

3Q 1995

TRANSMITTAL OF THIRD QUARTER 1995
GROUNDWATER MONITORING DATA
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA



DAMES & MOORE



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January 8, 1996

Mr. James L. Tjosvold, Acting Branch Chief
Region 1, Department of Toxic Substances Control
California Environmental Protection Agency
10151 Croyden Way, Suite 3
Sacramento, CA 95827

Attention: Mr. Fernando Amador
Project Manager

**Re: Transmittal of Third Quarter 1995
Groundwater Monitoring Data
Union Pacific Railroad yard
Sacramento, California
Project No. 00173-080-044**

Dear Mr. Amador:

At the request of Union Pacific Railroad Company (UPRR), Dames & Moore is forwarding the enclosed Transmittal of Third Quarter 1995 Groundwater Monitoring Data for the Union Pacific Railroad Yard, Sacramento, California.

If you have any questions or require further information, please telephone us at (916) 387-8800.

Sincerely,

DAMES & MOORE

Jim Brake, R.G.
Project Manager

Tony Mindling, R.G.
Project Hydrogeologist

Enclosure

cc: Distribution List

SAC185.16

**TRANSMITTAL OF THIRD QUARTER 1995
GROUNDWATER MONITORING DATA
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA**

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TABLE 1
GROUNDWATER ELEVATION DATA, 1988-1995
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW1-01 ⁽¹⁾	MW1-02	MW1-03	MW1-04	MW1-05	MW1-06	MW1-07	MW1-08	MW1-11	MW2-12	MW1-13
02/19/88	0.00	-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
01/22/92	-3.84	-4.72	-4.64	-7.28	-7.18	-7.46	-8.54	-7.98	-6.83	-7.49	-7.33
05/08/92	-2.37	-3.05	-2.97	-5.70	-5.46	-5.85	-7.04	-6.44	-5.41	-5.96	-5.76
09/29/92	-3.18	-4.95	-5.22	-7.21	-7.24	-7.49	-8.54	-7.92	-6.82	-7.42	-7.27
11/02/92	-3.67	-5.22	-5.26	-7.50	-7.49	-7.72	-8.80	-8.18	-7.11	-7.69	-7.58
01/12 - 01/13/93	-3.30	-3.29	-1.74	-7.11	-6.26	-6.54	-7.92	-7.12	-5.51	-6.45	-6.22
04/07/93	0.35	0.33	0.83	-2.71	-2.57	-2.92	-4.37	-3.61	-2.14	-3.03	-2.77
06/28/93	0.11	-1.27	-1.33	**	-3.99	-4.29	-5.48	-4.96	-3.72	-4.35	-4.77
09/20/93	--	-2.47	--	**	--	--	-6.27	--	-4.37	-5.00	-4.87
01/04/94	-1.48	-2.67	-2.56	**	--	-5.45	-6.58	-6.00	-4.80	-5.47	-5.35
04/11/94	-1.35	-2.31	-2.37	**	-5.00	-5.31	-6.39	-5.92	-4.79	-5.39	-5.83
06/29/94	-1.28	-2.78	-2.97	**	-5.35	-5.65	-6.69	-6.20	-5.11	-5.68	-6.09
10/25/94	-2.11	-3.81	-4.02	**	-6.21	-6.46	-7.50	-6.91	-5.82	-6.41	-6.29
01/12/95	--	-0.57	--	**	-4.57	-4.85	-6.24	-5.36	-2.75	-4.16	-4.35
04/25/95	3.93	1.49	1.91	-3.26	-0.89	-1.22	-2.41	-2.15	-0.33	-1.14	-1.26
07/11/95	1.55	0.57	0.52	-4.30	-2.02	-2.32	-3.42	-2.85	-1.63	-2.25	-2.44

TABLE 1
GROUNDWATER ELEVATION DATA, 1988-1995
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW1-14	MW1-15	MW1-16	MW1-17	MW1-18	MW1-19	MW1-20	MW1-21	MW1-22	MW1-23	MW1-24
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
01/22/92	-7.41	-7.37	-7.36	-7.86	-7.92	-8.56	-8.64	-8.16	-8.15	-7.82	-7.82
05/08/92	-5.84	-5.79	-5.80	-6.32	-6.38	-7.08	-7.15	-6.64	-6.61	-6.25	-6.23
09/29/92	-7.32	-7.36	-7.36	-7.78	-7.85	-8.47	-8.52	-8.14	-8.12	-7.86	-7.85
11/02/92	-7.63	-7.26	-7.26	-7.58	-8.13	-8.71	-8.82	-8.38	-8.40	-8.10	-8.08
01/12 - 01/13/93	-6.28	-6.26	-6.27	-6.79	-6.94	-7.66	-7.97	-7.42	-7.43	-6.99	-6.92
04/07/93	-2.86	-2.83	-2.83	-3.45	-3.57	-4.42	-4.48	-3.85	-3.84	-3.39	-3.37
06/28/93	-4.70	-4.42	-4.49	-4.91	-4.97	-5.66	-5.70	-5.10	-5.10	-4.70	-4.67
09/20/93	-4.91	--	-4.94	--	-5.57	--	-6.22	--	--	--	--
01/04/94	-5.40	-5.38	-5.38	-5.89	-5.97	-6.61	-6.66	-6.19	-6.18	-5.85	-5.83
04/11/94	-5.75	-5.45	-5.51	-5.91	-5.98	-6.60	-6.61	-6.07	-6.07	-5.69	-5.67
06/29/94	-6.03	-5.75	-5.80	-6.17	-6.24	-6.82	-6.85	-6.35	-6.35	-6.02	-6.00
10/25/94	--	-6.34	-6.35	-6.77	-6.85	-7.47	-7.48	-7.12	-7.11	-6.83	-6.84
01/12/95	-4.38	-4.36	-4.37	-4.66	-4.98	-6.26	-6.33	-5.72	-5.71	-5.37	-5.34
04/25/95	-1.26	-1.25	-1.22	-1.58	-1.77	-2.58	-2.64	-1.86	-1.86	-1.51	-1.48
07/11/95	-2.44	-2.29	-2.31	-2.74	-2.84	-3.52	-3.54	-3.03	-3.03	-2.69	-2.68

TABLE 1
GROUNDWATER ELEVATION DATA, 1988-1995
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW1-25	MW1-26	MW2-27	MW2-28	MW1-29	MW1-30	MW1-31	MW1-32	MW1-33	MW1-34	MW1-35
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
01/22/92	-9.13	-9.14	-9.13	-8.15	-7.91	-7.94	-8.07	-8.54	-6.84	-9.28	-9.29
05/08/92	-7.69	-7.69	-7.68	-6.72	-6.41	-6.45	-6.58	-7.09	-5.23	-8.38	-7.89
09/29/92	-9.09	-9.09	-9.08	-8.08	-7.83	-7.86	-7.95	-8.39	-6.82	-9.11	-9.11
11/02/92	-9.34	-9.33	-9.33	-8.37	-8.10	-8.13	-8.27	-8.74	-7.13	-9.37	-9.40
01/12 - 01/13/93	-8.53	-8.54	-8.55	-7.24	-6.92	-6.93	-7.15	-7.83	-5.46	-8.76	-8.78
04/07/93	-5.11	-5.12	-5.14	-4.46	-3.53	-3.73	-3.79	-4.41	-2.17	-5.38	-5.38
06/28/93	-5.95	-5.97	-5.97	-4.90	-4.70	-4.96	-5.21	**	-3.74	-6.22	-6.17
09/20/93	--	-6.73	--	-6.02	-5.88	-5.90	-6.13	**	-4.38	-7.03	-6.98
01/04/94	-7.12	-7.13	-7.13	-6.18	-5.96	-5.96	-6.18	**	-4.82	-7.38	-7.38
04/11/94	-6.88	-6.89	-6.89	--	--	--	--	**	-4.81	--	--
06/29/94	-7.14	-7.16	-7.15	-6.77	-6.67	-6.59	--	**	-5.12	-7.32	-7.33
10/25/94	-7.99	-8.00	-7.99	-7.03	-6.79	-6.81	-6.96	**	-5.83	-8.03	-8.06
01/12/95	-6.94	-6.95	-6.95	-5.11	-4.94	-4.94	-5.25	**	-2.67	-7.32	-7.19
04/25/95	-3.39	-3.06	-3.06	-1.97	-1.72	-1.74	-1.98	**	-0.34	-3.26	-3.26
07/11/95	-3.97	-3.98	-3.97	-2.95	-2.79	-2.81	-3.03	--	-1.63	-4.06	-4.07

TABLE 1
GROUNDWATER ELEVATION DATA, 1988-1995
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW1-36	MW2-37	MW1-38	MW1-39	MW2-40	MW3-41	MW1-42	MW1-43	MW2-44	MW1-45	MW2-46	MW3-47
07/30/91	---	---	---	-13.73	-7.83	-6.66	-5.07	-4.24	---	---	---	---
12/27/91	-10.71	-10.91	-13.05	-14.67	-8.82	-7.66	-6.13	-5.30	---	---	---	---
01/22/92	-10.69	-10.85	-13.02	-14.64	-8.65	-7.49	-5.88	-4.99	---	---	---	---
05/08/92	-9.46	-9.66	-11.97	-13.69	-7.24	-5.98	-4.25	-3.32	---	---	---	---
09/29/92	-10.28	-10.61	-12.84	-14.51	-8.50	-7.41	-5.98	-5.20	---	---	---	---
11/02/92	-10.63	-10.88	-13.07	-14.67	-8.84	-7.70	-6.08	-5.15	-13.13	---	---	---
01/12 - 01/13/93	-10.34	-10.43	-12.74	-14.50	-9.88	-6.46	-4.46	-3.59	-12.77	---	---	---
04/07/93	-7.19	-7.43	-10.16	-12.29	--	-3.03	-1.05	0.01	-10.26	---	---	---
06/28/93	-7.42	-7.65	-9.89	-11.60	-5.53	-4.31	-2.48	-1.57	-10.01	---	---	---
09/20/93	-8.09	-8.46	-10.50	-12.26	-6.60	-4.96	-3.46	-2.72	-10.69	---	---	---
01/04/94	-8.67	-8.85	-10.96	-12.61	-6.67	-5.46	--	-2.94	-11.02	---	---	---
04/11/94	--	--	--	--	--	-5.35	-3.57	-2.61	--	---	---	---
06/29/94	-8.73	-8.30	-10.77	-12.16	-6.87	-5.64	-3.96	-3.05	-10.62	-13.67	-12.37	-10.17
10/25/94	-9.23	-9.52	-11.60	-13.18	-7.49	-6.40	-4.97	-4.01	-11.64	-14.79	-13.38	-10.58
01/12/95	-8.70	-8.64	-10.50	-12.69	-6.06	-4.13	-1.42	-0.94	-10.76	-14.23	-12.80	-9.52
04/25/95	-4.73	-5.05	-7.52	-9.63	-2.61	-1.11	0.59	1.73	-7.65	-11.52	-9.81	-6.30
07/11/95	-5.22	-5.52	-7.60	-9.31	-3.55	-2.23	-0.55	0.30	-7.74	-10.89	-9.50	-6.74

TABLE 1
GROUNDWATER ELEVATION DATA, 1988-1995
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW1-48	EW1-01	PZ1-01	PZ0-2A	PZ0-2B	PZ2-03	PZ2-04	PZ1-05	PZ2-06	PZ1-07
06/29/94	-2.23	---	-7.20	-7.20	7.18	-6.87	-6.54	-10.72	-10.85	---
10/25/94	-3.34	-8.55	-7.20	-7.06	-7.15	-7.52	-7.30	-11.67	-11.75	-11.39
01/12/95	--	--	-6.32	-6.30	-6.27	-6.07	-5.81	-10.60	-10.90	-10.31
04/25/95	2.45	-4.69	-2.87	-2.86	-2.84	-2.62	-2.31	-7.60	-7.66	-7.19
07/11/95	1.00	-6.49	-3.89	-3.91	-8.63	-3.55	-3.24	-7.68	-7.85	-7.35

DATE	PZ2-08	PZ1-09	PZ1-10	PZ1-11	SVE1-04	SVE1-05
06/29/94	---	---	-2.52	-2.50	---	---
10/25/94	-11.48	-11.73	-3.59	-3.58	-4.59	-6.09
01/12/95	-10.56	-10.68	--	-0.64	-1.17	-3.78
04/25/95	-7.37	-7.70	2.17	2.42	0.93	-1.04
07/11/95	-7.54	-7.76	0.68	0.76	-0.25	-2.09

⁽¹⁾ The third character in the monitoring well ID represents the hydrostratigraphic zone (HSZ-1, 2, or 3) within which the well is completed.

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

--- Prior to well installation.

-- Not measured

** Extraction well for groundwater treatment system. These wells were initially inaccessible for groundwater level measurement following startup.

TABLE 2

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
 SELECTED METALS (ug/l)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background (2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 ≤1-9
MW1-01	03/03/88		4	--	--	--
	09/22/89		--	--	--	--
	05/10/90		9	--	--	--
	01/21/91		--	--	--	--
	04/22/91		--	5	130	--
	01/29/92		--	8	--	--
	07/09/93		N/A	N/A	--	N/A
	01/17/94		N/A	N/A	N/A	--
	07/23/95		N/A	N/A	16.5	N/A
MW1-02	03/03/88		3	--	--	--
	09/20/89		--	--	--	--
	05/17/90		1	--	20	--
	01/22/91		--	--	--	--
	04/22/91		--	5.7	140	--
	08/01/91		--	--	--	--
	11/07/91		--	--	--	--
	02/07/92		--	--	--	--
	08/25/92		--	--	--	1
	01/19/93		--	6	12	--
	07/01/93		N/A	N/A	6.3	N/A
	01/05/94		N/A	N/A	--	N/A
	07/14/95		N/A	N/A	7.2	N/A
MW1-03	03/03/88		4	--	--	--
	09/20/89		--	--	--	16
	02/13/90		N/A	N/A	N/A	20
	05/10/90		9	--	--	20
	01/22/91		--	--	--	--
	04/23/91		--	1.5	--	--
	08/01/91		--	--	--	--
	01/29/92		--	--	--	--
	07/09/93		N/A	N/A	N/A	5.7
	01/17/94		N/A	N/A	-- Jc	N/A
MW1-04	03/03/88		6	--	140	--
	09/20/89		--	--	34	12
	02/15/90		N/A	N/A	N/A	10
	05/23/90		--	4.5	99	--
	09/18/90		--	--	71	--
	02/05/91		--	33	200	--
	05/01/91		6.1	--	11	--
	08/14/91		5	--	--	--
	11/07/91		5	--	--	--
	01/28/92		--	--	--	--
	08/26/92		--	14	--	--
	01/20/93		--	14	8	--
	04/15/93		N/A	N/A	8.9	N/A
	04/18/93		N/A	N/A	5	N/A
	04/23/93		N/A	N/A	6.5	N/A
	04/30/93		N/A	N/A	5	N/A

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background(2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1-9
MW1-04	05/06/93		N/A	N/A	7.1	N/A
	05/14/93		N/A	N/A	10	N/A
	06/17/93		N/A	N/A	14	N/A
	07/12/93		N/A	N/A	6.7	N/A
	08/03/93		N/A	N/A	10	N/A
	09/10/93		N/A	N/A	12	N/A
	10/06/93		N/A	N/A	8	N/A
	11/08/93		N/A	N/A	7.8	N/A
	12/08/93		N/A	N/A	16	N/A
	01/14/94		N/A	N/A	7.8	N/A
	02/11/94		N/A	N/A	13	N/A
	03/02/94		N/A	N/A	24	N/A
	04/07/94		N/A	N/A	9.6	N/A
	05/05/94		N/A	N/A	6	N/A
	06/08/94		N/A	N/A	--	N/A
	07/08/94		N/A	N/A	8	N/A
	09/14/94		N/A	N/A	17	N/A
	10/10/94		N/A	N/A	25	N/A
	11/08/94		N/A	N/A	22	N/A
	12/07/94		N/A	N/A	30	N/A
	01/09/95		N/A	N/A	24	N/A
	02/09/95		N/A	N/A	8	N/A
	03/03/95		N/A	N/A	--	N/A
	04/04/95		N/A	N/A	21	N/A
MW1-05	03/04/88		--	10	--	--
	09/22/89		9.3	--	159	--
	05/17/90		2	--	70	--
	01/22/91		--	11	100	--
	04/23/91		--	7.2	81	--
	08/12/91		--	--	--	--
	11/13/91		--	--	--	--
	01/27/92		--	--	--	--
	01/22/93		--	7	42	--
	01/17/94		N/A	--	47 Jc	N/A
	07/17/95		N/A	5.85	108	N/A
MW1-06	03/04/88		5	--	--	--
	09/22/89		--	7.1	39	--
	05/16/90		2	--	10	--
	01/24/91		7	15	--	--
	04/23/91		5.8	5.4	40	--
	08/12/91		--	--	120	1
	11/13/91		--	7	110	--
	01/28/92		--	--	180	--
	08/28/92		--	5	110	--
	01/22/93		--	--	16	--
	07/09/93		N/A	N/A	36	N/A
	01/17/94		N/A	--	36 Jc	N/A
	07/17/95		N/A	5.39	48.8	N/A

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background(2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 1-9
MW1-07	03/04/88		4	10	50	--
	09/15/89		--	5	376	--
	05/23/90		--	111	215	.10
	01/30/91		7	200	200	--
	04/26/91		--	18	130	--
	08/07/91		--	14	150	--
	11/13/91		--	15	140	--
	02/07/92		--	15	180	--
	08/31/92		--	24	--	--
	10/23/92		N/A	N/A	--	N/A
	01/29/93		--	17	47	--
	07/07/93		N/A	10	62	N/A
	01/10/94		N/A	12	71 J	--
	07/21/94		N/A	N/A	39 J	N/A
	02/04/95		N/A	11	64	N/A
MW1-08	03/03/88		4	--	--	--
	09/20/89		--	--	--	--
	02/13/90		N/A	N/A	N/A	30
	05/23/90		--	--	12	24
	01/30/91		6	--	--	70
	04/26/91		--	8.8	29	--
	08/12/91		--	--	--	--
	11/11/91		--	--	--	--
	01/28/92		--	6	--	--
	08/28/92		--	--	--	--
	01/27/93		--	--	19	--
	01/17/94		N/A	N/A	21 Jc	--
	07/17/95		N/A	N/A	20.4	N/A
MW1-11	09/06/89		9.7	27	160	57
	02/15/90		N/A	N/A	N/A	20
	05/18/90		--	47.6	76	--
	09/17/90		--	47	55	--
	01/30/91		--	200	--	--
	04/26/91		--	38	32	--
	08/15/91		--	25	--	--
	11/07/91		--	19	--	--
	01/27/92		--	28	--	--
	08/26/92		--	48	--	--
	01/14/93		--	47	N/A	--
	07/02/93		N/A	55	N/A	N/A
	01/05/94		N/A	46	8.7 J	--
	07/05/94		N/A	41	N/A	N/A
	01/16/95		N/A	32 Jc	N/A	N/A
	07/14/95		N/A	N/A	--	N/A
MW1-13	09/13/89		18	--	14	--
	02/16/90		N/A	N/A	N/A	--
	05/25/90		30	--	--	--
	09/18/90		36	--	--	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background(2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1-9
MWI-13	02/05/91		20	--	100	--
	04/30/91		33	--	7.2	--
	08/07/91		40	--	--	1
	11/07/91		38	--	--	--
	02/07/92		43	--	--	--
	08/26/92		42	--	--	2
	01/20/93		21	--	6	--
	07/02/93		33	N/A	N/A	N/A
	01/07/94		21 μ c	N/A	--	N/A
	07/05/94		28	N/A	N/A	N/A
	01/30/95		36	N/A	N/A	N/A
	07/17/95		N/A	N/A	--	N/A
MWI-14	09/13/89		--	--	169	--
	02/16/90		N/A	N/A	N/A	--
	05/22/90		--	16	174	--
	09/18/90		--	13	160	--
	02/04/91		--	21	300	--
	05/01/91		--	37	98	--
	08/14/91		6	36	--	--
	11/22/91		--	16	--	--
	02/07/92		--	20	--	--
	08/27/92		--	22	--	--
	01/20/93		--	36	12	3
	07/02/93		N/A	N/A	14	N/A
	07/17/95		5.51	--	69	N/A
MWI-15	09/07/89		8.4	12	17	12
	02/12/90		N/A	N/A	N/A	30
	05/16/90		4	30	70	--
	01/24/91		--	12	--	--
	04/25/91		--	11	51	--
	08/05/91		--	18	--	--
	11/05/91		--	7	--	--
	01/30/92		--	6	--	--
	08/27/92		--	--	--	--
	01/25/93		13	--	9.6	--
	07/09/93		N/A	N/A	73	N/A
	01/17/94		N/A	5.2	55 μ c	--
	07/17/95		N/A	6.15	58.9	N/A
MWI-16	09/07/89		6	--	--	--
	02/12/90		N/A	N/A	N/A	30
	05/16/90		2	--	--	--
	01/24/91		7	11	--	--
	04/25/91		--	5.7	20	--
	08/13/91		5	5	--	--
	11/07/91		--	--	--	--
	01/30/92		--	5	--	--
	08/27/92		--	9	--	--
	01/21/93		--	7	--	--

TABLE 2

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background(2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1-9
MW1-16	01/06/94		N/A	5.2	--	--
	07/14/95		N/A	N/A	--	N/A
MW1-17	09/21/89		--	--	--	--
	02/12/90		N/A	N/A	N/A	30
	05/18/90		5	7.2	67	12
	01/25/91		7	9	200	--
	04/29/91		--	6.9	170	--
	08/06/91		--	5	170	--
	11/05/91		--	--	--	--
	01/30/92		--	6	110	--
	08/27/92		--	7	200	--
	01/25/93		--	--	34	--
	07/09/93		N/A	N/A	70	N/A
	01/17/94		N/A	N/A	79 μ C	--
	06/30/94		N/A	N/A	190	N/A
	02/04/95		N/A	N/A	87	N/A
MW1-18	09/21/89		--	--	10	--
	02/12/90		N/A	N/A	N/A	40
	05/18/90		9	5.5	13	21
	01/25/91		6	7	--	--
	04/29/91		--	6.5	24	--
	08/13/91		6	6	--	--
	11/05/91		--	--	--	--
	01/30/92		--	--	--	--
	08/27/92		--	7	--	--
	01/21/93		--	12	--	--
	01/06/94		N/A	N/A	--	--
	07/21/95		N/A	N/A	9.21	N/A
MW1-19	09/14/89		--	--	14	--
	02/14/90		N/A	N/A	N/A	20
	05/14/90		8	--	60	50
	01/24/91		10	--	--	--
	04/29/91		--	16	69	--
	08/05/91		--	5	--	--
	11/11/91		--	--	120	--
	01/30/92		--	5	170	--
	08/28/92		--	--	370	--
	01/25/93		--	8.4	84	--
	07/09/93		N/A	N/A	96	N/A
	01/16/94		--	--	100 μ C	--
	06/30/94		N/A	N/A	590	N/A
	01/25/95		N/A	N/A	120	N/A
MW1-20	09/14/89		--	--	--	--
	02/14/90		N/A	N/A	N/A	--
	05/14/90		8	--	--	40
	01/24/91		7	--	--	--
	04/29/91		--	15	5.3	--
	08/14/91		6	8	--	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background (2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1-9
MW1-20	11/11/91		--	--	--	--
	01/30/92		--	--	--	--
	08/28/92		--	7	--	--
	01/25/93		--	9.8	26	--
	01/06/94		N/A	5.4	N/A	--
MW1-21	09/08/89		8.4	--	15	--
	05/14/90		6	--	380	40
	01/23/91		5	7	300	--
	04/25/91		--	8.4	310	--
	08/07/91		--	--	190	--
	11/11/91		--	--	400	--
	01/30/92		--	5	370	--
	08/28/92		--	--	350	--
	01/29/93		--	--	180	--
	07/08/93		N/A	N/A	140	N/A
	01/16/94		N/A	--	400 Jc	--
	07/07/94		N/A	N/A	140	N/A
	02/04/95		N/A	N/A	110	N/A
MW1-22	09/11/89		24	--	17	--
	05/14/90		9	--	--	20
	01/23/91		--	--	--	--
	04/25/91		--	6.9	9.6	--
	08/14/91		6	--	--	--
	11/11/91		--	--	--	--
	01/30/92		6	5	--	1
	01/29/93		--	5.5	6.6	--
	01/16/94		5.9	N/A	N/A	12
	07/17/95		5.4	N/A	N/A	N/A
MW1-23	09/08/89		9.7	--	--	--
	05/14/90		3	--	450	30
	01/23/91		--	--	400	--
	04/23/91		--	6.5	360	--
	08/02/91		--	7	250	--
	11/11/91		--	--	180	--
	01/24/92		--	--	470	--
	08/28/92		--	--	280	--
	01/22/93		--	6	182	--
	07/08/93		N/A	N/A	170	N/A
	01/16/94		N/A	N/A	170 Jc	--
	07/13/94		N/A	N/A	160	N/A
	02/04/95		N/A	N/A	170	N/A
MW1-24	09/08/89		15	--	--	--
	05/14/90		5	--	420	30
	01/23/91		--	--	100	2
	04/24/91		--	2.9	240	--
	08/01/91		--	--	300	--
	11/13/91		--	--	130	--
	01/24/92		--	--	190	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background(2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1-9
MW1-24	01/22/93		--	--	98	--
	07/08/93		N/A	N/A	190	N/A
	01/16/94		--	N/A	140 μ c	--
	07/13/94		N/A	N/A	78	N/A
	02/04/95		N/A	N/A	100	N/A
MW1-25	09/11/89		11	--	--	--
	05/16/90		--	--	200	--
	01/29/91		8	10	300	--
	04/24/91		--	0	240	--
	08/02/91		--	9	210	--
	11/13/91		--	7	250	--
	01/23/92		--	5	910	--
	09/01/92		--	--	760	--
	01/27/93		--	5.5	270	--
	07/08/93		N/A	N/A	220	N/A
	01/16/94		--	--	220 μ c	N/A
	07/07/94		N/A	N/A	250	N/A
	01/25/95		N/A	N/A	150	N/A
MW1-26	09/12/89		11	--	--	--
	05/16/90		--	--	200	--
	01/29/91		--	--	300	--
	04/24/91		--	8	240	--
	08/13/91		--	6	250	--
	11/13/91		--	--	750	--
	01/27/92		--	--	720	--
	09/01/92		--	10	--	--
	10/23/92		N/A	N/A	160	N/A
	01/28/93		--	13	110	--
	07/07/93		N/A	N/A	120	N/A
	01/10/94		--	20	100 μ J	N/A
	07/07/94		N/A	N/A	95	N/A
	01/17/95		N/A	N/A	100 μ c	N/A
MW1-29	02/15/90		N/A	N/A	N/A	20
	05/25/90		--	--	15	--
	02/01/91		--	--	--	10
	04/30/91		--	3	58	--
	08/07/91		--	--	--	--
	11/05/91		--	--	--	--
	01/30/92		--	--	--	--
	08/31/92		--	--	--	--
	01/14/93		--	--	N/A	--
	01/11/94		N/A	N/A	18 μ J	10
	07/15/95		N/A	N/A	35.3	N/A
MW1-30	02/15/90		N/A	N/A	N/A	20
	05/24/90		5	--	174	63
	02/04/91		--	--	200	2
	04/30/91		--	7.9	130	--
	08/15/91		--	8	--	--

TABLE 2

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
 SELECTED METALS (ug/l)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background (2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1-9
MW1-30	11/05/91		--	6	--	--
	01/31/92		--	9	--	--
	08/31/92		--	8	--	--
	01/14/93		--	6	N/A	--
	07/06/93		N/A	N/A	26	N/A
	01/10/94		N/A	N/A	17 µl	--
	07/01/94		N/A	N/A	12	N/A
	07/15/95		N/A	N/A	13.7	N/A
MW1-31	05/24/90		9	--	201	30
	09/19/90		--	--	200	--
	02/01/91		--	--	200	1
	05/01/91		--	13	73	--
	08/15/91		--	21	--	--
	11/22/91		--	16	--	--
	01/31/92		--	13	--	1
	08/31/92		--	--	--	--
	01/21/93		--	--	10	--
	07/07/93		N/A	N/A	13	N/A
	01/11/94		N/A	6	8.5 µl	--
	07/01/94		N/A	N/A	7	N/A
	07/15/95		N/A	8.35	--	N/A
MW1-32	05/24/90		--	7.4	167	--
	09/19/90		--	--	120	--
	02/01/91		--	40	200	4
	05/01/91		--	11	65	--
	08/16/91		--	--	--	--
	11/22/91		--	--	--	--
	01/29/92		--	--	--	--
	09/04/92		--	--	--	--
	01/26/93		13	6.1	46	--
	04/15/93		N/A	N/A	21	N/A
	04/18/93		N/A	N/A	13	N/A
	04/23/93		N/A	N/A	18	N/A
	04/30/93		N/A	N/A	18	N/A
	05/06/93		N/A	N/A	17	N/A
	05/14/93		N/A	N/A	19	N/A
	06/17/93		N/A	N/A	150	N/A
	07/12/93		N/A	N/A	20	N/A
	08/03/93		N/A	N/A	23	N/A
	09/10/93		N/A	N/A	24	N/A
	10/06/93		N/A	N/A	20	N/A
	11/08/93		N/A	N/A	20	N/A
	12/08/93		N/A	N/A	23	N/A
	01/14/94		N/A	N/A	18	N/A
	02/11/94		N/A	N/A	20	N/A
	03/02/94		N/A	N/A	21	N/A
	04/07/94		N/A	N/A	18	N/A
	05/05/94		N/A	N/A	18	N/A

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background(2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1.9
MW1-32	06/08/94		N/A	N/A	15	N/A
	07/08/94		N/A	N/A	17	N/A
	09/14/94		N/A	N/A	16	N/A
	10/10/94		N/A	N/A	18	N/A
	11/08/94		N/A	N/A	14	N/A
	12/07/94		N/A	N/A	22	N/A
	01/09/95		N/A	N/A	30	N/A
	02/09/95		N/A	N/A	19	N/A
	03/03/95		N/A	N/A	17	N/A
	04/04/95		N/A	N/A	18	N/A
MW1-33	05/18/90		--	--	17	35
	01/30/91		8	200	--	--
	04/30/91		--	3.5	56	--
	08/07/91		--	5	--	1
	11/05/91		--	--	--	--
	01/24/92		--	--	--	--
	08/26/92		--	--	--	--
	01/14/93		--	--	N/A	--
	07/02/93		N/A	N/A	15	N/A
	01/06/94		N/A	--	--	N/A
	07/14/95		N/A	--	10.9	N/A
MW1-34	07/02/91		--	7	300	--
	08/16/91		--	6	230	--
	11/13/91		--	--	190	--
	01/23/92		--	--	160	--
	09/01/92		--	5	--	16
	10/26/92		N/A	N/A	130	N/A
	01/21/93		--	--	83	--
	07/07/93		N/A	N/A	80	N/A
	01/12/94		N/A	N/A	63 μ l	--
	07/20/94		N/A	N/A	51 μ l	N/A
MW1-35	02/01/95		N/A	N/A	45	N/A
	07/02/91		--	5	--	--
	08/08/91		6	9	--	--
	11/13/91		--	--	--	--
	01/23/92		--	--	--	--
	09/01/92		--	--	--	--
MW1-36	01/21/93		--	--	8	--
	12/12/91		--	--	--	--
	01/23/92		--	--	110	--
	09/04/92		--	10	120	--
	10/21/92		N/A	N/A	--	N/A
	01/27/93		--	11	93	--
	04/13/93		N/A	N/A	32	N/A
	07/07/93		N/A	N/A	79	N/A
	09/28/93		N/A	N/A	87	N/A
	01/12/94		--	--	N/A	--
	07/20/94		N/A	N/A	50 μ l	N/A

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background (2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1-9
MW1-36	01/31/95		N/A	N/A	51	N/A
	04/30/95		N/A	N/A	60	N/A
	07/15/95		5.39	8.4	29.4	N/A
MW1-38	12/12/91		--	--	--	--
	01/24/92		--	--	--	--
	09/04/92		--	7	100	--
	01/26/93		--	7.7	86	--
	04/09/93		N/A	N/A	73	N/A
	07/06/93		N/A	N/A	80	N/A
	09/27/93		N/A	N/A	92	N/A
	01/10/94		--	6.7	87 μ l	11
	07/14/94		N/A	N/A	75	N/A
MW1-39	07/22/95		N/A	N/A	68.8	N/A
	06/28/91		10	17	--	1
	08/06/91		--	17	--	--
	11/13/91		--	--	--	--
	01/23/92		--	--	180	--
	09/04/92		--	10	170	--
	10/21/92		N/A	N/A	--	N/A
	01/27/93		--	8.1	130	--
	07/06/93		N/A	N/A	280	N/A
	01/12/94		N/A	--	380 μ l	N/A
MW1-42	07/14/94		N/A	N/A	220	N/A
	01/19/95		N/A	N/A	71 μ c	N/A
	06/28/91		--	--	200	1
	08/08/91		--	10	190	--
	11/07/91		--	--	160	--
	02/07/92		--	--	160	3
	08/25/92		--	5	--	12
	01/19/93		--	6	60	--
	07/01/93		N/A	N/A	72	N/A
MW1-43	01/05/94		--	--	61 μ l	--
	07/07/94		N/A	N/A	40	N/A
	01/13/95		N/A	N/A	50 μ c	N/A
	06/28/91		10	--	200	--
	08/16/91		--	--	220	--
MW1-45	11/07/91		--	--	160	--
	02/07/92		--	--	180	--
	08/25/92		--	--	120	--
	10/22/92		N/A	N/A	170	N/A
	01/19/93		--	--	128	--
	07/01/93		N/A	N/A	140	N/A
	01/05/94		--	N/A	130 μ l	N/A
	07/13/94		N/A	N/A	210	N/A
	01/13/95		N/A	N/A	260 μ c	N/A
	07/20/94		--	6	57 μ l	4.5
MW1-45	11/02/94		--	12	480	--
	01/18/95		--	26 μ m	38 μ c	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background(2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1-9
MW1-45	05/04/95		--	15	110	N/A
MW2-12	09/12/89		28	18	15	--
	02/16/90		N/A	N/A	N/A	--
	05/22/90		--	10	51	15
	09/18/90		--	10	71	--
	02/04/91		--	50	200	--
	05/01/91		--	6.6	78	--
	08/15/91		--	5	--	--
	11/07/91		--	--	--	--
	01/28/92		--	--	120	--
	08/26/92		--	11	--	--
	10/26/92		N/A	N/A	--	N/A
	01/20/93		--	9	85	--
	07/02/93		N/A	N/A	93	N/A
	01/07/94		-- [U]c	26	94 [U]	-- [U]c
	07/05/94		N/A	N/A	88	N/A
	01/23/95		N/A	N/A	92 [Jc	N/A
	07/17/95		6	24.8	N/A	N/A
MW2-27	09/15/89		--	19	--	--
	05/21/90		--	--	67	23
	09/17/90		--	--	49	--
	01/29/91		--	8	--	--
	04/24/91		--	6.1	38	--
	08/13/91		--	--	--	1
	11/13/91		--	--	--	--
	01/23/92		--	--	--	--
	09/01/92		--	6	--	--
	01/28/93		--	8.3	46	--
	07/08/93		N/A	N/A	91	N/A
	01/16/94		N/A	--	68 [Jc	--
	07/07/94		N/A	N/A	52	N/A
	07/17/95		N/A	N/A	48.2	N/A
MW2-28	02/15/90		N/A	N/A	N/A	--
	05/21/90		--	4.4	26	16
	09/19/90		--	49	52	--
	02/01/91		--	10	--	1
	04/30/91		--	6	32	--
	08/13/91		--	5	--	2
	11/05/91		--	--	--	--
	01/30/92		--	--	--	--
	08/31/92		--	9	--	2
	01/13/93		--	17	N/A	--
	01/11/94		N/A	9.1	83 [U]	--
	07/15/95		N/A	N/A	101	N/A
MW2-37	12/12/91		--	--	--	--
	01/23/92		--	--	--	--
	09/04/92		--	--	--	--
	01/27/93		--	--	--	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

MONITORING WELL (1)	DATE SAMPLED	Analyte MCL Background(2)	As 50 0-20	Cr 50 1-20	Ni 100 1-12	Pb 50 <1-9
MW2-37	07/07/93		N/A	N/A	12	N/A
	09/28/93		N/A	N/A	--	N/A
	01/12/94		--	--	N/A	--
	07/20/94		N/A	N/A	--	N/A
	01/31/95		N/A	N/A	--	N/A
	07/15/95		54.2	--	N/A	N/A
MW2-40	06/28/91		5	4	--	--
	08/15/91		--	7	--	--
	11/22/91		--	5	--	--
	01/29/92		--	--	100	--
	08/31/92		--	5	--	--
	01/26/93		--	--	110	--
	07/15/93		N/A	N/A	93	N/A
	01/11/94		--	N/A	46 Jl	N/A
	06/30/94		N/A	N/A	43	N/A
	01/24/95		N/A	N/A	51 Jc	N/A
MW2-44	10/27/92		5	9	--	--
	01/26/93		--	7.5	19	--
	04/09/93		--	9	8.7	--
	07/06/93		--	7	12	--
	09/27/93		--	8.1	13	--
	01/10/94		--	11	21 Jl	--
	07/14/94		--	10	21	3.4 Jm
	07/23/95		--	--	--	N/A
MW2-46	07/20/94		--	6	9.1 Jl	--
	11/02/94		--	6.5	74	--
	01/24/95		--	8.8	59 Jc	-- uJc
	05/04/95		--	15 Ux	73	N/A
	07/22/95		5.33	11.5	45.3	N/A
MW3-41	06/28/91		15	5	--	--
	08/12/91		7	--	--	--
	11/05/91		6	6	--	--
	01/31/92		7	7	--	--
	08/25/92		--	11	--	--
	01/20/93		--	9	--	--
	01/07/94		-- UJc	11	N/A	N/A
MW3-47	07/21/94		--	12	--	--
	08/21/94		--	10	--	7.6
	11/04/94		--	9.4	15	5.6
	01/31/95		5.1	12	--	--
	04/30/95		--	17	--	N/A
	07/15/95		5.87	13.5	6.88	N/A

(1) - The third character in the monitoring well ID represents the hydrostratigraphic zone (HSZ -1,2,or 3) within which the well completed.

Wells are listed in order by HSZ.

(2) - Values in this row are drinking water Maximum Contaminant Levels (MCL established by DHS or EPA, whichever is more stringent.

MCL - Maximum Contaminant Level for drinking water, EPA or DHS, whichever is more stringent.

N/A - Not Analyzed.

NE - MCL Not Established

-- - Not Detected.

UJf,UJh, Jc, Uz,Ux,Jh - See Table 9 for key to data qualifiers

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (1)	Date Sampled	B (2)	T (1000)	F (1750)	X (600)	1,1,1-TCA (200)	1,1,2-TCA (32)	1,1-DCA (5)	1,1-DCE (6)	1,2-DCA (0.5)	Chloroform (100)	PCE (5)	PCE (5)	CCL (0.5)	TPH (NE)	TPH/Gas (NE)	TPH/D (NE)	Vinyl Chloride (0.5)
MW1-01	03/03/88	--	--	--	--	--	--	--	--	--	0.8	--	--	--	--	--	N/A	--
	09/22/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--
	05/10/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/21/91	--	--	--	--	--	--	--	--	--	0.8	--	--	--	N/A	N/A	N/A	--
	04/22/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	01/29/92	--	--	--	--	--	--	--	--	--	1.7	--	--	--	N/A	N/A	N/A	--
	07/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/17/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/23/95	--	--	--	--	--	--	--	--	--	1.9	--	--	--	N/A	N/A	N/A	--
MW1-02	03/03/88	--	--	--	--	--	--	--	--	--	0.6	--	--	--	280	--	N/A	--
	09/20/89	--	1.4	--	--	--	--	--	--	--	--	--	--	--	--	50	N/A	--
	05/17/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--	--	--
	01/22/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	04/22/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	08/01/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	11/07/91	8.4	1.2	--	8.3	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	02/07/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	05/26/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	08/25/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	10/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/19/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	04/07/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/01/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	09/21/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/05/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	04/12/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/05/94	N/A	N/A	N/A	N/A	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	N/A	N/A	N/A	-- UJh
	10/26/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/13/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	04/27/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/14/95	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
MW1-03	03/03/88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1(2)	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 16	1,2-DCA 0.5	Chloroform 100	PCE 5	TCF 5	CCL ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-03	09/20/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--
	02/13/90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	05/10/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/22/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	04/23/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	08/01/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/29/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/17/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/23/95	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
MW1-04	03/03/88	11	4.5	1.5	6	22	--	12	130	42	--	--	--	--	1100	300	N/A	--
	09/20/89	210	--	--	--	--	--	7.1	--	120	--	--	--	--	--	3000	N/A	--
	02/15/90	190	3.5	2.1	7.5	5.3	--	12	250	46	--	--	5.7	--	N/A	N/A	N/A	--
	05/23/90	130	4.9	6.3	2.1	4.1	--	5.8	5.5	45	--	--	4.9	--	N/A	650	--	--
	09/18/90	98	4.1	4.3	2.7	2.4	--	6	30	38	--	--	4.5	--	N/A	--	N/A	--
	02/05/91	17	--	--	--	1.2	--	6	45	16	--	--	4.2	--	N/A	N/A	N/A	--
	05/01/91	580	--	12	24	--	--	11	15	93	--	--	0.89	--	N/A	N/A	N/A	--
	08/14/91	--	0.6	2.5	13	--	--	13	27	--	--	--	1.4	--	N/A	N/A	N/A	--
	11/07/91	1200	26	26	8.7	--	--	19	40	--	--	--	--	--	N/A	N/A	N/A	--
	01/28/92	940	12	18	3.4	0.6	--	12	16	170	--	--	1.4	--	N/A	N/A	N/A	--
	05/29/92	210	7.5	6.7	9.3	2.4	--	15	110	20	--	--	7.8	--	N/A	N/A	N/A	--
	08/26/92	230	2.4	4.1	1.7	1.3	--	14	120	13	--	1.3	8.6	--	N/A	N/A	N/A	--
	10/20/92	260	--	--	--	--	--	--	32	--	--	--	--	--	N/A	N/A	N/A	--
	01/20/93	180	5.6	8.9	4.2	--	--	7.5	73	12	--	--	5	--	N/A	N/A	N/A	--
	04/15/93	350	35	18	93	1.3	--	8.8	37	20	--	--	6.1	--	N/A	2300	N/A	--
	04/17/93	200	19	10	46	1.4	--	5.8	44	14	--	0.82	4.8	--	N/A	980	N/A	--
	04/18/93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	04/23/93	160	16	8.4	32	1.4	--	5	39	9.2	--	--	3.8	--	N/A	1600	N/A	--
	04/30/93	200	22	7.6	37	1.5	--	5	62	--	--	--	4.5	--	N/A	N/A	N/A	--
	05/06/93	200	30	9.7	30	1.4	--	4.8	42	10	--	--	3.9	--	N/A	1100	N/A	--
	05/14/93	220	26	7.3	45	--	--	5.7	46	9.2	--	--	4.6	--	N/A	1200	N/A	--
	06/17/93	270	40	9.7	50	1.4	--	5.2	66	7.9	--	--	3.2	--	N/A	1400	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (1)	Date Sampled	B-1 (2)	1000	1750	X-600	1,1,1-TCA-200	1,1,2-TCA-32	1,1,1-DCA-5	1,1,1-DCE-6	1,2-DCA-0.5	Chloroform-100	PCE-5	TCE-5	CCL ₄ -0.5	TPH-NE	TPH/Gas-NE	TPH/D-NE	Vinyl Chloride-0.5
MW1-04	07/12/93	210	23	7.1	28	1.2	--	4.5	55	6	--	--	--	--	N/A	--	N/A	--
	08/03/93	170	27	9.2	31	1.3	--	4.5	64	5.7	--	--	2.9	--	N/A	N/A	N/A	--
	09/10/93	110	7.5	--	--	1.3	--	4.5	53	3.5	--	0.82	3	--	N/A	630	N/A	--
	09/24/93	97	8.7	--	--	--	--	--	42	--	--	--	--	--	N/A	N/A	N/A	--
	10/06/93	150	19	--	--	1.8	--	5.8	69	5.4	--	1.1	4.3	--	N/A	520	N/A	--
	11/08/93	110	15	5.1	21	1.6	--	5	65	4.4	--	1.2	3.7	--	N/A	750	N/A	--
	12/08/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--	N/A	--
	01/14/94	110	14	4.4	19	1.3	--	4.6	52	3.4	--	1.1	2.9	--	N/A	510	N/A	--
	02/11/94	110	14	4.3	17	1.8	--	4.6	64	4.6	--	1.5	3	--	N/A	330	N/A	--
	03/02/94	110	13	4	16	1.2	--	3.9	41	3.3	--	1.4	2.6	--	N/A	580	N/A	--
	04/07/94	120	14	3.7	19	1.5	--	3.6	53	2.7	--	1.3	2.7	--	N/A	660	N/A	--
	05/05/94	61	6.9	2.2	8.6	0.66	--	3.3	37	2.9	--	1	2.4	--	N/A	380	N/A	--
	06/08/94	75	--	--	--	--	--	2.9	37	1.8	--	0.88	2.1	--	N/A	415	N/A	--
	07/08/94	88	12	3.6	N/A	1.1	--	3.2	39	--	--	1	--	--	N/A	150	N/A	--
	09/14/94	84	11	3.5	17	--	--	2.4	38	2.1	--	0.7	1.6	--	N/A	310	N/A	--
	10/10/94	110	12	7.4	15	1.3	--	2.4	39	2.5	--	1.2	2.8	--	N/A	430	N/A	--
	11/08/94	96	13	4.5	17	0.62	--	3.8	33	3.3	--	1.1	2.6	--	N/A	470	N/A	--
	12/07/94	94	12	4.5	16	1	--	3.4	33	2.9	--	1.4	2.5	--	N/A	430	N/A	--
	01/09/95	84	13	4.6	15	--	--	4.3	46	--	--	2.1	2.8	--	N/A	340	N/A	--
	02/09/95	68	11	3.4	19	--	--	3.1	40	2.3	--	--	2.5	--	N/A	430	N/A	--
	03/03/95	39	7.5	2	11	--	--	2.5	33	1.4	--	1.1	2.4	--	N/A	340	N/A	--
	04/04/95	92	15	3.3	34	0.88	--	2.8	31	3.1	--	1.2	2.1	--	N/A	760	N/A	--
MW1-05	03/04/88	--	--	--	--	--	--	--	--	--	4.9	--	--	--	--	--	N/A	--
	09/22/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	60	N/A	--
	05/17/90	--	--	--	--	--	--	--	--	--	2.6	--	--	--	N/A	--	--	--
	01/22/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	04/23/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	08/12/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	11/13/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	01/27/92	--	--	--	--	--	--	--	--	--	1.2	--	--	--	N/A	N/A	N/A	--
	01/22/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/17/94	--	--	--	--	--	--	--	--	--	2.1	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COUMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well ID	Date Sampled	B 100	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1,1-DCA 5	1,1,2-DCE 5	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-05	07/17/95	N/A	N/A	N/A	N/A	--	--	--	--	--	1.9	--	--	--	N/A	N/A	N/A	--
MW1-06	03/04/88	--	--	--	--	--	--	--	--	--	0.6	--	--	--	--	--	N/A	--
	09/22/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--
	05/16/90	--	--	--	--	--	--	--	--	--	1.5	--	--	--	N/A	N/A	N/A	--
	01/24/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	04/23/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	08/12/91	--	--	--	--	--	--	--	--	--	6.2	--	--	--	N/A	N/A	N/A	--
	11/13/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	01/28/92	--	--	--	--	--	--	--	--	--	2.1	--	--	--	N/A	N/A	N/A	--
	08/28/92	--	--	--	--	--	--	--	--	--	0.85	--	--	--	N/A	N/A	N/A	--
	01/22/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/09/93	--	--	--	--	--	--	--	--	--	1.6	--	--	--	N/A	N/A	N/A	--
	01/17/94	--	--	--	--	--	--	--	--	--	1.8	--	--	--	N/A	N/A	N/A	--
	07/17/95	N/A	N/A	N/A	N/A	--	--	--	--	--	2.4	--	--	--	N/A	N/A	N/A	--
MW1-07	03/04/88	--	--	--	--	25	--	15	17	1.6	1.9	--	1	--	--	--	N/A	--
	09/15/89	--	--	--	--	26	--	15	23	3.1	1.1	--	1.1	--	--	50	N/A	--
	02/07/90	--	--	--	--	11	--	9.9	58	--	2.6	--	0.6	--	N/A	N/A	N/A	--
	05/23/90	--	--	--	--	9.7	--	9.2	8.1	--	3	--	--	--	N/A	--	--	--
	01/30/91	N/A	N/A	N/A	N/A	5.1	--	4.3	15	--	2.6	--	--	--	N/A	N/A	N/A	--
	04/26/91	N/A	N/A	N/A	N/A	4.6	--	4.5	11	--	3	--	--	--	N/A	N/A	N/A	--
	08/07/91	--	--	--	--	8.1	--	12	28	--	4.1	--	--	--	N/A	N/A	N/A	--
	11/13/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	02/07/92	--	--	--	--	7.2	--	12	32	--	4.9	--	--	--	N/A	N/A	N/A	--
	06/02/92	--	--	--	--	4.2	--	6.8	21	N/A	4.1	--	--	--	N/A	N/A	N/A	--
	08/31/92	--	--	--	--	5.2	--	8.5	39	--	4.5	--	--	--	N/A	N/A	N/A	--
	10/23/92	--	--	--	--	3.7	--	5.9	21	--	4.7	--	--	--	N/A	N/A	N/A	--
	01/29/93	--	--	--	--	1.4	--	3.6	9.6	--	1.8	--	--	--	N/A	N/A	N/A	--
	04/14/93	N/A	N/A	N/A	N/A	1.9	--	3.7	9.8	--	4	--	--	--	N/A	N/A	N/A	--
	07/07/93	--	--	--	--	0.93	--	2.9	11	--	3.3	--	--	--	N/A	N/A	N/A	--
	09/24/93	N/A	N/A	N/A	N/A	--	--	--	3.4	--	2.1	--	--	--	N/A	N/A	N/A	--
	01/10/94	--	--	--	--	--	--	1.3	6.2	--	2.2	--	--	--	N/A	N/A	N/A	--
	04/14/94	N/A	N/A	N/A	N/A	--	--	0.59	3.7	--	2.4	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (B)	Date Sampled	B 1(2)	F 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-07	07/21/94	N/A	N/A	N/A	N/A	--	--	0.71	--	--	2.1	--	--	--	N/A	N/A	N/A	--
	11/02/94	N/A	N/A	N/A	N/A	--	--	0.62	5.4	--	2	--	--	--	N/A	N/A	N/A	--
	02/04/95	N/A	N/A	N/A	N/A	--	--	1.5	8.3	--	1.1	1.8 μ f	--	--	N/A	N/A	N/A	--
	05/05/95	N/A	N/A	N/A	N/A	--	--	1.4	6.5	--	2.7	0.58	--	--	N/A	N/A	N/A	--
	07/21/95	--	--	--	--	--	--	1.4	6.6	--	3	--	--	--	N/A	N/A	N/A	--
MW1-08	03/03/88	--	--	--	--	2.4	--	0.9	13	--	--	0.8	--	--	--	--	N/A	--
	09/20/89	--	2.5	--	--	--	--	--	--	--	--	1.5	--	--	--	--	N/A	--
	02/13/90	--	--	--	--	1.1	--	--	13	--	--	1.5	--	--	N/A	N/A	N/A	--
	05/23/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--	--	--
	01/30/91	N/A	N/A	N/A	N/A	--	--	--	1.8	--	--	3.2	--	--	N/A	N/A	N/A	--
	04/26/91	N/A	N/A	N/A	N/A	--	--	--	1.8	--	--	3.7	--	--	N/A	N/A	N/A	--
	08/12/91	--	--	--	--	--	--	--	9.6	--	--	21	--	--	N/A	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	N/A	--
	01/28/92	--	--	--	--	--	--	--	1.8	--	--	8.8	--	--	N/A	N/A	N/A	--
	08/28/92	--	--	--	--	--	--	--	0.71	--	--	--	7.1	--	N/A	N/A	N/A	--
	01/27/93	--	--	--	--	--	--	--	0.61	--	--	3.7	--	--	N/A	N/A	N/A	--
	07/08/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	4.8	--	--	N/A	--	N/A	--
	01/17/94	--	--	--	--	--	--	--	--	--	0.6	2.8	--	--	N/A	N/A	N/A	--
	07/05/94	N/A	N/A	N/A	N/A	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	3.1 Uz	-- UJh	-- UJh	N/A	N/A	N/A	-- UJh
	01/25/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	3	--	--	N/A	N/A	N/A	--
	07/17/95	--	0.61	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW1-11	09/06/89	--	6	--	--	--	--	0.8	--	--	5.1	--	1.7	--	600	120	N/A	--
	02/15/90	--	--	--	--	--	--	--	8.3	--	0.6	--	0.5	--	N/A	N/A	N/A	--
	05/18/90	--	--	--	--	--	--	3.2	--	--	--	0.7	4.2	--	N/A	--	--	--
	09/17/90	--	--	--	--	1.7	--	6.2	18	--	--	--	2.4	--	N/A	--	N/A	--
	01/30/91	N/A	N/A	N/A	N/A	2.8	--	16	46	--	--	--	2.5	--	N/A	N/A	N/A	--
	04/26/91	N/A	N/A	N/A	N/A	4.5	--	19	62	--	--	0.59	3.5	--	N/A	N/A	N/A	--
	08/15/91	--	--	--	--	1.8	--	11	--	--	--	--	2	--	N/A	N/A	N/A	--
	11/07/91	N/A	N/A	N/A	N/A	1	--	7.2	9.9	0.6	--	--	1.1	--	N/A	N/A	N/A	--
	01/27/92	--	--	--	--	1.5	--	11	110	--	--	0.7	3	--	N/A	N/A	N/A	--
	06/02/92	--	--	--	--	1.5	0.5	7.6	54	--	--	--	3.8	--	N/A	N/A	N/A	--
	08/26/92	--	--	--	--	0.72	--	8	57	--	--	1.3	4.3	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (ft)	Date Sampled	B 1,2	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1,1-DCA 5	1,1,2-DCE 6	1,1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCl ₄ 10.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-11	10/20/92	--	--	--	--	0.51	--	4.7	37	--	--	0.68	2.6	--	N/A	N/A	N/A	--
	01/14/93	--	--	--	--	--	--	2.5	54	--	--	--	2.2	--	N/A	N/A	N/A	--
	04/09/93	N/A	N/A	N/A	N/A	0.95	--	2.9	27	--	--	--	2.8	--	N/A	N/A	N/A	--
	07/02/93	--	--	--	--	0.71	--	3.5	45	--	--	0.65	2.9	--	N/A	N/A	N/A	--
	09/24/93	N/A	N/A	N/A	N/A	--	--	1.7	20	--	--	0.54	1.3	--	N/A	N/A	N/A	--
	01/05/94	--	--	--	--	--	--	1.7	15	--	--	--	1.7	--	N/A	N/A	N/A	--
	04/13/94	N/A	N/A	N/A	N/A	--	--	2.4	18	--	--	--	1.5	--	N/A	N/A	N/A	--
	07/05/94	N/A	N/A	N/A	N/A	-- [UJh	-- [UJh	1.9 [Jh	14 [Jh	-- [UJh	-- [UJh	-- [UJh	1.6 [Jh	-- [UJh	N/A	N/A	N/A	-- [UJh
	10/26/94	N/A	N/A	N/A	N/A	--	--	0.72	8.6	--	--	--	0.7	--	N/A	N/A	N/A	--
	01/16/95	N/A	N/A	N/A	N/A	--	--	--	12	--	--	--	3	--	N/A	N/A	N/A	--
MW1-13	04/27/95	N/A	N/A	N/A	N/A	0.66	--	1.7	22	--	--	1.4	3.1	--	N/A	N/A	N/A	--
	07/14/95	--	--	--	--	--	--	1.5	14	--	--	0.83	2.7	--	N/A	N/A	N/A	--
	09/13/89	5700	343	--	147	--	0.8	13.2	--	360	--	--	0.6	--	3100	51000	N/A	--
	11/02/89	6700	210	50	88	--	--	20	24	270	--	--	--	--	N/A	N/A	N/A	--
	02/16/90	10500	400	150	1600	--	--	40	55	200	--	--	--	--	N/A	N/A	N/A	--
	05/25/90	12000	250	1200	530	--	--	32	--	250	--	--	--	--	N/A	46000	2400	--
	09/18/90	7300	310	410	620	--	--	27	15	210	--	--	--	--	N/A	--	N/A	--
	02/05/91	10000	390	--	600	0.6	--	36	25	96	--	--	--	--	N/A	N/A	N/A	--
	04/30/91	7900	260	340	520	--	--	17	14	120	--	--	--	--	N/A	N/A	N/A	--
	08/07/91	11000	440	450	760	1.1	--	24	9.6	108	--	--	1.5	--	N/A	N/A	N/A	--
	11/07/91	41000	1600	180	3900	--	--	160	210	--	--	--	--	--	N/A	N/A	N/A	--
	02/07/92	11000	630	780	1300	--	--	34	31	--	--	5.6	--	--	N/A	N/A	N/A	--
	06/04/92	9900	380	500	570	--	--	35	18	160	--	--	--	--	N/A	N/A	N/A	--
	08/26/92	13000	340	520	780	--	--	39	13	180	--	--	0.8	--	N/A	N/A	N/A	--
	10/27/92	9600	330	500	740	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/20/93	7300	290	340	520	--	--	8.5	8.8	150	--	--	--	--	N/A	N/A	N/A	--
	04/13/93	6500	340	330	600	--	--	30	8.7	130	--	--	0.68	--	N/A	N/A	N/A	--
	07/02/93	4600	87	120	140	--	--	26	23	89	--	--	--	--	N/A	N/A	N/A	--
	09/22/93	3800	66	190	110	--	--	21	27	81	--	--	6.5	--	N/A	N/A	N/A	--
	01/07/94	4100	180	250	280	--	--	27	100	73	--	--	16	--	N/A	N/A	N/A	--
	04/13/94	2200	67	130	79	--	--	40	140	61	--	--	22	--	N/A	N/A	N/A	--
	07/05/94	1800	43 [Jh	120 [Jh	36 [Jh	-- [UJh	-- [UJh	48 [Jh	78 [Jh	57 [Jh	-- [UJh	-- [UJh	11 [Jh	-- [UJh	N/A	N/A	N/A	-- [UJh

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (1)	Date Sampled	B (2)	1 (2)	E (2)	X (2)	1,1,1-TCA (200)	1,1,2-TCA (32)	1,1-DCA (5)	1,1-DCE (6)	1,2-DCA (0.5)	Chloroform (100)	PCE (5)	TCE (5)	CCl ₄ (0.5)	TPH (NF)	TPH/Gas (NF)	TPH/D (NF)	Vinyl Chloride (0.5)
MW1-13	10/29/94	2200	100	130	96	--	--	40	99	39	--	--	--	--	N/A	N/A	N/A	--
	01/30/95	2600	99	180	170	--	--	24	89	32	--	--	12	--	N/A	N/A	N/A	--
	04/28/95	2200	180	180	250	--	--	67	88	51	0.56	--	11	--	N/A	N/A	N/A	--
	07/17/95	2500	220	220	250	--	--	53	94	42	--	--	30	--	N/A	N/A	N/A	--
MW1-14	09/13/89	--	12.3	--	--	22	7.1	9.4	15.1	3.7	2.5	--	5.6	--	--	100	N/A	--
	11/02/89	--	--	--	--	20	6.3	9.3	75	7.7	2.5	--	4.7	--	N/A	N/A	N/A	--
	02/16/90	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	05/22/90	2.2	--	--	--	4.1	--	5.8	11	1.4	--	--	5.9	--	N/A	--	--	--
	09/18/90	--	--	--	--	2.3	--	5	47	--	--	--	5.7	--	N/A	--	N/A	--
	02/04/91	--	--	--	--	1.3	--	4.4	47	--	--	--	6.2	--	N/A	N/A	N/A	--
	05/01/91	--	--	--	--	0.88	--	3.1	18	--	--	--	4.9	--	N/A	N/A	N/A	--
	08/14/91	0.7	--	--	--	1.6	--	4.8	50	--	--	0.6	9.7	--	N/A	N/A	N/A	--
	11/22/91	--	--	--	--	1.9	--	6.3	150	1.5	--	--	5.6	--	N/A	N/A	N/A	--
	02/07/92	--	--	--	--	3.1	--	12	100	--	0.5	0.6	9.4	--	N/A	N/A	N/A	--
	06/01/92	15	--	--	--	5.1	0.7	28	120	3.7	0.8	--	10	--	N/A	N/A	N/A	--
	08/27/92	--	--	--	--	3.3	--	43	142	--	--	--	12	--	N/A	N/A	N/A	--
	10/26/92	--	--	--	--	--	--	36	200	--	--	--	13	--	N/A	N/A	N/A	--
	01/20/93	--	--	--	--	1.7	--	20	140	--	--	0.8	7	--	N/A	N/A	N/A	--
	04/13/93	1.5	--	--	--	1.8	0.59	12	99	--	--	0.65	7.9	--	N/A	N/A	N/A	--
	07/02/93	8.7	--	--	--	--	--	2.1	36	--	--	--	0.85	--	N/A	N/A	N/A	--
	09/22/93	0.79	--	--	--	1	0.61	7.7	80	0.5	--	1.1	6	--	N/A	N/A	N/A	--
	01/07/94	--	--	--	--	--	--	--	42	--	--	--	--	--	N/A	N/A	N/A	--
	04/13/94	0.63	--	--	--	0.58	--	4.9	44	--	--	--	7.8	--	N/A	N/A	N/A	--
	07/05/94	1.6 UJh	-- UJh	-- UJh	-- UJh	0.94 UJh	-- UJh	3.5 UJh	28 UJh	-- UJh	-- UJh	-- UJh	5.5 UJh	-- UJh	N/A	N/A	N/A	-- UJh
	10/29/94	1.4	--	--	--	0.55	--	7	36	--	--	--	6.2	--	N/A	N/A	N/A	--
	01/30/95	--	--	--	--	0.68	--	14	66	--	--	--	4.8	--	N/A	N/A	N/A	--
	04/28/95	--	--	--	--	1.5	0.89	18	94	--	--	--	4.2	--	N/A	N/A	N/A	--
	07/17/95	0.72	--	--	--	1.8	1.1	20	80	0.78	--	0.63	4.8	--	N/A	N/A	N/A	--
MW1-15	09/07/89	--	--	--	--	--	--	--	--	--	--	2.2	--	--	--	--	N/A	--
	02/12/90	--	--	--	--	0.5	--	--	5.8	--	--	2.8	--	--	N/A	N/A	N/A	--
	05/16/90	--	--	--	--	--	--	--	--	--	--	3.5	--	--	N/A	N/A	N/A	--
	01/24/91	N/A	N/A	N/A	N/A	0.7	--	--	1.2	--	--	6.8	--	--	N/A	N/A	N/A	--

Table 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well ID	Date Sampled	B 100	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,2-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCF 5	CCl ₄ 0.5	TPH NF	TPH/Gas NF	TPH/D NF	Vinyl Chloride 0.5
MW1-15	04/25/91	N/A	N/A	N/A	N/A	--	--	--	0.75	--	--	6.1	--	--	N/A	N/A	N/A	--
	08/05/91	--	--	--	--	--	--	--	--	--	--	7.8	--	--	N/A	N/A	N/A	--
	11/05/91	N/A	N/A	N/A	N/A	1.3	--	--	2.1	--	--	12	--	--	N/A	N/A	N/A	--
	01/30/92	--	--	--	--	--	--	--	1.6	--	--	10	--	--	N/A	N/A	N/A	--
	08/27/92	--	--	--	--	--	--	--	--	--	--	10	--	--	N/A	N/A	N/A	--
	01/25/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/09/93	--	--	--	--	--	--	--	--	--	--	5.8	--	--	N/A	N/A	N/A	--
	01/17/94	--	--	--	--	--	--	--	--	--	--	3.4	--	--	N/A	N/A	N/A	--
	07/05/94	N/A	N/A	N/A	N/A	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	0.54 Jh	2.4	-- UJh	-- UJh	N/A	N/A	N/A	-- UJh
	01/25/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
MW1-16	07/17/95	--	--	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	09/07/89	--	3.9	--	--	0.8	--	0.7	--	--	0.5	--	--	--	--	--	N/A	--
	02/12/90	--	--	--	--	2	--	1.8	29	--	--	--	--	--	N/A	N/A	N/A	--
	05/16/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/24/91	N/A	N/A	N/A	N/A	--	--	--	2.6	--	--	--	--	--	N/A	N/A	N/A	--
	04/25/91	N/A	N/A	N/A	N/A	0.83	--	--	2.8	--	--	--	--	--	N/A	N/A	N/A	--
	08/13/91	--	--	--	--	1.5	--	--	8.3	--	--	--	--	--	N/A	N/A	N/A	--
	11/07/91	N/A	N/A	N/A	N/A	1.6	--	--	5.7	--	--	--	--	--	N/A	N/A	N/A	--
	01/30/92	--	--	--	--	0.6	--	--	9	--	--	--	--	--	N/A	N/A	N/A	--
	06/04/92	--	--	--	--	1.9	--	--	2.7	--	--	--	--	--	N/A	N/A	N/A	--
	08/27/92	--	--	--	--	--	--	--	3.9	--	--	--	--	--	N/A	N/A	N/A	--
	10/23/92	--	--	--	--	0.81	--	--	3.2	--	--	--	--	--	N/A	N/A	N/A	--
	01/21/93	--	--	--	--	--	--	--	2.6	--	--	--	--	--	N/A	N/A	N/A	--
	04/12/93	N/A	N/A	N/A	N/A	0.64	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	06/29/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	09/23/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/06/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	04/14/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/05/94	N/A	N/A	N/A	N/A	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	N/A	N/A	N/A	-- UJh
	10/26/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/17/95	N/A	N/A	N/A	N/A	--	--	--	--	--	0.55	--	--	--	N/A	N/A	N/A	--
	04/30/95	N/A	N/A	N/A	N/A	--	--	--	--	--	0.83	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (1)	Date Sampled	B 1 (2)	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1,2-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCl ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-16	07/14/95	--	--	--	--	--	--	--	--	--	1	--	--	--	N/A	N/A	N/A	--
MW1-17	09/21/89	--	1.3	--	--	1.1	--	0.5	--	--	2.6	--	0.7	--	--	--	N/A	--
	02/12/90	--	--	--	--	0.8	--	0.6	36	--	--	--	0.5	--	N/A	N/A	N/A	--
	05/18/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--	--	--
	01/25/91	--	--	--	--	--	--	--	3	--	--	--	--	--	N/A	N/A	N/A	--
	04/29/91	--	--	--	--	--	--	--	3.8	--	--	--	--	--	N/A	N/A	N/A	--
	08/06/91	--	--	--	--	--	--	--	3.7	--	--	--	--	--	N/A	N/A	N/A	--
	11/05/91	N/A	N/A	N/A	N/A	0.6	--	--	2.8	--	--	--	--	--	N/A	N/A	N/A	--
	01/30/92	--	--	--	--	--	--	--	1.2	--	--	--	--	--	N/A	N/A	N/A	--
	08/27/92	--	--	--	--	--	--	--	0.8	--	--	--	--	--	N/A	N/A	N/A	--
	01/25/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/09/93	--	--	--	--	--	--	--	1	--	--	--	--	--	N/A	N/A	N/A	--
	01/17/94	--	--	--	--	--	--	--	0.61	--	--	1.1	--	--	N/A	N/A	N/A	--
	06/30/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	1.3 UZ	--	--	N/A	N/A	N/A	--
	02/04/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/17/95	--	0.52	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW1-18	09/21/89	--	1.3	--	--	1.9	0.8	3.4	4.2	--	1.5	--	9.4	--	--	50	N/A	--
	11/02/89	--	--	--	--	6.9	1	7.8	92	0.5	0.5	--	13	--	N/A	N/A	N/A	--
	02/12/90	--	--	--	--	4	--	4.8	230	--	--	--	8.1	--	N/A	N/A	N/A	--
	05/18/90	--	--	--	--	2.4	--	2.8	3.2	--	--	1	10	--	N/A	--	--	--
	01/25/91	--	--	--	--	0.9	--	1.4	22	--	--	--	2.9	--	N/A	N/A	N/A	--
	04/29/91	--	--	--	--	0.94	--	1.1	20	--	--	--	2.3	--	N/A	N/A	N/A	--
	08/13/91	--	--	--	--	1.5	--	1.2	18	--	--	--	3.8	--	N/A	N/A	N/A	--
	11/05/91	N/A	N/A	N/A	N/A	2.2	3.8	2	18	--	--	--	--	--	N/A	N/A	N/A	--
	01/30/92	--	--	--	--	1	--	0.8	25	--	--	--	2.8	--	N/A	N/A	N/A	--
	06/01/92	--	--	--	--	1.4	--	0.6	13	--	--	--	2.2	--	N/A	N/A	N/A	--
	08/27/92	--	--	--	--	0.94	--	--	16	--	--	--	3.2	--	N/A	N/A	N/A	--
	10/26/92	--	--	--	--	2.6	--	--	17	--	--	--	3	--	N/A	N/A	N/A	--
	01/21/93	--	--	--	--	0.77	--	--	14	--	--	--	1.6	--	N/A	N/A	N/A	--
	04/14/93	N/A	N/A	N/A	N/A	1.3	--	--	12	--	--	--	1.5	--	N/A	N/A	N/A	--
	06/30/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	09/24/93	N/A	N/A	N/A	N/A	--	--	--	5.4	--	--	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (D)	Date Sampled	B (2)	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 15	TCF 5	CCl 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-18	01/06/94	--	--	--	--	--	--	--	5.2	--	--	--	0.68	--	N/A	N/A	N/A	--
	04/14/94	N/A	N/A	N/A	N/A	--	--	--	3.7	--	--	--	0.52	--	N/A	N/A	N/A	--
	06/30/94	N/A	N/A	N/A	N/A	--	--	--	2.8	--	--	--	0.5	--	N/A	N/A	N/A	--
	10/26/94	N/A	N/A	N/A	N/A	--	--	--	2.7	--	--	--	--	--	N/A	N/A	N/A	--
	01/17/95	N/A	N/A	N/A	N/A	--	--	--	3.3	--	--	--	--	--	N/A	N/A	N/A	--
	05/03/95	N/A	N/A	N/A	N/A	--	--	--	2.3	--	--	--	0.7	--	N/A	N/A	N/A	--
	07/21/95	--	--	--	--	--	--	--	2.3	--	--	--	1	--	N/A	N/A	N/A	--
MW1-19	09/14/89	--	--	--	--	--	--	--	--	--	0.9	1	--	--	--	--	N/A	--
	02/14/90	--	--	--	--	0.8	--	--	13	--	--	1.3	--	--	N/A	N/A	N/A	--
	05/14/90	--	--	--	--	--	--	--	--	--	--	1.4	--	--	N/A	N/A	N/A	--
	01/24/91	N/A	N/A	N/A	N/A	--	--	--	5.9	--	--	1.7	--	--	N/A	N/A	N/A	--
	04/29/91	N/A	N/A	N/A	N/A	--	--	--	4.2	--	--	1.9	--	--	N/A	N/A	N/A	--
	08/05/91	--	--	--	--	--	--	--	2.4	--	--	3.2	--	--	N/A	N/A	N/A	--
	11/11/91	N/A	N/A	N/A	N/A	--	--	--	3.7	--	--	2.8	--	--	N/A	N/A	N/A	--
	01/30/92	--	--	--	--	--	--	--	2.9	--	--	3.6	--	--	N/A	N/A	N/A	--
	08/28/92	--	--	--	--	--	--	--	1.5	--	--	2	--	--	N/A	N/A	N/A	--
	01/25/93	--	--	--	--	--	--	--	8.9	--	--	1.5	--	--	N/A	N/A	N/A	--
	07/09/93	--	--	--	--	--	--	--	5.9	--	--	0.8	--	--	N/A	N/A	N/A	--
	01/16/94	--	--	--	--	--	--	--	7.1	--	--	--	--	--	N/A	N/A	N/A	--
	06/30/94	N/A	N/A	N/A	N/A	--	--	--	9.3	--	0.95	--	--	--	N/A	N/A	N/A	--
	01/25/95	N/A	N/A	N/A	N/A	--	--	--	9.7	--	--	--	--	--	N/A	N/A	N/A	--
	07/17/95	--	--	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW1-20	09/14/89	--	--	--	--	0.7	--	--	--	--	--	--	--	--	--	--	N/A	--
	02/14/90	--	--	--	--	2.1	--	2.1	36	--	--	--	--	--	N/A	N/A	N/A	--
	05/14/90	--	--	--	--	1.4	--	0.9	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/24/91	N/A	N/A	N/A	N/A	--	--	--	9.8	--	--	--	--	--	N/A	N/A	N/A	--
	04/29/91	N/A	N/A	N/A	N/A	0.51	--	--	8.9	--	--	--	--	--	N/A	N/A	N/A	--
	08/14/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	11/11/91	N/A	N/A	N/A	N/A	0.7	--	--	11	--	--	--	--	--	N/A	N/A	N/A	--
	01/30/92	--	--	--	--	0.6	--	--	11	--	--	--	--	--	N/A	N/A	N/A	--
	06/02/92	--	--	--	--	0.8	--	--	7.2	--	--	--	--	--	N/A	N/A	N/A	--
	08/28/92	--	--	--	--	--	--	--	8.3	--	--	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well ID	Date Sampled	B T(2)	T 1000	E 1250	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1,1,2-EDCA 5	1,1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL 4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-20	10/23/92	--	--	--	--	--	--	--	7.3	--	--	--	--	--	N/A	N/A	N/A	--
	01/25/93	--	--	--	--	--	--	--	4	--	--	--	--	--	N/A	N/A	N/A	--
	04/13/93	N/A	N/A	N/A	N/A	--	--	--	3.5	--	--	--	--	--	N/A	N/A	N/A	--
	06/29/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	09/24/93	N/A	N/A	N/A	N/A	--	--	--	0.51	--	--	--	--	--	N/A	N/A	N/A	--
	01/06/94	--	--	--	--	--	--	--	0.66	--	--	--	--	--	N/A	N/A	N/A	--
	04/14/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	06/30/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	10/26/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/17/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	05/03/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	1.3	--	--	N/A	N/A	N/A	--
	07/22/95	--	--	--	--	--	--	--	--	--	--	1.4	--	--	N/A	N/A	N/A	--
MW1-21	09/08/89	--	--	--	--	--	--	--	--	--	1.6	--	--	--	--	--	N/A	--
	02/13/90	--	--	--	--	--	--	--	1.1	22	1.6	--	--	--	N/A	N/A	N/A	--
	05/14/90	--	--	--	--	--	--	--	0.6	--	4.2	--	--	--	N/A	N/A	N/A	--
	01/23/91	N/A	N/A	N/A	N/A	--	--	--	0.8	--	2.4	--	--	--	N/A	N/A	N/A	--
	04/25/91	N/A	N/A	N/A	N/A	--	--	--	0.74	4.7	2.5	--	--	--	N/A	N/A	N/A	--
	08/07/91	--	--	--	--	--	--	--	0.9	--	5.1	--	--	--	N/A	N/A	N/A	--
	11/11/91	N/A	N/A	N/A	N/A	--	--	--	--	--	4.8	--	--	--	N/A	N/A	N/A	--
	01/30/92	--	--	--	--	--	--	--	2.7	--	5.1	--	--	--	N/A	N/A	N/A	--
	08/28/92	--	--	--	--	--	--	--	0.6	--	4	--	--	--	N/A	N/A	N/A	--
	01/29/93	--	--	--	--	--	--	--	1.3	--	2	--	--	--	N/A	N/A	N/A	--
	07/08/93	N/A	N/A	N/A	N/A	--	--	--	--	--	2.4	--	--	--	N/A	--	N/A	--
	01/16/94	--	--	--	--	--	--	1	6.1	--	1.4	--	--	--	N/A	N/A	N/A	--
	07/07/94	N/A	N/A	N/A	N/A	--	--	--	1.9	--	2.2	--	--	--	N/A	N/A	N/A	--
	02/04/95	N/A	N/A	N/A	N/A	--	--	--	1.4	15	--	3	--	--	N/A	N/A	N/A	--
MW1-22	09/11/89	--	--	--	--	--	--	--	--	--	3	--	--	--	--	--	N/A	--
	02/07/90	--	--	--	--	--	--	--	--	--	0.9	--	--	--	N/A	N/A	N/A	--
	05/14/90	--	--	--	--	--	--	--	--	--	5	--	--	--	N/A	N/A	N/A	--
	01/23/91	N/A	N/A	N/A	N/A	--	--	--	--	--	5.2	--	--	--	N/A	N/A	N/A	--
	04/25/91	N/A	N/A	N/A	N/A	--	--	--	--	--	4.8	--	--	--	N/A	N/A	N/A	--
	08/14/91	--	--	--	--	--	--	--	--	--	3.9	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well	Date Sampled	B 1-2	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCl ₄ 0.5	TPH NF	TPH/Gas NF	TPH/D NF	Vinyl Chloride 0.5
MW1-22	11/11/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	01/30/92	--	--	--	--	--	--	--	--	--	5.8	--	--	--	N/A	N/A	N/A	--
	01/29/93	--	--	--	--	--	--	--	--	--	1.5	--	--	--	N/A	N/A	N/A	--
	01/16/94	--	--	--	--	--	--	--	--	--	2	--	--	--	N/A	N/A	N/A	--
	07/17/95	N/A	N/A	N/A	N/A	--	--	--	--	--	2.8	--	--	--	N/A	N/A	N/A	--
MW1-23	09/08/89	--	--	--	--	--	--	--	--	--	4.3	--	--	--	--	--	N/A	--
	05/14/90	--	--	--	--	--	--	1.3	--	--	10	--	--	--	N/A	N/A	N/A	--
	01/23/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	04/23/91	N/A	N/A	N/A	N/A	--	--	0.67	--	--	3	--	--	--	N/A	N/A	N/A	--
	08/02/91	--	--	--	--	--	--	--	--	--	3.1	--	--	--	N/A	N/A	N/A	--
	11/11/91	N/A	N/A	N/A	N/A	--	--	--	--	--	4.6	0.7	--	--	N/A	N/A	N/A	--
	01/24/92	--	--	--	--	--	--	--	--	--	2.8	--	--	--	N/A	N/A	N/A	--
	08/28/92	--	--	--	--	--	--	1.2	--	--	4.5	--	--	--	N/A	N/A	N/A	--
	01/22/93	--	--	--	--	--	--	--	--	--	2.2	--	--	--	N/A	N/A	N/A	--
	07/08/93	N/A	N/A	N/A	N/A	--	--	--	--	--	2	--	--	--	N/A	--	N/A	--
	01/16/94	--	--	--	--	--	--	0.54	--	--	2	--	--	--	N/A	N/A	N/A	--
	07/13/94	N/A	N/A	N/A	N/A	--	--	0.71	0.76	--	1.5	--	--	--	N/A	N/A	N/A	--
	02/04/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	2.7	--	--	N/A	N/A	N/A	--
MW1-24	09/08/89	--	--	--	--	--	--	--	--	--	2.8	--	--	--	--	--	N/A	--
	05/14/90	--	--	--	--	--	--	--	--	--	11	--	--	--	N/A	N/A	N/A	--
	01/23/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	04/24/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	08/01/91	--	--	--	--	--	--	--	--	--	3.2	--	--	--	N/A	N/A	N/A	--
	11/13/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	01/24/92	--	--	--	--	--	--	--	--	--	2.5	--	--	--	N/A	N/A	N/A	--
	01/22/93	--	--	--	--	--	--	--	--	--	1.7	--	--	--	N/A	N/A	N/A	--
	07/08/93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	01/16/94	--	--	--	--	--	--	--	--	--	0.9	--	--	--	N/A	N/A	N/A	--
	07/13/94	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	02/04/95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	07/17/95	N/A	N/A	N/A	N/A	--	--	--	--	--	1.6	--	--	--	N/A	N/A	N/A	--
MW1-25	09/11/89	--	4.1	--	--	--	--	1	--	--	0.9	--	--	--	--	--	N/A	--

Table 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995

ORGANIC COMPOUNDS (ug/l)

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

Well (1)	Date Sampled	B (2)	T 1000	F 1750	X 600	1,1,1-TCF 200	1,1,2-TCF 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-25	02/08/90	--	--	--	--	--	--	1.3	7.6	--	1.1	--	--	--	N/A	N/A	N/A	--
	05/16/90	--	--	--	--	--	--	1.3	--	--	1.1	--	--	--	N/A	--	--	--
	01/29/91	N/A	N/A	N/A	N/A	--	--	1.3	2.3	--	1.1	--	--	--	N/A	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	N/A	--
	08/02/91	--	--	--	--	0.6	--	3	5.8	--	1.6	--	--	--	N/A	N/A	N/A	--
	11/13/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	01/23/92	--	--	--	--	2.1	--	6.9	8.7	--	2.2	--	--	--	N/A	N/A	N/A	--
	09/01/92	--	--	--	--	4.4	--	14	22	--	2.8	--	0.65	--	N/A	N/A	N/A	--
	01/27/93	--	--	--	--	2.2	--	10	6.3	0.77	1.6	--	--	--	N/A	N/A	N/A	--
	07/08/93	N/A	N/A	N/A	N/A	2.8	--	12	--	--	2.4	--	--	--	N/A	--	N/A	--
	01/16/94	--	--	--	--	1.3	--	5.9	6.3	--	1.5	--	--	--	N/A	N/A	N/A	--
	07/07/94	N/A	N/A	N/A	N/A	1	--	4.8	6.1	--	1.8	--	--	--	N/A	N/A	N/A	--
	01/25/95	N/A	N/A	N/A	N/A	--	--	5.4	6.7	--	3.1	--	--	--	N/A	N/A	N/A	--
	07/17/95	--	--	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW1-26	09/12/89	--	--	--	--	--	--	1	--	--	2.6	--	--	--	--	50	N/A	--
	02/08/90	--	--	--	--	--	--	3.2	14	--	1.3	--	--	--	N/A	N/A	N/A	--
	05/16/90	--	--	--	--	--	--	1.6	--	--	1.1	--	--	--	N/A	--	--	--
	01/29/91	N/A	N/A	N/A	N/A	--	--	1.6	3.6	--	1	--	--	--	N/A	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	N/A	--
	08/13/91	--	--	--	--	0.6	--	4	8.1	--	1.5	--	--	--	N/A	N/A	N/A	--
	11/13/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	01/27/92	--	1.4	--	--	1.1	--	4.8	5.1	--	2	--	--	--	N/A	N/A	N/A	--
	06/04/92	--	--	--	--	4.4	--	8.6	8.2	0.6	2.7	--	--	--	N/A	N/A	N/A	--
	09/01/92	--	--	--	--	3.7	--	12	19	--	3.6	--	--	--	N/A	N/A	N/A	--
	10/23/92	--	--	--	--	2.4	--	10	9.4	--	3.1	--	--	--	N/A	N/A	N/A	--
	01/28/93	--	--	--	--	3.2	--	13	15	0.9	2.5	--	--	--	N/A	N/A	N/A	--
	04/08/93	--	--	--	--	3.9	--	13	9.1	0.78	2.9	--	--	--	N/A	N/A	N/A	--
	07/07/93	--	--	--	--	3.3	--	14	14	--	2.3	--	--	--	N/A	N/A	N/A	--
	09/23/93	N/A	N/A	N/A	N/A	3	--	9.4	15	3.6	1.9	--	--	--	N/A	N/A	N/A	--
	01/10/94	--	--	--	--	2.6	--	11	15	0.7	2	--	--	--	N/A	N/A	N/A	--
	04/14/94	N/A	N/A	N/A	N/A	1.9	--	10	16	--	2.4	--	--	--	N/A	N/A	N/A	--
	07/07/94	N/A	N/A	N/A	N/A	1.4	--	6.6	9.3	--	2.3	--	--	--	N/A	N/A	N/A	--

Table 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995

ORGANIC COMPOUNDS (ug/l)

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

Well (1)	Date Sampled	B 1000	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 52	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL4 0.5	TPH NF	TPH/Gas NF	TPH/D NF	Y(ug/l) Chloride 0.5
MW1-26	10/29/94	N/A	N/A	N/A	N/A	1.1	--	7.1	12	--	1.9	--	--	--	N/A	N/A	N/A	--
	01/17/95	N/A	N/A	N/A	N/A	1.4	--	8.2	12	--	3.5	--	--	--	N/A	N/A	N/A	--
	04/30/95	N/A	N/A	N/A	N/A	1.5	--	8.5	13	--	4	--	--	--	N/A	N/A	N/A	--
	07/17/95	--	--	--	--	1.4	--	6.4	11	--	3.8	--	0.69	--	N/A	N/A	N/A	--
MW1-29	02/15/90	--	--	--	--	8.5	--	10	190	22	1.8	--	0.9	--	N/A	N/A	N/A	--
	04/23/90	--	--	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	05/25/90	6.2	--	--	--	4.6	--	4.1	8.6	14	--	--	--	--	N/A	--	--	--
	02/01/91	--	--	--	--	--	--	1.9	33	4.7	--	--	--	--	N/A	N/A	N/A	--
	04/30/91	--	--	--	--	1	--	2.4	16	6.6	0.57	--	--	0.68	N/A	N/A	N/A	--
	08/07/91	--	--	--	--	1.3	--	4.5	29	11	0.9	--	0.9	1	N/A	N/A	N/A	--
	11/05/91	--	--	--	--	1.4	--	3.7	21	7.1	1	--	0.8	1.1	N/A	N/A	N/A	--
	01/30/92	--	--	--	--	0.7	--	2	26	5.2	1.2	--	0.7	1.5	N/A	N/A	N/A	--
	05/29/92	--	--	--	--	1.1	--	4.3	19	--	0.8	--	1.2	--	N/A	N/A	N/A	--
	08/31/92	--	--	--	--	0.91	--	3.9	27	7.9	1.3	--	0.8	--	N/A	N/A	N/A	--
	10/22/92	--	--	--	--	0.87	--	2.3	18	6.1	0.56	--	--	--	N/A	N/A	N/A	--
	01/14/93	--	--	--	--	--	--	1.1	13	3.2	--	--	--	--	N/A	N/A	N/A	--
	04/12/93	--	--	--	--	--	--	1.2	5	3	--	--	0.51	--	N/A	N/A	N/A	--
	06/30/93	--	--	--	--	--	--	--	--	2.3	--	--	--	--	N/A	N/A	N/A	--
	09/28/93	--	--	--	--	--	--	0.81	8.8	2.6	--	--	0.66	--	N/A	N/A	N/A	--
	01/11/94	--	--	--	--	--	--	0.73	7.9	2.3	--	--	0.68	--	N/A	N/A	N/A	--
	04/25/94	--	--	--	--	--	--	1.1	9	2.7	2	--	--	1.6	N/A	N/A	N/A	--
	07/01/94	--	--	--	--	--	--	0.73	3.6	1.6	4	--	0.59	3.7	N/A	N/A	N/A	--
	10/31/94	--	--	--	--	--	--	--	3.4	1.5	1.7	--	--	1.3	N/A	N/A	N/A	--
	01/20/95	--	--	--	--	--	--	0.87	5	2.5	1.9	--	0.54	1.9	N/A	N/A	N/A	--
	05/05/95	--	--	--	--	--	--	0.77	4.1	2.3	0.95	--	0.51	0.94	N/A	N/A	N/A	--
	07/15/95	--	--	--	--	--	--	0.83	4.1	3	0.88	--	1.1	1.3	N/A	N/A	N/A	--
MW1-30	02/15/90	--	--	--	--	45	2.3	18	820	--	1.5	--	4.8	--	N/A	60	N/A	--
	05/24/90	2.3	--	--	--	21	3	19	48	4.8	0.9	--	6.8	--	N/A	60	--	--
	02/04/91	--	--	--	--	6.3	--	8.2	160	--	--	--	2.8	--	N/A	N/A	N/A	--
	04/30/91	--	--	--	--	5.9	--	9	75	--	--	--	5.8	--	N/A	N/A	N/A	--
	08/15/91	--	--	--	--	4.4	--	6.8	84	--	--	--	6.4	--	N/A	N/A	N/A	--
	11/05/91	--	0.8	--	--	8.5	--	11	88	--	--	--	9.4	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (1)	Date Sampled	B 100	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL 4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-30	01/31/92	--	--	--	--	1.8	--	7	140	--	--	0.8	8	--	N/A	N/A	N/A	--
	05/28/92	--	--	--	--	3	--	10	61	--	--	--	9.5	--	N/A	N/A	N/A	--
	08/31/92	--	--	--	--	6.9	--	14	130	--	--	--	10	--	N/A	N/A	N/A	--
	10/22/92	--	--	--	--	3.3	--	17	116	--	--	--	10	--	N/A	N/A	N/A	--
	01/14/93	--	--	--	--	1.3	--	6.2	93	--	--	--	6.3	--	N/A	N/A	N/A	--
	04/12/93	--	--	--	--	1.9	--	8.7	46	--	--	--	8.1	--	N/A	N/A	N/A	--
	07/06/93	--	--	--	--	1.3	--	8.6	78	--	--	--	7.2	--	N/A	N/A	N/A	--
	09/28/93	--	--	--	--	--	--	12	99	--	--	--	6.4	--	N/A	N/A	N/A	--
	01/10/94	--	--	--	--	--	--	7.7	99	--	--	--	6.5	--	N/A	N/A	N/A	--
	04/25/94	--	--	--	--	1.4	--	4.9	66	--	--	--	8.6	--	N/A	N/A	N/A	--
	07/01/94	--	--	--	--	0.67	--	3.3	44	--	--	--	7.7	--	N/A	N/A	N/A	--
	10/31/94	--	--	--	--	--	--	2	45	--	--	--	8.3	--	N/A	N/A	N/A	--
	01/27/95	--	--	--	--	1.2	--	2	31	--	--	--	8.6	--	N/A	N/A	N/A	--
	05/05/95	--	--	--	--	0.83	--	1.5	25	--	--	0.71	7.2	--	N/A	N/A	N/A	--
	07/15/95	--	--	--	--	1.4	--	4.1	32	--	--	--	7.8	--	N/A	N/A	N/A	--
MW1-31	05/24/90	1.1	--	--	--	39	2.7	22	54	0.6	1.7	--	10	--	N/A	60	--	--
	09/19/90	0.63	--	--	--	20	--	15	160	--	--	--	7.6	--	N/A	--	N/A	--
	02/01/91	--	--	--	--	--	--	7.6	150	--	--	--	--	--	N/A	N/A	N/A	--
	05/01/91	--	--	--	--	5.9	--	12	110	--	--	--	7.3	--	N/A	N/A	N/A	--
	08/15/91	--	--	--	--	6.2	--	10	120	--	--	--	6.6	--	N/A	N/A	N/A	--
	11/22/91	--	--	--	--	6.3	--	17	140	--	--	0.62	9.3	--	N/A	N/A	N/A	--
	01/31/92	--	--	--	--	4.3	0.6	16	310	--	0.6	1.1	12	--	N/A	N/A	N/A	--
	05/28/92	--	--	--	--	3.5	--	10	130	--	--	--	12	--	N/A	N/A	N/A	--
	08/31/92	--	--	--	--	5.5	--	9.6	170	--	--	--	10	--	N/A	N/A	N/A	--
	10/21/92	--	--	--	--	--	--	7.5	121	--	--	--	11	--	N/A	N/A	N/A	--
	01/21/93	--	--	--	--	2.1	--	8.5	82	--	--	--	12	--	N/A	N/A	N/A	--
	04/12/93	--	--	--	--	1.7	--	4.2	46	--	--	--	8.2	--	N/A	N/A	N/A	--
	07/07/93	--	--	--	--	1.7	--	5.3	43	--	--	0.71	14	--	N/A	N/A	N/A	--
	09/28/93	--	--	--	--	--	--	--	50	--	--	--	--	--	N/A	N/A	N/A	--
	01/11/94	--	--	--	--	--	--	--	54	--	--	--	7.8	--	N/A	N/A	N/A	--
	04/26/94	--	--	--	--	0.65	--	2.5	53	--	--	0.89	11	--	N/A	N/A	N/A	--
	07/01/94	--	--	--	--	0.5	--	1.6	40	--	--	--	9	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (I)	Date Sampled	B 1(2)	T 1000	D 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-31	10/31/94	--	--	--	--	0.78	--	2	40	--	--	--	11	--	N/A	N/A	N/A	--
	01/20/95	--	--	--	--	0.95	--	1.4	34	--	--	0.71	11	--	N/A	N/A	N/A	--
	05/05/95	--	--	--	--	0.75	--	0.74	22	--	--	0.8	8.5	--	N/A	N/A	N/A	--
	07/15/95	--	--	--	--	--	--	0.85	19	--	--	0.66	9.6	--	N/A	N/A	N/A	--
MW1-32	05/24/90	--	--	--	--	20	0.8	20	42	--	0.7	0.5	12	--	N/A	60	--	--
	09/19/90	--	--	--	--	15	--	18	180	--	--	--	11	--	N/A	--	N/A	--
	02/01/91	--	--	--	--	--	--	6.1	130	--	--	--	5	--	N/A	N/A	N/A	--
	05/01/91	--	--	--	--	6.4	--	11	160	--	--	--	11	--	N/A	N/A	N/A	--
	08/16/91	--	--	--	--	5.2	--	7.5	140	--	--	--	8.8	--	N/A	N/A	N/A	--
	11/22/91	--	--	--	--	4	--	7.4	88	--	--	--	8.9	--	N/A	N/A	N/A	--
	01/29/92	--	--	--	--	3.3	--	8.7	240	--	--	0.9	16	--	N/A	N/A	N/A	--
	05/29/92	--	--	--	--	3.9	--	8.6	90	--	--	--	15	--	N/A	N/A	N/A	--
	09/04/92	--	--	--	--	--	--	7.1	155	--	--	--	11	--	N/A	N/A	N/A	--
	10/22/92	--	--	--	--	--	--	--	96	--	--	--	11	--	N/A	N/A	N/A	--
	01/26/93	--	--	--	--	1.2	--	4.5	58	--	--	--	8.9	--	N/A	N/A	N/A	--
	04/15/93	--	--	--	--	2	--	3.1	47	--	--	--	9.6	--	N/A	--	N/A	--
	04/17/93	--	--	--	--	1.4	--	2.8	37	--	--	0.5	6.5	--	N/A	--	N/A	--
	04/18/93	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	04/23/93	--	--	--	--	1.6	--	3.1	40	--	--	--	6.9	--	N/A	--	N/A	--
	04/30/93	--	--	--	--	1.3	--	3.2	45	--	--	--	6.7	--	N/A	N/A	N/A	--
	05/06/93	--	--	--	--	1.3	--	3.8	45	--	--	--	7.3	--	N/A	--	N/A	--
	05/14/93	--	--	--	--	--	--	3.6	44	--	--	--	6.9	--	N/A	--	N/A	--
	06/17/93	--	--	--	--	--	--	3.1	43	--	--	--	7.4	--	N/A	--	N/A	--
	07/12/93	--	--	--	--	0.72	--	2.6	46	--	--	--	5.9	--	N/A	--	N/A	--
	08/03/93	--	--	--	--	--	--	2.7	44	--	--	--	5.3	--	N/A	N/A	N/A	--
	09/10/93	--	--	--	--	0.9	--	2.8	38	--	--	--	5.1	--	N/A	--	N/A	--
	09/27/93	N/A	N/A	N/A	N/A	--	1.3	4	43	--	--	4.6	7.5	--	N/A	N/A	N/A	--
	10/06/93	--	--	--	--	1.3	--	4.2	52	0.6	--	--	7.2	--	N/A	--	N/A	--
	11/08/93	--	--	--	--	1.4	--	4	49	0.7	--	--	7.2	--	N/A	--	N/A	--
	12/08/93	--	--	--	--	1.2	--	4.2	50	0.7	--	--	6.1	--	N/A	--	N/A	--
	01/14/94	--	--	--	--	--	--	--	44	--	--	--	--	--	N/A	--	N/A	--
	02/11/94	--	--	--	--	1.4	--	4.5	58	0.53	--	0.53	7.4	--	N/A	--	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (J)	Date Sampled	B 100	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCl ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-32	03/02/94	--	--	--	--	1.2	--	4.3	41	0.7	--	--	7.2	--	N/A	--	N/A	--
	04/07/94	--	--	--	--	1.2	--	4	52	--	--	--	6.8	--	N/A	--	N/A	--
	05/05/94	--	--	--	--	0.67	--	3.7	33	--	--	--	6.5	--	N/A	--	N/A	--
	06/08/94	--	--	--	--	0.81	--	4	39	0.65	--	--	6.2	--	N/A	--	N/A	--
	07/08/94	--	--	--	--	1	--	3.8	44	0.98	--	--	4.9	--	N/A	--	N/A	--
	09/14/94	--	--	--	--	0.5	--	0.8	19	--	--	--	4.1	--	N/A	--	N/A	--
	10/10/94	--	--	--	--	0.86	--	2	26	--	--	--	6.3	--	N/A	--	N/A	--
	11/08/94	--	--	--	--	--	--	1.4	25	--	--	--	5.4	--	N/A	--	N/A	--
	12/07/94	--	--	--	--	0.93	--	4.2	39	--	--	--	6.5	--	N/A	--	N/A	--
	01/09/95	--	--	--	--	--	--	4.9	51	--	--	--	6.9	--	N/A	--	N/A	--
	02/09/95	--	--	--	--	--	--	3.1	31	--	--	--	6.9	--	N/A	--	N/A	--
	03/03/95	--	--	--	--	--	--	3.5	34	--	--	--	6.7	--	N/A	--	N/A	--
	04/04/95	--	--	--	--	0.64	--	3.3	29	--	--	0.84	4.7	--	N/A	--	N/A	--
MW1-33	05/18/90	--	--	--	--	17	--	8.1	38	--	--	--	1.4	--	N/A	--	--	--
	01/30/91	--	--	--	--	3.4	--	--	120	--	--	--	--	--	N/A	N/A	N/A	--
	04/30/91	--	--	--	--	2.3	--	2	31	--	--	--	--	--	N/A	N/A	N/A	--
	08/07/91	--	--	--	--	6.7	--	5.4	85	--	--	--	1	--	N/A	N/A	N/A	--
	11/05/91	--	--	--	--	8.1	--	6.2	100	--	--	--	--	--	N/A	N/A	N/A	--
	01/24/92	--	--	--	--	3	--	2.7	97	--	--	--	--	--	N/A	N/A	N/A	--
	06/02/92	--	--	--	--	4.4	--	4.6	95	--	--	--	0.8	--	N/A	N/A	N/A	--
	08/26/92	--	--	--	--	3.4	--	7	170	--	--	--	1.6	--	N/A	N/A	N/A	--
	10/20/92	--	--	--	--	4.1	--	2.6	131	--	--	--	--	--	N/A	N/A	N/A	--
	01/14/93	--	--	--	--	--	--	--	6.1	--	--	--	--	--	N/A	N/A	N/A	--
	04/09/93	N/A	N/A	N/A	N/A	--	--	--	7.6	--	--	--	--	--	N/A	N/A	N/A	--
	07/02/93	--	--	--	--	2.1	--	3.3	110	--	--	--	--	--	N/A	N/A	N/A	--
	09/22/93	N/A	N/A	N/A	N/A	2.1	--	3.5	92	--	--	--	--	--	N/A	N/A	N/A	--
	01/06/94	--	--	--	--	1.5	--	2.5	75	--	--	--	0.58	--	N/A	N/A	N/A	--
	04/13/94	N/A	N/A	N/A	N/A	1.3	--	2.5	75	--	--	--	0.6	--	N/A	N/A	N/A	--
	07/05/94	N/A	N/A	N/A	N/A	1.4 Jh	-- UJh	2.2 Jh	87 Jh	-- UJh	-- UJh	-- UJh	0.69 Jh	-- UJh	N/A	N/A	N/A	-- UJh
	10/26/94	N/A	N/A	N/A	N/A	0.67	--	1.6	66	--	--	--	--	--	N/A	N/A	N/A	--
	01/16/95	N/A	N/A	N/A	N/A	--	--	--	4.1	--	--	--	--	--	N/A	N/A	N/A	--
	04/27/95	N/A	N/A	N/A	N/A	--	--	--	5.1	--	--	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well ID	Date Sampled	B 1(2)	T 1000	E 1450	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1,1-DCA 5	1,1,2-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL 4 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-33	07/14/95	--	--	--	--	1.3	--	2.8	41	--	--	--	0.82	1.4	N/A	N/A	N/A	--
MW1-34	07/02/91	--	--	--	--	17	1.3	17	470	--	1.2	--	15	--	N/A	N/A	N/A	--
	08/16/91	--	--	--	--	24	--	20	510	--	--	--	--	--	N/A	N/A	N/A	--
	11/13/91	0.9	--	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/12/91	N/A	N/A	N/A	N/A	18	1.1	28	318	1.7	2.3	1.4	26	--	N/A	N/A	N/A	--
	01/23/92	--	--	--	--	19	4.9	25	370	2.3	1.7	0.86	20	--	N/A	N/A	N/A	--
	06/03/92	--	--	--	--	11	1.2	21	270	0.6	1.2	--	24	--	N/A	N/A	N/A	--
	09/01/92	--	--	--	--	13	--	25	480	--	--	--	30	--	N/A	N/A	N/A	--
	10/26/92	--	--	--	--	--	--	--	380	--	--	--	31	--	N/A	N/A	N/A	--
	01/21/93	--	--	--	--	1.3	--	3.3	68	--	--	--	5.6	--	N/A	N/A	N/A	--
	04/09/93	N/A	N/A	N/A	N/A	3.9	--	9.2	94	--	--	--	15	--	N/A	N/A	N/A	--
	07/07/93	--	--	--	--	3.9	0.63	13	190	--	--	0.72	23	--	N/A	N/A	N/A	--
	09/28/93	N/A	N/A	N/A	N/A	2.7	--	9.4	130	--	--	0.53	18	--	N/A	N/A	N/A	--
	01/12/94	--	--	--	--	2.2	--	8.7	120	--	--	0.54	17	--	N/A	N/A	N/A	--
	04/26/94	N/A	N/A	N/A	N/A	1.4	--	6.2	120	--	--	0.84	16	--	N/A	N/A	N/A	--
	07/20/94	N/A	N/A	N/A	N/A	1.3	--	5.9	86	--	--	--	17	--	N/A	N/A	N/A	--
	11/01/94	N/A	N/A	N/A	N/A	1.5	--	5.4	86	--	--	0.52	15	--	N/A	N/A	N/A	--
	02/01/95	N/A	N/A	N/A	N/A	--	--	3.4	47	--	--	--	12	--	N/A	N/A	N/A	--
	05/04/95	N/A	N/A	N/A	N/A	0.75	--	3.3	47	--	--	1	11	--	N/A	N/A	N/A	--
	07/23/95	--	--	--	--	1.1	--	4	46	--	--	0.62	12	--	N/A	N/A	N/A	--
MW1-35	07/02/91	--	--	--	--	6.8	--	4.8	220	--	0.7	--	3.8	--	N/A	N/A	N/A	--
	08/08/91	--	--	--	--	40	--	41	880	--	--	--	19	--	N/A	N/A	N/A	--
	11/13/91	--	--	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/12/91	N/A	N/A	N/A	N/A	2.6	--	2.8	92	--	1.9	0.7	2.6	--	N/A	N/A	N/A	--
	01/23/92	--	--	--	--	5.4	--	5.8	140	--	1	--	3.9	--	N/A	N/A	N/A	--
	06/01/92	--	--	--	--	2.4	--	2.4	49	--	0.8	--	4.8	--	N/A	N/A	N/A	--
	09/01/92	--	--	--	--	5.8	--	--	135	--	--	--	--	--	N/A	N/A	N/A	--
	10/26/92	--	--	--	--	--	--	--	94	--	--	--	5.8	--	N/A	N/A	N/A	--
	01/21/93	--	--	--	--	1.3	--	2.8	58	--	--	--	3.7	--	N/A	N/A	N/A	--
	04/09/93	N/A	N/A	N/A	N/A	1.2	--	1.2	36	--	--	--	2.7	--	N/A	N/A	N/A	--
	07/07/93	--	--	--	--	1.2	--	1.5	45	--	--	--	4.7	--	N/A	N/A	N/A	--
	09/28/93	N/A	N/A	N/A	N/A	0.72	--	0.78	32	--	--	--	3	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well # (1)	Date Sampled	B 1(2)	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-35	01/12/94	--	--	--	--	0.66	--	0.52	27	--	--	--	3.1	--	N/A	N/A	N/A	--
	04/26/94	N/A	N/A	N/A	N/A	--	--	--	10	--	--	--	2.2	--	N/A	N/A	N/A	--
	07/20/94	N/A	N/A	N/A	N/A	--	--	--	7.6	--	--	--	2	--	N/A	N/A	N/A	--
	11/01/94	N/A	N/A	N/A	N/A	--	--	--	3.6	--	--	--	1.5	--	N/A	N/A	N/A	--
	02/01/95	N/A	N/A	N/A	N/A	--	--	--	3	--	--	--	--	--	N/A	N/A	N/A	--
	05/04/95	N/A	N/A	N/A	N/A	--	--	--	4.2	--	--	--	1.3	--	N/A	N/A	N/A	--
	07/23/95	--	--	--	--	--	--	--	4.1	--	--	--	2	--	N/A	N/A	N/A	--
MW1-36	12/12/91	--	--	--	--	15	--	12	290	1.6	3.4	0.7	8.8	1.4	N/A	N/A	N/A	--
	01/23/92	0.53	1.4	--	--	21	3	13	330	2.7	2.6	--	8.9	--	N/A	N/A	N/A	--
	06/01/92	--	--	--	--	12	--	9.6	180	0.7	2	--	8.3	--	N/A	N/A	N/A	--
	09/04/92	--	--	--	--	14	--	--	210	--	--	--	--	--	N/A	N/A	N/A	--
	10/21/92	--	--	--	--	--	--	--	110	--	--	--	--	--	N/A	N/A	N/A	--
	01/27/93	--	--	--	--	4.5	--	5	110	1.1	0.66	--	5.8	--	N/A	N/A	N/A	--
	04/13/93	N/A	N/A	N/A	N/A	4.4	--	4.2	75	--	0.92	--	5.6	--	N/A	N/A	N/A	--
	07/07/93	--	--	--	--	2.6	--	3.5	60	--	1	--	5.1	--	N/A	N/A	N/A	--
	09/28/93	N/A	N/A	N/A	N/A	--	--	--	53	--	--	--	--	--	N/A	N/A	N/A	--
	01/12/94	--	--	--	--	--	--	--	110	--	--	--	5.8	--	N/A	N/A	N/A	--
	04/26/94	N/A	N/A	N/A	N/A	1.2	--	2	76	--	--	--	4.5	--	N/A	N/A	N/A	--
	07/20/94	N/A	N/A	N/A	N/A	0.96	--	1.8	42	--	--	--	4.4	--	N/A	N/A	N/A	--
	11/04/94	N/A	N/A	N/A	N/A	--	--	0.51	30	--	--	--	1.9	--	N/A	N/A	N/A	--
	01/31/95	N/A	N/A	N/A	N/A	--	--	1.4	53	--	--	--	4	--	N/A	N/A	N/A	--
	04/30/95	--	--	--	--	1.1	--	2.1	66	--	--	--	5	--	N/A	N/A	N/A	--
	07/15/95	--	--	--	--	1.6	--	1.9	50	--	--	--	5.3	--	N/A	N/A	N/A	--
MW1-38	12/12/91	--	--	--	--	--	--	9.1	260	4	4.2	--	8.6	2.2	N/A	N/A	N/A	--
	01/24/92	--	--	--	--	11	--	5.7	250	2.7	2.8	--	5.7	1.3	N/A	N/A	N/A	--
	06/03/92	--	--	--	--	14	--	8.6	150	2.2	3.6	--	8.7	1.9	N/A	N/A	N/A	--
	09/04/92	--	--	--	--	21	--	--	350	--	--	--	--	--	N/A	N/A	N/A	--
	10/27/92	--	--	--	--	22	--	13	230	--	--	--	14	--	N/A	N/A	N/A	--
	01/26/93	--	--	--	--	10	--	7.3	140	1.7	2.4	--	7.7	1.3	N/A	N/A	N/A	--
	04/09/93	N/A	N/A	N/A	N/A	9.4	--	7.1	84	1.3	3.4	--	6.3	1.3	N/A	N/A	N/A	--
	07/06/93	--	--	--	--	4.5	--	2.9	140	0.52	1.3	--	4.2	0.76	N/A	N/A	N/A	--
	09/27/93	N/A	N/A	N/A	N/A	8	--	--	130	--	--	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (1)	Date Sampled	B 1(2)	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCl ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-38	01/10/94	--	--	--	--	--	--	--	120	--	--	--	--	--	N/A	N/A	N/A	--
	04/15/94	N/A	N/A	N/A	N/A	6.2	--	6.6	130	0.89	2.1 μ	--	7.7	0.85	N/A	N/A	N/A	--
	07/14/94	N/A	N/A	N/A	N/A	4.7	--	5.8	130	0.68	1.9	--	7.4	0.86	N/A	N/A	N/A	--
	11/01/94	N/A	N/A	N/A	N/A	3.5	--	4.9	150	0.54	1.6	--	6.3	1	N/A	N/A	N/A	--
	01/24/95	N/A	N/A	N/A	N/A	4	--	6.1	140	--	2.2	--	7.3	--	N/A	N/A	N/A	--
	05/03/95	N/A	N/A	N/A	N/A	2.6	--	3.7	95	0.82	1.9	--	5.6	0.96	N/A	N/A	N/A	--
	07/22/95	--	--	--	--	2.8	--	3.8	63	0.99	1.9	--	5.4	0.95	N/A	N/A	N/A	--
MW1-39	06/28/91	--	--	--	--	0.6	--	--	0.7	2.9	4	--	--	1.8	N/A	N/A	N/A	--
	08/06/91	--	--	--	--	0.6	--	1	1	2.1	3.3	--	--	2.4	N/A	N/A	N/A	--
	11/13/91	--	--	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	12/12/91	N/A	N/A	N/A	N/A	1	--	1.2	3.2	2.5	4.9	0.6	--	2.4	N/A	N/A	N/A	--
	01/23/92	--	--	--	--	0.7	--	0.8	4.1	1.6	3.1	--	--	1.4	N/A	N/A	N/A	--
	06/03/92	--	--	--	--	1.1	--	1.3	4.1	1.6	3.1	--	--	2	N/A	N/A	N/A	--
	09/04/92	--	--	--	--	1.6	--	1.7	12	1.8	4.2	--	--	2.8	N/A	N/A	N/A	--
	10/21/92	--	--	--	--	1.6	--	1.2	7.7	--	2.3	--	--	1.8	N/A	N/A	N/A	--
	01/27/93	--	--	--	--	1.4	--	1.6	10	1.6	2.7	--	--	1.9	N/A	N/A	N/A	--
	04/09/93	N/A	N/A	N/A	N/A	1.7	--	1.5	10	1.1	2.7	--	0.63	1.7	N/A	N/A	N/A	--
	07/06/93	--	--	--	--	1.4	--	1.5	18	0.92	2	--	--	1.4	N/A	N/A	N/A	--
	09/27/93	N/A	N/A	N/A	N/A	2	--	2	20	0.95	2.5	--	0.73	1.4	N/A	N/A	N/A	--
	01/12/94	--	--	--	--	2.3	--	2.6	34	1.3	2.5	--	1.1	1.6	N/A	N/A	N/A	--
	04/15/94	N/A	N/A	N/A	N/A	2.5	--	2.8	34	1.2	2.6 μ Je	--	1.4	1.8	N/A	N/A	N/A	--
	07/14/94	N/A	N/A	N/A	N/A	2.4	--	3	41	1	2.5	--	1.5	1.5	N/A	N/A	N/A	--
	11/02/94	N/A	N/A	N/A	N/A	2.9	--	3.3	64	0.91	2.5	--	2.3	1.8	N/A	N/A	N/A	--
	01/19/95	--	--	--	--	2.9	--	4.1	70	1.7	2.9	--	2.5	1.6	N/A	N/A	N/A	--
	05/04/95	N/A	N/A	N/A	N/A	2.8	--	3.9	67	1.4	2.6	--	2.7	1.7	N/A	N/A	N/A	--
	07/22/95	--	--	--	--	3.3	--	4.6	59	2	2.9	--	3.3	1.9	N/A	N/A	N/A	--
MW1-42	06/28/91	--	--	--	--	11	--	110	330	--	--	--	4	--	N/A	N/A	N/A	--
	08/08/91	6.3	--	--	--	42	8.1	370	1500	--	8.7	--	19	--	N/A	N/A	N/A	--
	11/07/91	1.2	--	--	--	6.9	1.9	69	270	--	1.4	1.1	3.9	--	N/A	N/A	N/A	--
	02/07/92	1.6	--	--	--	8.7	2.2	100	480	0.7	2.5	1.6	5.5	--	N/A	N/A	N/A	--
	06/04/92	3.3	--	--	--	7	2.6	80	220	0.9	2	3.4	5.8	--	N/A	N/A	N/A	--
	08/25/92	1.2	--	--	--	5.5	2.6	110	260	1.6	1.9	4.2	7.2	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (ft)	Date Sampled	B-1 (2)	T-1000	E-1750	X-600	1,1,1-TCA-200	1,1,2-TCA-32	1,1-DCA-5	1,1-DCE-6	1,2-DCA-0.5	Chloroform-100	PCE-5	TCE-5	CCL 4-0.5	TPH-NE	TPH/Gas-NE	TPH/D-NE	Vinyl Chloride-0.5
MW1-42	10/27/92	--	--	--	--	--	--	110	340	--	--	28	--	--	N/A	N/A	N/A	--
	01/19/93	--	--	--	--	5.3	1.2	60	180	--	1.1	3	4.3	--	N/A	N/A	N/A	--
	04/08/93	--	--	--	--	5.9	1.7	44	95	0.54	1.4	2.9	3.8	--	N/A	N/A	N/A	--
	07/01/93	0.72	--	--	--	3.1	0.89	50	120	--	0.76	2.7	--	--	N/A	N/A	N/A	--
	09/21/93	--	--	--	--	3.5	1.1	45	120	--	0.8	2.6	--	--	N/A	N/A	N/A	--
	01/05/94	0.51	--	--	--	4.3	1.8	54	130	--	0.84	4	3.2	--	N/A	N/A	N/A	--
	04/12/94	0.54	--	--	--	4.5	1.8	50	120	--	0.9	4.8	3.6	--	N/A	N/A	N/A	--
	07/07/94	--	--	--	--	3.1	1.7	46	92	--	0.78	3.3	2.6	--	N/A	N/A	N/A	--
	10/26/94	0.7	--	--	--	2.8	0.88	89	50	--	--	3.6	2.3	--	N/A	N/A	N/A	--
	01/13/95	0.65	--	--	--	4.3	2.9	61	110	--	1.1	5.2	3.5	--	N/A	N/A	N/A	--
	04/27/95	0.87	--	--	--	3.4	2.6	57	92	--	0.96	3.9	2.9	--	N/A	N/A	N/A	--
	07/14/95	0.82	--	--	--	4.1	2.8	45	66	0.74	1.2	4.7	3.3	--	N/A	N/A	N/A	--
MW1-43	06/28/91	--	--	--	--	--	--	330	33	--	--	--	--	--	N/A	N/A	N/A	--
	08/16/91	--	--	--	--	--	--	200	21	--	--	--	--	--	N/A	N/A	N/A	--
	11/07/91	--	--	--	--	--	2	170	30	1.9	--	0.6	2.5	--	N/A	N/A	N/A	5.6
	02/07/92	--	--	--	--	0.7	2.2	220	45	2.3	--	1.4	4.3	--	N/A	N/A	N/A	7.4
	06/02/92	--	--	--	--	--	2.5	210	32	2.5	--	--	4.7	--	N/A	N/A	N/A	10
	08/25/92	0.6	--	--	--	--	1.9	260	--	2	--	1.1	5.4	--	N/A	N/A	N/A	7.9
	10/22/92	--	--	--	--	--	--	240	28	--	--	--	--	--	N/A	N/A	N/A	--
	01/19/93	--	--	--	--	--	1	110	24	1.1	--	0.9	2.8	--	N/A	N/A	N/A	--
	04/08/93	--	--	--	--	--	3.3	210	33	3.2	--	1	4.9	--	N/A	N/A	N/A	5.7
	07/01/93	--	--	--	--	--	--	--	25	--	--	--	--	--	N/A	N/A	N/A	11
	09/21/93	0.7	--	--	--	--	2.8	220	23	2.8	--	0.98	--	--	N/A	N/A	N/A	--
	01/05/94	--	--	--	--	--	1	290	25	--	--	--	3.7	--	N/A	N/A	N/A	7.6
	04/12/94	0.55	--	--	--	--	4.3	310	43	3.9	--	1.3	7.4	--	N/A	N/A	N/A	10
	07/13/94	--	--	--	--	--	3.3	260	37	2.9	--	1 µg	6.2	--	N/A	N/A	N/A	8.1
	10/26/94	0.52	--	--	--	--	2.1	200	15	2.2	--	1.4	6.4	--	N/A	N/A	N/A	9.2
	01/13/95	--	--	--	--	--	2.1	150	17	2.3	--	--	4.3	--	N/A	N/A	N/A	3.8
	04/27/95	N/A	N/A	N/A	N/A	--	3.5	310	33	4.2	--	1.8	7.3	--	N/A	N/A	N/A	9.8
	07/14/95	1.1	--	--	--	--	3.3	290	30	3.7	--	1.5	7.6	--	N/A	N/A	N/A	14
MW1-45	07/20/94	--	--	--	--	--	--	--	--	0.55	2.2	--	--	1.3	N/A	N/A	N/A	--
	11/02/94	--	--	--	--	--	--	--	--	0.76	1.7	--	--	1.4	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (1)	Date Sampled	B 100	T 1000	E 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1,2-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW1-45	01/18/95	--	--	--	--	--	--	--	--	--	2.2	--	--	1.4	N/A	N/A	N/A	--
	05/04/95	--	--	--	--	--	--	--	--	--	1.9	--	--	1.4	N/A	N/A	N/A	--
	07/22/95	--	--	--	--	--	--	--	--	0.95	2.2	--	--	1.7	N/A	N/A	N/A	--
MW1-48	07/21/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	09/24/94	--	--	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	02/08/95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	--	430 µQ	N/A
	05/01/95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	--	--	N/A
	07/23/95	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	--	180	N/A
MW2-12	09/12/89	--	2.2	--	--	--	--	1.3	--	--	6.4	--	4	--	--	70	N/A	--
	10/13/89	0.8	--	--	--	--	--	4.9	26.3	--	4.5	--	5.7	--	N/A	N/A	N/A	--
	02/16/90	--	--	--	--	--	--	9.6	62	--	1.4	--	9	--	N/A	N/A	N/A	--
	05/22/90	--	--	--	--	--	--	9.2	1.4	--	0.6	--	9.4	--	N/A	--	--	--
	09/18/90	--	--	--	--	0.88	--	10	24	--	--	--	12	--	N/A	--	N/A	--
	02/04/91	--	--	--	--	--	--	13	47	--	--	--	14	--	N/A	N/A	N/A	--
	05/01/91	N/A	N/A	N/A	N/A	0.55	--	12	39	--	--	--	13	--	N/A	N/A	N/A	--
	08/15/91	--	0.6	--	--	0.7	--	13	27	--	--	--	15	--	N/A	N/A	N/A	--
	11/07/91	--	--	--	--	1.4	--	15	28	--	--	--	13	--	N/A	N/A	N/A	--
	01/28/92	0.6	--	--	--	0.8	--	23	120	--	--	0.6	19	--	N/A	N/A	N/A	--
	06/01/92	--	--	--	--	0.8	--	19	61	--	--	--	11	--	N/A	N/A	N/A	--
	08/26/92	--	--	--	--	0.64	--	31	94	--	--	0.93	16	--	N/A	N/A	N/A	--
	10/26/92	--	--	--	--	--	--	26	97	--	--	--	14	--	N/A	N/A	N/A	--
	01/20/93	--	--	--	--	0.6	--	21	78	--	--	--	9.1	--	N/A	N/A	N/A	--
	04/13/93	700	52	47	88	--	--	23	52	19	--	--	13	--	N/A	N/A	N/A	--
	07/02/93	--	--	--	--	--	--	12	30	--	--	--	4.7	--	N/A	N/A	N/A	--
	09/22/93	--	--	--	--	--	--	11	42	--	--	--	2.5	--	N/A	N/A	N/A	--
	01/07/94	--	--	--	--	--	--	12	45	--	--	--	--	--	N/A	N/A	N/A	--
	04/13/94	--	--	--	--	--	--	16	42	--	--	--	2.1	--	N/A	N/A	N/A	--
	07/05/94	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- Jh	14 Jh	38 Jh	-- UJh	-- UJh	-- UJh	3 UJh	-- UJh	N/A	N/A	N/A	-- UJh
	10/29/94	--	--	--	--	--	--	12	35	--	--	--	3.6	--	N/A	N/A	N/A	--
	01/23/95	--	--	--	--	--	--	14	40	--	--	--	4.8	--	N/A	N/A	N/A	--
	04/28/95	0.6	--	--	--	--	--	11	34	--	--	--	4.2	--	N/A	N/A	N/A	--
	07/17/95	0.66	--	--	--	--	--	10	30	--	--	--	4.4	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (ft)	Date Sampled	B 100	T 1000	F 1750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 16	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW2-27	09/15/89	--	--	--	--	--	--	--	--	--	5.5	--	--	--	--	--	N/A	--
	02/13/90	--	--	--	--	--	--	1.1	3.9	--	0.9	--	--	--	N/A	N/A	N/A	--
	05/21/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	--	--	--
	09/17/90	--	--	--	--	--	--	--	0.99	--	1.1	--	--	--	N/A	--	N/A	--
	01/29/91	N/A	N/A	N/A	N/A	--	--	--	--	--	0.7	--	--	--	N/A	N/A	N/A	--
	04/24/91	N/A	N/A	N/A	N/A	--	--	--	1.1	--	1.4	--	--	--	N/A	N/A	N/A	--
	08/13/91	--	--	--	--	--	--	--	--	--	0.9	--	--	--	N/A	N/A	N/A	--
	11/13/91	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
	01/23/92	--	--	--	--	--	--	--	0.83	--	1.3	--	--	--	N/A	N/A	N/A	--
	09/01/92	--	--	--	--	--	--	--	--	--	3	--	--	--	N/A	N/A	N/A	--
	01/28/93	--	--	--	--	--	--	--	--	--	1.7	--	--	--	N/A	N/A	N/A	--
	07/08/93	N/A	N/A	N/A	N/A	--	--	--	--	--	3.1	--	--	--	N/A	--	N/A	--
	01/16/94	--	--	--	--	--	--	0.76	1.1	--	2.4	--	--	--	N/A	N/A	N/A	--
	07/07/94	N/A	N/A	N/A	N/A	-- UJs	-- UJs	2.2 UJs	2.4 UJs	-- UJs	2.2 UJs	-- UJs	-- UJs	-- UJs	N/A	N/A	N/A	-- UJs
	01/23/95	N/A	N/A	N/A	N/A	--	--	3	4.7	--	3.4	--	--	--	N/A	N/A	N/A	--
	07/17/95	--	--	--	--	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
MW2-28	02/15/90	--	--	--	--	--	--	5.8	1	--	0.7	--	--	--	N/A	--	N/A	--
	05/21/90	--	--	--	--	--	--	9.5	--	--	--	--	--	--	N/A	--	--	--
	09/19/90	--	--	--	--	--	--	9	4	--	--	--	--	--	N/A	--	N/A	--
	02/01/91	--	--	--	--	--	--	13	4.3	--	--	--	--	--	N/A	N/A	N/A	--
	04/30/91	--	--	--	--	--	--	8.1	3.9	--	--	--	--	--	N/A	N/A	N/A	--
	08/13/91	--	--	--	--	--	--	13	--	--	--	--	--	--	N/A	N/A	N/A	--
	11/05/91	--	--	--	--	--	--	14	9.4	--	--	--	--	--	N/A	N/A	N/A	--
	01/30/92	--	--	--	--	--	--	17	24	--	--	--	--	--	N/A	N/A	N/A	--
	05/28/92	--	--	--	--	--	--	9.5	6	--	--	--	--	--	N/A	N/A	N/A	--
	08/31/92	--	--	--	--	--	--	20	31	--	--	--	--	--	N/A	N/A	N/A	--
	10/22/92	--	--	--	--	--	--	18	21	--	--	--	--	--	N/A	N/A	N/A	--
	01/13/93	--	--	--	--	--	--	13	22	--	--	--	--	--	N/A	N/A	N/A	--
	04/12/93	--	--	--	--	--	--	12	11	--	--	--	--	--	N/A	N/A	N/A	--
	06/30/93	--	--	--	--	--	--	4.1	--	--	--	--	--	--	N/A	N/A	N/A	--
	09/28/93	--	--	--	--	--	--	8.6	8.7	--	--	--	--	--	N/A	N/A	N/A	--
	01/11/94	--	--	--	--	--	--	5.9	4.2	--	--	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well ID	Date Sampled	Benzene (2)	Toluene 1000	Ethylbenzene 1500	Xylenes 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1,1-DCA 5	1,1,2-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCl ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW2-28	04/25/94	--	--	--	--	--	--	10	17	--	--	--	--	--	N/A	N/A	N/A	--
	07/01/94	--	--	--	--	--	--	4.6	4.2	--	--	--	--	--	N/A	N/A	N/A	--
	10/31/94	--	--	--	--	--	--	6.3	7	--	--	--	--	--	N/A	N/A	N/A	--
	01/20/95	--	--	--	--	--	--	9	14	--	--	--	--	--	N/A	N/A	N/A	--
	05/05/95	--	--	--	--	--	--	9.1	16	--	--	--	0.65	--	N/A	N/A	N/A	--
	07/15/95	--	--	--	--	--	--	8.1	14	--	--	--	--	--	N/A	N/A	N/A	--
MW2-37	12/12/91	--	--	--	--	1	--	3.6	9.3	7.1	4.6	0.6	0.6	1.3	N/A	N/A	N/A	--
	01/23/92	--	--	--	--	--	--	4.4	8.5	9.7	3.1	--	--	1.8	N/A	N/A	N/A	--
	06/01/92	--	--	--	--	--	--	2.6	6	6.2	3.8	--	0.5	1.5	N/A	N/A	N/A	--
	09/04/92	--	--	--	--	0.95	--	3.6	16	7.4	4.2	--	--	1.4	N/A	N/A	N/A	--
	10/21/92	--	--	--	--	1.1	--	2.9	13	4.9	2.5	--	--	0.84	N/A	N/A	N/A	--
	01/27/93	--	--	--	--	--	--	2.7	9.2	5.5	2.3	--	--	0.61	N/A	N/A	N/A	--
	04/13/93	N/A	N/A	N/A	N/A	--	--	2.9	8	6.5	3.9	--	--	0.99	N/A	N/A	N/A	--
	07/07/93	--	--	--	--	--	--	2.8	7.9	5.8	3.1	--	--	0.78	N/A	N/A	N/A	--
	09/28/93	N/A	N/A	N/A	N/A	0.55	--	3.2	16	5.8	2.8	--	0.5	0.84	N/A	N/A	N/A	--
	01/12/94	--	--	--	--	--	--	3.7	20	6.2	2.4	--	0.57	0.61	N/A	N/A	N/A	--
	04/26/94	N/A	N/A	N/A	N/A	--	--	3.1	20	7.7	2.5	--	--	0.55	N/A	N/A	N/A	--
	07/20/94	N/A	N/A	N/A	N/A	0.51	--	4.3	31	7.2	2.7	--	0.75	0.57	N/A	N/A	N/A	--
	11/04/94	N/A	N/A	N/A	N/A	--	--	5	40	9.5	2.5	--	0.98	--	N/A	N/A	N/A	--
	01/31/95	N/A	N/A	N/A	N/A	--	--	3.1	27	4	1.9	--	--	--	N/A	N/A	N/A	--
	04/30/95	N/A	N/A	N/A	N/A	1.4	--	5.2	39	7	2.9	--	1.7	--	N/A	N/A	N/A	--
	07/15/95	--	--	--	--	1.2	--	5.3	42	6.2	3	--	1.9	0.71	N/A	N/A	N/A	--
MW2-40	06/28/91	--	--	--	--	4	--	19	110	--	--	--	46	--	N/A	N/A	N/A	--
	08/15/91	--	--	--	--	3.8	--	15	140	--	--	--	30	--	N/A	N/A	N/A	--
	11/22/91	--	--	--	--	2.4	--	12	95	--	--	--	27	--	N/A	N/A	N/A	--
	01/29/92	--	--	--	--	4.2	--	25	190	--	0.6	--	40	--	N/A	N/A	N/A	--
	05/29/92	--	--	--	--	5.2	--	25	170	--	0.6	--	38	--	N/A	N/A	N/A	--
	08/31/92	--	--	--	--	8.4	--	35	370	--	--	--	52	--	N/A	N/A	N/A	--
	10/22/92	--	--	--	--	6.9	--	--	220	29	--	--	49	--	N/A	N/A	N/A	--
	01/26/93	--	--	--	--	3.3	--	27	170	--	--	--	32	--	N/A	N/A	N/A	--
	04/13/93	N/A	N/A	N/A	N/A	3.7	--	26	120	--	--	--	38	--	N/A	N/A	N/A	--
	07/15/93	N/A	N/A	N/A	N/A	1.7	--	17	110	--	--	--	16	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well (C)	Date Sampled	B 100	T 1000	E 750	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCA 5	1,1-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCl ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW2-40	09/27/93	N/A	N/A	N/A	N/A	--	--	15	120	--	--	16	--	--	N/A	N/A	N/A	--
	01/11/94	--	--	--	--	--	--	11	100	--	--	--	12	--	N/A	N/A	N/A	--
	04/25/94	N/A	N/A	N/A	N/A	0.87	--	11	120	--	--	--	13	--	N/A	N/A	N/A	--
	06/30/94	N/A	N/A	N/A	N/A	0.81	--	10	93	--	--	--	12	--	N/A	N/A	N/A	--
	11/01/94	N/A	N/A	N/A	N/A	1.8	--	17	160	--	--	--	21	--	N/A	N/A	N/A	--
	01/24/95	N/A	N/A	N/A	N/A	--	--	16	160	--	--	--	17	--	N/A	N/A	N/A	--
	05/03/95	N/A	N/A	N/A	N/A	1	--	13	120	--	--	--	13	--	N/A	N/A	N/A	--
	07/22/95	--	--	--	--	--	--	16	120	--	--	--	16	--	N/A	N/A	N/A	--
MW2-44	10/27/92	--	--	--	--	--	--	0.69	2	4.3	7.2	--	--	9.6	N/A	N/A	N/A	--
	01/26/93	--	--	--	--	--	--	--	0.96	1.9	3.6	--	--	4.1	N/A	N/A	N/A	--
	04/09/93	N/A	N/A	N/A	N/A	--	--	--	0.79	2.5	5.1	--	--	5.3	N/A	N/A	N/A	--
	07/06/93	--	--	--	--	--	--	--	--	2.4	4.2	--	--	5.6	N/A	N/A	N/A	--
	09/27/93	N/A	N/A	N/A	N/A	--	--	--	1.2	2.4	4.4	4.5	--	5.9	N/A	N/A	N/A	--
	01/10/94	--	--	--	--	--	--	--	0.77	2.1	3.6	--	--	3.9	N/A	N/A	N/A	--
	04/15/94	N/A	N/A	N/A	N/A	--	--	--	1.1	2.5	4.4 Jc	--	--	6.1	N/A	N/A	N/A	--
	07/14/94	N/A	N/A	N/A	N/A	--	--	--	1.2	1.9	4	--	--	4.9	N/A	N/A	N/A	--
	11/01/94	N/A	N/A	N/A	N/A	--	--	--	--	1.7	2.8	--	--	5.1	N/A	N/A	N/A	--
	01/24/95	N/A	N/A	N/A	N/A	--	--	--	--	--	3.6	--	--	4.7	N/A	N/A	N/A	--
	05/03/95	N/A	N/A	N/A	N/A	--	--	--	1.5	2.2	3.4	--	--	5	N/A	N/A	N/A	--
	07/23/95	--	--	--	--	--	--	--	1.7	2.1	3.8	--	0.8	5.5	N/A	N/A	N/A	--
MW2-46	07/20/94	--	--	--	--	--	--	--	--	--	2.6	--	--	0.89	N/A	N/A	N/A	--
	11/02/94	--	--	--	--	--	--	--	--	--	2.2	--	--	0.79	N/A	N/A	N/A	--
	01/24/95	--	--	--	--	--	--	--	--	--	3.1	--	--	--	N/A	N/A	N/A	--
	05/04/95	--	--	--	--	--	--	--	--	0.72	2.6	--	--	1.3	N/A	N/A	N/A	--
	07/22/95	--	--	--	--	--	--	--	--	1.1	3.1	--	--	1.5	N/A	N/A	N/A	--
MW3-41	06/28/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	08/12/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	11/05/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/31/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	05/26/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	08/25/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	10/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--

Table 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1995
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Well ID	Date Sampled	B 100	T 1000	E 150	X 600	1,1,1-TCA 200	1,1,2-TCA 32	1,1-DCE 5	1,1,2-DCE 6	1,2-DCA 0.5	Chloroform 100	PCE 5	TCE 5	CCL ₄ 0.5	TPH NE	TPH/Gas NE	TPH/D NE	Vinyl Chloride 0.5
MW3-41	01/20/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	06/30/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	09/22/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/07/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	04/13/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/05/94	N/A	N/A	N/A	N/A	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	N/A	N/A	N/A	-- UJh
	10/26/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/23/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	04/28/95	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/17/95	0.83	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
MW3-47	07/21/94	-- UJh	-- Rh	-- UJh	-- Rh	-- Rh	-- Rh	-- UJh	-- UJh	-- UJh	-- UJh	-- UJh	-- Rh	-- UJh	N/A	N/A	N/A	-- Rh
	08/21/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	11/04/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	01/31/95	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	04/30/95	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--
	07/15/95	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A	N/A	--

1) - The third character in the monitoring well ID represents the hydrostratigraphic zone (HSZ -1,2,or 3) within which the well completed.
Wells are listed in order by HSZ.

2) - Values in this row are drinking water Maximum Contaminant Levels (MCL established by DHS or EPA, whichever is more stringent.

UCL - Maximum Contaminant Level for drinking water, EPA or DHS, whichever is more stringent.

N/A - Not Analyzed.

NE - MCL Not Established

-- - Not Detected.

UJF,UJh, Jc, Uz,Ux,Jh - See Table 9 for key to data qualifiers

B - Benzene	DCE - Dichloroethene
T - Toulene	PCE - Tetrachloroethene
X - Xylene	CCL - Carbon Tetrachloride
E - Ethylbenzene	TPH - Total Petroleum Hydrocarbons
TCA - Trichloroethane	TPH/gas- Total Petroleum Hydrocarbons as gasoline
DCE - Dichloroethane	TPH/D - Total Petroleum Hydrocarbons as diesel

TABLE 4
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA								
	ER-01 07/23/95	ER-07 07/21/95	ER-38 07/22/95	ER-44 07/23/95	MW1-01 07/23/95	MW1-02 07/14/95	MW1-05 07/17/95	
ANALYTE	MCL							
ARSENIC	50	-	-	-	< 5.00	-	-	-
CHROMIUM	50	-	-	-	10.70	-	-	5.85
NICKEL	100	< 5.00	< 5.00	< 5.00	23.20	16.50	7.20	108.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled. - = 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."

Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 4 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL	SAMPLE	MW1-05	MW1-06	MW1-08	MW1-11	MW1-13	MW1-14	MW1-14
		DATE	07/17/95	07/17/95	07/17/95	07/14/95	07/17/95	07/17/95	07/17/95
		QA	DUPLICATE						DUPLICATE
			SAMPLE						SAMPLE
ARSENIC	50	-	-	-	-	-	-	5.51	5.64
CHROMIUM	50	< 5.00	5.39	-	-	-	-	< 5.00	< 5.00
NICKEL	100	112.00	48.80	20.40	< 5.00	< 5.00	69.00	70.30	

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled. - = 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."

Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 4 (cont.)
 1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
 METALS
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

ANALYTE	SAMPLE							
	DATE							
	QA							
	MCL	MW1-15	MW1-16	MW1-18	MW1-22	MW1-29	MW1-30	MW1-31
		07/17/95	07/14/95	07/21/95	07/17/95	07/15/95	07/15/95	07/15/95
ARSENIC	50	-	-	-	5.40	-	-	-
CHROMIUM	50	6.15	-	-	-	-	-	8.35
NICKEL	100	58.90	< 5.00	9.21	-	35.30	13.70	< 5.00

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled. - = 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."
 Lab flag/Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 4 (cont.)
 1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
 METALS
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

ANALYTE	MCL	SAMPLE		MW1-33		MW1-36		MW1-38		MW1-45		MW2-12		MW2-27	
		DATE	QA	07/15/95	07/14/95	07/15/95	07/15/95	07/22/95	07/22/95	07/22/95	07/22/95	07/17/95	07/17/95	07/17/95	07/17/95
				DUPLICATE						DUPLICATE					
				SAMPLE						SAMPLE					
ARSENIC	50	-	-	-	-	5.39	-	< 5.00	6.00	-					
CHROMIUM	50	8.53	< 5.00	8.40	-	9.46	24.80	-							
NICKEL	100	< 5.00	10.90	29.40	68.80	121.00	-	48.20							

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled. - = 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."
 Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 4 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW2-28		MW2-37	MW2-44	MW2-46	MW3-47
	07/15/95		07/15/95	07/23/95	07/22/95	07/15/95
ANALYTE	MCL					
ARSENIC	50	-	54.20	< 5.00	5.33	5.87
CHROMIUM	50	-	< 50.90	< 5.00	11.50	13.50
NICKEL	100	101.00	-	< 5.00	45.30	6.88

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. DATE refers to date sampled. - = 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."
Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	ER-01 07/23/95	ER-07 07/21/95	ER-26 07/17/95	ER-38 07/22/95	ER-44 07/23/95	FB-1 07/15/95	FB-2 07/17/95	FB-3 07/21/95
ANALYTE	MCL							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	0.52 Ju	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 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
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
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 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
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
2-CHLOROETHYL VINYL ETHER	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 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
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 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
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 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. DATE refers to date sampled.
< = 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."
Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	ER-01 07/23/95	ER-07 07/21/95	ER-26 07/17/95	ER-38 07/22/95	ER-44 07/23/95	FB-1 07/15/95	FB-2 07/17/95	FB-3 07/21/95
ANALYTE	MCL							
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROMETHANE	-	< 1.00	1.20 J,l	< 1.00 UJl	< 1.00	1.10	< 1.00 UJl	< 1.00 UJl
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	< 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
METHYLENE CHLORIDE	5.0	1.20 Uy	< 1.00	< 1.00	< 1.00	2.60 Uz	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 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	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 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	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

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TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	FB-4 07/22/95	FB-5 07/23/95	MW1-01 07/23/95	MW1-02 07/14/95	MW1-03 07/23/95	MW1-05 07/17/95	MW1-05 07/17/95 DUPLICATE SAMPLE	MW1-06 07/17/95
ANALYTE	MCL							
1,1,1-TRICHLOROETHANE	200.0	< 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 Ju	< 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
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
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 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
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
2-CHLOROETHYL VINYL ETHER	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 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
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 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
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00

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TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		FB-4 07/22/95	FB-5 07/23/95	MW1-01 07/23/95	MW1-02 07/14/95	MW1-03 07/23/95	MW1-05 07/17/95	MW1-05 07/17/95 DUPLICATE SAMPLE	MW1-06 07/17/95
ANALYTE	MCL								
CHLOROFORM	100.0	< 0.50	< 0.50	1.90	< 0.50	< 0.50	1.90	1.50	2.40
CHLOROMETHANE	-	1.10	< 1.00	< 1.00	< 1.00	< 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	-	< 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
METHYLENE CHLORIDE	5.0	1.70 Uz	1.10 Uz	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
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	< 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	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 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. DATE refers to date sampled.
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TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW1-07 07/21/95	MW1-07 07/21/95 DUPLICATE SAMPLE	MW1-08 07/17/95	MW1-11 07/14/95	MW1-13 07/17/95	MW1-13 07/17/95 DUPLICATE SAMPLE	MW1-14 07/17/95	MW1-14 07/17/95 DUPLICATE SAMPLE
ANALYTE	MCL							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	1.80
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	1.10
1,1-DICHLOROETHANE	5.0	1.40	1.50	-	1.50	53.00	52.00	20.00
1,1-DICHLOROETHENE	6.0	6.60	6.80	-	14.00	94.00	93.00	80.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 25.00	< 25.00	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	-	< 0.50	42.00	42.00	0.78
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 25.00	< 25.00	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	0.97	< 0.50	< 0.50	< 25.00	< 25.00	< 0.50
2-CHLOROETHYL VINYL ETHER	-	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	-	< 1.00	< 50.00	< 50.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 25.00	< 25.00	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	-	< 1.00	< 50.00	< 50.00	< 1.00

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Lab flag/Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW1-07 07/21/95	MW1-07 07/21/95 DUPLICATE SAMPLE	MW1-08 07/17/95	MW1-11 07/14/95	MW1-13 07/17/95	MW1-13 07/17/95 DUPLICATE SAMPLE	MW1-14 07/17/95	MW1-14 07/17/95 DUPLICATE SAMPLE
ANALYTE	MCL								
CHLOROFORM	100.0	3.00	3.00	-	< 0.50	< 25.00	< 25.00	< 0.50	< 0.50
CHLOROMETHANE	-	1.30 Ux	1.90 Ux	-	< 1.00	< 50.00 UJL	< 50.00 UJL	< 1.00 UJL	< 1.00 UJL
CIS-1,2-DICHLOROETHENE	6.0	-	-	-	< 0.50	< 25.00	< 25.00	0.53	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	-	< 1.00	< 50.00	< 50.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	-	0.83	< 25.00	< 25.00	0.63	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	-	< 0.50	< 25.00	< 25.00	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	-	2.70	30.00	27.00	4.80	4.10
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	-	< 1.00	< 50.00	< 50.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	< 1.00	-	< 1.00	< 50.00	< 50.00	< 1.00	< 1.00

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Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
 1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
 CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW1-15 07/17/95	MW1-16 07/14/95	MW1-17 07/17/95	MW1-18 07/21/95	MW1-19 07/17/95	MW1-20 07/22/95	MW1-22 07/17/95	MW1-24 07/17/95
ANALYTE	MCL								
1,1,1-TRICHLOROETHANE	200.0	-	< 0.50	-	< 0.50	-	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	-	< 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
1,1-DICHLOROETHANE	5.0	-	< 0.50	-	< 0.50	-	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	-	< 0.50	-	2.30	-	< 0.50	< 0.50	< 0.50
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
1,2-DICHLOROPROPANE	5.0	-	< 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
2-CHLOROETHYL VINYL ETHER	-	-	< 0.50	-	< 0.50	-	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	-	< 0.50	-	< 0.50	-	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	-	< 0.50	-	< 0.50	-	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	-	< 1.00	-	< 1.00	-	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	-	< 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	-	-	< 1.00	-	< 1.00	-	< 1.00	< 1.00	< 1.00

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."
 Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
 1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
 CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW1-15 07/17/95	MW1-16 07/14/95	MW1-17 07/17/95	MW1-18 07/21/95	MW1-19 07/17/95	MW1-20 07/22/95	MW1-22 07/17/95	MW1-24 07/17/95
ANALYTE	MCL								
CHLOROFORM	100.0	-	1.00	-	< 0.50	-	< 0.50	2.80	1.60
CHLOROMETHANE	-	-	< 1.00	-	< 1.00 UJL	-	< 1.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	-	< 0.50	-	-	-	< 0.50	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	-	< 0.50	-	< 0.50	-	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	-	< 0.50	-	< 0.50	-	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	-	< 1.00	-	< 1.00	-	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	-	< 0.50	-	< 0.50	-	1.40	< 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	-	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	-	< 0.50	-	1.00	-	< 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

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.

< = 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."

Lab flag/Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW1-25 07/17/95	MW1-26 07/17/95	MW1-29 07/15/95	MW1-30 07/15/95	MW1-31 07/15/95	MW1-31 07/15/95 DUPLICATE SAMPLE	MW1-33 07/14/95	MW1-34 07/23/95
ANALYTE	MCL								
1,1,1-TRICHLOROETHANE	200.0	-	1.40 Jx	< 0.50	1.40	< 0.50	< 0.50	1.30	1.10
1,1,2,2-TETRACHLOROETHANE	1.0	-	< 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
1,1-DICHLOROETHANE	5.0	-	6.40	0.83	4.10	0.85	0.60	2.80	4.00
1,1-DICHLOROETHENE	6.0	-	11.00	4.10	32.00	19.00	18.00	41.00	46.00
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	3.00	< 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
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	1.30	< 0.50	< 0.50	< 0.50	< 0.50
2-CHLOROETHYL VINYL ETHER	-	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	-	< 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
BROMOMETHANE	-	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	-	< 0.50	1.30	< 0.50	< 0.50	< 0.50	1.40	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	-	< 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. DATE refers to date sampled.
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Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
 1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
 CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW1-25 07/17/95	MW1-26 07/17/95	MW1-29 07/15/95	MW1-30 07/15/95	MW1-31 07/15/95	MW1-31 07/15/95 DUPLICATE SAMPLE	MW1-33 07/14/95	MW1-34 07/23/95
ANALYTE	MCL							
CHLOROFORM	100.0	-	3.80	0.88	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROMETHANE	-	-	< 1.00 UJL	< 1.00 UJL	< 1.00 UJL	< 1.00 UJL	< 1.00	1.90
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	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	-	< 0.50	< 0.50	< 0.50	0.66	0.56	< 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	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	-	0.69	1.10	7.80	9.60	9.50	0.82
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

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
 < = 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."
 Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW1-35 07/23/95	MW1-36 07/15/95	MW1-38 07/22/95	MW1-39 07/22/95	MW1-42 07/14/95	MW1-43 07/14/95	MW1-45 07/22/95	MW1-45 07/22/95 DUPLICATE SAMPLE
ANALYTE	MCL							
1,1,1-TRICHLOROETHANE	200.0	< 0.50	1.60	2.80	3.30	4.10	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 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	2.80	3.30	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	1.90	3.80	4.60	45.00	290.00	< 0.50
1,1-DICHLOROETHENE	6.0	4.10	50.00	63.00	59.00	66.00	30.00	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.10 Uz	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	0.99	2.00	0.74	3.70	0.95
1,2-DICHLOROPROPANE	5.0	< 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
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
2-CHLOROETHYL VINYL ETHER	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 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
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	0.95	1.90	< 0.50	< 0.50	1.70
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.80	< 0.50
CHLOROETHANE	-	< 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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Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW1-35 07/23/95	MW1-36 07/15/95	MW1-38 07/22/95	MW1-39 07/22/95	MW1-42 07/14/95	MW1-43 07/14/95	MW1-45 07/22/95	MW1-45 07/22/95 DUPLICATE SAMPLE
ANALYTE	MCL								
CHLOROFORM	100.0	< 0.50	< 0.50	1.90	2.90	1.20	< 0.50	2.20	2.10
CHLOROMETHANE	-	2.00	< 1.00 UJL	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.80	< 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
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	4.70	1.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.87	< 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	2.00	5.30	5.40	3.30	3.30	7.60	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 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	14.00	< 1.00	< 1.00

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TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW2-12 07/17/95	MW2-27 07/17/95	MW2-28 07/15/95	MW2-37 07/15/95	MW2-40 07/22/95	MW2-44 07/23/95	MW2-46 07/22/95	MW3-41 07/17/95	
ANALYTE	MCL								
1,1,1-TRICHLOROETHANE	200.0	< 0.50	-	< 0.50	1.20	< 2.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	10.00	-	8.10	5.30	16.00	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	30.00	-	14.00	42.00	120.00	1.70	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	-	< 0.50	6.20	< 2.50	2.10	1.10	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
2-CHLOROETHYL VINYL ETHER	-	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	-	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	-	< 0.50	0.71	< 2.50	5.50	1.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	-	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00

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TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW2-12 07/17/95	MW2-27 07/17/95	MW2-28 07/15/95	MW2-37 07/15/95	MW2-40 07/22/95	MW2-44 07/23/95	MW2-46 07/22/95	MW3-41 07/17/95	
ANALYTE	MCL								
CHLOROFORM	100.0	< 0.50	-	< 0.50	3.00	< 2.50	3.80	3.10	< 0.50
CHLOROMETHANE	-	< 1.00 UJL	-	< 1.00 UJL	< 1.00 UJL	< 5.00	2.80 Ux	< 1.00	< 1.00 UJL
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	-	< 1.00	< 1.00	< 5.00	1.50 Uy	1.30 Uz	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
TRANS-1,2-DICHLOROETHENE	10.0	< 0.50	-	< 0.50	< 0.50	16.00	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	-	< 0.50	< 0.50	< 2.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	4.40	-	< 0.50	1.90	16.00	0.80	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	-	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 1.00	-	< 1.00	< 1.00	< 5.00	< 1.00	< 1.00	< 1.00

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Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW3-47 07/15/95	TB-07-14-95 07/14/95	TB-07-15-95 07/15/95	TB-07-17-95 07/17/95	TB-07-21-95 07/21/95	TB-07-22-95 07/22/95
ANALYTE	MCL					
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 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
1,1-DICHLOROETHANE	5.0	< 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
1,2-DICHLOROBENZENE	600.0	< 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
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 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
2-CHLOROETHYL VINYL ETHER	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 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. DATE refers to date sampled.
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Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 5 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW3-47 07/15/95	TB-07-14-95 07/14/95	TB-07-15-95 07/15/95	TB-07-17-95 07/17/95	TB-07-21-95 07/21/95	TB-07-22-95 07/22/95
ANALYTE	MCL					
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00 UJL	< 1.00 UJL	< 1.00
CIS-1,2-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	2.60	< 1.00	< 1.00	1.50 Uz 2.00
TETRACHLOROETHENE	5.0	< 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	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 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

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. DATE refers to date sampled.
< = 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."
Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 6
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (EPA METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	ER-01 07/23/95	ER-07 07/21/95	ER-26 07/17/95	ER-38 07/22/95	ER-44 07/23/95	FB-1 07/15/95	FB-2 07/17/95	FB-3 07/21/95
ANALYTE	MCL							
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE (TOTAL)	-	< 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. DATE refers to date sampled.
< = 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."
Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 6 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (EPA METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL	SAMPLE		FB-4	FB-5	MW1-01	MW1-02	MW1-03	MW1-07	MW1-07	MW1-08		
		DATE		07/22/95	07/23/95	07/23/95	07/14/95	07/23/95	07/21/95	07/21/95	07/17/95		
		QA								DUPLICATE			
										SAMPLE			
BENZENE	1	<	0.50	<	0.50	<	0.50	<	0.50	<	0.50	<	0.50
ETHYL BENZENE	680	<	0.50	<	0.50	<	0.50	<	0.50	<	0.50	<	0.50
TOLUENE	1000	<	0.50	<	0.50	<	0.50	<	0.50	<	0.50		0.61
XYLENE (TOTAL)	-	<	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. DATE refers to date sampled.

< = 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."

Lab flag/Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 6 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (EPA METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL	SAMPLE		MW1-11	MW1-13	MW1-13	MW1-14	MW1-15	MW1-16	MW1-17	MW1-18				
		DATE		07/14/95	07/17/95	07/17/95	07/17/95	07/17/95	07/14/95	07/17/95	07/21/95				
		QA				DUPLICATE									
						SAMPLE									
BENZENE	1	<	0.50	2500.00	2500.00	0.72	<	0.50	<	0.50	<	0.50			
ETHYL BENZENE	680	<	0.50	220.00	220.00	<	0.50	<	0.50	<	0.50	<	0.50		
TOLUENE	1000	<	0.50	220.00	220.00	<	0.50	<	0.50	<	0.50	0.52	<	0.50	
XYLENE (TOTAL)	-	<	0.50	250.00	250.00	<	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. DATE refers to date sampled.
< = Constituent below detection limits. Detection limits may vary depending on interference by other sample constituents.
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Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 6 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (EPA METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW1-19 07/17/95	MW1-20 07/22/95	MW1-25 07/17/95	MW1-26 07/17/95	MW1-29 07/15/95	MW1-30 07/15/95	MW1-31 07/15/95	MW1-31 07/15/95 DUPLICATE SAMPLE
ANALYTE	MCL								
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE (TOTAL)	-	< 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. DATE refers to date sampled.

< = 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."

Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 6 (cont.)
 1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
 AROMATIC COMPOUNDS (EPA METHOD 602)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW1-33		MW1-34		MW1-35		MW1-36		MW1-38		MW1-39		MW1-42		MW1-43	
	07/14/95		07/23/95		07/23/95		07/15/95		07/22/95		07/22/95		07/14/95		07/14/95	
	ANALYTE	MCL														
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.82		1.10	
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	
XYLENE (TOTAL)	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 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. DATE refers to date sampled.

< = 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."

Lab flag/Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 6 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (EPA METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

ANALYTE	MCL	SAMPLE		MW1-45	MW1-45	MW2-12	MW2-27	MW2-28	MW2-37	MW2-40	MW2-44		
		DATE		07/22/95	07/22/95	07/17/95	07/17/95	07/15/95	07/15/95	07/22/95	07/23/95		
		QA			DUPLICATE								
					SAMPLE								
BENZENE	1	<	0.50	<	0.50	0.66	<	0.50	<	0.50	<	0.50	
ETHYL BENZENE	680	<	0.50	<	0.50	<	0.50	<	0.50	<	0.50	<	0.50
TOLUENE	1000	<	0.50	<	0.50	<	0.50	<	0.50	<	0.50	<	0.50
XYLENE (TOTAL)	-	<	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. DATE refers to date sampled.

< = 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."

Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 6 (cont.)
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (EPA METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA	MW2-46 07/22/95	MW3-41 07/17/95	MW3-47 07/15/95	TB-07-14-95 07/14/95	TB-07-15-95 07/15/95	TB-07-17-95 07/17/95	TB-07-21-95 07/21/95	TB-07-22-95 07/22/95
ANALYTE	MCL							
BENZENE	1	< 0.50	0.83	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE (TOTAL)	-	< 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. DATE refers to date sampled.
< = 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."
Lab flag|Validation qualifier. See Table 9 for key to data qualifiers.

TABLE 7
1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
FIELD PARAMETERS, TPH GASOLINE, AND TPH DIESEL
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	QA	TEMPERATURE	EC-F	pH-F	TPH/GASOLINE	TPH/DIESEL
			degrees C	umhos/cm		ug/L (ppb)	ug/L (ppb)
AS-1	06/23/95		-	-	-	< 50	-
EW-1	06/23/95		-	-	-	< 50	-
FB-6	07/23/95		-	-	-	< 50	< 50
MW1-01	07/23/95		66.0	1073	7.21	-	-
MW1-02	07/14/95		69.7	684	7.27	-	-
MW1-03	07/23/95		65.8	841	7.18	-	-
MW1-04	06/23/95		-	-	-	430	-
MW1-05	07/19/95		70.0	981	7.21	-	-
MW1-06	07/19/95		69.9	785	7.37	-	-
MW1-07	07/21/95		70.2	872	7.15	-	-
MW1-08	07/19/95		71.5	758	7.26	-	-
MW1-11	07/14/95		69.7	964	7.91	-	-
MW1-13	07/17/95		68.8	817	6.99	-	-
MW1-14	07/17/95		68.8	1039	7.47	-	-
MW1-15	07/19/95		71.2	743	7.47	-	-
MW1-16	07/14/95		69.7	857	7.73	-	-
MW1-17	07/19/95		69.7	772	7.59	-	-
MW1-18	07/21/95		69.6	743	7.10	-	-
MW1-19	07/19/95		71.5	838	7.32	-	-
MW1-20	07/22/95		69.7	864	7.19	-	-
MW1-22	07/19/95		70.8	711	7.69	-	-
MW1-24	07/19/95		71.2	837	7.11	-	-
MW1-25	07/19/95		72.4	965	7.30	-	-
MW1-26	07/18/95		71.6	896	7.24	-	-
MW1-29	07/15/95		71.1	950	7.35	-	-
MW1-30	07/15/95		69.9	1122	7.28	-	-
MW1-31	07/15/95		70.2	1200	7.37	-	-
MW1-32	06/23/95		-	-	-	< 50	-
MW1-33	07/14/95		68.8	484	7.59	-	-
MW1-34	07/23/95		69.5	1083	7.24	-	-
MW1-35	07/23/95		69.5	847	7.29	-	-
MW1-36	07/15/95		68.7	737	7.48	-	-
MW1-38	07/22/95		67.5	684	7.17	-	-
MW1-39	07/22/95		67.1	828	7.11	-	-
MW1-42	07/14/95		71.8	1100	7.03	-	-
MW1-43	07/14/95		69.7	4280	7.43	-	-
MW1-45	07/22/95		68.7	703	7.49	-	-
MW1-48	07/23/95		70.1	565	7.07	< 50	180
MW2-12	07/17/95		68.8	1109	7.47	-	-
MW2-27	07/18/95		71.5	929	7.29	-	-
MW2-28	07/15/95		69.3	1249	7.29	-	-
MW2-37	07/15/95		67.7	863	7.42	-	-
MW2-40	07/22/95		69.2	1307	7.20	-	-
MW2-44	07/23/95		67.5	751	7.43	-	-

DATE refers to date sampled.
- = Parameter not analyzed.
B = Field blank.
D = Duplicate sample.
RB = Rinsate blank.

TABLE 7 (cont.)
 1995 THIRD QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
 FIELD PARAMETERS, TPH GASOLINE, AND TPH DIESEL
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

SAMPLE	DATE	QA	TEMPERATURE	EC-F	pH-F	TPH/GASOLINE	TPH/DIESEL
			degrees C	umhos/cm		ug/L (ppb)	ug/L (ppb)
MW2-46	07/22/95		67.3	681	7.18	-	-
MW3-41	07/17/95		68.8	778	7.66	-	-
MW3-47	07/15/95		19.4	881	7.16	-	-
PZ1-10	07/17/95		-	-	-	< 50	70
PZ1-10	07/20/95		70.8	636	7.08	-	-
PZ1-11	07/17/95		-	-	-	< 50	67
PZ1-11	07/20/95		70.4	1048	6.87	-	-
TP-1	06/23/95		-	-	-	< 50	-

DATE refers to date sampled.

- = Parameter not analyzed.

B = Field blank.

D = Duplicate sample.

RB = Rinsate blank.

TABLE 8
DATA VALIDATION QUALIFIER DEFINITIONS AND INTERPRETATION KEY
Assigned by Dames & Moore's Data Review Team

DATA QUALIFIER DEFINITIONS

- U The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- J The analyte was positively identified; the associated numerical value is the approximate concentration of the analyte in the sample.
- N The analysis indicates the presence of an analyte for which there is presumptive evidence to make a "tentative identification."
- NJ The analysis indicates the presence of an analyte that has been "tentatively identified" and the associated numerical value represents its approximate concentration.
- UJ The analyte was not detected above the reported sample quantitation limit. However, the reported quantitation limit is approximate and may or may not represent the actual limit of quantitation necessary to accurately and precisely measure the analyte in the sample.
- R The sample results are rejected due to serious deficiencies in the ability to analyze the sample and meet quality control criteria. The presence or absence of the analyte cannot be verified.

DATA QUALIFIER DEFINITIONS — REASON CODE DEFINITIONS

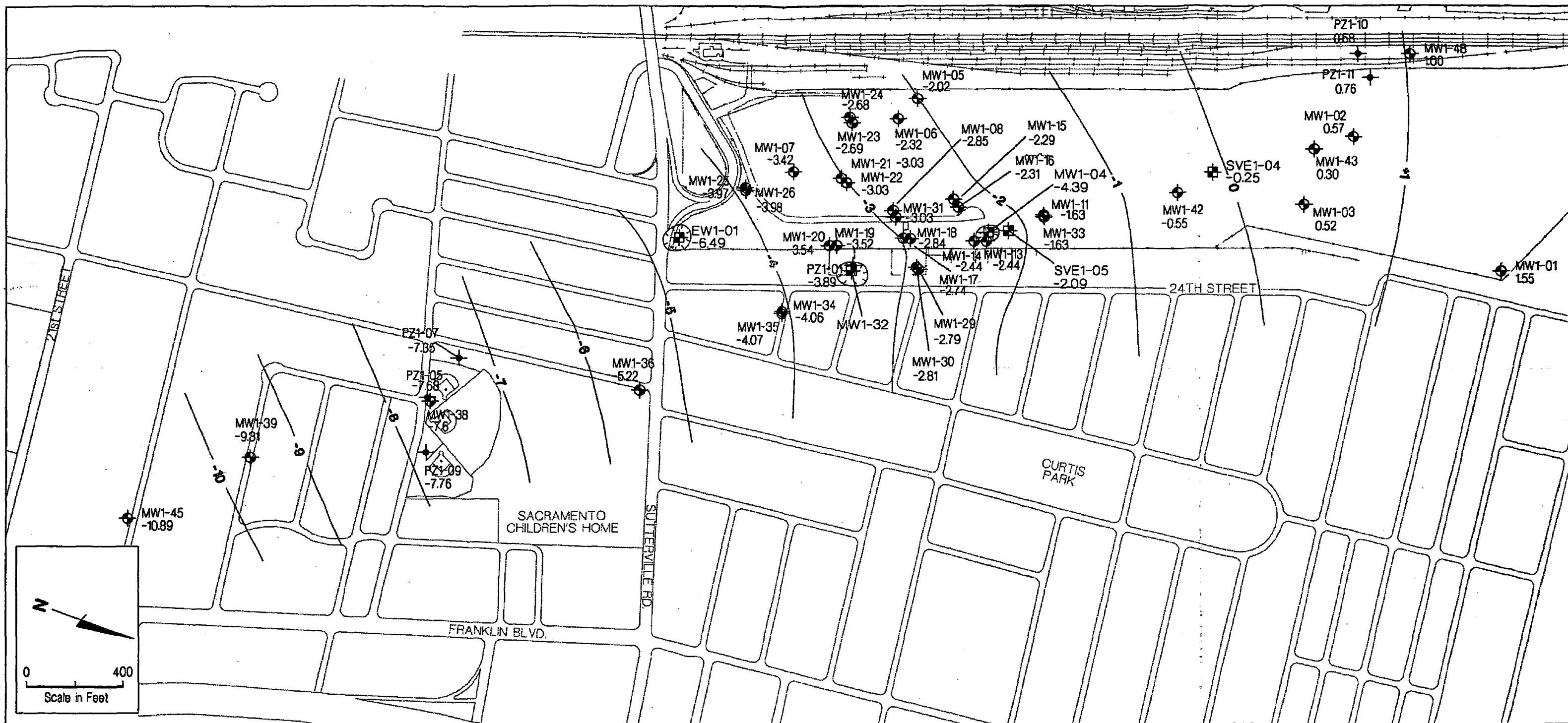
- a Analytical sequence deficiency or omission.
- b Gross compound breakdown (4,4'-DDT/Endrin).
- c Calibration failure; poor or unstable response.
- d Laboratory duplicate imprecision.
- e Laboratory duplicate control sample imprecision.
- f Field duplicate imprecision.
- g Poor chromatography.
- h Holding time violation.
- i Internal standard failure.
- j Poor mass spectrographic performance.
- k Serial dilution imprecision.
- l Laboratory control sample recovery failure.
- m Matrix spike/matrix spike duplicate recovery failure.
- n Interference check sample recovery failure.
- o Calibration blank contamination (metals/inorganics only).
- p Preparation blank contamination (metals/inorganics only).
- q No valid quantitation column present.
- r Linearity failure in initial calibration.
- s Surrogate spike recovery failure (GC organics and GC/MS organics only).
- t Instrument tuning failure.
- u No confirmation column present (GC Organics only).
- w Retention time (RT) outside of RT window
- x Field blank contamination.
- y Trip blank contamination
- z Method blank contamination.
- Q Other.

INTERPRETATION KEY

The following example shows how an analytical result which includes qualifiers assigned by both the Dames & Moore data review team and the analytical laboratory could be displayed in the data tables:

< 5.20 Uz | JB

The qualifier assigned by the data review team preceeds the "|"; the laboratory qualifier follows it. In this example, the result is qualified as a non-detection due to the bias introduced by contamination of the associated method blank. Presence of the analyte in the method blank is indicated by the laboratory qualifier (B). The qualifier assigned by the Dames & Moore data review team (Uz) indicates that the analyte concentration is considered to be below the adjusted detection limit (quantitation limit) based on the level of contamination in the method blank.



EXPLANATION

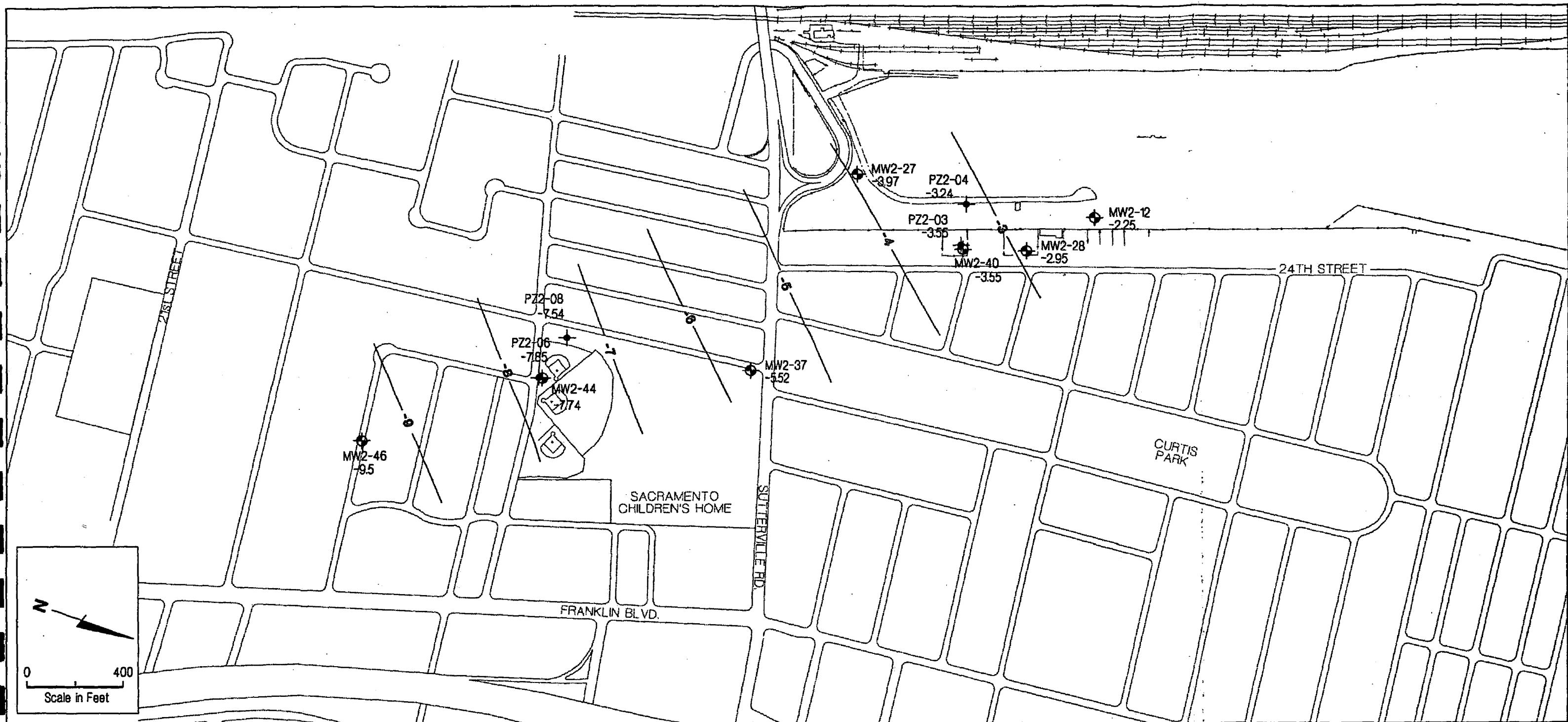
- Fence Line
- -7 --- Approximate Groundwater Contour
- ⊕ Monitoring Well Location
- ⊕ Extraction Well Location
- ⊕ Piezometer Location
- 3.89 Groundwater Elevation for First Hydrostratigraphic Zone Wells Shown in Feet MSLD

GROUNDWATER ELEVATION CONTOURS FIRST HYDROSTRATIGRAPHIC ZONE

JULY 1995

Union Pacific Railroad Yard
Sacramento, California

FIGURE 1



EXPLANATION

- Fence Line
- ⊕ Monitoring Well Location
- ⊞ Extraction Well Location
- ⊕ Piezometer Location
- 7--- Approximate Groundwater Contour
- 3.89 Groundwater Elevation for First Hydrostratigraphic Zone Wells Shown in Feet MSLD

GROUNDWATER ELEVATION CONTOURS SECOND HYDROSTRATIGRAPHIC ZONE

JULY 1995

Union Pacific Railroad Yard
Sacramento, California

FIGURE 2



REPORT OF LABORATORY ANALYSIS

August 02, 1995

Mr. Jim Brake
Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

RE: PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

Dear Mr. Brake:

Enclosed are the results of analyses for samples received on July 15, 1995. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Donna J. Breaux".

Donna J. Breaux
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

DATE: 08/02/95
PAGE: 1

Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

PACE Sample No: 70186374		Date Collected: 07/14/95						
Client Sample ID: MW-2		Date Received: 07/15/95						
Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	7.2	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested 07/19/95								
GC -- Volatiles								
Volatile Halogenated & Aromatic Organics								
Chloromethane	ND	ug/L	1.0	07/21/95	EPA 8010	MDW	74-87-3	
Bromomethane	ND	ug/L	1.0	07/21/95	EPA 8010	MDW	74-83-9	
Vinyl Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	MDW	75-01-4	
Chloroethane	ND	ug/L	1.0	07/21/95	EPA 8010	MDW	75-00-3	
Methylene Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	MDW	75-09-2	
Trichlorofluoromethane	ND	ug/L	1.0	07/21/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	75-35-4	
1,1-Dichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	75-34-3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	156-60-5	
Chloroform	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	67-66-3	
1,2-Dichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	107-06-2	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	71-55-6	
Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	71-43-2	
Carbon Tetrachloride	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	56-23-5	
Bromodichloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	108-88-3	
1,2-Dichloropropane	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	124-48-1	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	10061-02-6	
Bromoform	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	75-25-2	
Tetrachloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	79-34-5	
Chlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	108-90-7	
Ethyl Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	100-41-4	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	1330-20-7	

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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186374
Client Sample ID: MW-2

Date Collected: 07/14/95
Date Received: 07/15/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
1,2-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	106-46-7	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	MDW	156-59-2	
a,a,a-Trifluorotoluene (S)	105	%		07/21/95	EPA 8020	PFW	2164-17-2	
Bromochloromethane (S)	112	%		07/21/95	EPA 8010	MDW	74-97-5	
1,4-Dichlorobutane(S)	119	%		07/21/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186382
Client Sample ID: MW-43

Date Collected: 07/14/95
Date Received: 07/15/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Volatile Halogenated & Aromatic Organics								
Chloromethane	ND	ug/L	1.0	07/21/95	EPA 8010	PFW	74-87-3	
Bromomethane	ND	ug/L	1.0	07/21/95	EPA 8010	PFW	74-83-9	
Vinyl Chloride	14	ug/L	1.0	07/21/95	EPA 8010	PFW	75-01-4	
Chloroethane	ND	ug/L	1.0	07/21/95	EPA 8010	PFW	75-00-3	
Methylene Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	PFW	75-09-2	
Trichlorofluoromethane	ND	ug/L	1.0	07/21/95	EPA 8010	PFW	75-69-4	
1,1-Dichloroethene	30	ug/L	0.5	07/21/95	EPA 8010	PFW	75-35-4	
1,1-Dichloroethane	290	ug/L	5.0	07/21/95	EPA 8010	PFW	75-34-3	
trans-1,2-Dichloroethene	0.87	ug/L	0.5	07/21/95	EPA 8010	PFW	156-60-5	
Chloroform	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	67-66-3	
1,2-Dichloroethane	3.7	ug/L	0.5	07/21/95	EPA 8010	PFW	107-06-2	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	71-55-6	
Benzene	1.1	ug/L	0.5	07/21/95	EPA 8020	LMK	71-43-2	
Carbon Tetrachloride	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	56-23-5	
Bromodichloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	75-27-4	
Toluene	ND	ug/L	0.5	07/21/95	EPA 8020	LMK	108-88-3	
1,2-Dichloropropane	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	10061-01-5	
Trichloroethene	7.6	ug/L	0.5	07/21/95	EPA 8010	PFW	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	124-48-1	
1,1,2-Trichloroethane	3.3	ug/L	0.5	07/21/95	EPA 8010	PFW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	10061-02-6	
Bromoform	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	75-25-2	
Tetrachloroethene	1.5	ug/L	0.5	07/21/95	EPA 8010	PFW	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	79-34-5	
Chlorobenzene	0.8	ug/L	0.5	07/21/95	EPA 8010	PFW	108-90-7	
Ethyl Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	LMK	100-41-4	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/21/95	EPA 8020	LMK	1330-20-7	
1,2-Dichlorobenzene	1.1	ug/L	0.5	07/21/95	EPA 8010	PFW	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	PFW	106-46-7	
cis-1,2-Dichloroethene	9.8	ug/L	0.5	07/21/95	EPA 8010	PFW	156-59-2	
Bromochloromethane (S)	107	%		07/21/95	EPA 8010	PFW	74-97-5	
a,a,a-Trifluorotoluene (S)	108	%		07/21/95	EPA 8020	LMK	2164-17-2	
1,4-Dichlorobutane(S)	114	%		07/21/95	EPA 8010	PFW	110-56-5	

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PACE Project Number: 702300

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186390
Client Sample ID: MW-42

Date Collected: 07/14/95
Date Received: 07/15/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Volatile Halogenated & Aromatic Organics								
Chloromethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	74-87-3	
Bromomethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	74-83-9	
Vinyl Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-01-4	
Chloroethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-00-3	
Methylene Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-09-2	
Trichlorofluoromethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-69-4	
1,1-Dichloroethene	66	ug/L	0.5	07/21/95	EPA 8010	LMK	75-35-4	
1,1-Dichloroethane	45	ug/L	0.5	07/21/95	EPA 8010	LMK	75-34-3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	156-60-5	
Chloroform	1.2	ug/L	0.5	07/21/95	EPA 8010	LMK	67-66-3	
1,2-Dichloroethane	0.74	ug/L	0.5	07/21/95	EPA 8010	LMK	107-06-2	
1,1,1-Trichloroethane	4.1	ug/L	0.5	07/21/95	EPA 8010	LMK	71-55-6	
Benzene	0.82	ug/L	0.5	07/21/95	EPA 8020	PFW	71-43-2	
Carbon Tetrachloride	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	56-23-5	
Bromodichloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-27-4	
Toluene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	108-88-3	
1,2-Dichloropropane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	10061-01-5	
Trichloroethene	3.3	ug/L	0.5	07/21/95	EPA 8010	LMK	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	124-48-1	
1,1,2-Trichloroethane	2.8	ug/L	0.5	07/21/95	EPA 8010	LMK	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	10061-02-6	
Bromoform	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-25-2	
Tetrachloroethene	4.7	ug/L	0.5	07/21/95	EPA 8010	LMK	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	79-34-5	
Chlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	108-90-7	
Ethyl Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	100-41-4	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	1330-20-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	106-46-7	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	156-59-2	
Bromochloromethane (S)	102	%		07/21/95	EPA 8010	LMK	74-97-5	
a,a,a-Trifluorotoluene (S)	119	%		07/21/95	EPA 8020	PFW	2164-17-2	
1,4-Dichlorobutane(S)	113	%		07/21/95	EPA 8010	LMK	110-56-5	

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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186408
Client Sample ID: MW-33

Date Collected: 07/14/95
Date Received: 07/15/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Chromium Furnace, Method 7191								
Chromium	ND	ug/L	5	07/28/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/19/95				
Nickel by Furnace, Method 7520								
Nickel	10.9	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/19/95				
GC -- Volatiles								
Volatile Halogenated & Aromatic Organics								
Chloromethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	74-87-3	
Bromomethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	74-83-9	
Vinyl Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-01-4	
Chloroethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-00-3	
Methylene Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-09-2	
Trichlorofluoromethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-69-4	
1,1-Dichloroethene	41	ug/L	0.5	07/21/95	EPA 8010	LMK	75-35-4	
1,1-Dichloroethane	2.8	ug/L	0.5	07/21/95	EPA 8010	LMK	75-34-3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	156-60-5	
Chloroform	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	67-66-3	
1,2-Dichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	107-06-2	
1,1,1-Trichloroethane	1.3	ug/L	0.5	07/21/95	EPA 8010	LMK	71-55-6	
Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	71-43-2	
Carbon Tetrachloride	1.4	ug/L	0.5	07/21/95	EPA 8010	LMK	56-23-5	
Bromodichloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-27-4	
Toluene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	108-88-3	
1,2-Dichloropropane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	10061-01-5	
Trichloroethene	0.82	ug/L	0.5	07/21/95	EPA 8010	LMK	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	124-48-1	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	10061-02-6	
Bromoform	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-25-2	
Tetrachloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	79-34-5	
Chlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	108-90-7	
Ethyl Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	100-41-4	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	110-75-8	
Xylene (Total)	ND	ug/L	5	07/21/95	EPA 8020	PFW	1330-20-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	106-46-7	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	156-59-2	
Bromochloromethane (S)	103	%		07/21/95	EPA 8010	LMK	74-97-5	
a,a,a-Trifluorotoluene (S)	108	%		07/21/95	EPA 8020	PFW	2164-17-2	
1,4-Dichlorobutane(S)	113	%		07/21/95	EPA 8010	LMK	110-56-5	

*Data Validation: 8/11/95
I called lab and asked
for confirmation of this
result. We've never had
CCl4 in this well before.
Jim*

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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186465
Client Sample ID: MW-11

Date Collected: 07/14/95
Date Received: 07/15/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	ND	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/19/95				
GC -- Volatiles								
Volatile Halogenated & Aromatic Organics								
Chloromethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	74-87-3	
Bromomethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	74-83-9	
Vinyl Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-01-4	
Chloroethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-00-3	
Methylene Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-09-2	
Trichlorofluoromethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-69-4	
1,1-Dichloroethene	14	ug/L	0.5	07/21/95	EPA 8010	LMK	75-35-4	
1,1-Dichloroethane	1.5	ug/L	0.5	07/21/95	EPA 8010	LMK	75-34-3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	156-60-5	
Chloroform	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	67-66-3	
1,2-Dichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	107-06-2	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	71-55-6	
Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	71-43-2	
Carbon Tetrachloride	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	56-23-5	
Bromodichloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-27-4	
Toluene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	108-88-3	
1,2-Dichloropropane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	10061-01-5	
Trichloroethene	2.7	ug/L	0.5	07/21/95	EPA 8010	LMK	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	124-48-1	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	10061-02-6	
Bromoform	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-25-2	
Tetrachloroethene	0.83	ug/L	0.5	07/21/95	EPA 8010	LMK	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	79-34-5	
Chlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	108-90-7	
Ethyl Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	100-41-4	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	1330-20-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	106-46-7	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	156-59-2	
Bromochloromethane (S)	101	%		07/21/95	EPA 8010	LMK	74-97-5	
a,a,a-Trifluorotoluene (S)	117	%		07/21/95	EPA 8020	PFW	2164-17-2	
1,4-Dichlorobutane(S)	112	%		07/21/95	EPA 8010	LMK	110-56-5	

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PACE Project Number: 702300

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186473
Client Sample ID: MW-16

Date Collected: 07/14/95
Date Received: 07/15/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	ND	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/19/95				
GC -- Volatiles								
Volatile Halogenated & Aromatic Organics								
Chloromethane	ND	ug/L	1.0	07/20/95	EPA 8010	LMK	74-87-3	
Bromomethane	ND	ug/L	1.0	07/20/95	EPA 8010	LMK	74-83-9	
Vinyl Chloride	ND	ug/L	1.0	07/20/95	EPA 8010	LMK	75-01-4	
Chloroethane	ND	ug/L	1.0	07/20/95	EPA 8010	LMK	75-00-3	
Methylene Chloride	ND	ug/L	1.0	07/20/95	EPA 8010	LMK	75-09-2	
Trichlorofluoromethane	ND	ug/L	1.0	07/20/95	EPA 8010	LMK	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	75-35-4	
1,1-Dichloroethane	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	75-34-3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	156-60-5	
Chloroform	1	ug/L	0.5	07/20/95	EPA 8010	LMK	67-66-3	
1,2-Dichloroethane	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	107-06-2	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	71-55-6	
Benzene	ND	ug/L	0.5	07/20/95	EPA 8020	LMK	71-43-2	
Carbon Tetrachloride	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	56-23-5	
Bromodichloromethane	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	75-27-4	
Toluene	ND	ug/L	0.5	07/20/95	EPA 8020	LMK	108-88-3	
1,2-Dichloropropane	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	124-48-1	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	10061-02-6	
Bromoform	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	75-25-2	
Tetrachloroethene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	79-34-5	
Chlorobenzene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	108-90-7	
Ethyl Benzene	ND	ug/L	0.5	07/20/95	EPA 8020	LMK	100-41-4	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/20/95	EPA 8020	LMK	1330-20-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	106-46-7	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/20/95	EPA 8010	LMK	156-59-2	
Bromochloromethane (S)	110	%		07/20/95	EPA 8010	LMK	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		07/20/95	EPA 8020	LMK	2164-17-2	
1,4-Dichlorobutane(S)	117	%		07/20/95	EPA 8010	LMK	110-56-5	

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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186481
Client Sample ID: TB-07-14-95

Date Collected: 07/14/95
Date Received: 07/15/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Volatile Halogenated & Aromatic Organics								
Chloromethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	74-87-3	
Bromomethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	74-83-9	
Vinyl Chloride	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-01-4	
Chloroethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-00-3	
Methylene Chloride	2.6	ug/L	1.0	07/21/95	EPA 8010	LMK	75-09-2	1
Trichlorofluoromethane	ND	ug/L	1.0	07/21/95	EPA 8010	LMK	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-35-4	
1,1-Dichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-34-3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	156-60-5	
Chloroform	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	67-66-3	
1,2-Dichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	107-06-2	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	71-55-6	
Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	71-43-2	
Carbon Tetrachloride	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	56-23-5	
Bromodichloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-27-4	
Toluene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	108-88-3	
1,2-Dichloropropane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	124-48-1	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	10061-02-6	
Bromoform	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	75-25-2	
Tetrachloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	79-34-5	
Chlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	108-90-7	
Ethyl Benzene	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	100-41-4	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/21/95	EPA 8020	PFW	1330-20-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	106-46-7	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/21/95	EPA 8010	LMK	156-59-2	
Bromochloromethane (S)	107	%		07/21/95	EPA 8010	LMK	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		07/21/95	EPA 8020	PFW	2164-17-2	
1,4-Dichlorobutane(S)	117	%		07/21/95	EPA 8010	LMK	110-56-5	



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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

PARAMETER FOOTNOTES

ND	Not Detected
NC	Not Calculable
PRL	PACE Reporting Limit
(S)	Surrogate
[1]	Possible laboratory contaminant.

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James & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 4305
Associated PACE Samples: 70186382
70186481

QC Batch Method: EPA 8020
70186390 70186408 70186465 70186473

Date of Batch: 06/26/95

METHOD BLANK: 70188651
Associated PACE Samples:

	70186382	70186390	70186408	70186465	70186473	70186481
Parameter	Units	Method Blank Result	PRL	Footnotes		
Benzene	ug/L	ND	0.5			
Chlorobenzene	ug/L	ND	0.5			
1,4-Dichlorobenzene	ug/L	ND	0.5			
1,3-Dichlorobenzene	ug/L	ND	0.5			
2-Dichlorobenzene	ug/L	ND	0.5			
Ethyl Benzene	ug/L	ND	0.5			
Toluene	ug/L	ND	0.5			
Xylene (Total)	ug/L	ND	0.5			
m,p,a-Trifluorotoluene (S)	%	109				

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70188677 70188685

Parameter	Units	70183579	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	ND	20	22	108	21	106	2	
Chlorobenzene	ug/L	ND	20	22	112	22	110	2	
1,4-Dichlorobenzene	ug/L	ND	20	21	106	21	106	0	
1,3-Dichlorobenzene	ug/L	ND	20	21	106	21	104	2	
2-Dichlorobenzene	ug/L	ND	20	21	107	21	106	1	
Ethyl Benzene	ug/L	ND	20	22	108	21	105	3	
Toluene	ug/L	ND	20	21	107	21	104	3	
Xylene (Total)	ug/L	ND	60	64	106	62	104	2	
m,p,a-Trifluorotoluene (S)					102		100		

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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70154604

70154612

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	20	18	93	20	99	6	
Chlorobenzene	ug/L	20	19	94	20	100	6	
1,4-Dichlorobenzene	ug/L	20	18	92	20	98	6	
1,3-Dichlorobenzene	ug/L	20	18	93	19	97	4	
1,2-Dichlorobenzene	ug/L	20	18	92	19	97	5	
Ethyl Benzene	ug/L	20	19	94	20	100	6	
Toluene	ug/L	20	19	93	20	98	5	
Xylene (Total)	ug/L	60	55	92	59	98	6	
a,a,a-Trifluorotoluene (S)				90		91		

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James & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5172
Associated PACE Samples: 70186374

QC Batch Method: EPA 8020

Date of Batch: 07/20/95

METHOD BLANK: 70188628
Associated PACE Samples:

70186374

Parameter	Units	Method Blank Result	PRL	Footnotes
Benzene	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
Ethyl Benzene	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	0.5	
m,p,a,a-Trifluorotoluene (S)	%	105		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70191143 70191150

Parameter	Units	70189980	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	ND	20	18	91	19	95	4	
Chlorobenzene	ug/L	ND	20	26	129	22	110	16	
1,4-Dichlorobenzene	ug/L	ND	20	20	99	21	105	6	
1,3-Dichlorobenzene	ug/L	ND	20	19	95	20	100	5	
1,2-Dichlorobenzene	ug/L	ND	20	19	97	20	102	5	
Ethyl Benzene	ug/L	ND	20	20	100	20	101	1	
Toluene	ug/L	ND	20	18	91	19	95	4	
Xylene (Total)	ug/L	ND	60	57	95	59	98	3	
m,p,a,a-Trifluorotoluene (S)					84		88		



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PACE Project Number: 702300

Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70188636		70188644							
Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes	
Benzene	ug/L	20	21	107	21	105	2		
Chlorobenzene	ug/L	20	21	107	21	107	0		
1,4-Dichlorobenzene	ug/L	20	23	115	24	120	4		
1,3-Dichlorobenzene	ug/L	20	23	116	24	118	2		
1,2-Dichlorobenzene	ug/L	20	23	116	24	118	2		
Ethyl Benzene	ug/L	20	22	108	21	107	1		
Toluene	ug/L	20	22	108	21	107	1		
Xylene (Total)	ug/L	60	65	108	65	108	0		
a,a,a-Trifluorotoluene (S)				96		95			

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James & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5107 QC Batch Method: EPA 8010 Date of Batch: 07/19/95
Associated PACE Samples: 70186382 70186390 70186408 70186465 70186473
70186481

METHOD BLANK: 70188065
Associated PACE Samples:

	70186382	70186390	70186408	70186465	70186473	70186481
		Method Blank Result	PRL			
Parameter	Units			Footnotes		
Fluoromethane	ug/L	ND	1.0			
Chloromethane	ug/L	ND	1.0			
Vinyl Chloride	ug/L	ND	1.0			
Chloroethane	ug/L	ND	1.0			
Ethylene Chloride	ug/L	ND	1.0			
Trichlorofluoromethane	ug/L	ND	1.0			
1,1-Dichloroethene	ug/L	ND	0.5			
1,1-Dichloroethane	ug/L	ND	0.5			
trans-1,2-Dichloroethene	ug/L	ND	0.5			
Chloroform	ug/L	ND	0.5			
1,2-Dichloroethane	ug/L	ND	0.5			
1,1,1-Trichloroethane	ug/L	ND	0.5			
Carbon Tetrachloride	ug/L	ND	0.5			
1,1-Dichloroethane	ug/L	ND	0.5			
1,2-Dichloropropane	ug/L	ND	0.5			
trans-1,3-Dichloropropene	ug/L	ND	0.5			
Trichloroethene	ug/L	ND	0.5			
Dibromochloromethane	ug/L	ND	0.5			
1,1,2-Trichloroethane	ug/L	ND	0.5			
trans-1,3-Dichloropropene	ug/L	ND	0.5			
Bromoform	ug/L	ND	0.5			
Tetrachloroethene	ug/L	ND	0.5			
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5			
Chlorobenzene	ug/L	ND	0.5			
1,2-Dichloroethyl Vinyl Ether	ug/L	ND	0.5			

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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70188065

Associated PACE Samples:

	70186382	70186390	70186408	70186465	70186473	70186481
		Method Blank Result	PRL			
Parameter	Units					Footnotes
1,2-Dichlorobenzene	ug/L	0.51	0.5			
1,3-Dichlorobenzene	ug/L	ND	0.5			
1,4-Dichlorobenzene	ug/L	ND	0.5			
cis-1,2-Dichloroethene	ug/L	ND	0.5			
Bromochloromethane (S)	%	107				
1,4-Dichlorobutane(S)	%	109				

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70187455 70187463

Parameter	Units	70180682	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	17	85	16	80	6	
Bromomethane	ug/L	ND	20	22	113	19	97	15	
Vinyl Chloride	ug/L	ND	20	22	108	20	98	10	
Chloroethane	ug/L	ND	20	24	120	21	105	13	
Methylene Chloride	ug/L	ND	20	20	102	18	90	12	
Trichlorofluoromethane	ug/L	ND	20	23	115	20	102	12	
1,1-Dichloroethene	ug/L	ND	20	22	108	19	97	11	
1,1-Dichloroethane	ug/L	ND	20	21	107	19	95	12	
trans-1,2-Dichloroethene	ug/L	ND	20	22	109	19	96	13	
Chloroform	ug/L	ND	20	21	105	19	94	11	
1,2-Dichloroethane	ug/L	ND	20	21	105	19	94	11	
1,1,1-Trichloroethane	ug/L	ND	20	22	108	20	98	10	
Carbon Tetrachloride	ug/L	ND	20	22	108	19	96	12	
Bromodichloromethane	ug/L	ND	20	23	117	21	105	11	
1,2-Dichloropropane	ug/L	ND	20	21	105	19	95	10	
cis-1,3-Dichloropropene	ug/L	ND	20	21	103	18	92	11	
Trichloroethene	ug/L	ND	20	21	107	20	98	9	
Dibromochloromethane	ug/L	ND	20	23	114	21	104	9	
1,1,2-Trichloroethane	ug/L	ND	20	21	104	19	93	11	
trans-1,3-Dichloropropene	ug/L	ND	20	21	106	19	94	12	
Bromoform	ug/L	ND	20	24	120	21	107	11	
Tetrachloroethene	ug/L	ND	20	21	105	19	94	11	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	102	18	90	12	
Chlorobenzene	ug/L	ND	20	22	111	20	101	9	
2-Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
1,2-Dichlorobenzene	ug/L	ND	20	21	105	19	94	11	

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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70187455 70187463

Parameter	Units	70180682	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
1,3-Dichlorobenzene	ug/L	ND	20	21	105	19	93	12	
1,4-Dichlorobenzene	ug/L	ND	20	21	105	19	93	12	
Bromochloromethane (S)					103		95		
1,4-Dichlorobutane(S)					107		96		

LABORATORY CONTROL SAMPLE & LCSD: 70186754 70186762

Parameter	Units	Spike Conc.	LCSD Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	20	16	82	16	83	1	
Bromomethane	ug/L	20	21	106	20	101	5	
Vinyl Chloride	ug/L	20	22	108	21	104	4	
Chloroethane	ug/L	20	22	112	22	109	3	
Methylene Chloride	ug/L	20	20	102	20	98	4	
Trichlorofluoromethane	ug/L	20	22	113	21	106	6	
1,1-Dichloroethene	ug/L	20	21	107	21	104	3	
1,1-Dichloroethane	ug/L	20	21	106	20	102	4	
trans-1,2-Dichloroethene	ug/L	20	21	106	20	103	3	
Chloroform	ug/L	20	21	105	20	101	4	
1,2-Dichloroethane	ug/L	20	21	105	20	100	5	
1,1,1-Trichloroethane	ug/L	20	21	107	20	102	5	
Carbon Tetrachloride	ug/L	20	21	107	20	103	4	
Bromodichloromethane	ug/L	20	23	115	22	111	4	
1,2-Dichloropropane	ug/L	20	21	107	20	103	4	
trans-1,3-Dichloropropene	ug/L	20	21	104	20	100	4	
Trichloroethene	ug/L	20	22	109	21	106	3	
Dibromochloromethane	ug/L	20	23	113	22	110	3	
1,1,2-Trichloroethane	ug/L	20	20	103	20	100	3	
trans-1,3-Dichloropropene	ug/L	20	21	105	20	102	3	
Bromoform	ug/L	20	23	114	23	116	2	
Tetrachloroethene	ug/L	20	20	103	20	100	3	
1,1,2,2-Tetrachloroethane	ug/L	20	19	93	19	95	2	
Chlorobenzene	ug/L	20	22	112	21	107	5	
Chloroethyl Vinyl Ether	ug/L	20	21	107	20	100	7	
1,2-Dichlorobenzene	ug/L	20	21	105	20	101	4	
1,3-Dichlorobenzene	ug/L	20	21	106	20	100	6	
1,4-Dichlorobenzene	ug/L	20	21	106	20	101	5	
Bromochloromethane (S)				101		101		
1,4-Dichlorobutane(S)				103		105		



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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5168

QC Batch Method: EPA 8010

Date of Batch: 07/20/95

Associated PACE Samples:

70186374

METHOD BLANK: 70188586

Associated PACE Samples:

70186374

Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Methylene Chloride	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
1,1-Dichloroethane	ug/L	ND	0.5	
trans-1,2-Dichloroethene	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
Trichloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	

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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70188586
Associated PACE Samples:

70186374

Parameter	Units	Method Blank Result	PRL	Footnotes
1,2-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	109		
1,2-Dichlorobutane(S)	%	116		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70189253 70189261									
Parameter	Units	70183991	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	18	88	18	91	3	
Bromomethane	ug/L	ND	20	16	82	17	86	5	
Ethyl Chloride	ug/L	ND	20	18	91	19	95	4	
Chloroethane	ug/L	ND	20	18	88	19	93	6	
Methylene Chloride	ug/L	ND	20	21	107	23	114	6	
1-chlorofluoromethane	ug/L	ND	20	26	129	29	144	11	
1,1-Dichloroethene	ug/L	ND	20	21	99	22	109	10	
1,2-Dichloroethane	ug/L	ND	20	21	103	22	110	7	
trans-1,2-Dichloroethene	ug/L	ND	20	20	102	22	111	8	
Chloroform	ug/L	ND	20	18	93	20	99	6	
1,1-Dichloroethane	ug/L	ND	20	19	97	21	105	8	
1,1,1-Trichloroethane	ug/L	ND	20	21	103	21	106	3	
Carbon Tetrachloride	ug/L	ND	20	19	97	20	102	5	
Bromodichloromethane	ug/L	ND	20	19	94	21	103	9	
1,1-Dichloropropane	ug/L	ND	20	19	95	20	103	8	
cis-1,3-Dichloropropene	ug/L	ND	20	20	101	22	110	9	
1,1,1-Trichloroethene	ug/L	2.7	20	19	82	20	89	8	
Dibromochloromethane	ug/L	ND	20	21	104	22	112	7	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	103	22	109	6	
trans-1,3-Dichloropropene	ug/L	ND	20	20	100	21	107	7	
Bromoform	ug/L	ND	20	21	106	22	111	5	
Tetrachloroethene	ug/L	ND	20	19	96	21	103	7	
1,1,1,2-Tetrachloroethane	ug/L	ND	20	21	105	22	112	6	
Chlorobenzene	ug/L	ND	20	20	100	22	110	10	
Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
1,2-Dichlorobenzene	ug/L	ND	20	21	107	21	105	2	

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QUALITY CONTROL DATA

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PACE Project Number: 702300

Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70189253 70189261

Parameter	Units	70183991	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
1,3-Dichlorobenzene	ug/L	ND	20	22	111	21	104	7	
1,4-Dichlorobenzene	ug/L	ND	20	23	115	19	96	18	
Bromochloromethane (S)					93		99		
1,4-Dichlorobutane(S)					92		97		

LABORATORY CONTROL SAMPLE & LCSD: 70188594 70188602

Parameter	Units	Spike Conc.	LCSD Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	20	16	79	18	90	13	
Bromomethane	ug/L	20	16	80	18	92	14	
Vinyl Chloride	ug/L	20	16	80	19	94	16	
Chloroethane	ug/L	20	16	79	18	90	13	
Methylene Chloride	ug/L	20	20	99	23	114	14	
Trichlorofluoromethane	ug/L	20	17	84	19	97	14	
1,1-Dichloroethene	ug/L	20	18	93	21	107	14	
1,1-Dichloroethane	ug/L	20	19	95	21	107	12	
trans-1,2-Dichloroethene	ug/L	20	19	95	22	109	14	
Chloroform	ug/L	20	18	89	20	98	10	
1,2-Dichloroethane	ug/L	20	20	98	21	105	7	
1,1,1-Trichloroethane	ug/L	20	20	98	21	106	8	
Carbon Tetrachloride	ug/L	20	19	94	20	102	8	
Bromodichloromethane	ug/L	20	20	98	20	102	4	
1,2-Dichloropropane	ug/L	20	19	97	20	102	5	
cis-1,3-Dichloropropene	ug/L	20	20	103	21	106	3	
Trichloroethene	ug/L	20	18	91	19	96	5	
Dibromochloromethane	ug/L	20	21	106	22	111	5	
1,1,2-Trichloroethane	ug/L	20	20	101	22	109	8	
trans-1,3-Dichloropropene	ug/L	20	20	102	22	108	6	
Bromoform	ug/L	20	22	109	22	113	4	
Tetrachloroethene	ug/L	20	19	95	20	102	7	
1,1,2,2-Tetrachloroethane	ug/L	20	21	105	22	108	3	
Chlorobenzene	ug/L	20	20	101	22	112	10	
2-Chloroethyl Vinyl Ether	ug/L	20	25	127	21	107	17	
1,2-Dichlorobenzene	ug/L	20	20	102	23	114	11	
1,3-Dichlorobenzene	ug/L	20	20	102	23	113	10	
1,4-Dichlorobenzene	ug/L	20	20	103	23	117	13	
Bromochloromethane (S)				89		98		
1,4-Dichlorobutane(S)				91		98		

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QUALITY CONTROL DATA

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James & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702300
Client Project ID: Union.Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5115

QC Batch Method: EPA 3020

Date of Batch: 07/19/95

Associated PACE Samples: 70186374 70186408 70186465 70186473

Method BLANK: 70187059

Associated PACE Samples:

70186374 70186408 70186465 70186473

Parameter	Units	Method Blank Result	PRL	Footnotes
Nickel	ug/L	ND	5	
Chromium	ug/L	ND	5	

MATRIX SPIKE: 70187067

Parameter	Units	70186465	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Nickel	ug/L	ND	40	42	92	
Chromium	ug/L	17.9	20	35.8	90	

LABORATORY CONTROL SAMPLE & LCSD: 70187083

Parameter	Units	70187091 Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Nickel	ug/L	40	36	90	36.5	91	1	
Chromium	ug/L	20	17.7	89	18.4	92	3	

AMPLE DUPLICATE: 70187075

Parameter	Units	70186465	Dup. Result	RPD	Footnotes
Nickel	ug/L	ND	ND	NC	
Chromium	ug/L	17.9	16	11	



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PACE Project Number: 702300
Client Project ID: Union Pacific Railroad-Sac.

QUALITY CONTROL DATA PARAMETER FOOTNOTES

The Quality Control Sample Final Results listed above have been rounded to reflect an appropriate number of significant figures. Consistent with EPA guidelines unrounded concentrations have been used to calculate % Rec and RPD values.

ND	Not Detected
NC	Not Calculable
PRL	PACE Reporting Limit
RPD	Relative Percent Difference
(S)	Surrogate

702300

261385

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client Dames & Moore
Address 8801 Folsom Blvd
Sac, Ca 95826
Phone (916) 387-8800

Report To: Tony Mindling
Bill To: Same
P.O. # / Billing Reference: Same
Project Name / No. 00173-080-044

Pace Client No. _____
Pace Project Manager _____
Pace Project No. _____
*Requested Due Date: _____

Sampled By (PRINT):

Sampler Signature Greg Fernald Date Sampled 7-14-95

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES				ANALYSES REQUEST	REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA		
1	MW-2	0954	W	186374	5		✓	✓		✓	
2	MW-43	1044		186382	4			✓		✓	
3	MW-42	1338		186390	4			✓		✓	
4	MW-33	1426		186408	5		✓	✓		✓	
5	MW-11	1514		186465	5		✓	✓		✓	
6	MW-16	1558		186473	5		✓	✓		✓	
7	TB-07-14-95	0800		186481	2				✓	✓	601/602
8											

COOLER NOS.	BAILERS	SHIPMENT METHOD		ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
1		OUT/DATE	RETURNED/DATE		<u>Greg Fernald</u>	<u>Red X Ansell</u>	7-14-95	1700

Additional Comments

August 08, 1995

Mr. Jim Brake
Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

RE: PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

Dear Mr. Brake:

Enclosed are the results of analyses for samples received on July 22, 1995. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Donna J. Breaux

Donna J. Breaux
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

PACE Sample No: 70194949
Client Sample ID: MW-7

Date Collected: 07/21/95
Date Received: 07/22/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	1.3	ug/L	1.0	07/31/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	6.6	ug/L	0.5	07/31/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	1.4	ug/L	0.5	07/31/95	EPA 8010	MDW	75-34-3	
Chloroform	3	ug/L	0.5	07/31/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	1330-20-7	

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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70194949
Client Sample ID: MW-7

Date Collected: 07/21/95
Date Received: 07/22/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
1,3-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	95-50-1	
Bromochloromethane (S)	108	%		07/31/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	106	%		07/31/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	119	%		07/31/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70194956
Client Sample ID: MW-18

Date Collected: 07/21/95
Date Received: 07/22/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	9.21	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/25/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	2.3	ug/L	0.5	07/28/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	1	ug/L	0.5	07/28/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	95-50-1	
Bromochloromethane (S)	106	%		07/28/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	107	%		07/28/95	EPA 8020	MDW	2164-17-2	

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PACE Project Number: 702387

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70194956

Client Sample ID: MW-18

Date Collected: 07/21/95

Date Received: 07/22/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
1,4-Dichlorobutane(S)	116	%		07/28/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70194964
Client Sample ID: MW-70

Date Collected: 07/21/95
Date Received: 07/22/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	1.9	ug/L	1.0	07/28/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	6.8	ug/L	0.5	07/28/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	1.5	ug/L	0.5	07/28/95	EPA 8010	MDW	75-34-3	
Chloroform	3	ug/L	0.5	07/28/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW		
Bromoform	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.6	07/28/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	0.97	ug/L	0.5	07/28/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	95-50-1	
Bromochloromethane (S)	108	%		07/28/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	104	%		07/28/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		07/28/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70194972
Client Sample ID: ER-7

Date Collected: 07/21/95
Date Received: 07/22/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	ND	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/25/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	1.2	ug/L	1.0	07/31/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	0.87	ug/L	0.5	07/31/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	95-50-1	
Bromochloromethane (S)	106	%		07/31/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	108	%		07/31/95	EPA 8020	MDW	2164-17-2	



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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70194972
Client Sample ID: ER-7

Date Collected: 07/21/95
Date Received: 07/22/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
1,4-Dichlorobutane(S)	105	%		07/31/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702387

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70194980
Client Sample ID: FB-3

Date Collected: 07/21/95
Date Received: 07/22/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	1.2	ug/L	1.0	07/31/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	95-50-1	
Bromochloromethane (S)	109	%		07/31/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	103	%		07/31/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	114	%		07/31/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702387

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70194998
Client Sample ID: TB-07-21-95

Date Collected: 07/21/95

Date Received: 07/22/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/31/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	1.5	ug/L	0.5	07/31/95	EPA 8010	MDW	75-09-2	1
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/31/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/31/95	EPA 8010	MDW	95-50-1	
Bromochloromethane (S)	112	%		07/31/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		07/31/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	117	%		07/31/95	EPA 8010	MDW	110-56-5	



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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

PARAMETER FOOTNOTES

Not Detected
Not Calculable
PACE Reporting Limit
(S) Surrogate
Possible laboratory contaminant.



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QUALITY CONTROL DATA

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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702387

Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5344

Associated PACE Samples:

70194956

QC Batch Method: EPA 3020

70194972

Date of Batch: 07/25/95

METHOD BLANK: 70195896

Associated PACE Samples:

70194956

70194972

Method
Blank
Result

PRL

Footnotes

Parameter

Units

Nickel

ug/L

ND

5

MATRIX SPIKE: 70195920

Parameter

Units

70192372

Spike
Conc.

Matrix
Spike
Result

Spike
% Rec

Footnotes

Nickel

ug/L

112

40

148

90

LABORATORY CONTROL SAMPLE & LCSD: 70195904

70195912

Parameter

Units

Spike
Conc.

LCS
Result

Spike
% Rec

LCSD
Result

Spike
Dup
% Rec

RPD

Footnotes

Nickel

ug/L

40

40

100

39.8

99

1

SAMPLE DUPLICATE: 70195938

Parameter

Units

70192372

Dup.
Result

RPD

Footnotes

Nickel

ug/L

112

111

1

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James & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5371
Associated PACE Samples: 70194956 70194964

QC Batch Method: EPA 8010/20

Date of Batch: 07/26/95

METHOD BLANK: 70199245
Associated PACE Samples:

70194956

70194964

Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
Ethylene Chloride	ug/L	ND	0.5	
trans-1,2-Dichloroethene	ug/L	ND	0.5	
1,1-Dichloroethane	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Benzene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
1,1-Dichloroethene	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
Vinylbenzene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70199245
Associated PACE Samples:

Parameter	Units	70194956	70194964	PRL	Footnotes
			Method Blank Result		
1,1,2,2-Tetrachloroethane	ug/L		ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L		ND	0.5	
Xylene (Total)	ug/L		ND	0.5	
1,3-Dichlorobenzene	ug/L		ND	0.5	
1,4-Dichlorobenzene	ug/L		ND	0.5	
1,2-Dichlorobenzene	ug/L		ND	0.5	
Bromochloromethane (S)	%		112		
a,a,a-Trifluorotoluene (S)	%		107		
1,4-Dichlorobutane(S)	%		113		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70199252 70199260									
Parameter	Units	70187760	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	20	103	18	90	13	
Vinyl Chloride	ug/L	ND	20	21	104	20	98	6	
Bromomethane	ug/L	ND	20	26	132	24	118	11	
Chloroethane	ug/L	ND	20	24	119	22	111	7	
Trichlorofluoromethane	ug/L	ND	20	23	113	21	107	5	
1,1-Dichloroethene	ug/L	14	20	31	87	30	82	6	
Methylene Chloride	ug/L	ND	20	20	99	19	97	2	
trans-1,2-Dichloroethene	ug/L	ND	20	21	105	20	101	4	
1,1-Dichloroethane	ug/L	8.1	20	27	94	26	89	5	
Chloroform	ug/L	ND	20	21	106	20	102	4	
1,1,1-Trichloroethane	ug/L	ND	20	22	109	21	104	5	
Carbon Tetrachloride	ug/L	ND	20	22	109	21	103	6	
Benzene	ug/L	ND	20	21	106	21	103	3	
1,2-Dichloroethane	ug/L	ND	20	21	107	21	104	3	
cis-1,3-Dichloropropene	ug/L	ND	20	21	105	20	103	2	
Trichloroethene	ug/L	ND	20	22	109	21	104	5	
1,2-Dichloropropane	ug/L	ND	20	22	108	21	105	3	
Bromodichloromethane	ug/L	ND	20	24	120	23	117	3	
Toluene	ug/L	ND	20	21	105	21	104	1	
1,1,2-Trichloroethane	ug/L	ND	20	21	106	21	106	0	
trans-1,3-Dichloropropene	ug/L	ND	20	22	108	21	106	2	
Tetrachloroethene	ug/L	ND	20	21	104	20	100	4	
Dibromochloromethane	ug/L	ND	20	24	120	23	117	3	

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QUALITY CONTROL DATA

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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70199252 70199260

Parameter	Units	70187760	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chlorobenzene	ug/L	ND	20	21	107	22	110	3	
Ethylbenzene	ug/L	ND	20	22	108	21	107	1	
Formoform	ug/L	ND	20	23	117	24	121	3	
1,2,2-Tetrachloroethane	ug/L	ND	20	21	104	22	108	4	
Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
Xylene (Total)	ug/L	ND	60	64	107	63	105	2	
1,3-Dichlorobenzene	ug/L	ND	20	21	105	21	105	0	
4-Dichlorobenzene	ug/L	ND	20	21	105	21	105	0	
2-Dichlorobenzene	ug/L	ND	20	21	105	21	106	1	
Bromochloromethane (S)					108		103		
a,a,a-Trifluorotoluene (S)					101		99		
4-Dichlorobutane(S)					107		110		

LABORATORY CONTROL SAMPLE & LCSD: 70197108 70197116

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	20	16	79	15	76	4	
Vinyl Chloride	ug/L	20	21	107	18	92	15	
Monomethane	ug/L	20	21	107	19	95	12	
Chloroethane	ug/L	20	21	105	20	101	4	
Trichlorofluoromethane	ug/L	20	22	108	21	104	4	
1,1-Dichloroethene	ug/L	20	21	104	20	102	2	
Methylene Chloride	ug/L	20	20	101	20	98	3	
trans-1,2-Dichloroethene	ug/L	20	21	104	20	101	3	
1-Dichloroethane	ug/L	20	21	105	20	102	3	
Chloroform	ug/L	20	21	105	21	103	2	
1,1,1-Trichloroethane	ug/L	20	21	105	21	104	1	
Carbon Tetrachloride	ug/L	20	21	105	21	104	1	
Benzene	ug/L	20	21	105	21	105	0	
1,2-Dichloroethane	ug/L	20	21	105	21	104	1	
cis-1,3-Dichloropropene	ug/L	20	21	104	20	101	3	
Trichloroethene	ug/L	20	21	106	21	106	0	
2-Dichloropropane	ug/L	20	21	106	21	104	2	
Monodichloromethane	ug/L	20	24	118	24	121	3	
Toluene	ug/L	20	21	105	21	104	1	
1,1,2-Trichloroethane	ug/L	20	21	107	21	105	2	
trans-1,3-Dichloropropene	ug/L	20	21	107	21	105	2	
Tetrachloroethene	ug/L	20	20	101	20	101	0	
Dibromochloromethane	ug/L	20	24	119	23	117	2	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70197108

70197116

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Chlorobenzene	ug/L	20	22	109	23	114	4	
Ethylbenzene	ug/L	20	22	108	21	106	2	
Bromoform	ug/L	20	24	122	24	121	1	
1,1,2,2-Tetrachloroethane	ug/L	20	21	105	21	103	2	
2-Chloroethyl Vinyl Ether	ug/L	20	23	114	19	96	17	
Xylene (Total)	ug/L	60	64	106	63	105	1	
1,3-Dichlorobenzene	ug/L	20	21	105	20	102	3	
1,4-Dichlorobenzene	ug/L	20	21	106	21	104	2	
1,2-Dichlorobenzene	ug/L	20	21	106	21	105	1	
Bromochloromethane (S)				106		105		
a,a,a-Trifluorotoluene (S)				102		101		
1,4-Dichlorobutane(S)				108		109		

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

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James & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5526 QC Batch Method: EPA 8021 Date of Batch: 07/31/95
Associated PACE Samples: 70194949 70194972 70194980 70194998

METHOD BLANK: 70203732
Associated PACE Samples:

	70194949	70194972	70194980	70194998
		Method Blank		
Parameter	Units	Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
Ethylene Chloride	ug/L	1.3	0.5	1
trans-1,2-Dichloroethene	ug/L	ND	0.5	
1,1-Dichloroethane	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Benzene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Trichloroethene	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
Ethylbenzene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70203732
Associated PACE Samples:

	70194949	70194972	70194980	70194998
		Method Blank Result	PRL	Footnotes
Parameter	Units			
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	0.5	
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
Bromochloromethane (S)	%	108		
a,a,a-Trifluorotoluene (S)	%	105		
1,4-Dichlorobutane(S)	%	117		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70204375 70204383									
Parameter	Units	70194980	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	1.2	20	16	76	17	77	1	
Vinyl Chloride	ug/L	ND	20	18	88	18	90	2	
Bromomethane	ug/L	ND	20	20	98	20	102	4	
Chloroethane	ug/L	ND	20	20	102	20	100	2	
Trichlorofluoromethane	ug/L	ND	20	20	98	20	100	2	
1,1-Dichloroethene	ug/L	ND	20	18	91	19	95	4	
Methylene Chloride	ug/L	ND	20	18	91	18	91	0	
trans-1,2-Dichloroethene	ug/L	ND	20	18	93	19	94	1	
1,1-Dichloroethane	ug/L	ND	20	19	95	19	94	1	
Chloroform	ug/L	ND	20	19	95	19	95	0	
1,1,1-Trichloroethane	ug/L	ND	20	19	97	19	97	0	
Carbon Tetrachloride	ug/L	ND	20	19	96	19	96	0	
Benzene	ug/L	ND	20	21	105	21	105	0	
1,2-Dichloroethane	ug/L	ND	20	19	96	19	96	0	
cis-1,3-Dichloropropene	ug/L	ND	20	18	90	18	92	2	
Trichloroethene	ug/L	ND	20	19	97	19	97	0	
1,2-Dichloropropane	ug/L	ND	20	19	97	19	97	0	
Bromodichloromethane	ug/L	ND	20	21	106	21	107	1	
Toluene	ug/L	ND	20	20	103	21	105	2	
1,1,2-Trichloroethane	ug/L	ND	20	19	94	19	96	2	
trans-1,3-Dichloropropene	ug/L	ND	20	18	91	19	94	3	

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QUALITY CONTROL DATA

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PACE Project Number: 702387

Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70204375 70204383

Parameter	Units	70194980	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Tetrachloroethene	ug/L	ND	20	18	91	18	92	1	
Dibromochloromethane	ug/L	ND	20	21	106	21	106	0	
Chlorobenzene	ug/L	ND	20	20	99	20	99	0	
Phenylbenzene	ug/L	ND	20	21	103	21	106	3	
Bromoform	ug/L	ND	20	22	108	22	110	2	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	18	92	19	93	1	
2-Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
Styrene (Total)	ug/L	ND	60	59	98	62	104	6	
1,3-Dichlorobenzene	ug/L	ND	20	19	94	19	94	0	
1,4-Dichlorobenzene	ug/L	ND	20	19	95	19	95	0	
1,2-Dichlorobenzene	ug/L	ND	20	19	95	19	95	0	
Bromochloromethane (S)					96		96		
1,1,1-Trifluorotoluene (S)					99		100		
1,1-Dichlorobutane(S)					99		100		

LABORATORY CONTROL SAMPLE & LCSD: 70203740 70203757

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	20	17	85	15	75	12	
Methyl Chloride	ug/L	20	20	98	18	89	10	
Bromomethane	ug/L	20	23	114	19	97	16	
Chloroethane	ug/L	20	22	111	20	100	10	
Trichlorofluoromethane	ug/L	20	22	108	18	90	18	
1,1-Dichloroethene	ug/L	20	20	100	18	91	9	
1,2-Dichloroethene	ug/L	20	20	98	18	89	10	
trans-1,2-Dichloroethene	ug/L	20	20	101	18	91	10	
1,1-Dichloroethane	ug/L	20	20	102	18	91	11	
Bromoform	ug/L	20	20	99	18	92	7	
1,1,1-Trichloroethane	ug/L	20	20	101	19	93	8	
Carbon Tetrachloride	ug/L	20	20	101	18	93	8	
Benzene	ug/L	20	20	103	20	103	0	
1,2-Dichloroethane	ug/L	20	20	100	18	93	7	
trans-1,3-Dichloropropene	ug/L	20	20	100	18	91	9	
1,2-Dichloroethene	ug/L	20	20	103	19	96	7	
1,2-Dichloropropane	ug/L	20	20	102	18	93	9	
Bromodichloromethane	ug/L	20	22	112	20	101	10	
Styrene	ug/L	20	21	104	21	104	0	
1,2-Trichloroethane	ug/L	20	20	102	19	94	8	
trans-1,3-Dichloropropene	ug/L	20	21	103	19	94	9	

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QUALITY CONTROL DATA

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PACE Project Number: 702387
Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70203740

70203757

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Tetrachloroethene	ug/L	20	20	100	18	89	12	
Dibromochloromethane	ug/L	20	23	114	20	103	10	
Chlorobenzene	ug/L	20	22	110	19	96	14	
Ethylbenzene	ug/L	20	21	106	21	106	0	
Bromoform	ug/L	20	24	120	21	107	11	
1,1,2,2-Tetrachloroethane	ug/L	20	20	100	17	85	16	
2-Chloroethyl Vinyl Ether	ug/L	20	22	109	20	98	11	
Xylene (Total)	ug/L	60	63	105	63	105	0	
1,3-Dichlorobenzene	ug/L	20	21	103	18	92	11	
1,4-Dichlorobenzene	ug/L	20	21	103	18	92	11	
1,2-Dichlorobenzene	ug/L	20	20	102	19	93	9	
Bromochloromethane (S)				102		94		
a,a,a-Trifluorotoluene (S)				98		100		
1,4-Dichlorobutane(S)				107		97		



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PACE Project Number: 702387

Client Project ID: Union Pacific Railroad-Sac.

QUALITY CONTROL DATA PARAMETER FOOTNOTES

The Quality Control Sample Final Results listed above have been rounded to reflect an appropriate number of significant figures. Consistent with EPA guidelines unrounded concentrations have been used to calculate % Rec and RPD values.

ND Not Detected

NC Not Calculable

PRL PACE Reporting Limit

RPD Relative Percent Difference

Q Surrogate

[1] Possible laboratory contaminant.



ENVIRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical RequestClient DAMES & MOOREReport To: TONY MINDLING

Pace Client No. _____

Address 8801 FOLSOM BLVDBill To: STANLEY AS

Pace Project Manager _____

SAC, Ca 95826

P.O. # / Billing Reference _____

Pace Project No. _____

Phone (916) 387-8800Project Name / No. 00173-080-044

*Requested Due Date: _____

Sampled By (PRINT):

Sampler Signature

Date Sampled

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PAGE NO.
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1	MW-7	1133	W	194949
2	MW-18	1025		194956
3	MW-70	—		194964
4	ER-7	1215		194972
5	FB-3	1200		194980
6	TB-07-21-95			194998
7				
8				

NO. OF CONTAINERS

PRESERVATIVES

UNPRESERVED

H₂SO₄HNO₃

VOA

ANALYSES
REQUEST601
602
As
Cu
Ni
Pb

REMARKS

COOLER NOS.

BAILERS

SHIPMENT METHOD
OUT/DATE RETURNED DATEITEM
NUMBER

RELINQUISHED BY / AFFILIATION

ACCEPTED BY / AFFILIATION

DATE

TIME

Additional Comments

SEE REVERSE SIDE FOR INSTRUCTIONS

ORIGINAL



REPORT OF LABORATORY ANALYSIS

August 10, 1995

Mr. Jim Brake
Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

RE: PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

Dear Mr. Brake:

Enclosed are the results of analyses for samples received on July 25, 1995. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Donna J. Breaux".

Donna J. Breaux
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

DATE: 08/10/95
PAGE: 1

Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

PACE Sample No: 70199849
Client Sample ID: MW-45

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	1.4	ug/L	1.0	08/01/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-34-3	
Chloroform	2.2	ug/L	0.5	08/01/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	1.7	ug/L	0.5	08/01/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	0.95	ug/L	0.5	08/01/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	1330-20-7	

REPORT OF LABORATORY ANALYSIS

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199849
Client Sample ID: MW-45

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
1,3-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	111	%		08/01/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		08/01/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	115	%		08/01/95	EPA 8010	MDW	110-56-5	



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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199856
Client Sample ID: MW-145

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	ND	ug/L	5	08/02/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/31/95				
Chromium Furnace, Method 7191								
Chromium	9.46	ug/L	5	08/03/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/31/95				
Nickel by Furnace, Method 7520								
Nickel	121	ug/L	20	08/03/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/31/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-34-3	
Chloroform	2.1	ug/L	0.5	08/01/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	1.7	ug/L	0.5	08/01/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	0.8	ug/L	0.5	08/01/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	110-75-8	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199856
Client Sample ID: MW-145

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Xylene (Total)	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	106	%		08/01/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	104	%		08/01/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	118	%		08/01/95	EPA 8010	MDW	110-56-5	



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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199864
Client Sample ID: MW-38

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7521								
Nickel	68.8	ug/L	5	08/03/95	EPA 7521	SMS	7440-02-0	
Date Digested				07/31/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	63	ug/L	0.5	08/01/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	3.8	ug/L	0.5	08/01/95	EPA 8010	MDW	75-34-3	
Chloroform	1.9	ug/L	0.5	08/01/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	2.8	ug/L	0.5	08/01/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	0.95	ug/L	0.5	08/01/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	0.99	ug/L	0.5	08/01/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	5.4	ug/L	0.5	08/01/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	109	%		08/01/95	EPA 8010	MDW	74-97-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199864
Client Sample ID: MW-38

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
a,a,a-Trifluorotoluene (S)	108	%		08/01/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		08/01/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199872
Client Sample ID: ER-38

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	ND	ug/L	5	08/03/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/31/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	106	%		08/01/95	EPA 8010	MDW	74-97-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199872
Client Sample ID: ER-38

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
a,a,a-Trifluorotoluene (S)	105	%		08/01/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	118	%		08/01/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199880
Client Sample ID: MW-39

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	59	ug/L	0.5	08/01/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	4.6	ug/L	0.5	08/01/95	EPA 8010	MDW	75-34-3	
Chloroform	2.9	ug/L	0.5	08/01/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	3.3	ug/L	0.5	08/01/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	1.9	ug/L	0.5	08/01/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	2	ug/L	0.5	08/01/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	3.3	ug/L	0.5	08/01/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	109	%		08/01/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	120	%		08/01/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		08/01/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199898
Client Sample ID: MW-46

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	5.33	ug/L	5	08/02/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/31/95				
Chromium Furnace, Method 7191								
Chromium	11.5	ug/L	5	08/03/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/31/95				
Nickel by Furnace, Method 7521								
Nickel	45.3	ug/L	5	08/03/95	EPA 7521	SMS	7440-02-0	
Date Digested				07/31/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	1.3	ug/L	1.0	08/01/95	EPA 8010	MDW	75-09-2	1
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-34-3	
Chloroform	3.1	ug/L	0.5	08/01/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	1.5	ug/L	0.5	08/01/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	1.1	ug/L	0.5	08/01/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	110-75-8	

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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199898
Client Sample ID: MW-46

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Xylene (Total)	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	112	%		08/01/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	104	%		08/01/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		08/01/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199906
Client Sample ID: MW-20

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	1.4	ug/L	0.5	08/02/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	110	%		08/02/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	106	%		08/02/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	118	%		08/02/95	EPA 8010	MDW	110-56-5	



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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199914
Client Sample ID: FB-4

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	1.1	ug/L	1.0	08/01/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	1.7	ug/L	1.0	08/01/95	EPA 8010	MDW	75-09-2	1
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	110	%		08/01/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		08/01/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	105	%		08/01/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199922
Client Sample ID: MW-40

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	5.0	08/02/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	5.0	08/02/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	5.0	08/02/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	5.0	08/02/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	5.0	08/02/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	120	ug/L	2.5	08/02/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	5.0	08/02/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	16	ug/L	2.5	08/02/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	2.5	08/02/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	16	ug/L	2.5	08/02/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	2.5	08/02/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	2.5	08/02/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	2.5	08/02/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	2.5	08/02/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		08/02/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	119	%		08/02/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		08/02/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199997
Client Sample ID: ER-44

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	ND	ug/L	5	08/02/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/31/95				
Chromium Furnace, Method 7191								
Chromium	10.7	ug/L	5	08/03/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/31/95				
Nickel by Furnace, Method 7520								
Nickel	23.2	ug/L	5	08/03/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/31/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	1.1	ug/L	1.0	08/01/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	2.6	ug/L	1.0	08/01/95	EPA 8010	MDW	75-09-2	1
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	110-75-8	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70199997
Client Sample ID: ER-44

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Xylene (Total)	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		08/01/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		08/01/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	117	%		08/01/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200001
Client Sample ID: MW-35

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	2	ug/L	1.0	08/02/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	4.1	ug/L	0.5	08/02/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	2	ug/L	0.5	08/02/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		08/02/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	114	%		08/02/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	113	%		08/02/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200019
Client Sample ID: FB-5

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/01/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/01/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/01/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	107	%		08/01/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		08/01/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	113	%		08/01/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200027
Client Sample ID: MW-34

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	1.9	ug/L	1.0	08/02/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	46	ug/L	0.5	08/02/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	4	ug/L	0.5	08/02/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	1.1	ug/L	0.5	08/02/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	12	ug/L	0.5	08/02/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	0.62	ug/L	0.5	08/02/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	104	%		08/02/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	110	%		08/02/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	110	%		08/02/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200035
Client Sample ID: TB-07-22-95

Date Collected: 07/22/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	2	ug/L	1.0	08/02/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		08/02/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	103	%		08/02/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	115	%		08/02/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200043
Client Sample ID: MW-1

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	16.5	ug/L	5	08/03/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/31/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-34-3	
Chloroform	1.9	ug/L	0.5	08/02/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	107	%		08/02/95	EPA 8010	MDW	74-97-5	



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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200043
Client Sample ID: MW-1

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
a,a,a-Trifluorotoluene (S)	105	%		08/02/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	118	%		08/02/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200050
Client Sample ID: ER-1

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	ND	ug/L	5	08/03/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/31/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/02/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	1.2	ug/L	1.0	08/02/95	EPA 8010	MDW	75-09-2	1
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/02/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/02/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	111	%		08/02/95	EPA 8010	MDW	74-97-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200050
Client Sample ID: ER-1

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
a,a,a-Trifluorotoluene (S)	105	%		08/02/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	120	%		08/02/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200068
Client Sample ID: MW-3

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/03/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/03/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/03/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	08/03/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	111	%		08/03/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		08/03/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	119	%		08/03/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200076
Client Sample ID: MW-48

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
GAS/BTEX by CA LUFT, Water								
Gasoline	ND	ug/L	50	08/01/95	CA LUFT	ADS		
TPH in Water by 8015 Modified								
Diesel Fuel	0.18	mg/L	0.051	08/04/95	TPH by EPA 8015M	DLA		3
n-Pentacosane (S)	110	%		08/04/95	TPH by EPA 8015M	DLA	629-99-2	
Date Extracted				08/02/95				

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200084
Client Sample ID: FB-6

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
GAS/BTEX by CA LUFT, Water								
Gasoline	ND	ug/L	50	08/01/95	CA LUFT	ADS		
GC								
TPH in Water by 8015 Modified								
Diesel Fuel	ND	mg/L	0.05	08/04/95	TPH by EPA 8015M	DLA		
n-Pentacosane (S)	96	%		08/04/95	TPH by EPA 8015M	DLA	629-99-2	
Date Extracted				08/02/95				

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200092
Client Sample ID: MW-44

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	ND	ug/L	5	08/02/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/31/95				
Chromium Furnace, Method 7191								
Chromium	ND	ug/L	5	08/03/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/31/95				
Nickel by Furnace, Method 7520								
Nickel	ND	ug/L	5	08/03/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/31/95				
GC - Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	2.8	ug/L	1.0	08/03/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	08/03/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	1.7	ug/L	0.5	08/03/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	1.5	ug/L	1.0	08/03/95	EPA 8010	MDW	75-09-2	1
trans-1,2-Dichloroethene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	75-34-3	
Chloroform	3.8	ug/L	0.5	08/03/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	5.5	ug/L	0.5	08/03/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	08/03/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	2.1	ug/L	0.5	08/03/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	0.8	ug/L	0.5	08/03/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	08/03/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	08/03/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	110-75-8	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70200092
Client Sample ID: MW-44

Date Collected: 07/23/95
Date Received: 07/25/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Xylene (Total)	ND	ug/L	0.5	08/03/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	08/03/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	110	%		08/03/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	109	%		08/03/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	120	%		08/03/95	EPA 8010	MDW	110-56-5	



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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

PARAMETER FOOTNOTES

ND Not Detected
NC Not Calculable
PRL PACE Reporting Limit
(S) Surrogate
[1] Possible laboratory contaminant.
[] Analyte is found in the associated blank as well as in the sample.
[] Late hydrocarbons present along with diesel.

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QUALITY CONTROL DATA

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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5522
Associated PACE Samples:

70200076

QC Batch Method: CA LUFT
70200084

Date of Batch: 07/31/95

METHOD BLANK: 70203526
Associated PACE Samples:

70200076

70200084

Parameter	Units	Method Blank Result	PRL	Footnotes
Gasoline	ug/L	ND	50	

LABORATORY CONTROL SAMPLE:

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec
Gasoline	ug/L	1000	1060	106



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D. Jones & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5526

QC Batch Method: EPA 8010/20

Date of Batch: 07/31/95

Associated PACE Samples:

70199849	70199856	70199864	70199872	70199880
70199898	70199906	70199914	70199922	70199997
70200001	70200019			

METHOD BLANK: 70203732

Associated PACE Samples:

70199849

70199856

Method
Blank
Result

Parameter	Units	Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Dibromoethane	ug/L	ND	1.0	
1,1-Dichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
Methylene Chloride	ug/L	1.3	1.0	1
trans-1,2-Dichloroethene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Benzene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
Trichloroethene	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
1,1-Dichloromethane	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70203732
Associated PACE Samples:

Parameter	Units	70199849	70199856	PRL	Footnotes
			Method Blank Result		
Ethylbenzene	ug/L		ND	0.5	
Bromoform	ug/L		ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L		ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L		ND	0.5	
Xylene (Total)	ug/L		ND	0.5	
1,3-Dichlorobenzene	ug/L		ND	0.5	
1,4-Dichlorobenzene	ug/L		ND	0.5	
1,2-Dichlorobenzene	ug/L		ND	0.5	
cis-1,2-Dichloroethene	ug/L		ND	0.5	
Bromochloromethane (S)	%		108		
a,a,a-Trifluorotoluene (S)	%		105		
1,4-Dichlorobutane(S)	%		117		

METHOD BLANK: 70205760
Associated PACE Samples:

Parameter	Units	70199864 70200001	70199872 70200019	70199880	70199898	70199906	70199914	70199997
			Method Blank Result	PRL				
Chloromethane	ug/L		ND	1.0				
Vinyl Chloride	ug/L		ND	1.0				
Bromomethane	ug/L		ND	1.0				
Chloroethane	ug/L		ND	1.0				
Trichlorofluoromethane	ug/L		ND	1.0				
1,1-Dichloroethene	ug/L		ND	0.5				
Methylene Chloride	ug/L		ND	1.0				
trans-1,2-Dichloroethene	ug/L		ND	0.5				
1,1-Dichloroethane	ug/L		ND	0.5				
Chloroform	ug/L		ND	0.5				
1,1,1-Trichloroethane	ug/L		ND	0.5				
Carbon Tetrachloride	ug/L		ND	0.5				
Benzene	ug/L		ND	0.5				
1,2-Dichloroethane	ug/L		ND	0.5				
cis-1,3-Dichloropropene	ug/L		ND	0.5				
Trichloroethene	ug/L		ND	0.5				

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70205760

Associated PACE Samples:

70199864 70199872 70199880 70199898 70199906 70199914 70199997
70200001 70200019

Parameter	Units	Method Blank Result	PRL	Footnotes
1,2-Dichloropropane	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
Ethylbenzene	ug/L	ND	0.5	
Formoform	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	111		
1,1,1-Trifluorotoluene (S)	%	105		
1,4-Dichlorobutane(S)	%	119		

METHOD BLANK: 70208442

Associated PACE Samples:

70199922

Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,2-Dichloroethene	ug/L	ND	0.5	
Methylene Chloride	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	0.5	

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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70208442

Associated PACE Samples:

70199922

Parameter	Units	Method Blank Result	PRL	Footnotes
1,1-Dichloroethane	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Benzene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
Trichloroethene	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
Ethylbenzene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	0.5	
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	112		
a,a,a-Trifluorotoluene (S)	%	104		
1,4-Dichlorobutane(S)	%	117		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70204375 70204383

Parameter	Units	70194980	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	1.2	20	16	76	17	77	1	
Vinyl Chloride	ug/L	ND	20	18	88	18	90	2	
Bromomethane	ug/L	ND	20	20	98	20	102	4	
Chloroethane	ug/L	ND	20	20	102	20	100	2	

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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70204375 70204383

Parameter	Units	70194980	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
1,1-Dichloroethane	ug/L	ND	20	20	98	20	100	2	
1,1-Dichloroethene	ug/L	ND	20	18	91	19	95	4	
Methylene Chloride	ug/L	ND	20	18	91	18	91	0	
trans-1,2-Dichloroethene	ug/L	ND	20	18	93	19	94	1	
1,1-Dichloroethane	ug/L	ND	20	19	95	19	94	1	
Chloroform	ug/L	ND	20	19	95	19	95	0	
1,1,1-Trichloroethane	ug/L	ND	20	19	97	19	97	0	
Carbon Tetrachloride	ug/L	ND	20	19	96	19	96	0	
Benzene	ug/L	ND	20	21	105	21	105	0	
1,2-Dichloroethane	ug/L	ND	20	19	96	19	96	0	
cis-1,3-Dichloropropene	ug/L	ND	20	18	90	18	92	2	
Trichloroethene	ug/L	ND	20	19	97	19	97	0	
1,2-Dichloropropane	ug/L	ND	20	19	97	19	97	0	
1,1-Dichloromethane	ug/L	ND	20	21	106	21	107	1	
Toluene	ug/L	ND	20	20	103	21	105	2	
1,1,2-Trichloroethane	ug/L	ND	20	19	94	19	96	2	
trans-1,3-Dichloropropene	ug/L	ND	20	18	91	19	94	3	
Trichloroethene	ug/L	ND	20	18	91	18	92	1	
Bromochloromethane	ug/L	ND	20	21	106	21	106	0	
Chlorobenzene	ug/L	ND	20	20	99	20	99	0	
Ethylbenzene	ug/L	ND	20	21	103	21	106	3	
Bromoform	ug/L	ND	20	22	108	22	110	2	
1,2,2-Tetrachloroethane	ug/L	ND	20	18	92	19	93	1	
2-Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
Xylene (Total)	ug/L	ND	60	59	98	62	104	6	
1,4-Dichlorobenzene	ug/L	ND	20	19	94	19	94	0	
1,3-Dichlorobenzene	ug/L	ND	20	19	95	19	95	0	
1,2-Dichlorobenzene	ug/L	ND	20	19	95	19	95	0	
Bromochloromethane (S)					96		96		
1,1,1-Trifluorotoluene (S)					99		100		
1,2-Dichlorobutane(S)					99		100		

LABORATORY CONTROL SAMPLE & LCSD: 70203740

70203757

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	20	17	85	15	75	12	
Vinyl Chloride	ug/L	20	20	98	18	89	10	
Bromomethane	ug/L	20	23	114	19	97	16	
Chloroethane	ug/L	20	22	111	20	100	10	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70203740

70203757

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Trichlorofluoromethane	ug/L	20	22	108	18	90	18	
1,1-Dichloroethene	ug/L	20	20	100	18	91	9	
Methylene Chloride	ug/L	20	20	98	18	89	10	
trans-1,2-Dichloroethene	ug/L	20	20	101	18	91	10	
1,1-Dichloroethane	ug/L	20	20	102	18	91	11	
Chloroform	ug/L	20	20	99	18	92	7	
1,1,1-Trichloroethane	ug/L	20	20	101	19	93	8	
Carbon Tetrachloride	ug/L	20	20	101	18	93	8	
Benzene	ug/L	20	20	103	20	103	0	
1,2-Dichloroethane	ug/L	20	20	100	18	93	7	
cis-1,3-Dichloropropene	ug/L	20	20	100	18	91	9	
Trichloroethene	ug/L	20	20	103	19	96	7	
1,2-Dichloropropane	ug/L	20	20	102	18	93	9	
Bromodichloromethane	ug/L	20	22	112	20	101	10	
Toluene	ug/L	20	21	104	21	104	0	
1,1,2-Trichloroethane	ug/L	20	20	102	19	94	8	
trans-1,3-Dichloropropene	ug/L	20	21	103	19	94	9	
Tetrachloroethene	ug/L	20	20	100	18	89	12	
Dibromochloromethane	ug/L	20	23	114	20	103	10	
Chlorobenzene	ug/L	20	22	110	19	96	14	
Ethylbenzene	ug/L	20	21	106	21	106	0	
Bromoform	ug/L	20	24	120	21	107	11	
1,1,2,2-Tetrachloroethane	ug/L	20	20	100	17	85	16	
2-Chloroethyl Vinyl Ether	ug/L	20	22	109	20	98	11	
Xylene (Total)	ug/L	60	63	105	63	105	0	
1,3-Dichlorobenzene	ug/L	20	21	103	18	92	11	
1,4-Dichlorobenzene	ug/L	20	21	103	18	92	11	
1,2-Dichlorobenzene	ug/L	20	20	102	19	93	9	
Bromochloromethane (S)				102		94		
a,a,a-Trifluorotoluene (S)				98		100		
1,4-Dichlorobutane(S)				107		97		

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

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James & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5539 QC Batch Method: EPA 3020 Date of Batch: 07/31/95
Associated PACE Samples: 70199856 70199864 70199872 70199898 70199997
 70200043 70200050 70200092

METHOD BLANK: 70204011
Associated PACE Samples:

70199856 70199864 70199872 70199898 70199997 70200043 70200050
70200092

Parameter	Units	Method Blank Result	PRL	Footnotes
Arsenic	ug/L	ND	5	
Nickel	ug/L	ND	5	
Chromium	ug/L	ND	5	

MATRIX SPIKE: 70204045

Parameter	Units	70199856	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Nickel	ug/L	121	40	168	117	
Chromium	ug/L	9.46	20	35.5	130	2
Arsenic	ug/L	ND	40	48.3	111	

LABORATORY CONTROL SAMPLE & LCSD: 70204029

Parameter	Units	70204037 Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Arsenic	ug/L	40	39.5	99	40.9	102	3	
Nickel	ug/L	40	40	100	41.4	103	3	
Chromium	ug/L	20	20.6	103	21.4	107	4	



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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

SAMPLE DUPLICATE: 70204052

Parameter	Units	70199856	Dup. Result	RPD	Footnotes
Nickel	ug/L	121	118	2	
Arsenic	ug/L	ND	ND	NC	
Chromium	ug/L	9.46	9.44	0	



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D. Es & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5613
Associated PACE Samples:

70200076

QC Batch Method: EPA 3520
70200084

Date of Batch: 08/02/95

METHOD BLANK: 70207733
Associated PACE Samples:

70200076

70200084

Parameter	Units	Method Blank Result	PRL	Footnotes
Diesel Fuel	mg/L	ND	0.05	3
n-Pentacosane (S)	%	111		

LABORATORY CONTROL SAMPLE & LCSD: 70207741

70207758

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Diesel Fuel	mg/L	1	0.75	75	0.73	73	3	
n-Pentacosane (S)				99		112		



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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5627
Associated PACE Samples:

70200027
70200092

QC Batch Method: EPA 8010/20

70200035 70200043 70200050 70200068

Date of Batch: 08/02/95

METHOD BLANK: 70208418
Associated PACE Samples:

	70200027	70200035	70200043	70200050	70200068	70200092
		Method Blank Result	PRL	Footnotes		
Parameter	Units					
Chloromethane	ug/L	ND	1.0			
Vinyl Chloride	ug/L	ND	1.0			
Bromomethane	ug/L	ND	1.0			
Chloroethane	ug/L	ND	1.0			
Trichlorofluoromethane	ug/L	ND	1.0			
1,1-Dichloroethene	ug/L	ND	0.5			
Methylene Chloride	ug/L	ND	1.0			
trans-1,2-Dichloroethene	ug/L	ND	0.5			
1,1-Dichloroethane	ug/L	ND	0.5			
Chloroform	ug/L	ND	0.5			
1,1,1-Trichloroethane	ug/L	ND	0.5			
Carbon Tetrachloride	ug/L	ND	0.5			
Benzene	ug/L	ND	0.5			
1,2-Dichloroethane	ug/L	ND	0.5			
cis-1,3-Dichloropropene	ug/L	ND	0.5			
Trichloroethene	ug/L	ND	0.5			
1,2-Dichloropropane	ug/L	ND	0.5			
Bromodichloromethane	ug/L	ND	0.5			
Toluene	ug/L	ND	0.5			
1,1,2-Trichloroethane	ug/L	ND	0.5			
trans-1,3-Dichloropropene	ug/L	ND	0.5			
Tetrachloroethene	ug/L	ND	0.5			
Dibromochloromethane	ug/L	ND	0.5			
Chlorobenzene	ug/L	ND	0.5			
Ethylbenzene	ug/L	ND	0.5			

REPORT OF LABORATORY ANALYSIS

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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70208418

Associated PACE Samples:

70200027

70200035

70200043

70200050

70200068

70200092

Parameter	Units	Method Blank Result	PRL	Footnotes
Form	ug/L	ND	0.5	
1,2,2-Tetrachloroethane	ug/L	ND	0.5	
2-chloroethyl Vinyl Ether	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	112		
1,1,1-Trifluorotoluene (S)	%	104		
1,2-Dichlorobutane(S)	%	117		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70212600 70212618									
Parameter	Units	70203591	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	13	65	14	69	6	
Vinyl Chloride	ug/L	ND	20	18	89	18	91	2	
Bromomethane	ug/L	ND	20	19	94	19	96	2	
Chloroethane	ug/L	ND	20	20	98	20	102	4	
Trichlorofluoromethane	ug/L	ND	20	19	97	20	101	4	
1,2-Dichloroethene	ug/L	ND	20	18	91	19	95	4	
Methylene Chloride	ug/L	ND	20	18	88	18	90	2	
trans-1,2-Dichloroethene	ug/L	ND	20	18	89	19	96	8	
1,1-Dichloroethane	ug/L	ND	20	18	92	19	97	5	
Chloroform	ug/L	ND	20	19	93	19	96	3	
1,1,1-Trichloroethane	ug/L	ND	20	19	95	20	99	4	
Carbon Tetrachloride	ug/L	ND	20	19	95	19	97	2	
Benzene	ug/L	ND	20	21	104	21	107	3	
1,2-Dichloroethane	ug/L	ND	20	19	94	19	97	3	
cis-1,3-Dichloropropene	ug/L	ND	20	18	93	19	94	1	
Trichloroethene	ug/L	ND	20	19	95	19	97	2	
1,2-Dichloropropane	ug/L	ND	20	19	95	19	97	2	
Bromodichloromethane	ug/L	ND	20	21	107	22	109	2	
Toluene	ug/L	ND	20	21	105	21	106	1	
1,2,2-Trichloroethane	ug/L	ND	20	19	96	19	97	1	
trans-1,3-Dichloropropene	ug/L	ND	20	19	95	19	96	1	

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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70212600 70212618									
Parameter	Units	70203591	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Tetrachloroethene	ug/L	ND	20	18	92	18	93	1	
Dibromochloromethane	ug/L	ND	20	22	108	22	108	0	
Chlorobenzene	ug/L	ND	20	20	102	20	102	0	
Ethylbenzene	ug/L	ND	20	21	107	22	109	2	
Bromoform	ug/L	ND	20	22	111	23	115	4	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	19	96	19	97	1	
2-Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
Xylene (Total)	ug/L	ND	60	64	106	64	107	1	
1,3-Dichlorobenzene	ug/L	ND	20	19	95	19	95	0	
1,4-Dichlorobenzene	ug/L	ND	20	19	95	19	95	0	
1,2-Dichlorobenzene	ug/L	ND	20	19	96	19	97	1	
Bromochloromethane (S)					93		93		
a,a,a-Trifluorotoluene (S)					99		99		
1,4-Dichlorobutane(S)					100		99		

LABORATORY CONTROL SAMPLE & LCSD: 70208426 70208434									
Parameter	Units	Spike Conc.	LCSD Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes	
Chloromethane	ug/L	20	17	84	16	82	2		
Vinyl Chloride	ug/L	20	20	99	18	91	8		
Bromomethane	ug/L	20	22	112	21	105	6		
Chloroethane	ug/L	20	22	112	22	109	3		
Trichlorofluoromethane	ug/L	20	21	107	21	104	3		
1,1-Dichloroethene	ug/L	20	20	99	19	96	3		
Methylene Chloride	ug/L	20	19	97	19	96	1		
trans-1,2-Dichloroethene	ug/L	20	20	100	20	100	0		
1,1-Dichloroethane	ug/L	20	20	101	20	101	0		
Chloroform	ug/L	20	20	101	20	101	0		
1,1,1-Trichloroethane	ug/L	20	21	103	20	103	0		
Carbon Tetrachloride	ug/L	20	20	102	20	102	0		
Benzene	ug/L	20	21	106	21	104	2		
1,2-Dichloroethane	ug/L	20	21	103	20	102	1		
cis-1,3-Dichloropropene	ug/L	20	20	102	20	100	2		
Trichloroethene	ug/L	20	21	104	21	104	0		
1,2-Dichloropropane	ug/L	20	20	103	20	102	1		
Bromodichloromethane	ug/L	20	23	113	22	113	0		
Toluene	ug/L	20	21	105	21	105	0		
1,1,2-Trichloroethane	ug/L	20	21	104	21	103	1		
trans-1,3-Dichloropropene	ug/L	20	21	105	21	103	2		

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PACE Project Number: 702428

Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70208426

70208434

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Trichloroethene	ug/L	20	20	100	20	99	1	
Dibromochloromethane	ug/L	20	23	116	23	114	2	
Chlorobenzene	ug/L	20	22	108	21	106	2	
Benzene	ug/L	20	22	108	21	107	1	
Formaldehyde	ug/L	20	24	120	24	121	1	
1,1,2,2-Tetrachloroethane	ug/L	20	20	102	20	101	1	
2-Chloroethyl Vinyl Ether	ug/L	20	23	113	22	108	5	
Benzene (Total)	ug/L	60	64	107	63	106	1	
1,3-Dichlorobenzene	ug/L	20	20	102	20	102	0	
1,4-Dichlorobenzene	ug/L	20	21	103	20	103	0	
1,2-Dichlorobenzene	ug/L	20	20	103	20	102	1	
Bromochloromethane (S)				102		103		
1,1,1-Trifluorotoluene (S)				101		100		
1,1,2,2-Tetrachloroethane (S)				107		107		



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PACE Project Number: 702428
Client Project ID: Union Pacific Railroad-Sac.

QUALITY CONTROL DATA PARAMETER FOOTNOTES

The Quality Control Sample Final Results listed above have been rounded to reflect an appropriate number of significant figures. Consistent with EPA guidelines unrounded concentrations have been used to calculate % Rec and RPD values.

ND Not Detected
NC Not Calculable
PRL PACE Reporting Limit
RPD Relative Percent Difference
(S) Surrogate
[1] Possible laboratory contaminant.
[2] High spike recovery may indicate a positive matrix interference.
[3] Below 1.0mg/kg

CHAIN-OF-CUSTODY RECORD

WHITE COPY - Original (Accompanies Samples) YELLOW COPY - Collector PINK COPY - Project Manager

[illegible]

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

DATE/TIME

RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature) DATE/TIME 7/25/95 RECEIVED BY: (Signature) [Signature]

DATE/TIME

RECEIVED BY: (Signature)

Clients Name: DAMES & MOORE
 Address: 8801 FOLSOM AVE
 City, State, Zip: SACRAMENTO, CA. 95826
 Phone: (916) 387-8800 Fax: _____
 Laboratory Contact: DENNA

LABORATORY NOTES:

JOB NO.: 00173-080-044-6132 SHEET 2 OF 2

SHEET 2 OF 2

PROJECT UP SACRAMENTO

LOCATION SUTTERVILLE Rd

COLLECTOR Greg Fernald DATE OF COLLECTION 7-22-95/7-23-95

DATE OF COLLECTION 7-22-95 / 7-23-95



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

CHAIN-OF-CUSTODY RECORD

WHITE COPY - Original (Accompanies Samples) YELLOW COPY - Collector PINK COPY - Project Manager

Sample Number	DATE Depth	Time	Sample Type	Container Type	ANALYSES																	FIELD NOTES:	Total Number Of Containers	Laboratory Note Number
					VOA 601/8010	VOA 602/8020	VOA 624/8240	Semi Vol 625/8270	PEST/PCB 8080	PNA 610/8310	DIESEL 8015M	GAS/TEX	TPH 418.1	PH	PCRA METALS (8)	PP METALS (13)	TLC METALS (17)	Asbestos	Pb	Cr	Ni			
MW-45	7-22-95	1231	W	VOA's & Poly	✓	✓													✓	✓	✓	199849		
MW-145	"	-		VOA's & Poly	✓	✓													✓	✓	✓	199856		
MW-38	"	1326		VOA's & Poly	✓	✓															✓	199864		
ER-38	"	1338		VOA's & Poly	✓	✓															✓	199872		
MW-39	"	1411		VOA's	✓	✓																199880		
MW-46	"	1449		VOA's & Poly	✓	✓													✓	✓	✓	199898		
MW-20	"	1540		VOA's	✓	✓																199906		
FB-4	"	1600		VOA's	✓	✓																199914		
MW-40	"	1724		VOA's	✓	✓																199922		
MW-1	7-23-95	1005		VOA's & Poly	✓	✓														✓	∞	199930	200043	
ER-1	"	1020		VOA's & Poly	✓	✓														✓	1/2	199948	200050	
MW-3	"	1050		VOA's	✓	✓																199955	200068	
MW-48	"	1150		VOA's & AMBER						✓	✓											199963	200076	
FB-6	"	1155		VOA's & AMBER						✓	✓											199971	200084	
MW-44	"	1306		VOA's & Poly	✓	✓													✓	✓	✓		200092	
ER-44	"	1320		VOA's & Poly	✓	✓													✓	✓	✓	199997		
MW-35	"	1358		VOA's	✓	✓																200001		
FB-5	"	1346		VOA's	✓	✓																200019		

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

RELINQUISHED BY: (Signature) DATE/TIME RECEIVED BY: (Signature)

Clients Name: DAMES & MOORE
 Address: 8801 FOLSOM BLVD
 City, State, Zip: SACRAMENTO, CA. 95826
 Phone: (916) 387-8800 Fax:
 Laboratory Contact: DONNA

LABORATORY NOTES:

JOB NO.: 00173-080-044-6132 SHEET 1 OF 2
 PROJECT: UP SACRAMENTO
 LOCATION: Sutterville Rd
 COLLECTOR: Greg Fernald DATE OF COLLECTION: 7-22-95/7-23-95



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



REPORT OF LABORATORY ANALYSIS

August 03, 1995

Mr. Jim Brake
Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

RE: PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

Dear Mr. Brake:

Enclosed are the results of analyses for samples received on July 21, 1995. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Donna J. Breaux".

Donna J. Breaux
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

DATE: 08/03/95
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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

PACE Sample No: 70192265		Date Collected: 07/17/95						
Client Sample ID: MW-15		Date Received: 07/21/95						
Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	58.9	ug/L	5	07/28/95	EPA7520	SMS	7440-02-0	
Date Digested				07/24/95				
Chromium Furnace, Method 7191								
Chromium	6.15	ug/L	5	07/28/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/24/95				
GC -- Volatiles								
Aromatic Volatile Organics								
Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-90-7	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	106-46-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	541-73-1	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	95-50-1	
Ethyl Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
a,a,a-Trifluorotoluene (S)	105	%		07/27/95	EPA 8020	MDW	2164-17-2	

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PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70192273
Client Sample ID: MW-8

Date Collected: 07/17/95
Date Received: 07/21/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	20.4	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/24/95				
GC -- Volatiles								
Aromatic Volatile Organics								
Benzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	71-43-2	
Chlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	108-90-7	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	106-46-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	541-73-1	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	95-50-1	
Ethyl Benzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	100-41-4	
Toluene	0.61	ug/L	0.5	07/28/95	EPA 8020	MDW	108-88-3	
Xylene (Total)	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	1330-20-7	
a,a,a-Trifluorotoluene (S)	104	%		07/28/95	EPA 8020	MDW	2164-17-2	

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PACE Project Number: 702362

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70192281
Client Sample ID: MW-5

Date Collected: 07/17/95
Date Received: 07/21/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Chromium Furnace, Method 7191								
Chromium	5.85	ug/L	5	07/28/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/24/95				
Nickel by Furnace, Method 7520								
Nickel	108	ug/L	20	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/24/95				
GC -- Volatiles								
Volatile Halogenated Organics								
Chloromethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	74-87-3	
Bromomethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	74-83-9	
Vinyl Chloride	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-01-4	
Chloroethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-00-3	
Methylene Chloride	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-09-2	
Trichlorofluoromethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-35-4	
1,1-Dichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-34-3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	156-60-5	
Chloroform	1.9	ug/L	0.5	07/28/95	EPA 8010	MDW	67-66-3	
1,2-Dichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	107-06-2	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	56-23-5	
Bromodichloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-27-4	
1,2-Dichloropropane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	124-48-1	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-02-6	
Bromoform	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-25-2	
Tetrachloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-34-5	
Chlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	108-90-7	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	110-75-8	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	106-46-7	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	110	%		07/28/95	EPA 8010	MDW	74-97-5	
1,4-Dichlorobutane(S)	116	%		07/28/95	EPA 8010	MDW	110-56-5	

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James & Moore, Sacramento
6501 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5107
Associated PACE Samples: 70192372

QC Batch Method: EPA 8010

Date of Batch: 07/19/95

METHOD BLANK: 70195789
Associated PACE Samples:

70192372

Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Methylene Chloride	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
trans-1,2-Dichloroethene	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
1,1-Dichloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	

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PACE Project Number: 702362

Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70195789
Associated PACE Samples:

70192372

Parameter	Units	Method Blank Result	PRL	Footnotes
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
Bromochloromethane (S)	%	110		
1,4-Dichlorobutane(S)	%	116		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70187455 70187463

Parameter	Units	70180682	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	17	85	16	80	6	
Bromomethane	ug/L	ND	20	22	113	19	97	15	
Vinyl Chloride	ug/L	ND	20	22	108	20	98	10	
Chloroethane	ug/L	ND	20	24	120	21	105	13	
Methylene Chloride	ug/L	ND	20	20	102	18	90	12	
Trichlorofluoromethane	ug/L	ND	20	23	115	20	102	12	
1,1-Dichloroethene	ug/L	ND	20	22	108	19	97	11	
1,1-Dichloroethane	ug/L	ND	20	21	107	19	95	12	
trans-1,2-Dichloroethene	ug/L	ND	20	22	109	19	96	13	
Chloroform	ug/L	ND	20	21	105	19	94	11	
1,2-Dichloroethane	ug/L	ND	20	21	105	19	94	11	
1,1,1-Trichloroethane	ug/L	ND	20	22	108	20	98	10	
Carbon Tetrachloride	ug/L	ND	20	22	108	19	96	12	
Bromodichloromethane	ug/L	ND	20	23	117	21	105	11	
1,2-Dichloropropane	ug/L	ND	20	21	105	19	95	10	
cis-1,3-Dichloropropene	ug/L	ND	20	21	103	18	92	11	
Trichloroethene	ug/L	ND	20	21	107	20	98	9	
Dibromochloromethane	ug/L	ND	20	23	114	21	104	9	
1,1,2-Trichloroethane	ug/L	ND	20	21	104	19	93	11	
trans-1,3-Dichloropropene	ug/L	ND	20	21	106	19	94	12	
Bromoform	ug/L	ND	20	24	120	21	107	11	
Tetrachloroethene	ug/L	ND	20	21	105	19	94	11	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	102	18	90	12	
Chlorobenzene	ug/L	ND	20	22	111	20	101	9	
2-Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
1,2-Dichlorobenzene	ug/L	ND	20	21	105	19	94	11	
1,3-Dichlorobenzene	ug/L	ND	20	21	105	19	93	12	
1,4-Dichlorobenzene	ug/L	ND	20	21	105	19	93	12	

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PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70187455 70187463

Parameter	Units	70180682	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Bromochloromethane (S)					103		95		
1,4-Dichlorobutane(S)					107		96		

LABORATORY CONTROL SAMPLE & LCSD: 70186754 70186762

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Bromomethane	ug/L	20	16	82	16	83	1	
Bromomethane	ug/L	20	21	106	20	101	5	
Vinyl Chloride	ug/L	20	22	108	21	104	4	
Chloroethane	ug/L	20	22	112	22	109	3	
Ethylene Chloride	ug/L	20	20	102	20	98	4	
Trichlorofluoromethane	ug/L	20	22	113	21	106	6	
1,1-Dichloroethene	ug/L	20	21	107	21	104	3	
1,1-Dichloroethane	ug/L	20	21	106	20	102	4	
trans-1,2-Dichloroethene	ug/L	20	21	106	20	103	3	
Bromoform	ug/L	20	21	105	20	101	4	
1,2-Dichloroethane	ug/L	20	21	105	20	100	5	
1,1,1-Trichloroethane	ug/L	20	21	107	20	102	5	
Carbon Tetrachloride	ug/L	20	21	107	20	103	4	
Bromodichloromethane	ug/L	20	23	115	22	111	4	
1,2-Dichloropropane	ug/L	20	21	107	20	103	4	
cis-1,3-Dichloropropene	ug/L	20	21	104	20	100	4	
Trichloroethene	ug/L	20	22	109	21	106	3	
Bromochloromethane	ug/L	20	23	113	22	110	3	
1,2-Trichloroethane	ug/L	20	20	103	20	100	3	
trans-1,3-Dichloropropene	ug/L	20	21	105	20	102	3	
Bromoform	ug/L	20	23	114	23	116	2	
Tetrachloroethene	ug/L	20	20	103	20	100	3	
1,1,2,2-Tetrachloroethane	ug/L	20	19	93	19	95	2	
Chlorobenzene	ug/L	20	22	112	21	107	5	
2-Chloroethyl Vinyl Ether	ug/L	20	21	107	20	100	7	
1,2-Dichlorobenzene	ug/L	20	21	105	20	101	4	
1,3-Dichlorobenzene	ug/L	20	21	106	20	100	6	
1,4-Dichlorobenzene	ug/L	20	21	106	20	101	5	
Bromochloromethane (S)				101		101		
1,4-Dichlorobutane(S)				103		105		

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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5172 QC Batch Method: EPA 8020 Date of Batch: 07/20/95
Associated PACE Samples: 70192265 70192273 70192307 70192315 70192349

METHOD BLANK: 70199526
Associated PACE Samples:

Parameter	Units	70192265	70192273 Method Blank Result	70192307	70192315	70192349	Footnotes
Benzene	ug/L		ND	0.5			
Chlorobenzene	ug/L		ND	0.5			
1,4-Dichlorobenzene	ug/L		ND	0.5			
1,3-Dichlorobenzene	ug/L		ND	0.5			
1,2-Dichlorobenzene	ug/L		ND	0.5			
Ethyl Benzene	ug/L		ND	0.5			
Toluene	ug/L		ND	0.5			
Xylene (Total)	ug/L		ND	0.5			
a,a,a-Trifluorotoluene (S)	%		104				

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70191143 70191150

Parameter	Units	70189980	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	ND	20	18	91	19	95	4	
Chlorobenzene	ug/L	ND	20	26	129	22	110	16	
1,4-Dichlorobenzene	ug/L	ND	20	20	99	21	105	6	
1,3-Dichlorobenzene	ug/L	ND	20	19	95	20	100	5	
1,2-Dichlorobenzene	ug/L	ND	20	19	97	20	102	5	
Ethyl Benzene	ug/L	ND	20	20	100	20	101	1	
Toluene	ug/L	ND	20	18	91	19	95	4	
Xylene (Total)	ug/L	ND	60	57	95	59	98	3	
a,a,a-Trifluorotoluene (S)					84		88		

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PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70188636

70188644

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	20	21	107	21	105	2	
Chlorobenzene	ug/L	20	21	107	21	107	0	
1,4-Dichlorobenzene	ug/L	20	23	115	24	120	4	
1,3-Dichlorobenzene	ug/L	20	23	116	24	118	2	
1,2-Dichlorobenzene	ug/L	20	23	116	24	118	2	
Ethyl Benzene	ug/L	20	22	108	21	107	1	
Toluene	ug/L	20	22	108	21	107	1	
Xylene (Total)	ug/L	60	65	108	65	108	0	
m,p,a-Trifluorotoluene (S)				96		95		

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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5249 QC Batch Method: EPA 8010 Date of Batch: 07/21/95
Associated PACE Samples: 70192281 70192299 70192323 70192331

METHOD BLANK: 70199286
Associated PACE Samples:

Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Methylene Chloride	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
1,1-Dichloroethane	ug/L	ND	0.5	
trans-1,2-Dichloroethene	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
Trichloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	

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PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70199286
Associated PACE Samples:

	70192281	70192299	70192323	70192331
		Method Blank Result	PRL	Footnotes
Parameter	Units			
3-Dichlorobenzene	ug/L	ND	0.5	
4-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	112		
4-Dichlorobutane(S)	%	113		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70191093 70191101

Parameter	Units	70189816	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	16	82	16	81	1	
Bromomethane	ug/L	ND	20	19	96	19	93	3	
vinyl Chloride	ug/L	ND	20	19	97	19	97	0	
Chloroethane	ug/L	ND	20	21	103	20	102	1	
Methylene Chloride	ug/L	ND	20	19	95	19	95	0	
Trichlorofluoromethane	ug/L	ND	20	20	101	20	100	1	
1,1-Dichloroethene	ug/L	ND	20	20	99	20	98	1	
1,2-Dichloroethane	ug/L	ND	20	20	98	20	99	1	
trans-1,2-Dichloroethene	ug/L	ND	20	19	96	19	96	0	
Chloroform	ug/L	ND	20	19	94	19	96	2	
1,2-Dichloroethane	ug/L	4.4	20	23	91	23	91	0	
1,1,1-Trichloroethane	ug/L	ND	20	19	96	19	96	0	
Carbon Tetrachloride	ug/L	ND	20	19	95	19	96	1	
Bromodichloromethane	ug/L	ND	20	21	105	21	104	1	
1,2-Dichloropropane	ug/L	ND	20	20	100	20	99	1	
cis-1,3-Dichloropropene	ug/L	ND	20	18	91	18	91	0	
Dichloroethene	ug/L	ND	20	20	98	20	98	0	
Bromochloromethane	ug/L	ND	20	21	104	21	104	0	
1,1,2-Trichloroethane	ug/L	ND	20	19	97	19	97	0	
trans-1,3-Dichloropropene	ug/L	ND	20	19	93	19	93	0	
Chloroform	ug/L	ND	20	21	104	21	105	1	
Trichloroethene	ug/L	ND	20	19	95	19	94	1	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	18	92	19	94	2	
Chlorobenzene	ug/L	ND	20	20	99	21	105	6	
Chloroethyl Vinyl Ether	ug/L	ND	20	20	98	20	98	0	
2-Dichlorobenzene	ug/L	ND	20	20	98	20	98	0	
1,3-Dichlorobenzene	ug/L	ND	20	19	96	19	95	1	



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PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70191093 70191101									
Parameter	Units	70189816	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
1,4-Dichlorobenzene	ug/L	ND	20	19	96	19	96	0	
Bromochloromethane (S)					96		97		
1,4-Dichlorobutane(S)					102		102		

LABORATORY CONTROL SAMPLE & LCSD: 70191119 70191127									
Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes	
Chloromethane	ug/L	20	16	79	16	80	1		
Bromomethane	ug/L	20	19	94	19	94	0		
Vinyl Chloride	ug/L	20	19	96	19	96	0		
Chloroethane	ug/L	20	20	98	20	103	5		
Methylene Chloride	ug/L	20	18	91	18	93	2		
Trichlorofluoromethane	ug/L	20	20	101	20	99	2		
1,1-Dichloroethene	ug/L	20	19	97	19	96	1		
1,1-Dichloroethane	ug/L	20	19	97	19	97	0		
trans-1,2-Dichloroethene	ug/L	20	19	96	19	95	1		
Chloroform	ug/L	20	19	96	19	95	1		
1,2-Dichloroethane	ug/L	20	20	98	20	99	1		
1,1,1-Trichloroethane	ug/L	20	19	97	19	96	1		
Carbon Tetrachloride	ug/L	20	19	97	19	95	2		
Bromodichloromethane	ug/L	20	21	106	21	106	0		
1,2-Dichloropropane	ug/L	20	20	98	20	99	1		
cis-1,3-Dichloropropene	ug/L	20	18	92	18	92	0		
Trichloroethene	ug/L	20	20	99	20	98	1		
Dibromochloromethane	ug/L	20	21	103	21	104	1		
1,1,2-Trichloroethane	ug/L	20	19	95	19	97	2		
trans-1,3-Dichloropropene	ug/L	20	19	93	18	93	0		
Bromoform	ug/L	20	20	101	21	105	4		
Tetrachloroethene	ug/L	20	18	92	19	93	1		
1,1,2,2-Tetrachloroethane	ug/L	20	17	86	18	91	6		
Chlorobenzene	ug/L	20	19	96	20	99	3		
2-Chloroethyl Vinyl Ether	ug/L	20	19	96	18	91	5		
1,2-Dichlorobenzene	ug/L	20	18	91	19	97	6		
1,3-Dichlorobenzene	ug/L	20	18	93	19	94	1		
1,4-Dichlorobenzene	ug/L	20	18	93	19	95	2		
Bromochloromethane (S)				97		99			
1,4-Dichlorobutane(S)				97		103			



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James & Moore, Sacramento
8801 Folsom Boulevard
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Sacramento, CA 95826

PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5282
Associated PACE Samples: 70192265 70192273 70192281 70192299 70192331

QC Batch Method: EPA 3020

Date of Batch: 07/24/95

METHOD BLANK: 70193412
Associated PACE Samples:

Parameter	Units	70192265	70192273 Method Blank Result	70192281 PRL	70192299	70192331 Footnotes
Arsenic	ug/L		ND	5		
Cadmium	ug/L		ND	5		
Chromium	ug/L		ND	5		

MATRIX SPIKE: 70193446

Parameter	Units	70190988	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Arsenic	ug/L	ND	40	36.1	89	
Cadmium	ug/L	ND	40	38.5	89	
Chromium	ug/L	ND	20	22.9	98	

LABORATORY CONTROL SAMPLE & LCSD: 70193420

Parameter	Units	70193438 Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Arsenic	ug/L	40	39.5	99	38.2	95	4	
Cadmium	ug/L	40	36.1	90	37.2	93	3	
Chromium	ug/L	20	18.3	92	18.2	91	1	



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PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

SAMPLE DUPLICATE: 70193453

Parameter	Units	70190988	Dup. Result	RPD	Footnotes
Nickel	ug/L	ND	ND	NC	
Arsenic	ug/L	ND	ND	NC	
Chromium	ug/L	ND	ND	NC	



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James & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5344
Associated PACE Samples: 70192372

QC Batch Method: EPA 3020

Date of Batch: 07/25/95

METHOD BLANK: 70195896
Associated PACE Samples:

70192372

Parameter	Units	Method Blank Result	PRL	Footnotes
Chromium	ug/L	ND	5	
Nickel	ug/L	ND	5	

MATRIX SPIKE: 70195920

Parameter	Units	70192372	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Chromium	ug/L	ND	20	22.2	87	
Nickel	ug/L	112	40	148	90	

LABORATORY CONTROL SAMPLE & LCSD: 70195904

Parameter	Units	70195912 Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Nickel	ug/L	40	40	100	39.8	99	1	
Chromium	ug/L	20	16	80	16.4	82	2	

SAMPLE DUPLICATE: 70195938

Parameter	Units	70192372	Dup. Result	RPD	Footnotes
Chromium	ug/L	ND	ND	NC	
Nickel	ug/L	112	111	1	



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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5408
Associated PACE Samples: 70192356

QC Batch Method: CA LUFT
70192364

Date of Batch: 07/27/95

METHOD BLANK: 70198445
Associated PACE Samples:

Parameter	Units	70192356	70192364 Method Blank Result	PRL	Footnotes
Gasoline	ug/L	ND	ND	50	
Benzene	ug/L	ND	ND	0.5	
Toluene	ug/L	ND	ND	0.5	
Ethyl Benzene	ug/L	ND	ND	0.5	
Xylene (Total)	ug/L	ND	ND	1	
Methyl-tert-butyl Ether	ug/L	ND	ND	5	
a,a,a-Trifluorotoluene (S)	%	89	89		
4-Bromofluorobenzene (S)	%	86	86		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70199807 70199815

Parameter	Units	70195847	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Gasoline	ug/L	ND	1000	1000	102	990	99	3	

LABORATORY CONTROL SAMPLE & LCSD: 70198429

Parameter	Units	70198437 Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Gasoline	ug/L	1000	1000	100	1000	104	4	



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D Jones & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5561
Associated PACE Samples:

QC Batch Method: EPA 3510
70192356 70192364

Date of Batch: 08/01/95

METHOD BLANK: 70204458
Associated PACE Samples:

Parameter	Units	70192356	70192364	PRL	Footnotes
			Method Blank Result		
Diesel Fuel	mg/L		0.057	0.05	
n-Pentacosane (S)	%		131		

LABORATORY CONTROL SAMPLE & LCSD: 70204466		70204474				Spike		Footnotes
Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	
Diesel Fuel	mg/L	1	0.89	89	0.9	90	1	
n-Pentacosane (S)				117		122		



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PACE Project Number: 702362
Client Project ID: Union Pacific Railroad-Sac.

QUALITY CONTROL DATA PARAMETER FOOTNOTES

The Quality Control Sample Final Results listed above have been rounded to reflect an appropriate number of significant figures. Consistent with EPA guidelines unrounded concentrations have been used to calculate % Rec and RPD values.

ND	Not Detected
NC	Not Calculable
PRL	PACE Reporting Limit
RPD	Relative Percent Difference
(S)	Surrogate



ENVIRONMENTAL LABORATORIES

Client DAMES & MOORE
Address 8801 Folsom Blvd
SAC, Ca 95826
Phone (916) 387-8800

Report To: Tony MINDling
Bill To: _____
P.O. # / Billing Reference SAME
Project Name / No. 00173-080-044

CHAIN-OF-CUSTODY RECORD
Analytical Request

Pace Client No. _____
Pace Project Manager _____
Pace Project No. _____
*Requested Due Date: _____

Sampled By (PRINT): Greg Fernald
Sampler Signature _____ Date Sampled 7/17/95

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PAGE NO.	NO. OF CONTAINERS	PRESERVATIVES					ANALYSES REQUEST	REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA			
1	mw-17	192349	1845	W	3				✓		✓	
2	mw-P-10 ⁽²⁾	192356	1350	↓	4				✓		✓	
3	P-11 ⁽²⁾	192364	1217	↓							✓	
4	MW50 (added by HP 7/25)			192372							✓	
5												
6												
7												
8												

COOLER NOS.	BAILERS	SHIPMENT OUT/DATE	METHOD RETURNED/DATE	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
					UPS	UPS	7/21	9:20
Additional Comments								

SEE REVERSE SIDE FOR INSTRUCTIONS



ENVIRONMENTAL LABORATORIES

702362

261392

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client DAMES & Moore
Address 8801 Folsom
SAC, ca 95826
Phone (916) 387-8800

Report To: Tony mindling
Bill To: _____
P.O. # / Billing Reference SAME
Project Name / No. 00173-080-044

Pace Client No. _____
Pace Project Manager _____
Pace Project No. _____
*Requested Due Date: _____

Sampled By (PRINT):

Greg Fernald

Sampler Signature

Date Sampled

7/17/95

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES					ANALYSES REQUEST										REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA												
1	MW-15	1110	W	192265	4				✓		✓			✓							
2	MW-8	1211		192273	4				✓		✓										
3	MW-5	1256		192281	4				✓		✓			✓	✓						
4	MW-6	1342		192294	4				✓		✓			✓	✓						
5	MW-25	1437		192307	3				✓		✓										
6	MW-19	1555		192315	3				✓		✓										
7	MW-24	1640		192323	3				✓		✓										
8	MW-22	1745		192331	4				✓		✓			✓							

COOLER NOS.	BAILERS	SHIPMENT METHOD		ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
		OUT/DATE	RETURNED/DATE					

Additional Comments

UPS
UPS
Nathan Peters 7/21 9:20

SEE REVERSE SIDE FOR INSTRUCTIONS



REPORT OF LABORATORY ANALYSIS

August 02, 1995

Mr. Jim Brake
Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

RE: PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

Dear Mr. Brake:

Enclosed are the results of analyses for samples received on July 18, 1995. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Donna Breaux".

Donna J. Breaux
Project Manager

Enclosures



REPORT OF LABORATORY ANALYSIS

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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

PACE Sample No: 70187711		Date Collected: 07/15/95						
Client Sample ID: MW-47		Date Received: 07/18/95						
Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	5.87	ug/L	5	07/24/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/21/95				
Chromium Furnace, Method 7191								
Chromium	13.5	ug/L	5	07/31/95	EPA 7191	WMS	7440-47-3	
Date Digested				07/21/95				
Nickel by Furnace, Method 7520								
Nickel	6.88	ug/L	5	07/31/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/21/95				
GC -- Volatiles								
Volatile Halogenated Organics								
Chloromethane	ND	ug/L	1.0	07/24/95	EPA 8010	PFW	74-87-3	
Bromomethane	ND	ug/L	1.0	07/24/95	EPA 8010	PFW	74-83-9	
Vinyl Chloride	ND	ug/L	1.0	07/24/95	EPA 8010	PFW	75-01-4	
Chloroethane	ND	ug/L	1.0	07/24/95	EPA 8010	PFW	75-00-3	
Methylene Chloride	ND	ug/L	1.0	07/24/95	EPA 8010	PFW	75-09-2	
Trichlorofluoromethane	ND	ug/L	1.0	07/24/95	EPA 8010	PFW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	75-35-4	
1,1-Dichloroethane	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	75-34-3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	156-60-5	
Chloroform	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	67-66-3	
1,2-Dichloroethane	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	107-06-2	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	56-23-5	
Benzene	ND	ug/L	0.5	07/24/95	EPA 8020	PFW	71-43-2	
Bromodichloromethane	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	75-27-4	
Toluene	ND	ug/L	0.5	07/24/95	EPA 8020	PFW	108-88-3	
1,2-Dichloropropane	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	10061-01-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187711
Client Sample ID: MW-47

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Trichloroethene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	124-48-1	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	10061-02-6	
Bromoform	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	75-25-2	
Tetrachloroethene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	79-34-5	
Chlorobenzene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	108-90-7	
Ethyl Benzene	ND	ug/L	0.5	07/24/95	EPA 8020	PFW	100-41-4	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/24/95	EPA 8020	PFW	1330-20-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	106-46-7	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/24/95	EPA 8010	PFW	156-59-2	
Bromochloromethane (S)	106	%		07/24/95	EPA 8010	PFW	74-97-5	
a,a,a-Trifluorotoluene (S)	106	%		07/24/95	EPA 8020	PFW	2164-17-2	
1,4-Dichlorobutane(S)	105	%		07/24/95	EPA 8010	PFW	110-56-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187729
Client Sample ID: MW-36

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	5.39	ug/L	5	07/24/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/21/95				
Chromium Furnace, Method 7191								
Chromium	8.4	ug/L	5	07/31/95	EPA 7191	WMS	7440-47-3	
Date Digested				07/21/95				
Nickel by Furnace, Method 7520								
Nickel	29.4	ug/L	5	07/31/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/21/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/24/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/24/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/24/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/24/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/24/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	50	ug/L	0.5	07/24/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/24/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	1.9	ug/L	0.5	07/24/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	1.6	ug/L	0.5	07/24/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/24/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	5.3	ug/L	0.5	07/24/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/24/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/24/95	EPA 8020	MDW		



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PACE Project Number: 702312

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187729
Client Sample ID: MW-36

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Bromoform	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/24/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/24/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	107	%		07/24/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	108	%		07/24/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		07/24/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187737
Client Sample ID: MW-37

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	54.2	ug/L	50.9	07/24/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/21/95				
Chromium Furnace, Method 7191								
Chromium	ND	ug/L	50.9	07/31/95	EPA 7191	WMS	7440-47-3	
Date Digested				07/21/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	42	ug/L	0.5	07/26/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	5.3	ug/L	0.5	07/26/95	EPA 8010	MDW	75-34-3	
Chloroform	3	ug/L	0.5	07/26/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	1.2	ug/L	0.5	07/26/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	0.71	ug/L	0.5	07/26/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/26/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	6.2	ug/L	0.5	07/26/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	1.9	ug/L	0.5	07/26/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/26/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/26/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	110-75-8	

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PACE Project Number: 702312

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187737
Client Sample ID: MW-37

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Xylene (Total)	ND	ug/L	0.5	07/26/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		07/26/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	113	%		07/26/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	117	%		07/26/95	EPA 8010	MDW	110-56-5	

Comments : NR=Ni

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187745
Client Sample ID: MW-29

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	35.3	ug/L	5	07/31/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/21/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	4.1	ug/L	0.5	07/26/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	0.83	ug/L	0.5	07/26/95	EPA 8010	MDW	75-34-3	
Chloroform	0.88	ug/L	0.5	07/26/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	1.3	ug/L	0.5	07/26/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/26/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	3	ug/L	0.5	07/26/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	1.1	ug/L	0.5	07/26/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/26/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/26/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/26/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		07/26/95	EPA 8010	MDW	74-97-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187745
Client Sample ID: MW-29

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
a,a,a-Trifluorotoluene (S)	108	%		07/26/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	113	%		07/26/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187752
Client Sample ID: MW-30

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7521								
Nickel	13.7	ug/L	5	07/31/95	EPA 7521	SMS	7440-02-0	
Date Digested				07/21/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	32	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	4.1	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	1.4	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	7.8	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	1.3	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		07/27/95	EPA 8010	MDW	74-97-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187752
Client Sample ID: MW-30

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
a,a,a-Trifluorotoluene (S)	108	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	117	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187760
Client Sample ID: MW-28

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	101	ug/L	20	07/31/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/21/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	14	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	8.1	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	105	%		07/27/95	EPA 8010	MDW	74-97-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187760
Client Sample ID: MW-28

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
a,a,a-Trifluorotoluene (S)	109	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	110	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187778
Client Sample ID: FB-1

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	107	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	114	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187786
Client Sample ID: MW-31

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	ND	ug/L	5	07/31/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/21/95				
Chromium Furnace, Method 7191								
Chromium	8.35	ug/L	5	07/31/95	EPA 7191	WMS	7440-47-3	
Date Digested				07/21/95				
-- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	19	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	0.85	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	9.6	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	0.66	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	



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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187786
Client Sample ID: MW-31

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	99	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	109	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	110	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187794
Client Sample ID: MW-131

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	ND	ug/L	5	07/31/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/21/95				
Chromium Furnace, Method 7191								
Chromium	8.53	ug/L	5	07/31/95	EPA 7191	WMS	7440-47-3	
Date Digested				07/21/95				
-- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	18	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	0.6	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	9.5	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	0.56	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187794
Client Sample ID: MW-131

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	108	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	114	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70187802
Client Sample ID: TB-07-15-95

Date Collected: 07/15/95
Date Received: 07/18/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	111	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		07/27/95	EPA 8010	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		07/27/95	EPA 8010	MDW	110-56-5	



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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

PARAMETER FOOTNOTES

ND	Not Detected
NC	Not Calculable
PRL	PACE Reporting Limit
(S)	Surrogate

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James & Moore, Sacramento
6001 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 4305
Associated PACE Samples: 70187711 70187729

QC Batch Method: EPA 8020
Date of Batch: 06/26/95

THOD BLANK: 70194600
Associated PACE Samples:

Parameter	Units	70187711	70187729	Method Blank Result	PRL	Footnotes
Benzene	ug/L	ND	0.5			
Chlorobenzene	ug/L	ND	0.5			
1,4-Dichlorobenzene	ug/L	ND	0.5			
1,3-Dichlorobenzene	ug/L	ND	0.5			
1,2-Dichlorobenzene	ug/L	ND	0.5			
Ethyl Benzene	ug/L	ND	0.5			
Toluene	ug/L	ND	0.5			
Xylene (Total)	ug/L	ND	0.5			
m,p,a-Trifluorotoluene (S)	%	105				

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70188677 70188685									
Parameter	Units	70183579	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	ND	20	22	108	21	106	2	
Chlorobenzene	ug/L	ND	20	22	112	22	110	2	
1,4-Dichlorobenzene	ug/L	ND	20	21	106	21	106	0	
1,3-Dichlorobenzene	ug/L	ND	20	21	106	21	104	2	
1,2-Dichlorobenzene	ug/L	ND	20	21	107	21	106	1	
Ethyl Benzene	ug/L	ND	20	22	108	21	105	3	
Toluene	ug/L	ND	20	21	107	21	104	3	
Xylene (Total)	ug/L	ND	60	64	106	62	104	2	
m,p,a-Trifluorotoluene (S)					102		100		

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70154604		70154612				Spike		Footnotes
Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Dup % Rec	RPD	
Benzene	ug/L	20	18	93	20	99	6	
Chlorobenzene	ug/L	20	19	94	20	100	6	
1,4-Dichlorobenzene	ug/L	20	18	92	20	98	6	
1,3-Dichlorobenzene	ug/L	20	18	93	19	97	4	
1,2-Dichlorobenzene	ug/L	20	18	92	19	97	5	
Ethyl Benzene	ug/L	20	19	94	20	100	6	
Toluene	ug/L	20	19	93	20	98	5	
Xylene (Total)	ug/L	60	55	92	59	98	6	
a,a,a-Trifluorotoluene (S)				90		91		

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James & Moore, Sacramento
6001 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5210 QC Batch Method: EPA 3020 Date of Batch: 07/21/95
Associated PACE Samples: 70187711 70187729 70187737 70187745 70187752
 70187760 70187786 70187794

METHOD BLANK: 70189733
Associated PACE Samples:

70187711 70187729 70187737 70187745 70187752 70187760 70187786
70187794

Parameter	Units	Method Blank Result	PRL	Footnotes
Arsenic	ug/L	ND	5	
Lead	ug/L	ND	5	
Chromium	ug/L	ND	5	
Nickel	ug/L	ND	5	

MATRIX SPIKE: 70189766

Parameter	Units	70187711	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Lead	ug/L	ND	40	39.2	98	
Arsenic	ug/L	5.87	40	51.4	114	
Chromium	ug/L	13.5	20	36.4	114	
Nickel	ug/L	6.88	40	42.2	88	

LABORATORY CONTROL SAMPLE & LCSD: 70189741

Parameter	Units	70189758 Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Arsenic	ug/L	40	41.3	103	41.2	103	0	
Lead	ug/L	40	43	108	43.4	108	0	
Chromium	ug/L	20	20.8	104	20.4	102	2	
Nickel	ug/L	40	38.1	95	37.9	95	0	



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PACE Project Number: 702312

Client Project ID: Union Pacific Railroad-Sac.

SAMPLE DUPLICATE: 70189774

Parameter	Units	70187711	Dup. Result	RPD	Footnotes
Lead	ug/L	ND	7.22	NC	
Arsenic	ug/L	5.87	5.59	5	
Chromium	ug/L	13.5	13.3	1	
Nickel	ug/L	6.88	6.05	13	

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James & Moore, Sacramento
6001 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

Batch ID: 5249 QC Batch Method: EPA 8010
Associated PACE Samples: 70187711 70187729

Date of Batch: 07/21/95

METHOD BLANK: 70194592
Associated PACE Samples:

Parameter	Units	70187711	70187729	PRL	Footnotes
		Method Blank Result			
Chloromethane	ug/L	ND		1.0	
Bromomethane	ug/L	ND		1.0	
Vinyl Chloride	ug/L	ND		1.0	
Chloroethane	ug/L	ND		1.0	
Methylene Chloride	ug/L	ND		1.0	
Trichlorofluoromethane	ug/L	ND		1.0	
1,1-Dichloroethene	ug/L	ND		0.5	
1,2-Dichloroethane	ug/L	ND		0.5	
trans-1,2-Dichloroethene	ug/L	ND		0.5	
Chloroform	ug/L	ND		0.5	
1,1-Dichloroethane	ug/L	ND		0.5	
1,1,1-Trichloroethane	ug/L	ND		0.5	
Carbon Tetrachloride	ug/L	ND		0.5	
Bromodichloromethane	ug/L	ND		0.5	
1,2-Dichloropropane	ug/L	ND		0.5	
cis-1,3-Dichloropropene	ug/L	ND		0.5	
Trichloroethene	ug/L	ND		0.5	
Dibromochloromethane	ug/L	ND		0.5	
1,1,2-Trichloroethane	ug/L	ND		0.5	
trans-1,3-Dichloropropene	ug/L	ND		0.5	
Bromoform	ug/L	ND		0.5	
Tetrachloroethene	ug/L	ND		0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND		0.5	
Chlorobenzene	ug/L	ND		0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND		0.5	
1,4-Dichlorobenzene	ug/L	ND		0.5	

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70194592
Associated PACE Samples:

70187711

70187729

Parameter	Units	Method Blank Result	PRL	Footnotes
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	110		
1,4-Dichlorobutane(S)	%	117		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70191093 70191101

Parameter	Units	70189816	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	16	82	16	81	1	
Bromomethane	ug/L	ND	20	19	96	19	93	3	
Vinyl Chloride	ug/L	ND	20	19	97	19	97	0	
Chloroethane	ug/L	ND	20	21	103	20	102	1	
Methylene Chloride	ug/L	ND	20	19	95	19	95	0	
Trichlorofluoromethane	ug/L	ND	20	20	101	20	100	1	
1,1-Dichloroethene	ug/L	ND	20	20	99	20	98	1	
1,1-Dichloroethane	ug/L	ND	20	20	98	20	99	1	
trans-1,2-Dichloroethene	ug/L	ND	20	19	96	19	96	0	
Chloroform	ug/L	ND	20	19	94	19	96	2	
1,2-Dichloroethane	ug/L	4.4	20	23	91	23	91	0	
1,1,1-Trichloroethane	ug/L	ND	20	19	96	19	96	0	
Carbon Tetrachloride	ug/L	ND	20	19	95	19	96	1	
Bromodichloromethane	ug/L	ND	20	21	105	21	104	1	
1,2-Dichloropropane	ug/L	ND	20	20	100	20	99	1	
cis-1,3-Dichloropropene	ug/L	ND	20	18	91	18	91	0	
Trichloroethene	ug/L	ND	20	20	98	20	98	0	
Dibromochloromethane	ug/L	ND	20	21	104	21	104	0	
1,1,2-Trichloroethane	ug/L	ND	20	19	97	19	97	0	
trans-1,3-Dichloropropene	ug/L	ND	20	19	93	19	93	0	
Bromoform	ug/L	ND	20	21	104	21	105	1	
Tetrachloroethene	ug/L	ND	20	19	95	19	94	1	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	18	92	19	94	2	
Chlorobenzene	ug/L	ND	20	20	99	21	105	6	
2-Chloroethyl Vinyl Ether	ug/L	ND	20	20	98	20	98	0	
1,2-Dichlorobenzene	ug/L	ND	20	20	98	20	98	0	
1,3-Dichlorobenzene	ug/L	ND	20	19	96	19	95	1	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

DATE: 08/02/95
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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70191093 70191101									
Parameter	Units	70189816	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
1,2-Dichlorobenzene	ug/L	ND	20	19	96	19	96	0	
Bromochloromethane (S)					96		97		
1,4-Dichlorobutane(S)					102		102		
LABORATORY CONTROL SAMPLE & LCSD: 70191119 70191127									
Parameter	Units	Spike Conc.	LCSD Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes	
Chloromethane	ug/L	20	16	79	16	80	1		
Bromomethane	ug/L	20	19	94	19	94	0		
Vinyl Chloride	ug/L	20	19	96	19	96	0		
Chloroethane	ug/L	20	20	98	20	103	5		
Methylene Chloride	ug/L	20	18	91	18	93	2		
Trichlorofluoromethane	ug/L	20	20	101	20	99	2		
1,1-Dichloroethene	ug/L	20	19	97	19	96	1		
1,2-Dichloroethane	ug/L	20	19	97	19	97	0		
trans-1,2-Dichloroethene	ug/L	20	19	96	19	95	1		
Chloroform	ug/L	20	19	96	19	95	1		
1,2-Dichloroethane	ug/L	20	20	98	20	99	1		
1,1,1-Trichloroethane	ug/L	20	19	97	19	96	1		
Carbon Tetrachloride	ug/L	20	19	97	19	95	2		
Bromodichloromethane	ug/L	20	21	106	21	106	0		
1,2-Dichloropropane	ug/L	20	20	98	20	99	1		
cis-1,3-Dichloropropene	ug/L	20	18	92	18	92	0		
Trichloroethene	ug/L	20	20	99	20	98	1		
Bromochloromethane	ug/L	20	21	103	21	104	1		
1,1,2-Trichloroethane	ug/L	20	19	95	19	97	2		
trans-1,3-Dichloropropene	ug/L	20	19	93	18	93	0		
Bromoform	ug/L	20	20	101	21	105	4		
Trichloroethene	ug/L	20	18	92	19	93	1		
1,1,2,2-Tetrachloroethane	ug/L	20	17	86	18	91	6		
Chlorobenzene	ug/L	20	19	96	20	99	3		
2-Chloroethyl Vinyl Ether	ug/L	20	19	96	18	91	5		
1,2-Dichlorobenzene	ug/L	20	18	91	19	97	6		
1,3-Dichlorobenzene	ug/L	20	18	93	19	94	1		
1,4-Dichlorobenzene	ug/L	20	18	93	19	95	2		
Bromochloromethane (S)				97		99			
1,4-Dichlorobutane(S)				97		103			



REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5371
Associated PACE Samples:

QC Batch Method: EPA 8010/20

Date of Batch: 07/26/95

70187729	70187737	70187745	70187752	70187760
70187778	70187786	70187794	70187802	

METHOD BLANK: 70197090
Associated PACE Samples:

70187729	70187737	70187745	70187752	70187778	70187786	70187794
70187802						

Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
Methylene Chloride	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	0.5	
1,1-Dichloroethane	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Benzene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
Trichloroethene	ug/L	ND	0.5	
1,2-Dichloropropene	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70197090
Associated PACE Samples:

70187729 70187737 70187745 70187752 70187778 70187786 70187794
70187802

Parameter	Units	Method Blank Result	PRL	Footnotes
Phenylbenzene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
Chloroethyl Vinyl Ether	ug/L	ND	0.5	
ene (Total)	ug/L	ND	0.5	
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
is-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	110		
a,a,a-Trifluorotoluene (S)	%	104		
1,4-Dichlorobutane(S)	%	116		

METHOD BLANK: 70199245
Associated PACE Samples:

70187760

Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Phenyl Chloride	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
ethylene Chloride	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	0.5	
1,1-Dichloroethane	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Benzene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
is-1,3-Dichloropropene	ug/L	ND	0.5	
Trichloroethene	ug/L	ND	0.5	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

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PACE Project Number: 702312

Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70199245

Associated PACE Samples:

70187760

Parameter	Units	Method Blank Result	PRL	Footnotes
1,2-Dichloropropane	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
Ethylbenzene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	0.5	
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	112		
a,a,a-Trifluorotoluene (S)	%	107		
1,4-Dichlorobutane(S)	%	113		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70199252 70199260

Parameter	Units	70187760	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	20	103	18	90	13	
Vinyl Chloride	ug/L	ND	20	21	104	20	98	6	
Bromomethane	ug/L	ND	20	26	132	24	118	11	
Chloroethane	ug/L	ND	20	24	119	22	111	7	
Trichlorofluoromethane	ug/L	ND	20	23	113	21	107	5	
1,1-Dichloroethene	ug/L	14	20	31	87	30	82	6	
Methylene Chloride	ug/L	ND	20	20	99	19	97	2	
trans-1,2-Dichloroethene	ug/L	ND	20	21	105	20	101	4	
1,1-Dichloroethane	ug/L	8.1	20	27	94	26	89	5	
Chloroform	ug/L	ND	20	21	106	20	102	4	
1,1,1-Trichloroethane	ug/L	ND	20	22	109	21	104	5	
Carbon Tetrachloride	ug/L	ND	20	22	109	21	103	6	

REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70199252 70199260

Parameter	Units	70187760	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	ND	20	21	106	21	103	3	
1,2-Dichloroethane	ug/L	ND	20	21	107	21	104	3	
cis-1,3-Dichloropropene	ug/L	ND	20	21	105	20	103	2	
Trichloroethene	ug/L	ND	20	22	109	21	104	5	
1,2-Dichloropropane	ug/L	ND	20	22	108	21	105	3	
Bromodichloromethane	ug/L	ND	20	24	120	23	117	3	
Toluene	ug/L	ND	20	21	105	21	104	1	
1,2-Trichloroethane	ug/L	ND	20	21	106	21	106	0	
trans-1,3-Dichloropropene	ug/L	ND	20	22	108	21	106	2	
Trichloroethene	ug/L	ND	20	21	104	20	100	4	
Dibromochloromethane	ug/L	ND	20	24	120	23	117	3	
Chlorobenzene	ug/L	ND	20	21	107	22	110	3	
Ethylbenzene	ug/L	ND	20	22	108	21	107	1	
Bromoform	ug/L	ND	20	23	117	24	121	3	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	21	104	22	108	4	
2-Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
Xylene (Total)	ug/L	ND	60	64	107	63	105	2	
1,4-Dichlorobenzene	ug/L	ND	20	21	105	21	105	0	
1,4-Dichlorobenzene	ug/L	ND	20	21	105	21	105	0	
1,2-Dichlorobenzene	ug/L	ND	20	21	105	21	106	1	
Bromochloromethane (S)					108		103		
1,1,1-Trifluorotoluene (S)					101		99		
1,1-Dichlorobutane(S)					107		110		

LABORATORY CONTROL SAMPLE & LCSD: 70197108

70197116

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	20	16	79	15	76	4	
Vinyl Chloride	ug/L	20	21	107	18	92	15	
Bromomethane	ug/L	20	21	107	19	95	12	
Chloroethane	ug/L	20	21	105	20	101	4	
Trichlorofluoromethane	ug/L	20	22	108	21	104	4	
1,2-Dichloroethene	ug/L	20	21	104	20	102	2	
Methylene Chloride	ug/L	20	20	101	20	98	3	
trans-1,2-Dichloroethene	ug/L	20	21	104	20	101	3	
1,1-Dichloroethane	ug/L	20	21	105	20	102	3	
Chloroform	ug/L	20	21	105	21	103	2	
1,1,1-Trichloroethane	ug/L	20	21	105	21	104	1	
Carbon Tetrachloride	ug/L	20	21	105	21	104	1	



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QUALITY CONTROL DATA

DATE: 08/02/95
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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70197108		70197116				Spike		Footnotes
Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Dup % Rec	RPD	
Benzene	ug/L	20	21	105	21	105	0	
1,2-Dichloroethane	ug/L	20	21	105	21	104	1	
cis-1,3-Dichloropropene	ug/L	20	21	104	20	101	3	
Trichloroethene	ug/L	20	21	106	21	106	0	
1,2-Dichloropropane	ug/L	20	21	106	21	104	2	
Bromodichloromethane	ug/L	20	24	118	24	121	3	
Toluene	ug/L	20	21	105	21	104	1	
1,1,2-Trichloroethane	ug/L	20	21	107	21	105	2	
trans-1,3-Dichloropropene	ug/L	20	21	107	21	105	2	
Tetrachloroethene	ug/L	20	20	101	20	101	0	
Dibromochloromethane	ug/L	20	24	119	23	117	2	
Chlorobenzene	ug/L	20	22	109	23	114	4	
Ethylbenzene	ug/L	20	22	108	21	106	2	
Bromoform	ug/L	20	24	122	24	121	1	
1,1,2,2-Tetrachloroethane	ug/L	20	21	105	21	103	2	
2-Chloroethyl Vinyl Ether	ug/L	20	23	114	19	96	17	
Xylene (Total)	ug/L	60	64	106	63	105	1	
1,3-Dichlorobenzene	ug/L	20	21	105	20	102	3	
1,4-Dichlorobenzene	ug/L	20	21	106	21	104	2	
1,2-Dichlorobenzene	ug/L	20	21	106	21	105	1	
Bromochloromethane (S)				106		105		
a,a,a-Trifluorotoluene (S)				102		101		
1,4-Dichlorobutane(S)				108		109		



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PACE Project Number: 702312
Client Project ID: Union Pacific Railroad-Sac.

QUALITY CONTROL DATA PARAMETER FOOTNOTES

The Quality Control Sample Final Results listed above have been rounded to reflect an appropriate number of significant figures. Consistent with EPA guidelines unrounded concentrations have been used to calculate % Rec and RPD values.

ND Not Detected
NC Not Calculable
PRL PACE Reporting Limit
RPD Relative Percent Difference
C Surrogate



ENVIRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client DAMES & MOORE
Address 8801 Folsom Blvd
SACRAMENTO, Ca 95826
Phone (916) 387-8800

Report To: TONY MINDLING
Bill To: S
P.O. # / Billing Reference Same as
Project Name / No. 00173-080-0445

Pace Client No. _____
Pace Project Manager 702312
Pace Project No. _____
*Requested Due Date: _____

Sampled By (PRINT): Greg Fernald
Sampler Signature: Greg Fernald Date Sampled: _____

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES					ANALYSES REQUEST	REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA			
1	MW-131	-	W	187794	5			✓	✓		✓ ✓ ✓	
2	TB-07-15-25	-		187802	2				✓		✓	
3												
4												
5												
6												
7												
8												

COOLER NOS.	BAILERS	SHIPMENT METHOD		ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
		OUT/DATE	RETURNED/DATE					
Additional Comments page 2 of 2					UPS	UPS WeatherPics	7/8/15	9:05

SEE REVERSE SIDE FOR INSTRUCTIONS

ENVIRONMENTAL LABORATORIES

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client Dames & Moore
Address 8801 Folsom Blvd
Sacramento, Ca 95826
Phone (916) 387-8800

Report To: TONY MINDLING
Bill To: SAIME
P.O. # / Billing Reference SAIME
Project Name / No. 00173-080-044

Pace Client No. _____
Pace Project Manager _____
Pace Project No. 702312
*Requested Due Date: _____

Sampled By (PRINT): Greg Fernald
Sampler Signature Greg Fernald Date Sampled _____

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES					ANALYSES REQUEST					REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA							
1	MW-47	1159	W	187711	5			✓	✓		✓	✓	✓	✓		
2	MW-36	1255		187729	5			✓	✓		✓	✓	✓	✓		
3	MW-37	1334		187737	5			✓	✓		✓	✓	✓			
4	MW-29	1518		187745	5			✓	✓		✓			✓		
5	MW-30	1609		187752	5			✓	✓		✓			✓		
	MW-28	1645		187760	5			✓	✓		✓			✓		
	FB-1	1655		187778	4				✓		✓					
	MW-31	1735		187786	5				✓	✓	✓	✓	✓			

COOLER NOS.	BAILERS	SHIPMENT METHOD		ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
		OUT/DATE	RETURNED/DATE		UPS	UPS	7/18/59	05
Additional Comments <u>page 1 of 2</u>								



REPORT OF LABORATORY ANALYSIS

August 04, 1995

Mr. Jim Brake
Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

RE: PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

Dear Mr. Brake:

Enclosed are the results of analyses for samples received on July 19, 1995. If you have any questions concerning this report, please feel free to contact me.

Sincerely,

A handwritten signature in cursive script that reads "Donna Breaux".

Donna J. Breaux
Project Manager

Enclosures

REPORT OF LABORATORY ANALYSIS

DATE: 08/04/95
PAGE: 1

Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

PACE Sample No: 70186770		Date Collected: 07/17/95						
Client Sample ID: MW-13		Date Received: 07/19/95						
Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	ND	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested 07/19/95								
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	50	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	50	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	50	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	50	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	50	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	94	ug/L	25	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	25	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	25	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	53	ug/L	25	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	25	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	25	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	2500	ug/L	25	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	42	ug/L	25	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	25	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	30	ug/L	25	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	25	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	220	ug/L	25	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	25	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	25	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	25	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	220	ug/L	25	07/27/95	EPA 8020	MDW		

REPORT OF LABORATORY ANALYSIS

DATE: 08/04/95
PAGE: 2

PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186770
Client Sample ID: MW-13

Date Collected: 07/17/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Bromoform	ND	ug/L	25	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	25	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	250	ug/L	25	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	25	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	25	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	25	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	25	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	111	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	123	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186788
Client Sample ID: MW-130

Date Collected: 07/17/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	50	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	50	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	50	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	50	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	50	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	93	ug/L	25	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	50	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	25	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	52	ug/L	25	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	25	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	25	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	2500	ug/L	25	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	42	ug/L	25	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	25	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	27	ug/L	25	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	25	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	220	ug/L	25	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	25	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	25	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	25	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	220	ug/L	25	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	25	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	25	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	25	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	250	ug/L	25	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	25	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	25	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	25	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	25	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	112	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	123	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	117	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186796
Client Sample ID: MW-41

Date Collected: 07/17/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	0.83	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	112	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	100	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	120	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No:	70186804	Date Collected:	07/17/95					
Client Sample ID:	MW-14	Date Received:	07/19/95					
Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	5.51	ug/L	5	07/20/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/19/95				
Chromium Furnace, Method 7191								
Chromium	ND	ug/L	5	07/28/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/19/95				
Nickel by Furnace, Method 7520								
Nickel	69	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/19/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	80	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	20	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	1.8	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	0.72	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	0.78	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	4.8	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	1.1	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	0.63	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186804
Client Sample ID: MW-14

Date Collected: 07/17/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	0.53	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	106	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	109	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	114	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No:	70186812	Date Collected:	07/17/95					
Client Sample ID:	MW-140	Date Received:	07/19/95					
Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	5.64	ug/L	5	07/20/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/19/95				
Chromium Furnace, Method 7191								
Chromium	ND	ug/L	5	07/28/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/19/95				
Nickel by Furnace, Method 7520								
Nickel	70.3	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/19/95				
GC -- Volatiles								
Volatile Halogenated Organics								
Chloromethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	74-87-3	
Bromomethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	74-83-9	
Vinyl Chloride	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-01-4	
Chloroethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-00-3	
Methylene Chloride	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-09-2	
Trichlorofluoromethane	ND	ug/L	1.0	07/26/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	140	ug/L	5.0	07/26/95	EPA 8010	MDW	75-35-4	
1,1-Dichloroethane	22	ug/L	0.5	07/26/95	EPA 8010	MDW	75-34-3	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	156-60-5	
Chloroform	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	67-66-3	
1,2-Dichloroethane	0.58	ug/L	0.5	07/26/95	EPA 8010	MDW	107-06-2	
1,1,1-Trichloroethane	1.7	ug/L	0.5	07/26/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	56-23-5	
Bromodichloromethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	75-27-4	
1,2-Dichloropropane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	4.1	ug/L	0.5	07/26/95	EPA 8010	MDW	79-01-6	
Dibromochloromethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	124-48-1	
1,1,2-Trichloroethane	0.8	ug/L	0.5	07/26/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	10061-02-6	
Bromoform	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	75-25-2	
Tetrachloroethene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	127-18-4	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	79-34-5	
Chlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	108-90-7	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	110-75-8	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	95-50-1	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	106-46-7	



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PACE Project Number: 702306

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186812
Client Sample ID: MW-140

Date Collected: 07/17/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/26/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	111	%		07/26/95	EPA 8010	MDW	74-97-5	
1,4-Dichlorobutane(S)	115	%		07/26/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186820
Client Sample ID: MW-12

Date Collected: 07/17/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Arsenic, AAS Furnace								
Arsenic	6	ug/L	5	07/20/95	EPA 7060	SMS	7440-38-2	
Date Digested				07/19/95				
Chromium Furnace, Method 7191								
Chromium	24.8	ug/L	5	07/28/95	EPA 7191	SMS	7440-47-3	
Date Digested				07/19/95				
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	30	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	10	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	0.66	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	4.4	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

DE Sample No: 70186820
ient Sample ID: MW-12

Date Collected: 07/17/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	110	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	115	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186838
Client Sample ID: MW-27

Date Collected: 07/18/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
Metals								
Nickel by Furnace, Method 7520								
Nickel	48.2	ug/L	5	07/28/95	EPA 7520	SMS	7440-02-0	
Date Digested				07/19/95				
GC -- Volatiles								
Aromatic Volatile Organics								
Benzene	ND	ug/L	0.5	07/26/95	EPA 8020	PFW	71-43-2	
Chlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8020	PFW	108-90-7	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8020	PFW	106-46-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8020	PFW	541-73-1	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/26/95	EPA 8020	PFW	95-50-1	
Ethyl Benzene	ND	ug/L	0.5	07/26/95	EPA 8020	PFW	100-41-4	
Toluene	ND	ug/L	0.5	07/26/95	EPA 8020	PFW	108-88-3	
Xylene (Total)	ND	ug/L	0.5	07/26/95	EPA 8020	PFW	1330-20-7	
a,a,a-Trifluorotoluene (S)	108	%		07/26/95	EPA 8020	PFW	2164-17-2	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

E Sample No: 70186846		Date Collected: 07/17/95						
ent Sample ID: MW-26		Date Received: 07/19/95						
ameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
-- Volatiles								
alogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	11	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	6.4	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	3.8	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	1.4	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	0.69	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	104	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	106	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	112	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306

Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186853

Client Sample ID: ER-26

Date Collected: 07/18/95

Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/27/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	0.52	ug/L	0.5	07/27/95	EPA 8010	MDW	71-55-6	2
Carbon Tetrachloride	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/27/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/27/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	106	%		07/27/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	112	%		07/27/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	115	%		07/27/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186861
Client Sample ID: TB-07-17-95

Date Collected: 07/17/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	109	%		07/28/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	105	%		07/28/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		07/28/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

PACE Sample No: 70186879
Client Sample ID: FB-2

Date Collected: 07/17/95
Date Received: 07/19/95

Parameters	Results	Units	PRL	Analyzed	Method	Analyst	CAS#	Footnotes
GC -- Volatiles								
Halogen. & Aromatic Vol. Orgs.								
Chloromethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	74-87-3	
Vinyl Chloride	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-01-4	
Bromomethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	74-83-9	
Chloroethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-00-3	
Trichlorofluoromethane	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-69-4	
1,1-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-35-4	
Methylene Chloride	ND	ug/L	1.0	07/28/95	EPA 8010	MDW	75-09-2	
trans-1,2-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	156-60-5	
1,1-Dichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-34-3	
Chloroform	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	67-66-3	
1,1,1-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	71-55-6	
Carbon Tetrachloride	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	56-23-5	
Benzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	71-43-2	
1,2-Dichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	107-06-2	
cis-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-01-5	
Trichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-01-6	
1,2-Dichloropropane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	78-87-5	
Bromodichloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-27-4	
Toluene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	108-88-3	
1,1,2-Trichloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-00-5	
trans-1,3-Dichloropropene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	10061-02-6	
Tetrachloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	127-18-4	
Dibromochloromethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	124-48-1	
Chlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	108-90-7	
Ethylbenzene	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	100-41-4	
Bromoform	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	75-25-2	
1,1,2,2-Tetrachloroethane	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	79-34-5	
2-Chloroethyl Vinyl Ether	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	110-75-8	
Xylene (Total)	ND	ug/L	0.5	07/28/95	EPA 8020	MDW	1330-20-7	
1,3-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	541-73-1	
1,4-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	106-46-7	
1,2-Dichlorobenzene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	95-50-1	
cis-1,2-Dichloroethene	ND	ug/L	0.5	07/28/95	EPA 8010	MDW	156-59-2	
Bromochloromethane (S)	108	%		07/28/95	EPA 8010	MDW	74-97-5	
a,a,a-Trifluorotoluene (S)	104	%		07/28/95	EPA 8020	MDW	2164-17-2	
1,4-Dichlorobutane(S)	116	%		07/28/95	EPA 8010	MDW	110-56-5	

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PACE Project Number: 702306

Client Project ID: Union Pacific Railroad-Sac.

AMETER FOOTNOTES

Not Detected

Not Calculable

PACE Reporting Limit

Surrogate

Possible laboratory contaminant.

No confirmation data available.

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QUALITY CONTROL DATA

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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 4305
Associated PACE Samples: 70186838

QC Batch Method: EPA 8020

Date of Batch: 06/26/95

METHOD BLANK: 70195623
Associated PACE Samples: 70186838

Parameter	Units	Method Blank Result	PRL	Footnotes
Benzene	ug/L	ND	2	
Chlorobenzene	ug/L	ND	0.7	
1,4-Dichlorobenzene	ug/L	ND	1	
1,3-Dichlorobenzene	ug/L	ND	1	
1,2-Dichlorobenzene	ug/L	ND	1	
Ethyl Benzene	ug/L	ND	2	
Toluene	ug/L	ND	2	
Xylene (Total)	ug/L	ND	5	
a,a,a-Trifluorotoluene (S)	%	108		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70188677 70188685									
Parameter	Units	70183579	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	ND	20	22	108	21	106	2	
Chlorobenzene	ug/L	ND	20	22	112	22	110	2	
1,4-Dichlorobenzene	ug/L	ND	20	21	106	21	106	0	
1,3-Dichlorobenzene	ug/L	ND	20	21	106	21	104	2	
1,2-Dichlorobenzene	ug/L	ND	20	21	107	21	106	1	
Ethyl Benzene	ug/L	ND	20	22	108	21	105	3	
Toluene	ug/L	ND	20	21	107	21	104	3	
Xylene (Total)	ug/L	ND	60	64	106	62	104	2	
a,a,a-Trifluorotoluene (S)					102		100		

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70154604

70154612

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Benzene	ug/L	20	18	93	20	99	6	
Chlorobenzene	ug/L	20	19	94	20	100	6	
1,4-Dichlorobenzene	ug/L	20	18	92	20	98	6	
1,3-Dichlorobenzene	ug/L	20	18	93	19	97	4	
2-Dichlorobenzene	ug/L	20	18	92	19	97	5	
Ethyl Benzene	ug/L	20	19	94	20	100	6	
Toluene	ug/L	20	19	93	20	98	5	
Xylene (Total)	ug/L	60	55	92	59	98	6	
m,p,a-Trifluorotoluene (S)				90		91		

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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5115 QC Batch Method: EPA 3020 Date of Batch: 07/19/95
Associated PACE Samples: 70186770 70186804 70186812 70186820 70186838

METHOD BLANK: 70187059
Associated PACE Samples:

Parameter	Units	70186770	70186804 Method Blank Result	70186812 PRL	70186820	70186838	Footnotes
Nickel	ug/L		ND	5			
Arsenic	ug/L		ND	5			
Chromium	ug/L		ND	5			

MATRIX SPIKE: 70187067

Parameter	Units	70186465	Spike Conc.	Matrix Spike Result	Spike % Rec	Footnotes
Arsenic	ug/L	6.02	40	49	107	
Nickel	ug/L	ND	40	42	92	
Chromium	ug/L	17.9	20	35.8	90	

LABORATORY CONTROL SAMPLE & LCSD: 70187083

Parameter	Units	70187091 Spike Conc.	LCSD Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Nickel	ug/L	40	36	90	36.5	91	1	
Arsenic	ug/L	40	39.2	98	39.5	99	1	
Chromium	ug/L	20	17.7	89	18.4	92	3	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

SAMPLE DUPLICATE: 70187075

Parameter	Units	70186465	Dup. Result	RPD	Footnotes
Arsenic	ug/L	6.02	5.84	3	
Nickel	ug/L	ND	ND	NC	
Chromium	ug/L	17.9	16	11	



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Dames & Moore, Sacramento
8801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5168
Associated PACE Samples: 70186812

QC Batch Method: EPA 8010

Date of Batch: 07/20/95

METHOD BLANK: 70197298
Associated PACE Samples:

70186812

Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Methylene Chloride	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
1,1-Dichloroethane	ug/L	ND	0.5	
trans-1,2-Dichloroethene	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
Trichloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	

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PACE Project Number: 702306

Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70197298

Associated PACE Samples:

70186812

Parameter	Units	Method Blank Result	PRL	Footnotes
1,2-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	107		
1,2-Dichlorobutane(S)	%	116		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70189253 70189261

Parameter	Units	70183991	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	18	88	18	91	3	
Bromomethane	ug/L	ND	20	16	82	17	86	5	
Vinyl Chloride	ug/L	ND	20	18	91	19	95	4	
Chloroethane	ug/L	ND	20	18	88	19	93	6	
Methylene Chloride	ug/L	ND	20	21	107	23	114	6	
Trichlorofluoromethane	ug/L	ND	20	26	129	29	144	11	
1,1-Dichloroethene	ug/L	ND	20	21	99	22	109	10	
1,2-Dichloroethane	ug/L	ND	20	21	103	22	110	7	
trans-1,2-Dichloroethene	ug/L	ND	20	20	102	22	111	8	
Chloroform	ug/L	ND	20	18	93	20	99	6	
1,2-Dichloroethane	ug/L	ND	20	19	97	21	105	8	
1,1,1-Trichloroethane	ug/L	ND	20	21	103	21	106	3	
Carbon Tetrachloride	ug/L	ND	20	19	97	20	102	5	
Bromodichloromethane	ug/L	ND	20	19	94	21	103	9	
1,2-Dichloropropane	ug/L	ND	20	19	95	20	103	8	
cis-1,3-Dichloropropene	ug/L	ND	20	20	101	22	110	9	
Trichloroethene	ug/L	2.7	20	19	82	20	89	8	
Dibromochloromethane	ug/L	ND	20	21	104	22	112	7	
1,1,2-Trichloroethane	ug/L	ND	20	20	103	22	109	6	
trans-1,3-Dichloropropene	ug/L	ND	20	20	100	21	107	7	
Bromoform	ug/L	ND	20	21	106	22	111	5	
Tetrachloroethene	ug/L	ND	20	19	96	21	103	7	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	21	105	22	112	6	
Chlorobenzene	ug/L	ND	20	20	100	22	110	10	
2-Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
1,4-Dichlorobenzene	ug/L	ND	20	21	107	21	105	2	
1,3-Dichlorobenzene	ug/L	ND	20	22	111	21	104	7	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70189253 70189261

Parameter	Units	70183991	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
1,4-Dichlorobenzene	ug/L	ND	20	23	115	19	96	18	
Bromochloromethane (S)					93		99		
1,4-Dichlorobutane(S)					92		97		

LABORATORY CONTROL SAMPLE & LCSD: 70188594

Parameter	Units	70188602 Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	20	16	79	18	90	13	
Bromomethane	ug/L	20	16	80	18	92	14	
Vinyl Chloride	ug/L	20	16	80	19	94	16	
Chloroethane	ug/L	20	16	79	18	90	13	
Methylene Chloride	ug/L	20	20	99	23	114	14	
Trichlorofluoromethane	ug/L	20	17	84	19	97	14	
1,1-Dichloroethene	ug/L	20	18	93	21	107	14	
1,1-Dichloroethane	ug/L	20	19	95	21	107	12	
trans-1,2-Dichloroethene	ug/L	20	19	95	22	109	14	
Chloroform	ug/L	20	18	89	20	98	10	
1,2-Dichloroethane	ug/L	20	20	98	21	105	7	
1,1,1-Trichloroethane	ug/L	20	20	98	21	106	8	
Carbon Tetrachloride	ug/L	20	19	94	20	102	8	
Bromodichloromethane	ug/L	20	20	98	20	102	4	
1,2-Dichloropropane	ug/L	20	19	97	20	102	5	
cis-1,3-Dichloropropene	ug/L	20	20	103	21	106	3	
Trichloroethene	ug/L	20	18	91	19	96	5	
Dibromochloromethane	ug/L	20	21	106	22	111	5	
1,1,2-Trichloroethane	ug/L	20	20	101	22	109	8	
trans-1,3-Dichloropropene	ug/L	20	20	102	22	108	6	
Bromoform	ug/L	20	22	109	22	113	4	
Tetrachloroethene	ug/L	20	19	95	20	102	7	
1,1,2,2-Tetrachloroethane	ug/L	20	21	105	22	108	3	
Chlorobenzene	ug/L	20	20	101	22	112	10	
2-Chloroethyl Vinyl Ether	ug/L	20	25	127	21	107	17	
1,2-Dichlorobenzene	ug/L	20	20	102	23	114	11	
1,3-Dichlorobenzene	ug/L	20	20	102	23	113	10	
1,4-Dichlorobenzene	ug/L	20	20	103	23	117	13	
Bromochloromethane (S)				89		98		
1,4-Dichlorobutane(S)				91		98		



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James & Moore, Sacramento
801 Folsom Boulevard
Suite 200
Sacramento, CA 95826

PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

Attn: Mr. Jim Brake
Phone: (916)387-8800

QC Batch ID: 5371

QC Batch Method: EPA 8010/20

Date of Batch: 07/26/95

Associated PACE Samples:

70186770	70186788	70186796	70186804	70186820
70186846	70186853	70186861	70186879	

METHOD BLANK: 70197090

Associated PACE Samples:

70186770	70186788	70186796	70186804
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Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
Methylene Chloride	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	0.5	
1,1-Dichloroethane	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Benzene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	
Toluene	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
Ethylbenzene	ug/L	ND	0.5	



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PACE Project Number: 702306

Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70197090

Associated PACE Samples:

70186770

70186788

70186796

70186804

Parameter	Units	Method Blank Result	PRL	Footnotes
Bromoform	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	0.5	
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	110		
a,a,a-Trifluorotoluene (S)	%	104		
1,4-Dichlorobutane(S)	%	116		

METHOD BLANK: 70199245

Associated PACE Samples:

70186820

70186846

70186853

70186861

70186879

Parameter	Units	Method Blank Result	PRL	Footnotes
Chloromethane	ug/L	ND	1.0	
Vinyl Chloride	ug/L	ND	1.0	
Bromomethane	ug/L	ND	1.0	
Chloroethane	ug/L	ND	1.0	
Trichlorofluoromethane	ug/L	ND	1.0	
1,1-Dichloroethene	ug/L	ND	0.5	
Methylene Chloride	ug/L	ND	1.0	
trans-1,2-Dichloroethene	ug/L	ND	0.5	
1,1-Dichloroethane	ug/L	ND	0.5	
Chloroform	ug/L	ND	0.5	
1,1,1-Trichloroethane	ug/L	ND	0.5	
Carbon Tetrachloride	ug/L	ND	0.5	
Benzene	ug/L	ND	0.5	
1,2-Dichloroethane	ug/L	ND	0.5	
cis-1,3-Dichloropropene	ug/L	ND	0.5	
Trichloroethene	ug/L	ND	0.5	
1,2-Dichloropropane	ug/L	ND	0.5	
Bromodichloromethane	ug/L	ND	0.5	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

METHOD BLANK: 70199245
Associated PACE Samples:

70186820 70186846 70186853 70186861 70186879

Parameter	Units	Method Blank Result	PRL	Footnotes
1,1-Duene	ug/L	ND	0.5	
1,1,2-Trichloroethane	ug/L	ND	0.5	
trans-1,3-Dichloropropene	ug/L	ND	0.5	
Tetrachloroethene	ug/L	ND	0.5	
Dibromochloromethane	ug/L	ND	0.5	
Chlorobenzene	ug/L	ND	0.5	
Ethylbenzene	ug/L	ND	0.5	
Bromoform	ug/L	ND	0.5	
1,1,2,2-Tetrachloroethane	ug/L	ND	0.5	
2-Chloroethyl Vinyl Ether	ug/L	ND	0.5	
Xylene (Total)	ug/L	ND	0.5	
1,3-Dichlorobenzene	ug/L	ND	0.5	
1,4-Dichlorobenzene	ug/L	ND	0.5	
1,2-Dichlorobenzene	ug/L	ND	0.5	
cis-1,2-Dichloroethene	ug/L	ND	0.5	
Bromochloromethane (S)	%	112		
a,a,a-Trifluorotoluene (S)	%	107		
1,1-Dichlorobutane(S)	%	113		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70199252 70199260

Parameter	Units	70187760	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
Chloromethane	ug/L	ND	20	20	103	18	90	13	
Vinyl Chloride	ug/L	ND	20	21	104	20	98	6	
Bromomethane	ug/L	ND	20	26	132	24	118	11	
Chloroethane	ug/L	ND	20	24	119	22	111	7	
Trichlorofluoromethane	ug/L	ND	20	23	113	21	107	5	
1,1-Dichloroethene	ug/L	14	20	31	87	30	82	6	
Methylene Chloride	ug/L	ND	20	20	99	19	97	2	
trans-1,2-Dichloroethene	ug/L	ND	20	21	105	20	101	4	
1,2-Dichloroethane	ug/L	8.1	20	27	94	26	89	5	
Chloroform	ug/L	ND	20	21	106	20	102	4	
1,1,1-Trichloroethane	ug/L	ND	20	22	109	21	104	5	
Carbon Tetrachloride	ug/L	ND	20	22	109	21	103	6	
1,2-Dichloroethene	ug/L	ND	20	21	106	21	103	3	
1,1-Dichloroethane	ug/L	ND	20	21	107	21	104	3	

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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 70199252 70199260									
Parameter	Units	70187760	Spike Conc.	Matrix Spike Result	Spike % Rec	Matrix Sp. Dup. Result	Spike Dup % Rec	RPD	Footnotes
cis-1,3-Dichloropropene	ug/L	ND	20	21	105	20	103	2	
Trichloroethene	ug/L	ND	20	22	109	21	104	5	
1,2-Dichloropropane	ug/L	ND	20	22	108	21	105	3	
Bromodichloromethane	ug/L	ND	20	24	120	23	117	3	
Toluene	ug/L	ND	20	21	105	21	104	1	
1,1,2-Trichloroethane	ug/L	ND	20	21	106	21	106	0	
trans-1,3-Dichloropropene	ug/L	ND	20	22	108	21	106	2	
Tetrachloroethene	ug/L	ND	20	21	104	20	100	4	
Dibromochloromethane	ug/L	ND	20	24	120	23	117	3	
Chlorobenzene	ug/L	ND	20	21	107	22	110	3	
Ethylbenzene	ug/L	ND	20	22	108	21	107	1	
Bromoform	ug/L	ND	20	23	117	24	121	3	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	21	104	22	108	4	
2-Chloroethyl Vinyl Ether	ug/L	ND	20	ND	0	ND	0	0	
Xylene (Total)	ug/L	ND	60	64	107	63	105	2	
1,3-Dichlorobenzene	ug/L	ND	20	21	105	21	105	0	
1,4-Dichlorobenzene	ug/L	ND	20	21	105	21	105	0	
1,2-Dichlorobenzene	ug/L	ND	20	21	105	21	106	1	
Bromochloromethane (S)					108		103		
a,a,a-Trifluorotoluene (S)					101		99		
1,4-Dichlorobutane(S)					107		110		

LABORATORY CONTROL SAMPLE & LCSD: 70197108 70197116									
Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes	
Chloromethane	ug/L	20	16	79	15	76	4		
Vinyl Chloride	ug/L	20	21	107	18	92	15		
Bromomethane	ug/L	20	21	107	19	95	12		
Chloroethane	ug/L	20	21	105	20	101	4		
Trichlorofluoromethane	ug/L	20	22	108	21	104	4		
1,1-Dichloroethene	ug/L	20	21	104	20	102	2		
Methylene Chloride	ug/L	20	20	101	20	98	3		
trans-1,2-Dichloroethene	ug/L	20	21	104	20	101	3		
1,1-Dichloroethane	ug/L	20	21	105	20	102	3		
Chloroform	ug/L	20	21	105	21	103	2		
1,1,1-Trichloroethane	ug/L	20	21	105	21	104	1		
Carbon Tetrachloride	ug/L	20	21	105	21	104	1		
Benzene	ug/L	20	21	105	21	105	0		
1,2-Dichloroethane	ug/L	20	21	105	21	104	1		

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PACE Project Number: 702306

Client Project ID: Union Pacific Railroad-Sac.

LABORATORY CONTROL SAMPLE & LCSD: 70197108

70197116

Parameter	Units	Spike Conc.	LCS Result	Spike % Rec	LCSD Result	Spike Dup % Rec	RPD	Footnotes
cis-1,3-Dichloropropene	ug/L	20	21	104	20	101	3	
Trichloroethene	ug/L	20	21	106	21	106	0	
1,2-Dichloropropane	ug/L	20	21	106	21	104	2	
Bromodichloromethane	ug/L	20	24	118	24	121	3	
Boluene	ug/L	20	21	105	21	104	1	
1,1,2-Trichloroethane	ug/L	20	21	107	21	105	2	
trans-1,3-Dichloropropene	ug/L	20	21	107	21	105	2	
Tetrachloroethene	ug/L	20	20	101	20	101	0	
Bromochloromethane	ug/L	20	24	119	23	117	2	
Chlorobenzene	ug/L	20	22	109	23	114	4	
Ethylbenzene	ug/L	20	22	108	21	106	2	
Bromoform	ug/L	20	24	122	24	121	1	
1,1,2,2-Tetrachloroethane	ug/L	20	21	105	21	103	2	
Chloroethyl Vinyl Ether	ug/L	20	23	114	19	96	17	
Xylene (Total)	ug/L	60	64	106	63	105	1	
1,3-Dichlorobenzene	ug/L	20	21	105	20	102	3	
1,4-Dichlorobenzene	ug/L	20	21	106	21	104	2	
1,2-Dichlorobenzene	ug/L	20	21	106	21	105	1	
Bromochloromethane (S)				106		105		
a,a,a-Trifluorotoluene (S)				102		101		
1,4-Dichlorobutane(S)				108		109		



REPORT OF LABORATORY ANALYSIS

DATE: 08/04/95
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PACE Project Number: 702306
Client Project ID: Union Pacific Railroad-Sac.

QUALITY CONTROL DATA PARAMETER FOOTNOTES

The Quality Control Sample Final Results listed above have been rounded to reflect an appropriate number of significant figures. Consistent with EPA guidelines unrounded concentrations have been used to calculate % Rec and RPD values.

ND	Not Detected
NC	Not Calculable
PRL	PACE Reporting Limit
RPD	Relative Percent Difference
(S)	Surrogate

CHAIN-OF-CUSTODY RECORD
Analytical Request

Client DAMES & MOORE
Address 8801 FOLSOM BLVD
SAC, CA 95826
Phone (916) 387-8800

Report To: TONY MILDING
Bill To: Same As
P.O. # / Billing Reference
Project Name / No. 00173-080-044-632

Pace Client No.
Pace Project Manager
Pace Project No.
*Requested Due Date:

Sampled By (PRINT): Greg Fergald
Sampler Signature Greg Fergald Date Sampled 7-17-95 to 7-18-95

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES					ANALYSES REQUEST	REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA			
1	~~ER-26~~ ER-26	1415	W	1868534	4				✓		✓ ✓	RECEIVED D&M LABORATORIES 1995 JUL 19 AM 10:41
2	TB-07-17-95	0700	W	1868531	2				✓		✓ ✓	
3	FB-2	1415	W	1868539	4				✓		✓ ✓	
4												
5												
6												
7												
8												

COOLER NOS.	BAILERS	SHIPMENT METHOD		ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
		OUT/DATE	RETURNED/DATE					

Additional Comments

UP SACRAMENTO 1/4ly H₂O Samples

James N. Babb

7/19/95 1230



ENVIRONMENTAL LABORATORIES

Client DAMES & MOORE
Address 8801 Folsom Blvd
SACRAMENTO, Ca 95826
Phone (916) 387-8800

Report To: TONY MINDLING
Bill To: SAME AS
P.O. # / Billing Reference
Project Name / No. 00173-080-044-632

CHAIN-OF-CUSTODY RECORD
Analytical Request

Pace Client No.
Pace Project Manager
Pace Project No.
*Requested Due Date:

Sampled By (PRINT):

Sampler Signature Greg Fernald Date Sampled 7-17-95 & 7-18-95

ITEM NO.	SAMPLE DESCRIPTION	TIME	MATRIX	PACE NO.	NO. OF CONTAINERS	PRESERVATIVES					ANALYSES REQUEST						REMARKS
						UNPRESERVED	H ₂ SO ₄	HNO ₃	VOA								
1	MW-13	1034	W	186776			✓	✓			✓	✓		✓			RECEIVED D&M LABORATORIES 1995 JUL 19 AM 10:41
2	MW-130	-		186788				✓			✓	✓					
3	MW-41	1204		186796					✓		✓	✓					
4	MW-14	1338		186804				✓	✓		✓	✓	✓	✓			
5	MW-140	-		186812				✓	✓		✓		✓	✓			
6	MW-12	1507		186820				✓	✓		✓	✓	✓				
7	MW-27	1241		186838				✓	✓		✓			✓			
8	MW-26	1351		186846					✓		✓	✓					

COOLER NOS.	BAILERS	SHIPMENT METHOD	ITEM NUMBER	RELINQUISHED BY / AFFILIATION	ACCEPTED BY / AFFILIATION	DATE	TIME
		OUT/DATE	RETURNED/DATE				

Additional Comments

UP SACRAMENTO 1/4ly H₂O Sampling

Jamin Bbb 7/19 1230

SEE REVERSE SIDE FOR INSTRUCTIONS