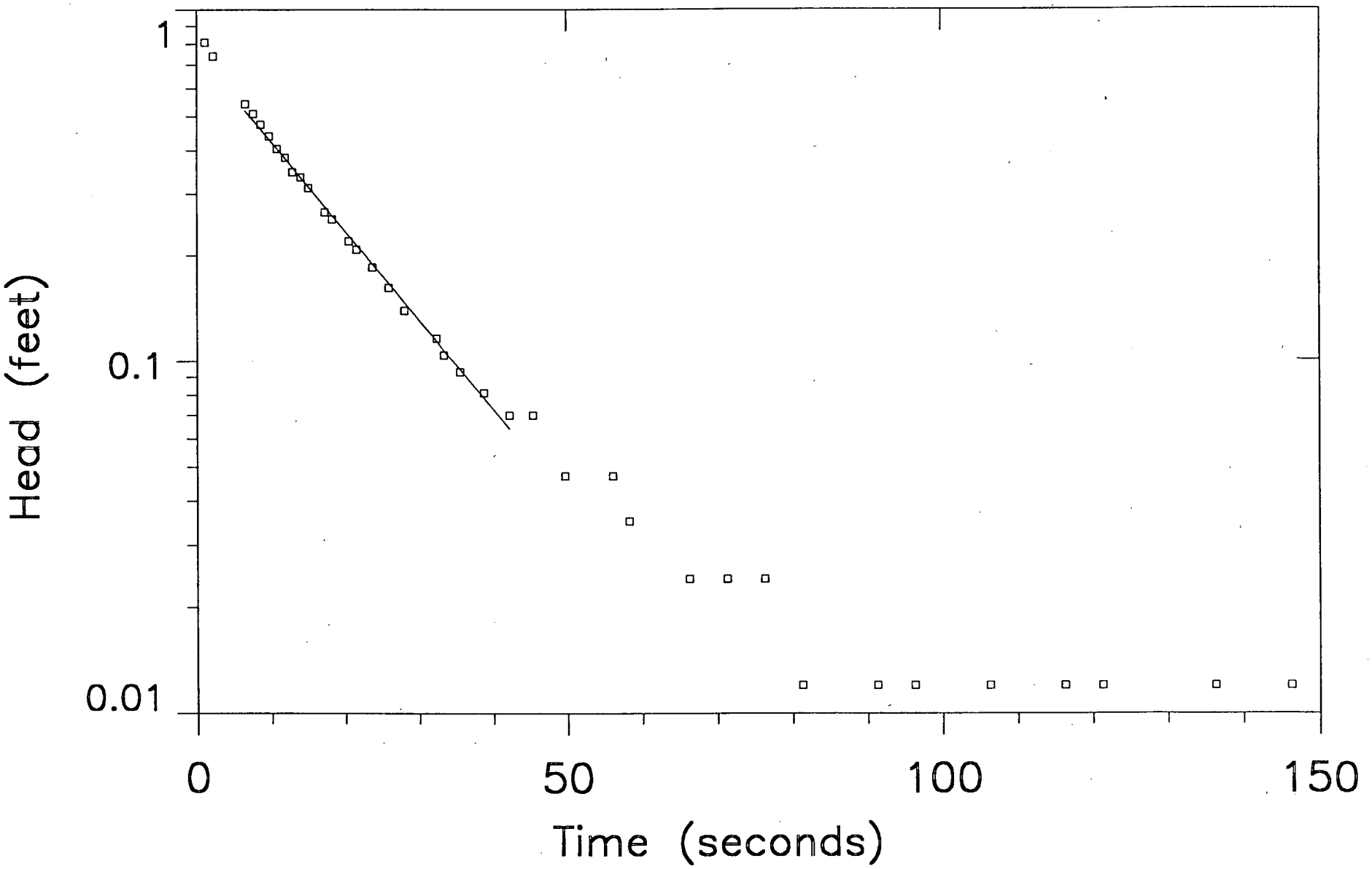
MW39FH



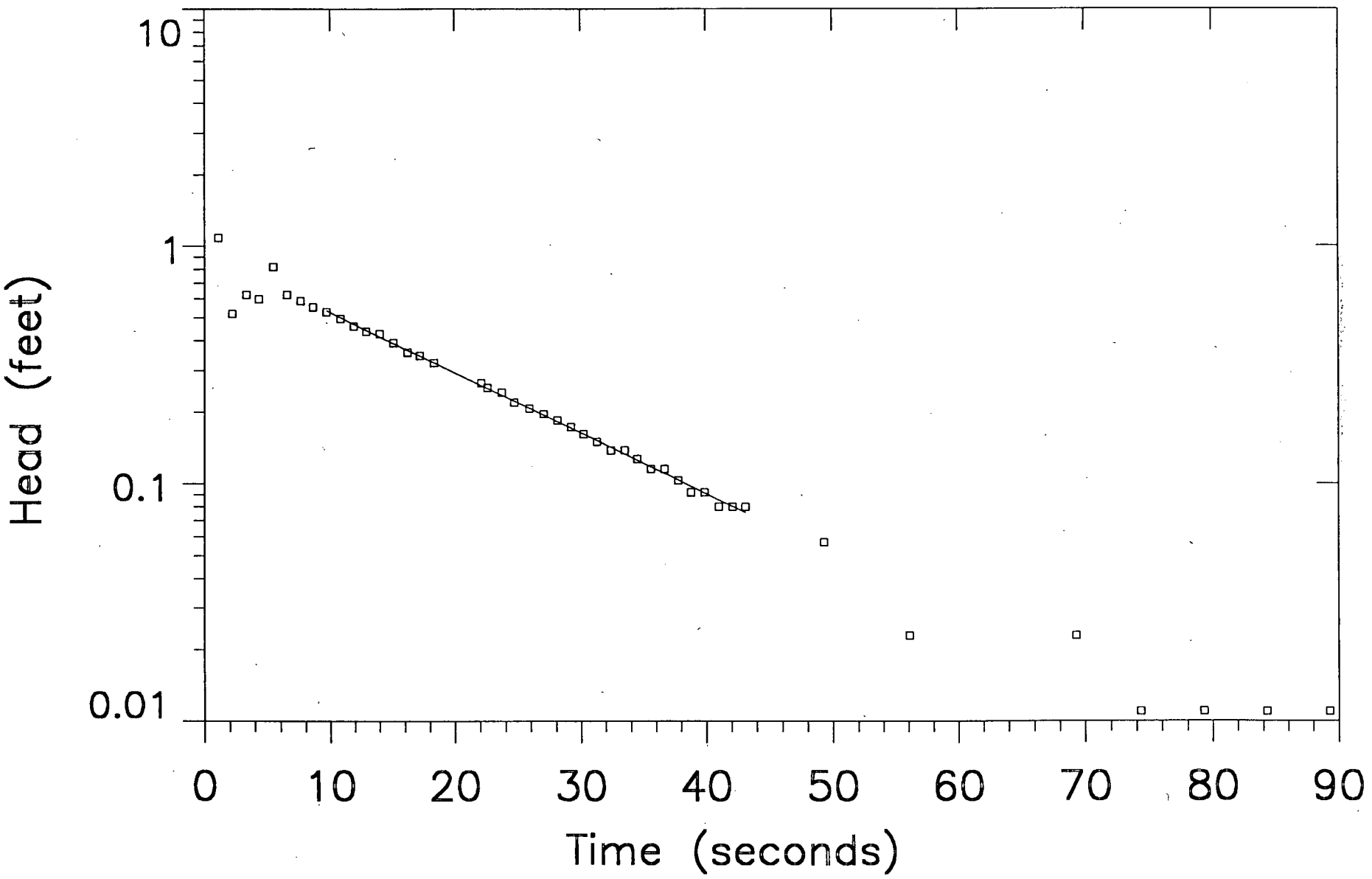
MW39RH



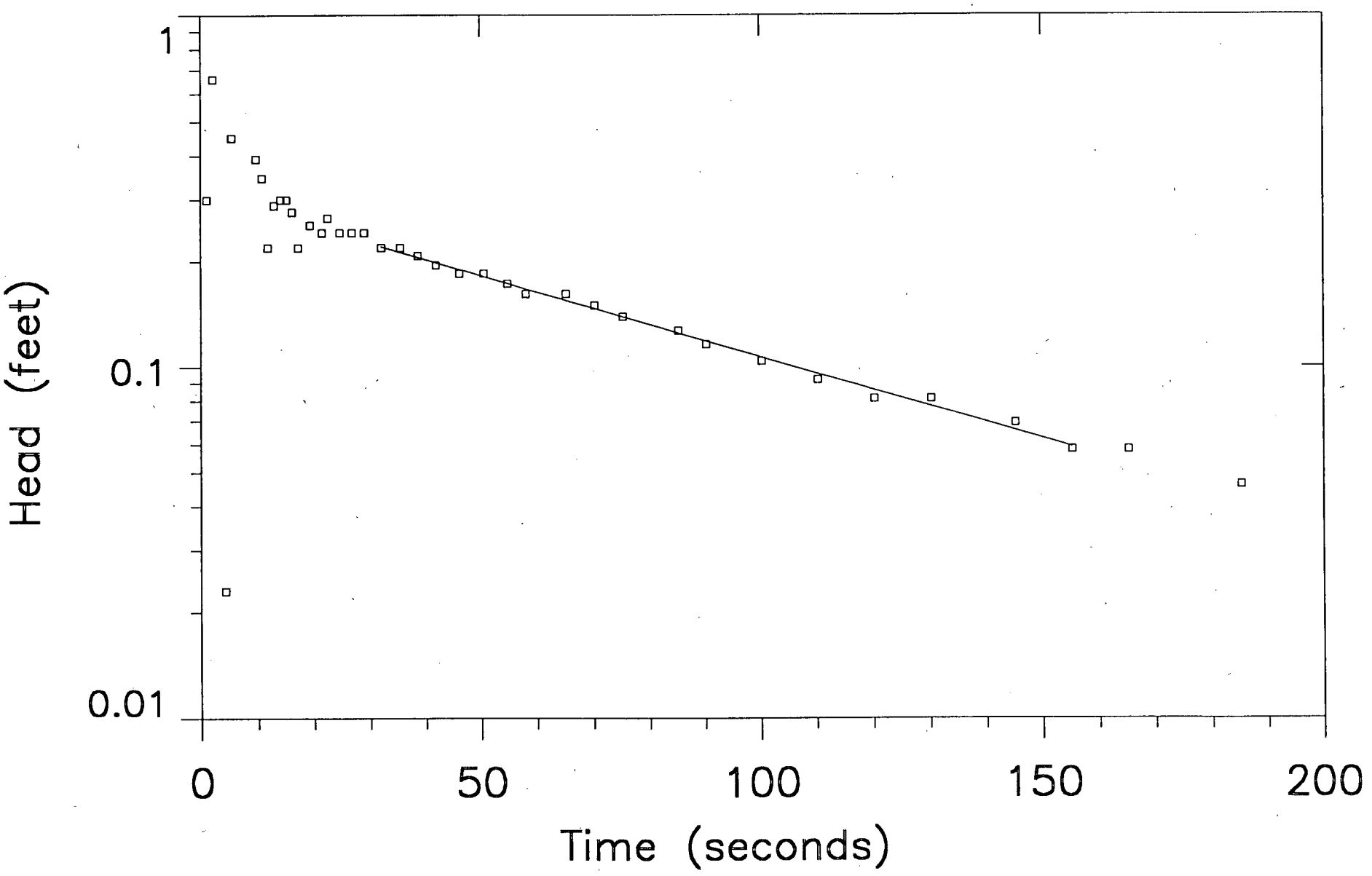
MW40RH



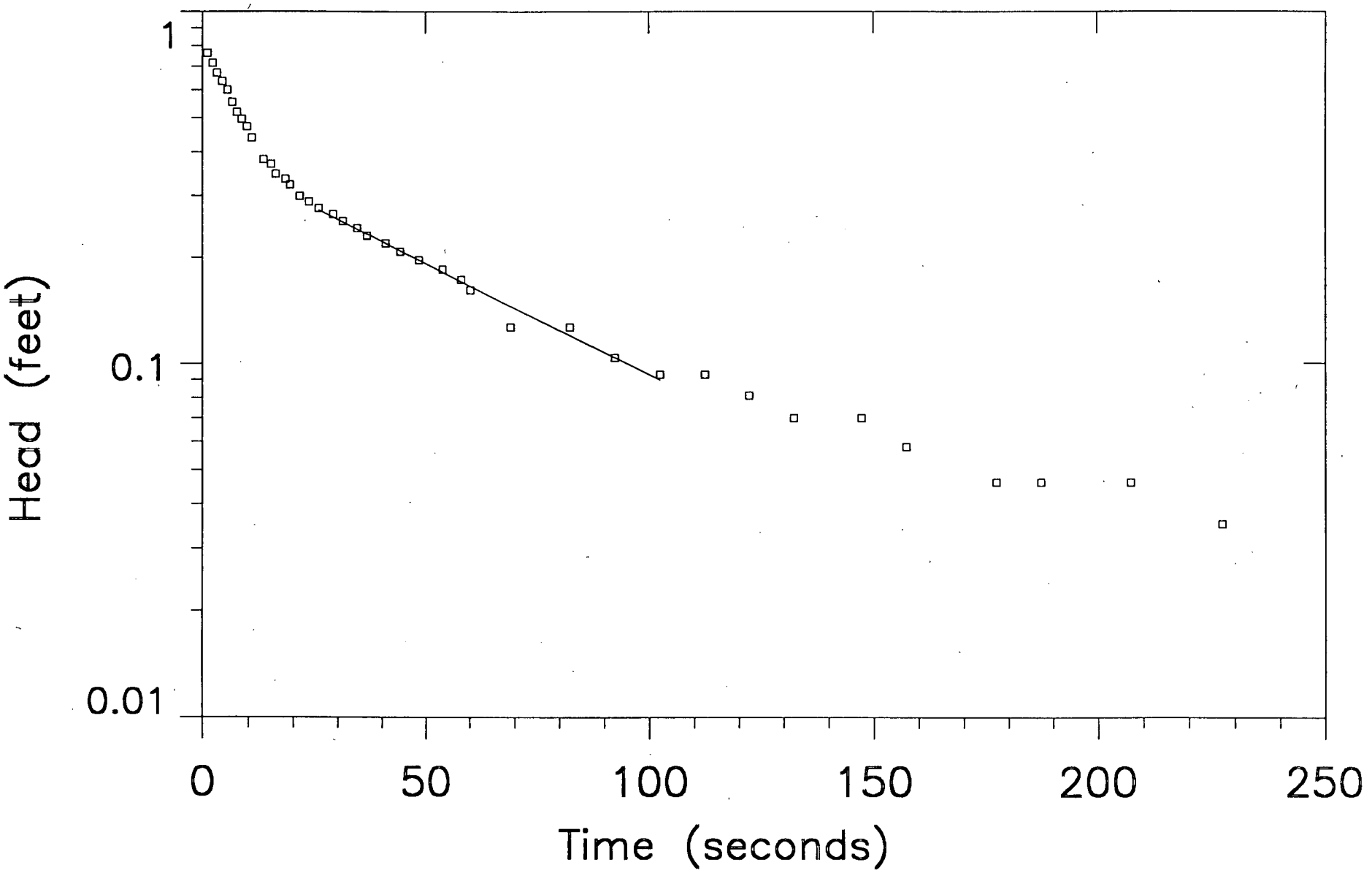
MW41FH



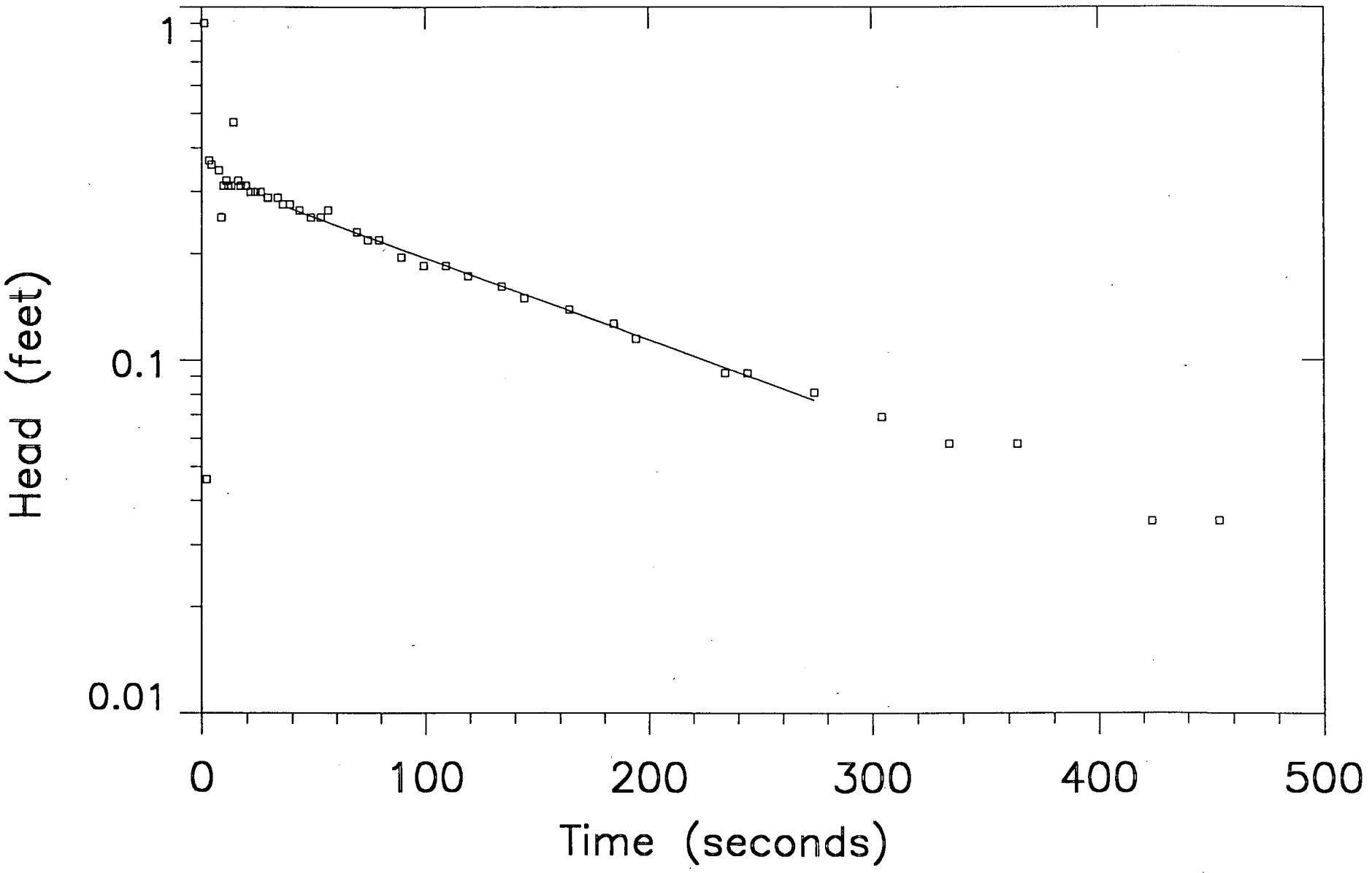
MW42FH



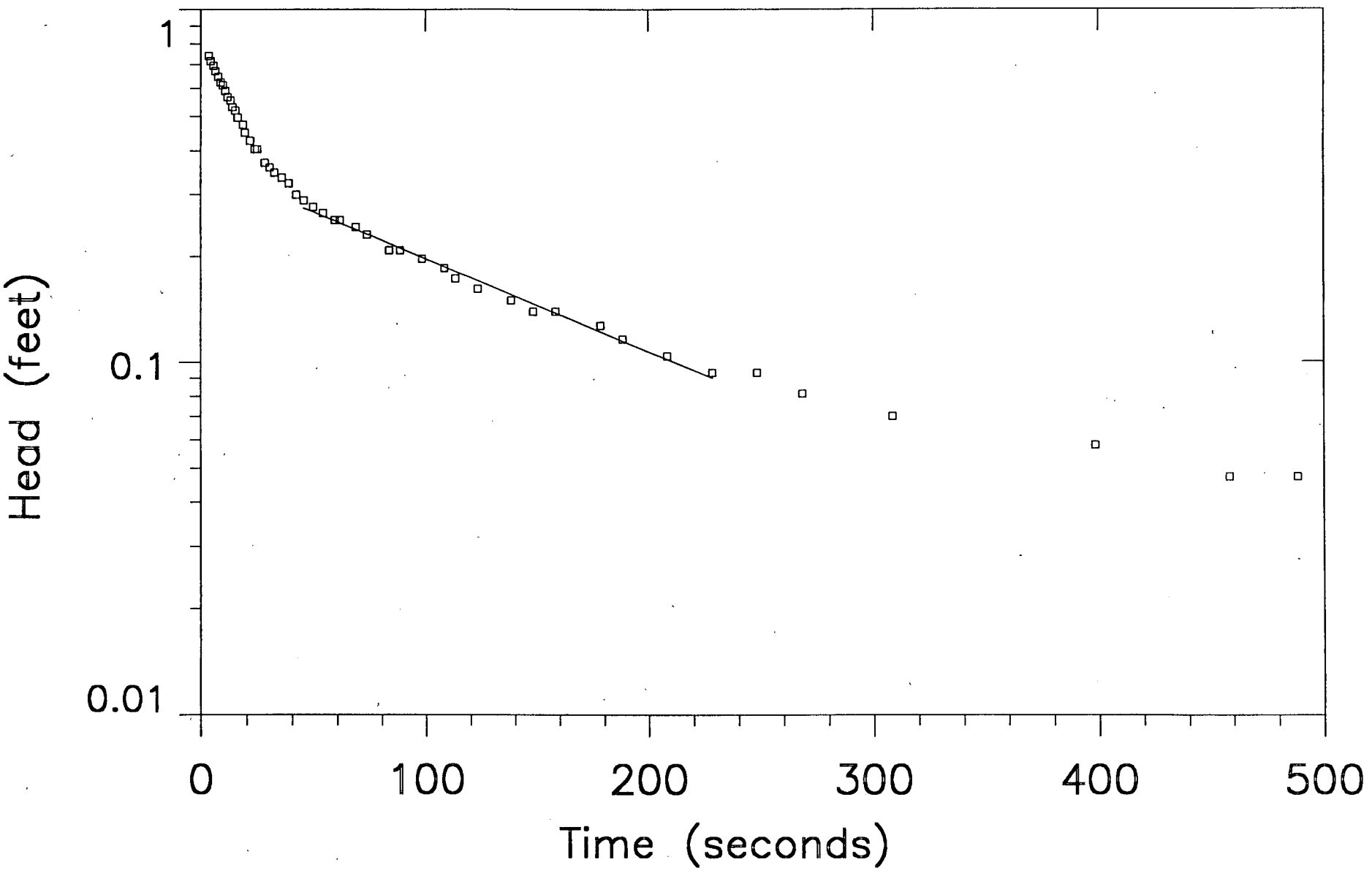
MW42RH



MW43FH



MW43RH



Attachment

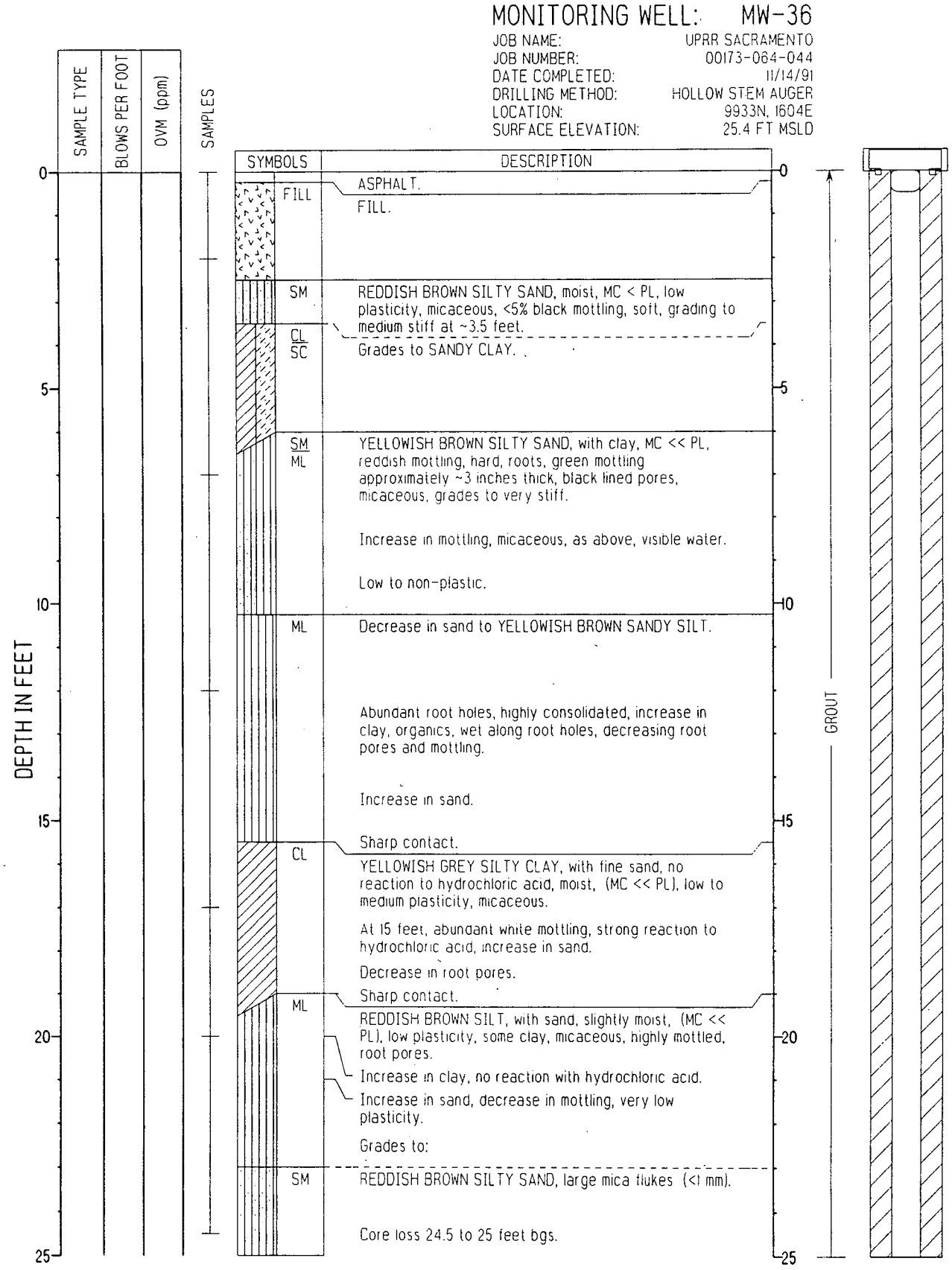
4

ATTACHMENT 4

WELL COMPLETION AND GEOPHYSICAL LOGS

MONITORING WELL: MW-36

JOB NAME:	UPRR SACRAMENTO
JOB NUMBER:	00173-064-044
DATE COMPLETED:	11/14/91
DRILLING METHOD:	HOLLOW STEM AUGER
LOCATION:	9933N, 1604E
SURFACE ELEVATION:	25.4 FT MSLD

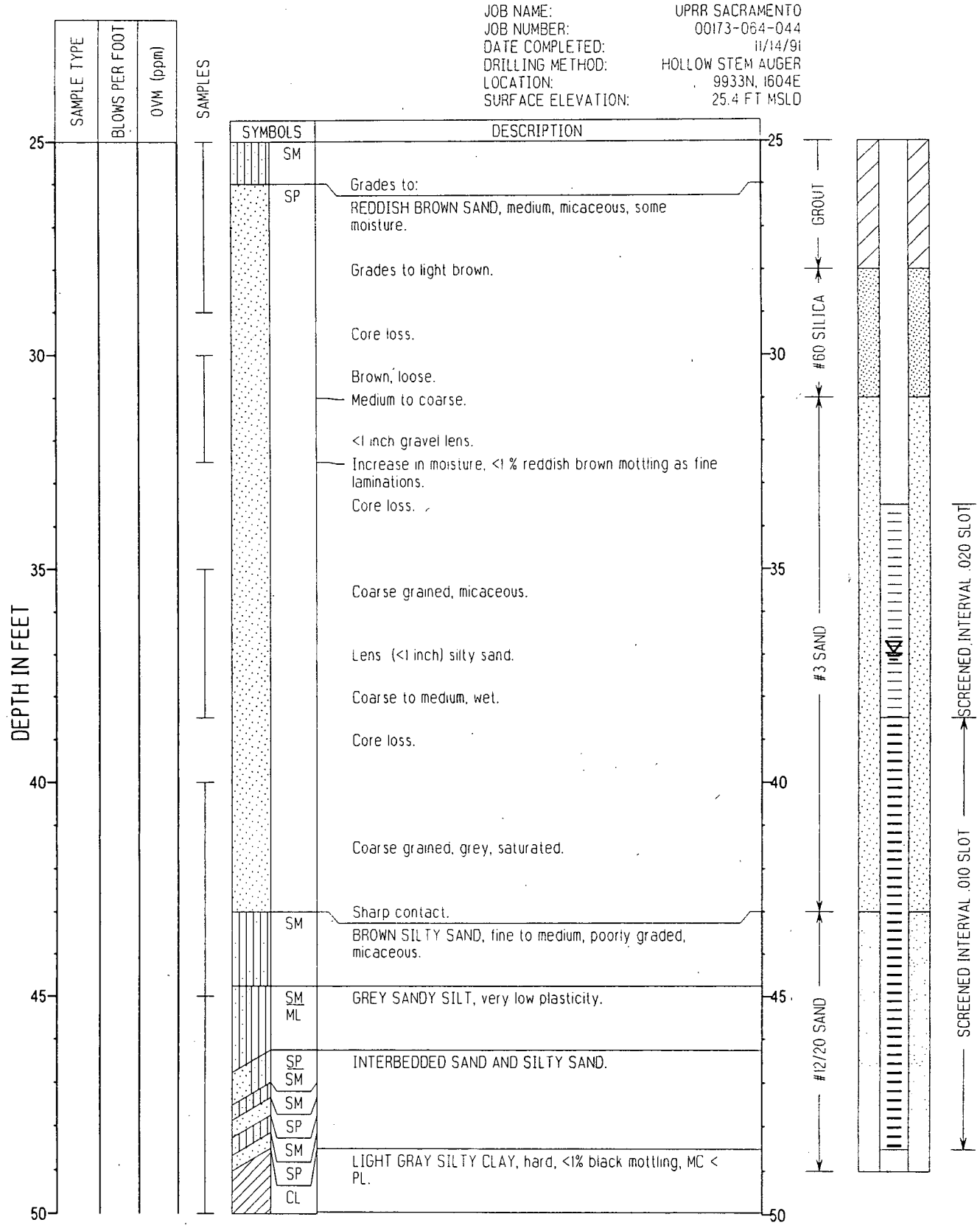


WELL LOG

DAMES & MOORE

MONITORING WELL: MW-36

JOB NAME:	UPRR SACRAMENTO
JOB NUMBER:	00173-064-044
DATE COMPLETED:	11/14/91
DRILLING METHOD:	HOLLOW STEM AUGER
LOCATION:	9933N, 1604E
SURFACE ELEVATION:	25.4 FT MSLD



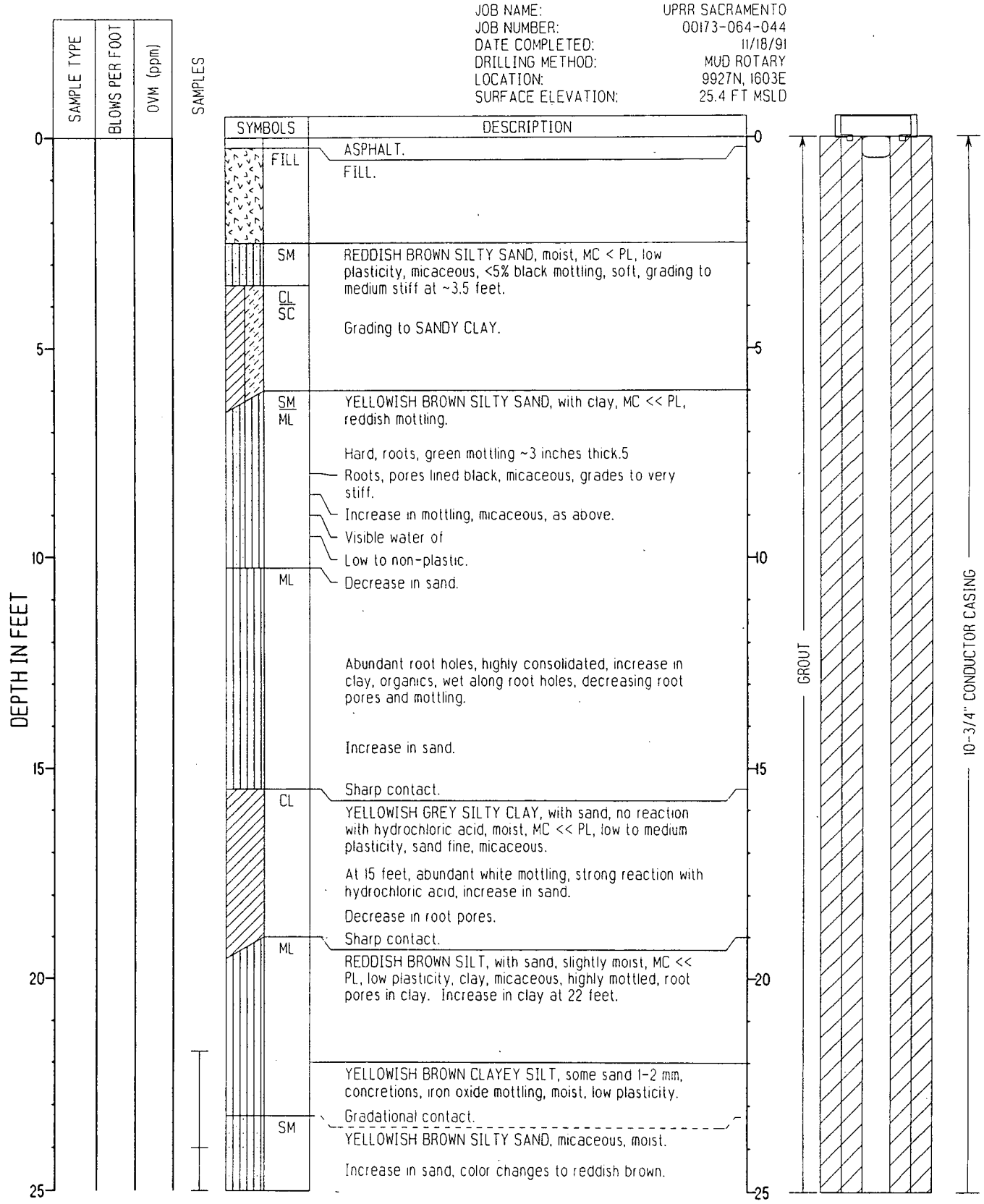
NOTES:
1) BORING COMPLETED TO 50 FEET BELOW GROUND SURFACE (BGS) USING HOLLOW STEM AUGER AND CONTINUOUS CORE ON 11/14/91.
2) MONITORING WELL COMPLETED ON 5/15/91. 4" SCHEDULE 40 PVC CASING INSTALLED TO 33.5 FEET BGS. STAINLESS STEEL CONTINUOUS WRAP SCREEN (0.020 INCH SLOT SIZE) INSTALLED FROM 33.5 TO 48.5 FEET BGS AND (0.010 INCH SLOT SIZE) FROM 38.5 TO 48.5 FEET BGS. COMPLETED WITH A FLUSH MOUNT SURFACE VAULT.

WELL LOG

DAMES & MOORE

MONITORING WELL: MW-37

JOB NAME:	UPRR SACRAMENTO
JOB NUMBER:	00173-064-044
DATE COMPLETED:	11/18/91
DRILLING METHOD:	MUD ROTARY
LOCATION:	9927N, 1603E
SURFACE ELEVATION:	25.4 FT MSLD

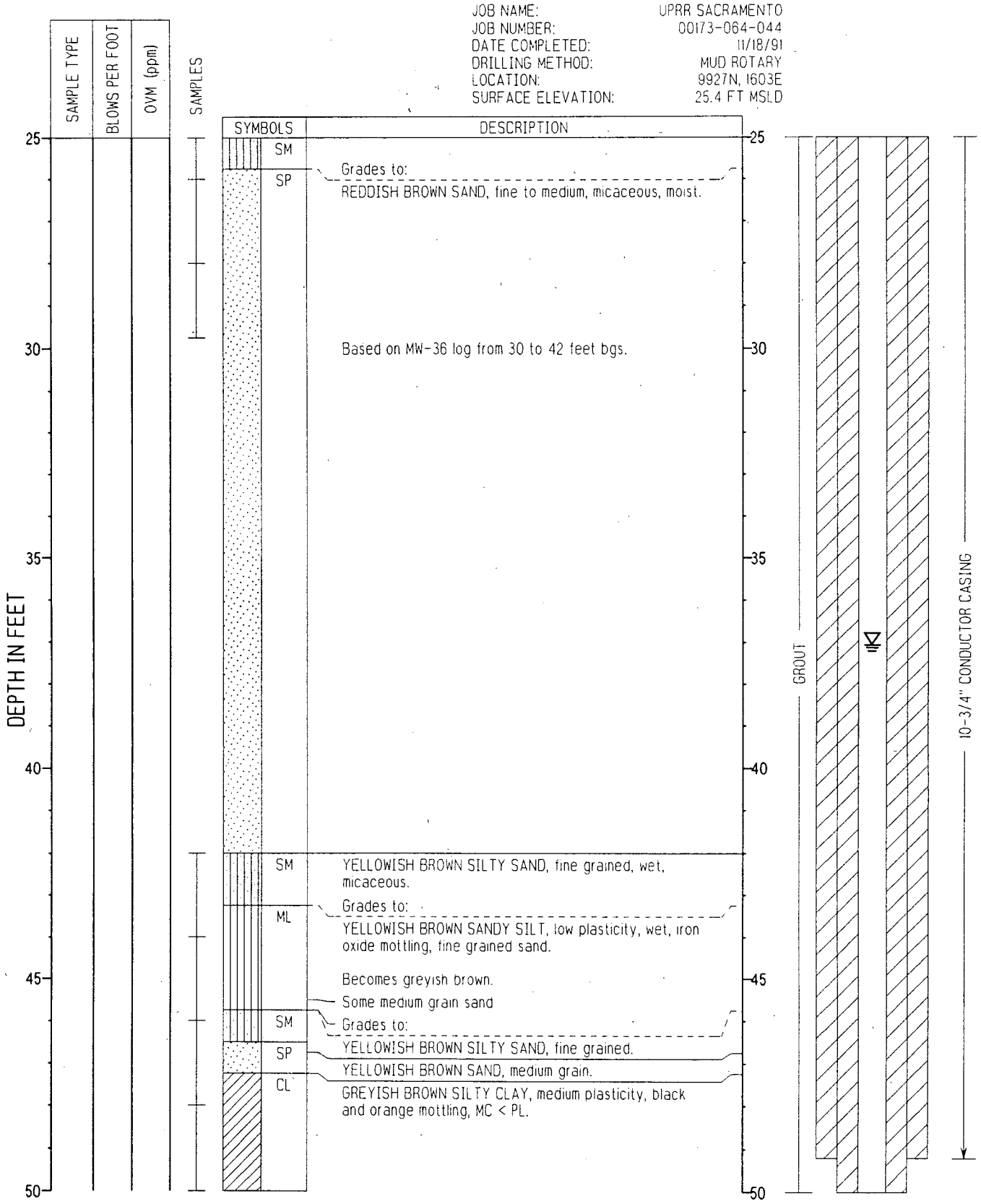


WELL LOG

DAMES & MOORE

MONITORING WELL: MW-37

JOB NAME:	UPRR SACRAMENTO
JOB NUMBER:	00173-064-044
DATE COMPLETED:	11/18/91
DRILLING METHOD:	MUD ROTARY
LOCATION:	9927N, 1603E
SURFACE ELEVATION:	25.4 FT MSLD

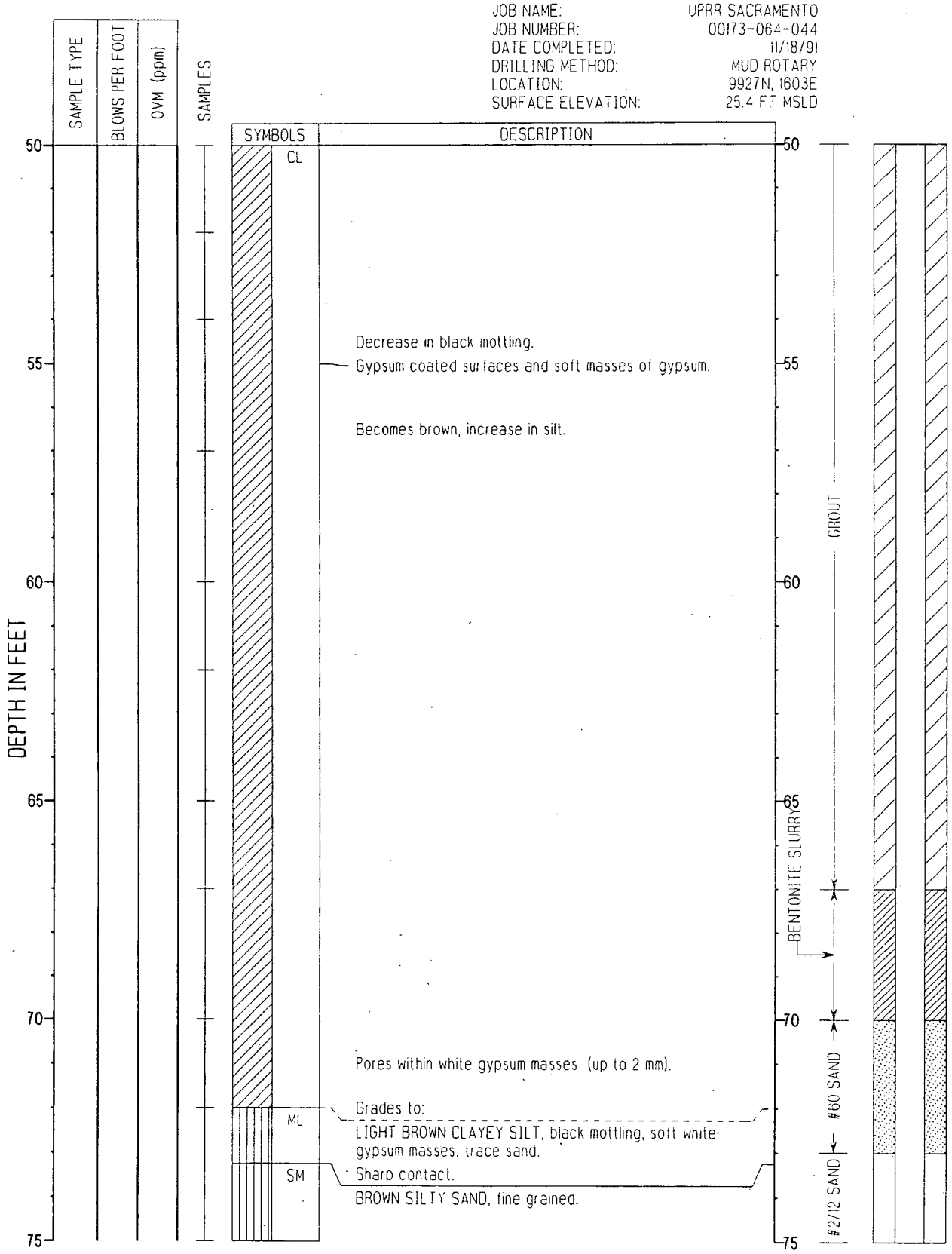


WELL LOG

DAMES & MOORE

MONITORING WELL: MW-37

JOB NAME:	UPRR SACRAMENTO
JOB NUMBER:	00173-064-044
DATE COMPLETED:	11/18/91
DRILLING METHOD:	MUD ROTARY
LOCATION:	9927N, 1603E
SURFACE ELEVATION:	25.4 F.T MSLD

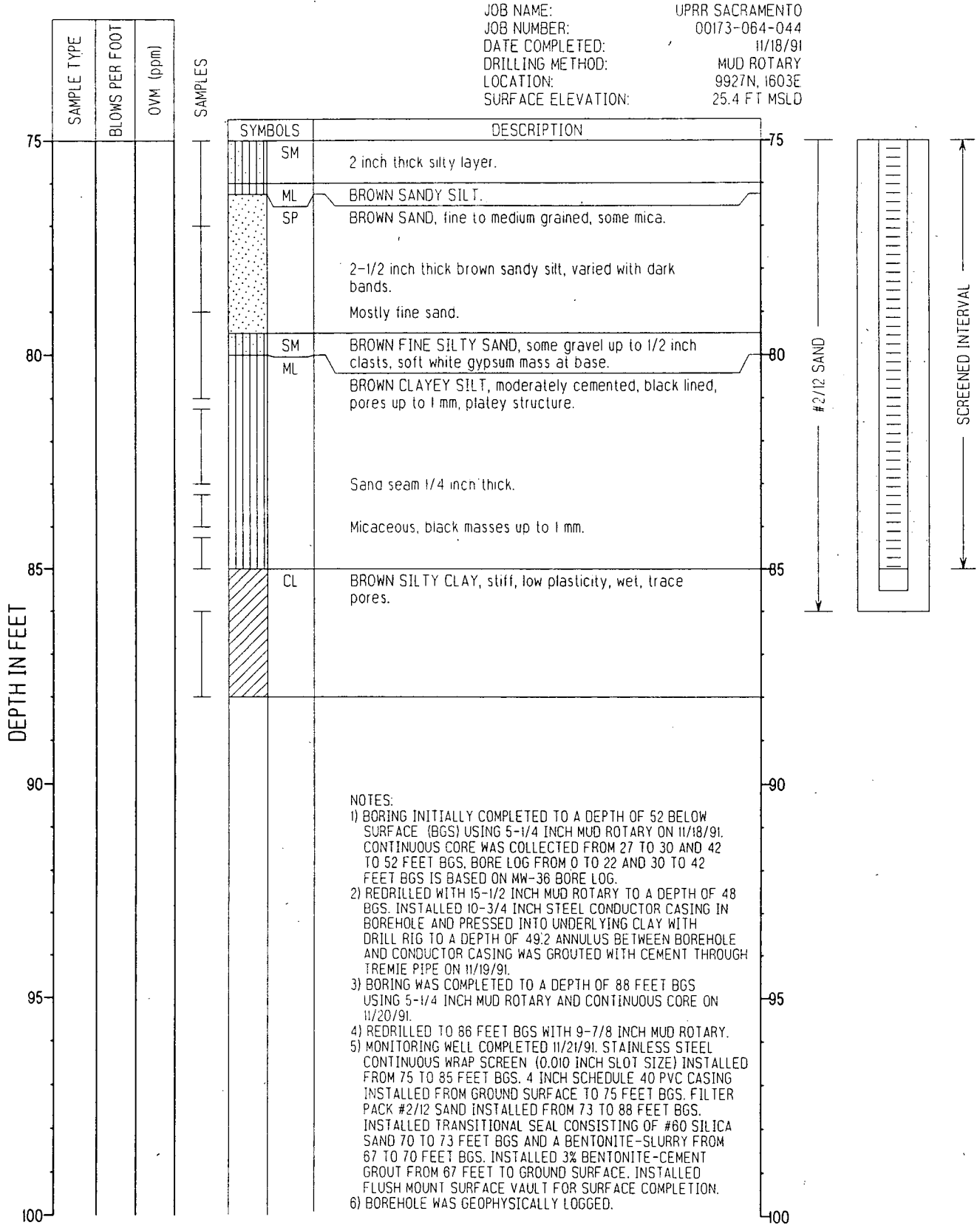


WELL LOG

DAMES & MOORE

MONITORING WELL: MW-37

JOB NAME:	UPRR SACRAMENTO
JOB NUMBER:	00173-064-044
DATE COMPLETED:	11/18/91
DRILLING METHOD:	MUD ROTARY
LOCATION:	9927N, 1603E
SURFACE ELEVATION:	25.4 FT MSLD



NOTES:

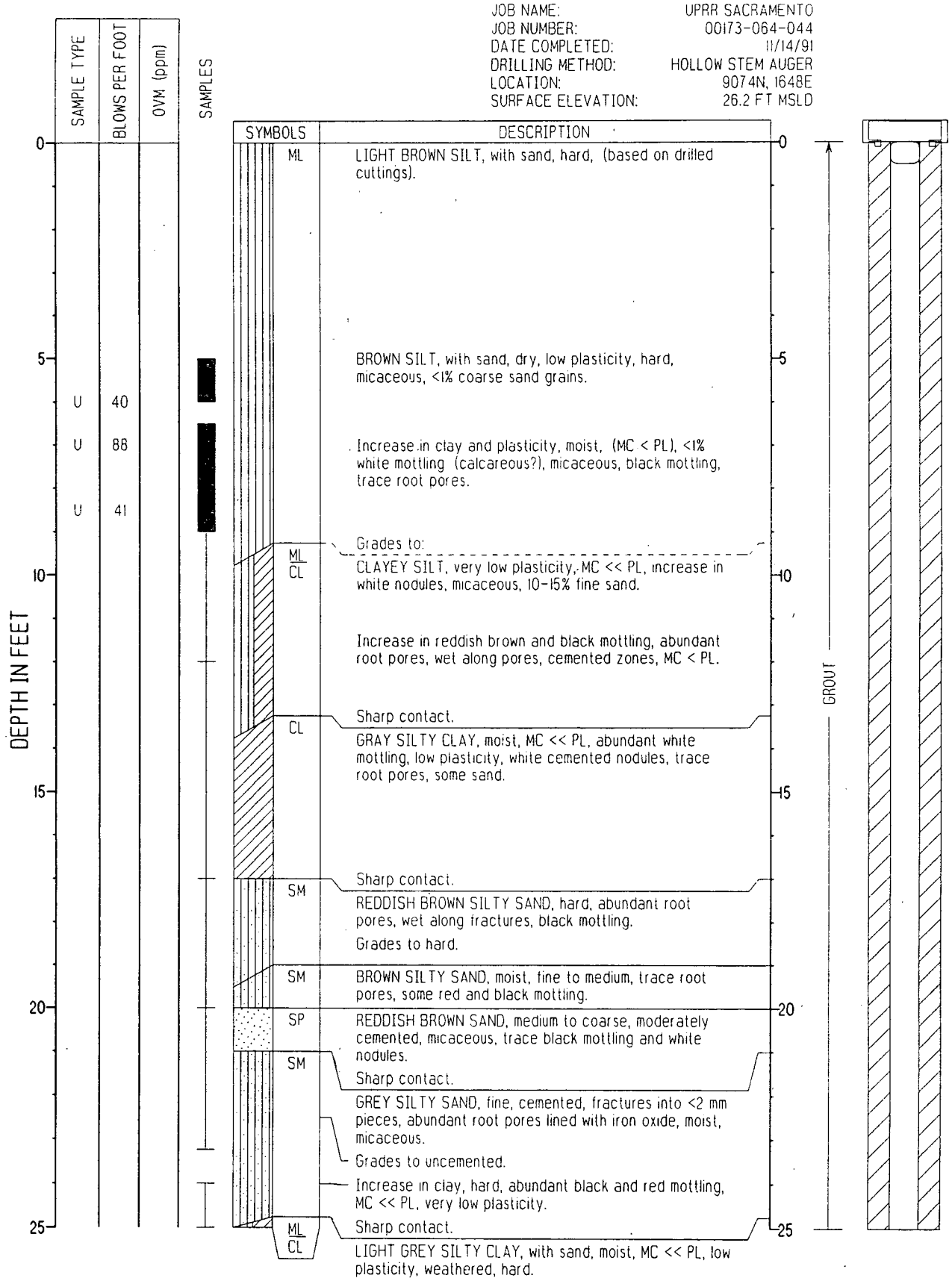
1) BORING INITIALLY COMPLETED TO A DEPTH OF 52 BELOW SURFACE (BGS) USING 5-1/4 INCH MUD ROTARY ON 11/18/91. CONTINUOUS CORE WAS COLLECTED FROM 27 TO 30 AND 42 TO 52 FEET BGS. BORE LOG FROM 0 TO 22 AND 30 TO 42 FEET BGS IS BASED ON MW-36 BORE LOG.
2) REDRILLED WITH 15-1/2 INCH MUD ROTARY TO A DEPTH OF 48 BGS. INSTALLED 10-3/4 INCH STEEL CONDUCTOR CASING IN BOREHOLE AND PRESSED INTO UNDERLYING CLAY WITH DRILL RIG TO A DEPTH OF 49.2 ANNULUS BETWEEN BOREHOLE AND CONDUCTOR CASING WAS GROUTED WITH CEMENT THROUGH TREMIE PIPE ON 11/19/91.
3) BORING WAS COMPLETED TO A DEPTH OF 88 FEET BGS USING 5-1/4 INCH MUD ROTARY AND CONTINUOUS CORE ON 11/20/91.
4) REDRILLED TO 86 FEET BGS WITH 9-7/8 INCH MUD ROTARY.
5) MONITORING WELL COMPLETED 11/21/91. STAINLESS STEEL CONTINUOUS WRAP SCREEN (0.010 INCH SLOT SIZE) INSTALLED FROM 75 TO 85 FEET BGS. 4 INCH SCHEDULE 40 PVC CASING INSTALLED FROM GROUND SURFACE TO 75 FEET BGS. FILTER PACK #2/12 SAND INSTALLED FROM 73 TO 88 FEET BGS. INSTALLED TRANSITIONAL SEAL CONSISTING OF #60 SILICA SAND 70 TO 73 FEET BGS AND A BENTONITE-SLURRY FROM 67 TO 70 FEET BGS. INSTALLED 3% BENTONITE-CEMENT GROUT FROM 67 FEET TO GROUND SURFACE. INSTALLED FLUSH MOUNT SURFACE VAULT FOR SURFACE COMPLETION.
6) BOREHOLE WAS GEOPHYSICALLY LOGGED.

WELL LOG

DAMES & MOORE

MONITORING WELL: MW-38

JOB NAME:	UPRR SACRAMENTO
JOB NUMBER:	00173-064-044
DATE COMPLETED:	11/14/91
DRILLING METHOD:	HOLLOW STEM AUGER
LOCATION:	9074N, 1648E
SURFACE ELEVATION:	26.2 FT MSLD

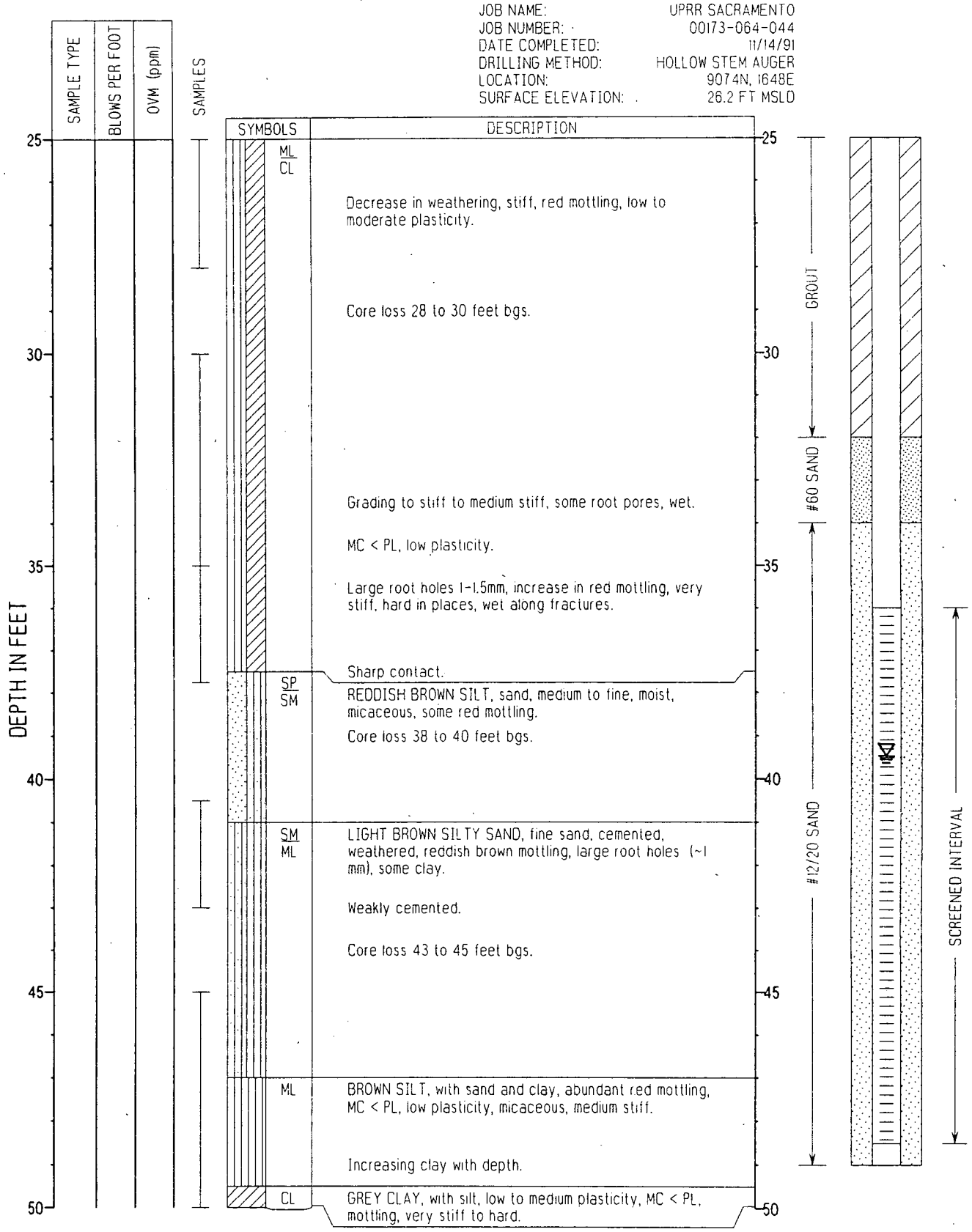


WELL LOG

DAMES & MOORE

MONITORING WELL: MW-38

JOB NAME:	UPRR SACRAMENTO
JOB NUMBER:	00173-064-044
DATE COMPLETED:	11/14/91
DRILLING METHOD:	HOLLOW STEM AUGER
LOCATION:	9074N, 1648E
SURFACE ELEVATION:	26.2 FT MSLD



NOTES:
1) BORING COMPLETED TO 50 FEET BELOW GROUND SURFACE (BGS) USING HOLLOW STEM AUGER AND CONTINUOUS CORE ON 11/14/91.
2) MONITORING WELL COMPLETED ON 11/15/91. 4" SCHEDULE 40 PVC CASING INSTALLED TO 36 FEET BGS. STAINLESS STEEL CONTINUOUS WRAP SCREEN (0.010 INCH SLOT SIZE) INSTALLED FROM 36 TO 48.5 FEET BGS. COMPLETED WITH FLUSH MOUNT SURFACE VAULT.

WELL LOG
DAMES & MOORE

GEO-HYDRO-DATA

INCORPORATED

CALIPER-GAMMA LOG

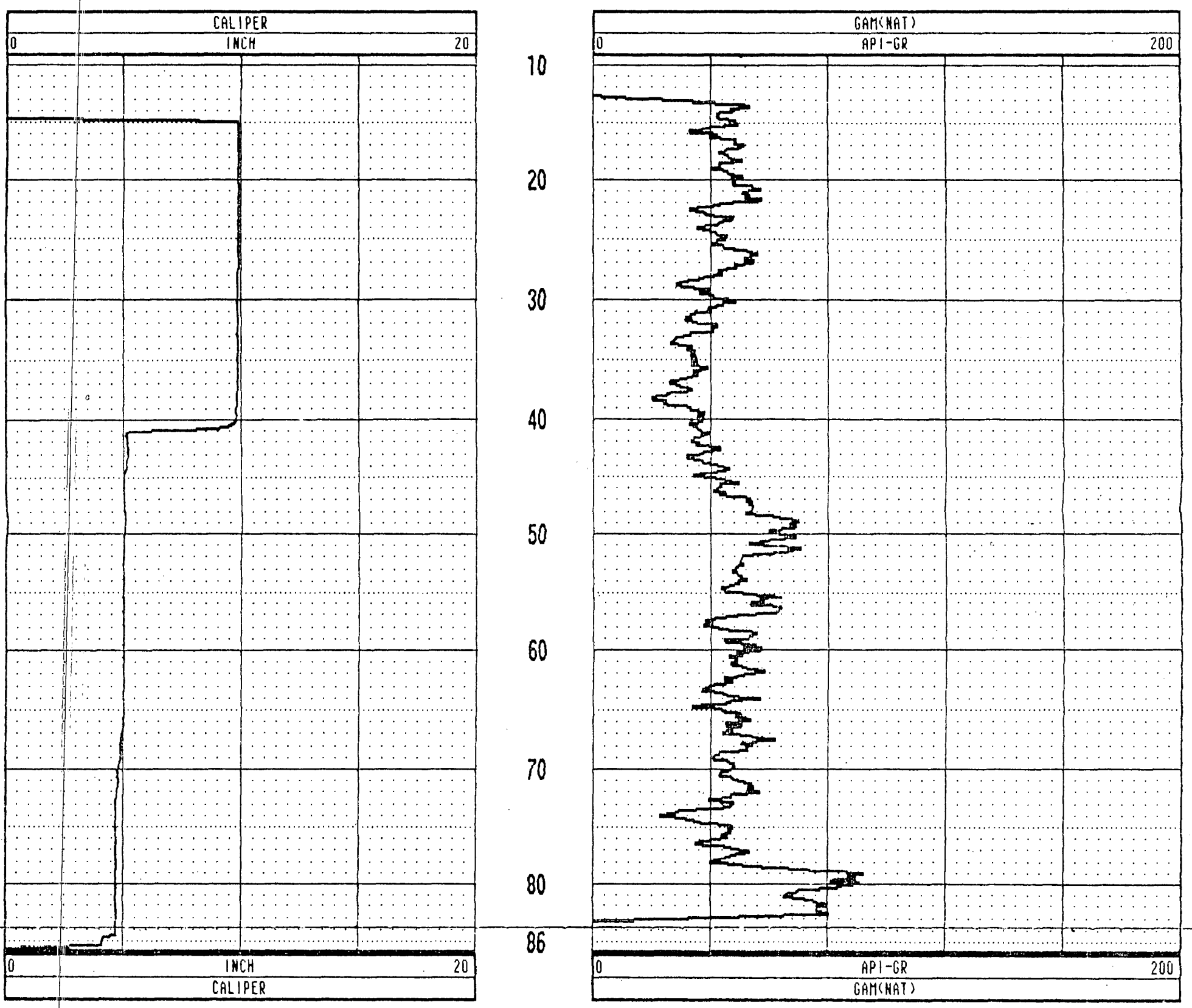
COMPANY	: UNION PACIFIC			OTHER SERVICES:	
WELL	: MW-37			INVOICE	
LOCATION/FIELD	: SACRAMENTO			8868	
COUNTY	: SACRAMENTO			1388	
STATE	: CALIFORNIA,U.S.A.				
SECTION	: N/A	TOWNSHIP	: N/A	RANGE	: N/A
DATE	: 11/20/91	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 86 FEET	ELEV. PERM. DATUM	: N/A	KB	: N/A
LOG BOTTOM	: 86.00	LOG MEASURED FROM	: G.L.	DF	: N/A
LOG TOP	: 9.40	DRL MEASURED FROM	: G.L.	GL	: N/A
CASING DRILLER	: 50	LOGGING UNIT	: 10		
CASING TYPE	: STEEL	FIELD OFFICE	: CLEMENTS,CAL		
CASING THICKNESS	: .250	RECORDED BY	: D.SHANHOLTZR		
BIT SIZE	: 6	BOREHOLE FLUID	: CLAY-GEL	FILE	: PROCESSED
MAGNETIC DECL.	: -	RM	: -	TYPE	: 9041A
MATRIX DENSITY	: -	RM TEMPERATURE	: -	LOG	: 6
FLUID DENSITY	: -	MATRIX DELTA T	: -	PLOT	: GHD 36
NEUTRON MATRIX	: N/A	FLUID DELTA T	: -	THRESH	: 400

REMARKS :

DRILLED BY ALL TERRIAN

CONSULTANT-DAMES AND MOORE

ALL SERVICES PROVIDED SUBJECT TO SCHLUMBERGER TERMS AND CONDITIONS



GEO-HYDRO-DATA

INCORPORATED

ELECTRIC WELL LOG

COMPANY	: UNION PACIFIC			OTHER SERVICES:	
WELL	: MW-37			INVOICE	
LOCATION/FIELD	: SACRAMENTO/SUTTERVILLE RD.			8857	
COUNTY	: SACRAMENTO			388	
STATE	: CALIFORNIA,U.S.A.				
SECTION	: N/A	TOWNSHIP	: N/A	RANGE	: N/A
DATE	: 11/18/91	PERMANENT DATUM	: G.L.	ELEVATIONS	
DEPTH DRILLER	: 52 FEET	ELEV. PERM. DATUM	: N/A	KB	: N/A
LOG BOTTOM	: 85.98	LOG MEASURED FROM	: G.L.	DF	: N/A
LOG TOP	: 9.48	DRL MEASURED FROM	: G.L.	GL	: N/A
CASING DRILLER	: -	LOGGING UNIT	: 10		
CASING TYPE	: -	FIELD OFFICE	: CLEMENTS,CAL		
CASING THICKNESS	: -	RECORDED BY	: D.SHANHOLTZR		
BIT SIZE	: 6	BOREHOLE FLUID	: CLAY-GEL	FILE	: PROCESSED
MAGNETIC DECL.	: -	RM	: -	TYPE	: 9041A
MATRIX DENSITY	: -	RM TEMPERATURE	: -	LOG	: 5
FLUID DENSITY	: -	MATRIX DELTA T	: -	PLOT	: 1 0
NEUTRON MATRIX	: N/A	FLUID DELTA T	: -	THRESH	: 3000

REMARKS :

DRILLED BY ALL TERRIAN ,ROSEVILLE,CA.

CONSULTANTT,DAMES AND MOORE,SACRAMENTO,CA.

ALL SERVICES PROVIDED SUBJECT TO STANDARD TERMS AND CONDITIONS

