

JUNE, 1994

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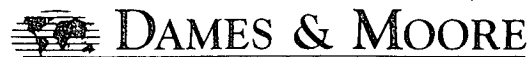
TRANSMITTAL OF SECOND QUARTER 1994
GROUNDWATER MONITORING DATA
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA



DAMES & MOORE

SAC110.21

Project No. 00173-080-044
June 1994



8801 FOLSOM BOULEVARD, SUITE 200, SACRAMENTO, CALIFORNIA 95826
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June 2, 1994

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

Attention: Mr. Jose Salcedo
Project Manager

Re: Transmittal of Second Quarter 1994
Groundwater Monitoring Data
Union Pacific Railroad Yard
Sacramento, California
Project No. 00173-080-044

Dear Mr. Salcedo:

At the request of Union Pacific Railroad Company (UPRR), Dames & Moore is forwarding the enclosed Transmittal of Second Quarter 1994 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) 387-7530.

Sincerely,

DAMES & MOORE

Jim Brake, R.G.
Project Manager

FOR Mark Eisen
Project Hydrogeologist

Enclosure

cc: Distribution List

SAC110.21

**DISTRIBUTION LIST: UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA
PROJECT NUMBER 00173-080-044**

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SACRAMENTO, CALIFORNIA
PROJECT NUMBER 00173-080-044**

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TRANSMITTAL OF FIRST QUARTER 1994
GROUNDWATER MONITORING DATA
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

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GROUNDWATER ELEVATION DATA, 1988-1994
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW-1	MW-2	MW-3	MW-4	MW-5	MW-6	MW-7	MW-8	MW-11	MW-12	MW-13
02/19/88	0.00	-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	-7.5	-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

TABLE 1
GROUNDWATER ELEVATION DATA, 1988-1994
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW-14	MW-15	MW-16	MW-17	MW-18	MW-19	MW-20	MW-21	MW-22	MW-23	MW-24
10/09/89	-5.55	-5.56	-5.56	-6.03	-6.09	-6.77	-6.85	-6.43	-6.41	-6.10	-6.10
02/21/90	-4.31	-4.29	-4.29	-4.82	-4.95	-5.82	-5.91	-5.35	-5.33	-4.96	-4.94
06/15/90	-4.80	-4.79	-4.79	-5.28	-5.36	-6.05	-6.12	-5.64	-5.62	-5.30	-5.27
09/20/90	-6.26	-6.26	-6.25	-6.69	-6.76	-7.37	-7.45	-7.07	-7.04	-6.77	-6.75
02/05/91	-6.76	-6.71	-6.71	-7.23	-7.29	-7.97	-8.03	-7.55	-7.53	-7.22	-7.18
04/22/91	-5.27	-5.22	-5.23	-5.77	-5.85	-6.57	-6.65	-6.13	-6.13	-5.80	-5.77
07/30/91	-6.53	-6.57	-6.55	-7.00	-7.06	-7.70	-7.76	-7.38	-7.35	-7.09	-7.07
12/27/91	-7.60	-7.57	-7.57	-8.02	-8.08	-8.69	-8.76	-8.33	-8.32	-8.04	-8.02
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	-5.8	-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

TABLE 1
GROUNDWATER ELEVATION DATA, 1988-1994
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

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

TABLE 1
GROUNDWATER ELEVATION DATA, 1988-1994
(Elevation in feet mean sea level datum)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

DATE	MW-36	MW-37	MW-38	MW-39	MW-40	MW-41	MW-42	MW-43	MW-44
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	--

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

--- Prior to well installation.

-- Not measured

** Extraction well for groundwater treatment system. Unable to measure water level in this well.

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-01	03/03/88	4.0	--	--	--
	04/14/88	5.0	30	--	--
	09/20/89	--	--	--	--
	05/10/90	9.0	--	--	--
	09/05/90	--	--	--	--
	01/21/91	--	--	--	--
	04/22/91	--	5.0	130	--
	01/29/92	--	8.0	--	--
	07/09/93	NA	NA	--	NA
	01/17/94	NA	NA	NA	--
MW-02	03/03/88	3.0	--	--	--
	04/14/88	--	120	--	--
	09/20/89	--	--	--	--
	05/17/90	1.0	--	20	--
	09/11/90	--	--	--	--
	01/22/91	--	--	--	--
	04/22/91	4.0	5.7	140	--
	08/01/91	--	--	--	--
	11/07/91	--	--	--	--
	02/07/92	--	--	--	--
	08/25/92	--	--	--	1.0
	01/19/93	--	6.0	12	--
	07/01/93	NA	NA	6.3	NA
	01/05/94	NA	NA	--	NA
MW-03	03/03/88	4.0	--	--	--
	04/14/88	3.0	40	--	--
	09/20/89	--	--	--	16
	02/13/90	NA	NA	NA	20
	05/10/90	9.0	--	--	20
	09/05/90	--	--	--	--
	01/22/91	--	--	--	--
	04/23/91	--	1.5	--	--
	08/01/91	--	--	--	--
	01/29/92	--	--	--	--
	07/09/93	NA	NA	NA	5.7
	01/17/94	NA	NA	--	NA

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-04	03/03/88	6.0	--	140	--
	04/18/88	5.0	10.0	160	--
	09/20/89	--	--	34	12
	02/15/90	NA	NA	NA	10
	05/23/90	--	4.5	99	--
	09/18/90	--	--	71	--
	05/01/91	6.1	--	11	--
	02/05/91	--	33	200	--
	08/14/91	5.0	--	--	--
	11/07/91	5.0	--	--	--
	01/28/92	--	--	--	--
	08/26/92	--	14	--	--
	01/20/93	--	14	8.0	--
	04/15/93	NA	NA	8.9	NA
	04/18/93	NA	NA	5.0	NA
	04/23/93	NA	NA	6.5	NA
	04/30/93	NA	NA	5.0	NA
	05/06/93	NA	NA	7.1	NA
	05/14/93	NA	NA	10	NA
	06/17/93	NA	NA	14	NA
	07/12/93	NA	NA	6.7	NA
	08/03/93	NA	NA	10	NA
	09/10/93	NA	NA	12	NA
	10/07/93	NA	NA	8.0	NA
	11/08/93	NA	NA	7.8	NA
	01/14/94	NA	NA	7.8	NA
	04/07/94	NA	NA	9.6	NA
MW-05	03/04/88	--	10	--	--
	04/15/88	--	--	--	--
	09/20/89	9.3	--	159	--
	05/17/90	2.0	--	70	--
	09/12/90	--	14	--	--
	01/22/91	--	11	100	--
	04/23/91	--	7.2	81	--
	08/12/91	--	--	--	--
	11/13/91	--	--	--	--
	01/28/92	--	--	--	--
	01/22/93	--	7.0	42	--
	01/17/94	NA	--	47	NA

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-06	03/04/88	5.0	--	--	--
	04/15/88	--	40	--	--
	09/20/89	--	7.1	39	--
	05/17/90	2.0	--	100	--
	09/11/90	--	21	42	--
	01/24/91	7.0	15	--	--
	04/23/91	5.8	5.4	40	--
	08/12/91	--	--	120	1.0
	11/13/91	--	7.0	110	--
	01/28/92	--	--	180	--
	08/28/92	--	5.0	110	--
	01/22/93	--	--	16	--
	07/09/93	NA	NA	36	NA
	01/17/94	NA	--	36	NA
MW-07	03/04/88	4.0	10	50	--
	04/15/88	9.0	470	230	--
	09/15/89	--	5.0	405	--
	05/23/90	--	111	215	10
	09/07/90	--	15	250	--
	01/30/91	7.0	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	NA	NA	--	NA
	01/29/93	--	17	47	--
	07/07/93	NA	10	62	NA
	01/10/94	NA	12	71	--
MW-08	03/03/88	--	--	--	--
	04/18/88	5.0	40	--	--
	09/20/89	--	--	--	--
	02/13/90	NA	NA	NA	30
	05/23/90	--	--	12	24
	09/13/90	--	--	--	--
	01/30/91	6.0	--	--	70
	04/26/91	--	8.8	29	--
	08/12/91	--	--	--	--
	11/11/91	--	--	--	--
	01/28/92	--	6.0	--	--
	08/28/92	--	--	--	--
	01/27/93	--	--	19	--
	01/17/94	NA	NA	21	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-11	09/06/89	9.7	27	160	57
	02/15/90	NA	NA	NA	20
	05/18/90	--	47	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	--	--
	07/02/93	NA	55	NA	NA
	01/05/94	NA	46	8.7	--
MW-12	09/11/89	28	18	15	--
	02/15/90	NA	NA	NA	--
	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	--	5.0	--	--
	11/07/91	--	--	--	--
	01/28/92	--	--	120	--
	08/26/92	--	11	--	--
	10/26/92	NA	NA	--	NA
	01/20/93	--	9.0	85	--
	07/02/93	NA	NA	93	NA
	01/07/94	--	26	94	--
MW-13	09/13/89	18	--	14	--
	02/15/90	NA	NA	NA	--
	05/25/90	30	--	10	--
	09/18/90	36	--	--	--
	02/05/91	20	--	100	--
	04/30/91	33	--	7.0	--
	08/07/91	40	--	--	1.0
	11/07/91	38	--	--	--
	02/07/92	43	--	--	--
	08/26/92	42	--	2.0	--
	01/20/93	21	--	6.0	--
	07/02/93	33	NA	NA	NA
	01/07/94	21	NA	8.4	NA

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-14	09/13/89	--	--	169	--
	02/15/90	NA	NA	NA	--
	05/22/90	--	16	174	--
	09/18/90	--	13	160	--
	02/04/91	--	21	300	--
	05/01/91	--	37	98	--
	08/14/91	6.0	36	--	--
	11/22/91	--	16	--	--
	02/07/92	--	20	--	--
	08/27/92	--	22	--	--
	01/20/93	--	36	12	3.0
	07/02/93	NA	NA	14	NA
MW-15	09/07/89	6.0	--	--	--
	02/07/90	NA	NA	NA	30
	05/16/90	4.0	30	70	--
	09/14/90	5.0	--	52	--
	01/24/91	--	12	--	--
	04/25/91	--	11	51	--
	08/05/91	--	18	--	--
	11/05/91	--	7.0	--	--
	01/30/92	--	6.0	--	--
	08/27/92	--	--	--	--
	01/25/93	13	--	9.6	--
	07/09/93	NA	NA	73	NA
MW-16	01/17/94	NA	5.2	55	--
	09/07/89	6.0	--	--	--
	02/07/90	NA	NA	NA	30
	05/16/90	2.0	--	--	--
	09/14/90	--	10	--	--
	01/24/91	7.0	11	--	--
	04/25/91	--	5.7	20	--
	08/13/91	5.0	5.0	--	--
	11/07/91	--	--	--	--
	01/30/92	--	5.0	--	--
	08/27/92	--	9.0	--	--
	01/21/93	--	7.0	--	--
	01/06/94	NA	5.2	--	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-17	09/21/89	--	--	--	--
	02/07/90	NA	NA	NA	30
	05/18/90	--	7.2	67	12
	09/13/90	--	--	50	--
	01/25/91	7.0	9.0	200	--
	04/29/91	--	6.9	170	--
	08/06/91	--	5.0	170	--
	11/05/91	--	--	--	--
	01/30/92	--	6.0	110	--
	08/27/92	--	7.0	200	--
	01/25/93	--	--	34	--
	07/09/93	NA	NA	70	NA
	01/17/94	NA	NA	79	--
MW-18	09/21/89	--	--	10	--
	02/07/90	NA	NA	NA	40
	05/18/90	--	5.5	13	21
	09/13/90	--	--	--	--
	01/25/91	6.0	7.0	--	--
	04/29/91	--	6.5	24	--
	08/13/91	6.0	6.0	--	--
	11/05/91	--	--	--	--
	01/30/92	--	--	--	--
	08/27/92	--	7.0	--	--
	01/21/93	--	12	--	--
	01/06/94	NA	NA	--	--
MW-19	09/14/89	--	--	14	--
	02/13/90	NA	NA	NA	20
	05/14/90	8.0	--	60	50
	09/07/90	--	--	45	--
	01/24/91	10	--	--	--
	04/29/91	--	16	69	--
	08/05/91	--	5.0	--	--
	11/11/91	--	--	120	--
	01/30/92	--	5.0	170	--
	08/28/92	--	--	370	--
	01/25/93	--	8.4	84	--
	07/09/93	NA	NA	96	NA
	01/16/94	--	--	100	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-20	09/14/89	--	--	--	--
	02/13/90	NA	NA	NA	--
	05/14/90	8.0	--	--	40
	09/07/90	--	--	--	--
	01/24/91	7.0	--	--	--
	04/29/91	--	15	5.3	--
	08/14/91	6.0	8.0	--	--
	11/11/91	--	--	--	--
	01/30/92	--	--	--	--
	08/28/92	--	7.0	--	--
	01/25/93	--	9.8	26	--
	01/06/94	NA	5.4	NA	--
MW-21	09/08/89	8.4	--	15	--
	05/15/90	6.0	--	380	40.0
	09/07/90	--	29.0	300	--
	01/23/91	5.0	7.0	300	--
	04/25/91	--	8.4	310	--
	08/07/91	--	--	190	--
	11/11/91	--	--	400	--
	01/30/92	--	5.0	370	--
	08/28/92	--	--	350	--
	01/29/93	--	--	200	--
	07/08/93	NA	NA	140	NA
	01/16/94	NA	--	400	--
MW-22	09/08/89	24	--	17	--
	05/15/90	9.0	--	--	20
	09/07/90	--	--	--	--
	01/23/91	--	--	--	--
	04/25/91	--	6.9	--	--
	08/14/91	6.0	--	--	--
	11/11/91	--	--	--	--
	01/30/92	6.0	5.0	--	1.0
	01/29/93	--	5.5	6.6	--
	01/16/94	5.9	NA	NA	12

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-23	09/08/89	9.7	--	--	--
	05/15/90	3.0	--	450	30
	09/06/90	--	--	250	--
	01/23/91	--	--	400	--
	04/23/91	--	6.5	360	--
	08/02/91	--	7.0	250	--
	11/11/91	--	--	180	--
	01/24/92	--	--	470	--
	08/28/92	--	--	280	--
	01/22/93	--	6.0	200	--
	07/08/93	NA	NA	170	NA
	01/16/94	NA	NA	170	--
MW-24	09/08/89	15	--	--	--
	05/15/90	5.0	--	420	30
	09/06/90	--	--	110	--
	01/23/91	--	--	100	2.0
	04/24/91	--	2.9	240	--
	08/01/91	--	--	300	--
	11/13/91	--	--	130	--
	01/24/92	--	--	190	--
	01/22/93	--	--	98	--
	07/08/93	NA	NA	190	NA
	01/16/94	--	NA	140	--
MW-25	09/11/89	11	--	--	--
	05/16/90	3.0	--	200	--
	09/12/90	--	11	130	--
	01/29/91	8.0	10	300	--
	04/24/91	--	--	240	--
	08/02/91	--	9.0	210	--
	11/13/91	--	7.0	250	--
	01/23/92	--	5.0	910	--
	09/01/92	--	--	760	--
	01/27/93	--	5.5	330	--
	07/08/93	NA	NA	220	NA
	01/16/94	--	--	220	NA

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-26	09/11/89	11	--	--	--
	05/16/90	--	--	200	--
	09/12/90	--	--	260	--
	01/29/91	--	--	300	--
	04/24/91	--	8.0	240	--
	08/13/91	--	6.0	250	--
	11/13/91	--	--	750	--
	01/27/92	--	--	720	--
	09/01/92	--	10	--	--
	10/23/92	NA	NA	160	NA
	01/28/93	--	13	110	--
	07/07/93	NA	NA	120	NA
	01/10/94	--	20	100	NA
MW-27	09/15/89	--	19	--	--
	05/21/90	--	--	67	23
	09/17/90	--	--	49	--
	01/29/91	--	8.0	--	--
	04/24/91	--	6.1	38	--
	08/13/91	--	--	--	1.0
	11/13/91	--	--	--	--
	01/23/92	--	--	--	--
	09/01/92	--	6.0	--	--
	01/28/93	--	8.3	46	--
	07/08/93	NA	NA	91	NA
	01/16/94	NA	--	68	--
MW-28	02/15/90	NA	NA	NA	--
	05/25/90	--	4.4	26	16
	09/19/90	--	49	52	--
	02/01/91	--	10	--	1.0
	04/30/91	--	6.0	32	--
	08/13/91	--	5.0	--	2.0
	11/05/91	--	--	--	--
	01/30/92	--	--	--	--
	08/31/92	--	9.0	--	2.0
	01/13/93	--	17	--	--
	01/11/94	NA	9.1	83	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-29	02/15/90	NA	NA	NA	20
	05/25/90	--	--	15	--
	09/06/90	--	--	--	--
	02/01/91	--	--	--	10
	04/30/91	--	3.0	58	--
	08/15/91	--	--	--	--
	11/05/91	--	--	--	--
	01/30/92	--	--	--	--
	08/31/92	--	--	--	--
	01/14/93	--	--	--	--
	01/11/94	NA	NA	18	10
MW-30	02/15/90	NA	NA	NA	20
	05/24/90	5.0	--	174	63
	09/05/90	--	--	190	--
	02/04/91	--	--	200	2.0
	04/30/91	--	7.9	130	--
	08/15/91	--	8.0	--	--
	11/05/91	--	6.0	--	--
	01/31/92	--	9.0	--	--
	08/31/92	--	8.0	--	--
	01/14/93	--	6.0	--	--
	07/06/93	NA	NA	26	NA
	01/10/94	NA	NA	17	--
MW-31	05/24/90	9.0	--	201	30.0
	09/19/90	--	--	200	--
	02/01/91	--	--	200	1.0
	05/01/91	--	13	73	--
	08/15/91	--	21	--	--
	11/22/91	--	16	--	--
	01/31/92	--	13	--	1.0
	08/31/92	--	--	--	--
	01/21/93	--	--	10	--
	07/07/93	NA	NA	13	NA
	01/11/94	NA	6.0	8.5	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-32	05/24/90	--	7.4	169	10
	09/19/90	--	--	120	--
	02/01/91	--	40	200	4.0
	05/01/91	--	12	65	--
	08/16/91	--	--	--	--
	11/22/91	--	--	--	--
	01/29/92	--	--	--	--
	09/04/92	--	--	--	--
	01/26/93	13	6.1	46	--
	04/15/93	NA	NA	21	NA
	04/18/93	NA	NA	13	NA
	04/23/93	NA	NA	18	NA
	04/30/93	NA	NA	18	NA
	05/06/93	NA	NA	17	NA
	05/14/93	NA	NA	19	NA
	06/17/93	NA	NA	150	NA
	07/12/93	NA	NA	20	NA
	08/03/93	NA	NA	23	NA
	09/10/93	NA	NA	24	NA
	10/06/93	NA	NA	20	NA
	11/08/93	NA	NA	20	NA
	01/14/94	NA	NA	18	NA
	04/07/94	NA	NA	18	NA
MW-33	05/18/90	--	--	17	35
	09/14/90	--	--	--	--
	01/30/91	8.0	200	--	--
	04/30/91	--	3.5	56	--
	08/07/91	--	5.0	--	1.0
	11/05/91	--	--	--	--
	01/24/92	--	--	--	--
	08/26/92	--	--	--	--
	01/14/93	--	--	--	--
	07/02/93	NA	NA	15	NA
	01/06/94	NA	--	--	NA
MW-34	07/02/91	--	7.0	300	--
	08/16/91	--	6.0	230	--
	11/13/91	--	--	190	--
	01/23/92	--	--	160	--
	09/01/92	--	5.0	--	16
	10/26/92	NA	NA	130	NA
	01/21/93	--	--	83	--
	07/07/93	NA	NA	80	NA
	01/12/94	NA	NA	63	--

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-35	07/02/91	--	5.0	--	--
	08/08/91	6.0	9.0	--	--
	11/13/91	--	--	--	--
	01/23/92	--	--	--	--
	09/01/92	--	--	--	--
	01/21/93	--	--	8.0	--
MW-36	12/12/91	--	--	--	--
	01/23/92	--	--	110	--
	09/04/92	--	10	120	--
	10/21/92	NA	NA	--	NA
	01/27/93	--	11	93	--
	04/13/93	NA	NA	32	NA
	07/07/93	NA	NA	79	NA
	09/28/93	NA	NA	87	NA
	01/12/94	--	--	NA	--
MW-37	12/12/91	--	--	--	--
	01/23/92	--	--	--	--
	09/04/92	--	--	--	--
	01/27/93	--	--	--	--
	07/07/93	NA	NA	12	NA
	09/28/93	NA	NA	93	NA
	01/12/94	--	--	NA	--
MW-38	12/12/91	--	--	--	--
	01/24/92	--	--	--	--
	09/04/92	--	7.0	100	--
	01/26/93	--	7.7	86	--
	04/09/93	NA	NA	73	NA
	07/06/93	NA	NA	80	NA
	09/27/93	NA	NA	92	NA
	01/10/94	--	8.6	93	11
MW-39	06/28/91	10	17	--	1.0
	08/06/91	--	17	--	--
	11/13/91	--	--	--	--
	01/24/92	--	--	180	--
	09/04/92	--	10	170	--
	10/21/92	NA	NA	100	NA
	01/27/93	--	8.1	130	--
	07/06/93	NA	NA	280	NA
	01/12/94	NA	--	380	NA

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-40	06/28/91	5.0	4.0	--	--
	08/15/91	--	7.0	--	--
	11/22/91	--	5.0	--	--
	01/29/92	--	--	100	--
	08/31/92	--	5.0	--	--
	01/26/93	--	--	110	--
	07/15/93	NA	NA	93	NA
	01/11/94	--	NA	46	NA
MW-41	06/28/91	15	5.0	--	--
	08/12/91	7.0	--	--	--
	11/05/91	6.0	6.0	--	--
	01/31/92	7.0	7.0	--	--
	08/25/92	--	11	--	--
	01/20/93	--	9.0	--	--
	01/07/94	--	11	NA	NA
MW-42	06/28/91	8.0	--	200	1.0
	08/08/91	--	10	190	--
	11/07/91	--	--	160	--
	02/07/92	--	--	160	3.0
	08/25/92	--	5.0	--	12
	01/19/93	--	6.0	60	--
	07/01/93	NA	NA	72	NA
	01/05/94	--	--	61	--
MW-43	06/28/91	10	--	200	--
	11/07/91	--	--	160	--
	08/16/91	--	--	220	--
	02/07/92	--	--	180	--
	08/25/92	--	--	120	--
	08/25/92	--	--	120	--
	10/22/92	NA	NA	170	NA
	01/19/93	--	--	130	--
	07/01/93	NA	NA	140	NA
	01/05/94	--	NA	130	NA

TABLE 2
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988-1994
SELECTED METALS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	As	Cr	Ni	Pb
	MCL	50	50	100*	50
	Background Concentration ¹	0-20	1-20	1-12	<1-9
MW-44	10/27/92	5.0	9.0	--	--
	01/26/93	22	7.5	19	--
	04/09/93	--	9.0	8.7	--
	07/06/93	--	8.2	15	--
	09/27/93	--	8.1	13	--
	01/10/94	--	11	21	--

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

* Proposed EPA MCL for Nickel, effective 1/94.

-- Not detected.

NA Not analyzed.

¹ Background Concentration—Values were obtained from: Johnson, K.L., 1985. Chemical Quality of Groundwater in Sacramento and Western Placer Counties, California. U.S. Geological Survey Water Resources Investigation Report, 85-4164.

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-01	03/03/88	--	--	--	--	--	--	--	--	--	0.8	--	--	--	--	--
	09/20/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/10/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	09/05/90	--	--	--	--	--	--	--	--	--	1.0	--	--	--	--	--
	01/21/91	--	--	--	--	--	--	--	--	--	0.80	--	--	--	N/A	N/A
	01/29/92	--	--	--	--	--	--	--	--	--	1.7	--	--	--	N/A	N/A
	07/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/17/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
MW-02	03/03/88	--	--	--	--	--	--	--	--	--	0.6	--	--	--	280	--
	09/20/89	--	1.4	--	--	--	--	--	--	--	--	--	--	--	--	50*
	05/17/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/11/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/22/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	04/22/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	08/01/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	11/07/91+	8.4	1.2	8.3	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	02/07/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	05/26/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	08/25/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	10/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	01/19/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	04/07/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	07/01/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/21/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A
	01/05/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	04/12/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A
MW-03	03/03/88	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/20/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/10/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	09/05/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	01/22/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	08/01/91	--	--	--	--	--	--	--	--	N/A	--	--	--	--	N/A	N/A
	01/29/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	07/09/93	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	01/17/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-04	03/03/88	11	4.5	6	1.5	22	--	12	130	42	--	--	--	--	1100	300
	09/20/89	210	--	--	--	--	--	7.1	--	120	--	--	--	--	--	3000
	02/15/90	190	3.5	7.5	2.1	5.3	--	12	250	46	--	--	5.7	--	N/A	N/A
	05/23/90	130	4.9	2.1	6.3	4.1	--	5.8	5.5	45	--	--	4.9	--	--	650
	09/18/90	98	4.1	2.7	4.3	2.4	--	6	30	38	--	--	4.5	--	--	--
	02/05/91	17	--	--	--	1.2	--	6	45	16	--	--	4.2	--	N/A	N/A
	05/01/91	580	--	24	12	--	--	11	15	93	--	--	0.89	--	N/A	N/A
	08/14/91	--	0.6	13	2.5	--	--	13	27	--	--	--	1.4	--	N/A	N/A
	11/07/91	1200	26	8.7	26	--	--	19	40	--	--	--	--	--	N/A	N/A
	01/28/92	940	12	3.4	18	0.6	--	12	16	170	--	--	1.4	--	N/A	N/A
	05/29/92	210	7.5	9.3	6.7	2.4	--	15	110	20	--	--	7.8	--	N/A	N/A
	08/26/92	230	2.4	1.7	4.1	1.3	--	14	120	13	--	1.3	8.6	--	N/A	N/A
	10/20/92	260	--	--	--	--	--	--	32	--	--	--	--	--	N/A	N/A
	01/20/93	180	5.6	4.2	8.9	--	--	7.5	73	12	--	--	5.0	--	N/A	N/A
	04/17/93	350	35	93	18	1.3	--	8.8	37	20	--	--	6.1	--	N/A	2,300
	04/18/93	200	19	46	10	1.4	--	5.8	44	14	--	0.82	4.8	--	N/A	980
	04/23/93	160	16	32	8.4	1.4	--	5.0	39	9.2	--	--	3.8	--	N/A	--
	04/30/93	200	22	37	7.6	1.5	--	5.0	62	--	--	--	4.5	--	N/A	N/A
	05/06/93	200	30	30	9.7	1.4	--	4.8	42	10	--	--	3.9	--	N/A	1,100
	05/14/93	220	26	45	7.3	--	--	5.7	46	9.2	--	--	4.6	--	N/A	1,200
	06/17/93	270	40	50	9.7	1.4	--	5.2	66	7.9	--	--	3.2	--	N/A	1,400
	07/12/93	210	23	28	7.1	1.2	--	4.5	55	6.0	--	--	--	--	N/A	910
	08/03/93	170	27	31	9.2	1.3	--	4.5	64	5.7	--	--	2.9	--	N/A	N/A
	09/10/93	110	7.5	--	--	1.3	--	4.5	53	3.5	--	0.82	3.0	--	N/A	630
	09/24/93	93	8.7	--	--	--	--	--	42	--	--	--	--	--	N/A	N/A
	10/07/93	150	19	--	--	1.8	--	5.8	69	5.4	--	1.1	4.3	--	N/A	520
	11/08/93	110	15	21	5.1	1.6	--	5.0	65	4.4	--	1.2	3.7	--	N/A	750
	01/14/94	110	14	19	4.4	1.3	--	4.6	52	3.4	--	1.1	2.9	--	510	N/A
	04/07/94	120	14	19	3.7	1.5	--	3.6	53	2.7	--	1.3	2.7	--	N/A	660

TABLE 3

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ORGANIC COMPOUNDS (ug/l)

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B	T	X	E	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	Chloroform	PCE	TCE	CCL ₄	TPH	TPH/Gas
		1	1000	1,750	680	200	32	5	6	0.5	100	5	5	0.5	NE	NE
MW-05	03/04/88	---	---	---	---	---	---	---	---	---	4.9	---	---	---	---	---
	09/20/89	---	---	---	---	---	---	---	---	---	---	---	---	---	---	60
	05/17/90	---	---	---	---	---	---	---	---	---	2.6	---	---	---	---	---
	09/12/90	---	---	---	---	---	---	---	---	---	2.3	---	---	---	---	---
	08/12/91	---	---	---	---	---	---	---	---	---	---	---	---	---	N/A	N/A
	01/28/92	---	---	---	---	---	---	---	---	---	1.2	---	---	---	N/A	N/A
	01/22/93	---	---	---	---	---	---	---	---	---	---	---	---	---	N/A	N/A
	01/17/94	---	---	---	---	---	---	---	---	---	2.1	---	---	---	N/A	N/A
MW-06	03/04/88	---	---	---	---	---	---	---	---	---	0.6	---	---	---	---	---
	09/20/89	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	05/17/90	---	---	---	---	---	---	---	---	---	1.5	---	---	---	N/A	N/A
	09/11/90	---	---	---	---	---	---	---	---	---	2.0	---	---	---	---	---
	08/12/91	---	---	---	---	---	---	---	---	---	6.2	---	---	---	N/A	N/A
	01/28/92	---	---	---	---	---	---	---	---	---	2.1	---	---	---	N/A	N/A
	08/28/92	---	---	---	---	---	---	---	---	---	0.85	---	---	---	N/A	N/A
	01/22/93	---	---	---	---	---	---	---	---	---	---	---	---	---	N/A	N/A
	07/09/93	---	---	---	---	---	---	---	---	---	1.6	---	---	---	---	---
	01/17/94	---	---	---	---	---	---	---	---	---	1.8	---	---	---	N/A	N/A
MW-07	03/04/88	---	---	---	---	25	---	15	17	1.6	1.9	---	1.0	---	---	---
	09/15/89	---	---	---	---	26	---	15	0.5	3.1	1.1	---	1.1	---	---	50
	02/07/90	---	---	---	---	11	---	9.9	58	---	2.6	---	0.6	---	N/A	N/A
	05/17/90	---	---	---	---	9.7	---	9.2	8.1	---	3	---	---	---	---	---
	09/07/90	---	---	---	---	6.4	---	6.1	19	---	2.5	---	---	---	---	---
	01/30/91	N/A	N/A	N/A	N/A	5.1	---	4.3	15	---	2.6	---	---	---	N/A	N/A
	04/26/91	N/A	N/A	N/A	N/A	4.6	---	4.5	11	---	3.0	---	---	---	N/A	N/A
	08/07/91	---	---	---	---	8.1	---	12	28	---	4.1	---	---	---	N/A	N/A
	02/07/92	---	---	---	---	7.2	---	12	32	---	4.9	---	---	---	N/A	N/A
	06/02/92	---	---	---	---	4.2	---	6.8	21	---	4.1	---	---	---	N/A	N/A
	08/31/92	---	---	---	---	5.2	---	8.5	39	---	4.5	---	---	---	N/A	N/A
	10/23/92	---	---	---	---	3.7	---	5.9	21	---	4.7	---	---	---	N/A	N/A
	01/29/93	---	---	---	---	1.4	---	3.6	9.6	---	1.8	---	---	---	N/A	N/A
	04/14/93	N/A	N/A	N/A	N/A	1.9	---	3.7	9.8	---	4.0	---	---	---	N/A	N/A
	07/07/93	---	---	---	---	0.93	---	2.9	11	---	3.3	---	---	---	N/A	NA
	09/24/93	N/A	N/A	N/A	N/A	---	---	---	3.4	---	2.1	---	---	---	N/A	N/A
	01/10/94	---	---	---	---	---	---	1.3	6.2	---	2.2	---	---	---	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

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ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-08	03/03/88	--	--	--	--	--	--	0.9	--	--	--	0.8	--	--	--	--
	09/20/89	--	2.5	--	--	--	--	--	--	--	--	1.5	--	--	--	--
	05/23/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/13/90	--	--	--	--	0.6	--	--	3.8	--	--	--	--	--	--	--
	01/30/91	N/A	N/A	N/A	N/A	--	--	--	1.8	--	--	--	--	--	N/A	N/A
	04/26/91	N/A	N/A	N/A	N/A	--	--	--	1.8	--	--	3.2	--	--	N/A	N/A
	08/12/91	--	--	--	--	--	--	--	9.6	--	--	21.0	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	0.7	--	--	2.5	--	--	5.3	--	--	N/A	N/A
	01/28/92	--	--	--	--	--	--	--	1.8	--	--	8.8	--	--	N/A	N/A
	08/28/92	--	--	--	--	--	--	--	0.71	--	--	--	7.1	--	N/A	N/A
	01/27/93	--	--	--	--	--	--	--	0.61	--	--	3.7	--	--	N/A	N/A
	07/08/93	N/A	N/A	N/A	N/A	--	--	--	--	--	--	4.8	--	--	N/A	--
	01/17/94	--	--	--	--	--	--	--	--	--	0.60	2.8	--	--	N/A	N/A
MW-11	09/06/89	--	6.0	--	--	--	--	0.8	--	--	5.1	--	1.7	--	600	120
	02/15/90	--	--	--	--	--	--	--	8.3	--	0.6	--	0.5	--	N/A	N/A
	05/18/90	--	--	--	--	--	--	3.2	--	--	--	0.7	4.2	--	--	--
	09/17/90	--	--	--	--	1.7	--	6.2	18	--	--	--	2.4	--	--	--
	01/30/91	N/A	N/A	N/A	N/A	2.8	--	16	46	--	--	--	2.5	--	N/A	N/A
	04/26/91	N/A	N/A	N/A	N/A	4.5	--	19	62	--	--	--	3.5	--	N/A	N/A
	08/15/91	--	--	--	--	1.8	--	11	--	--	--	--	2.0	--	N/A	N/A
	11/07/91	N/A	N/A	N/A	N/A	1.0	--	7.2	9.9	0.6	--	--	1.1	--	N/A	N/A
	01/27/92	--	--	--	--	1.5	--	11	110	--	--	0.7	3.0	--	N/A	N/A
	06/02/92	--	--	--	--	1.5	0.5	7.6	54	--	--	--	3.8	--	N/A	N/A
	08/26/92	--	--	--	--	0.72	--	8.0	57	--	--	1.3	4.3	--	N/A	N/A
	10/20/92	--	--	--	--	0.51	--	4.7	37	--	--	0.68	2.6	--	N/A	N/A
	01/14/93	--	--	--	--	--	--	2.5	54	--	--	--	2.2	--	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
	07/02/93	--	--	--	--	0.71	--	3.5	45	--	--	0.65	2.9	--	NA	NA
	09/24/93	N/A	N/A	N/A	N/A	--	--	1.7	20	--	--	0.54	1.3	--	N/A	N/A
	01/05/94	--	--	--	--	--	--	1.7	15	--	--	--	1.7	--	N/A	N/A
	04/13/94	N/A	N/A	N/A	N/A	--	--	2.4	18	--	--	--	1.5	--	N/A	N/A

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Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-12	09/11/89	--	2.2	--	--	--	--	1.3	--	--	6.4	--	4	--	--	70
	10/13/89	0.8	--	--	--	--	--	4.9	26.3	--	4.5	--	5.7	--	N/A	N/A
	02/15/90	--	--	--	--	--	--	9.6	62	--	1.4	--	9	--	N/A	N/A
	05/22/90	--	--	--	--	--	--	9.2	1.4	--	0.6	--	9	--	--	--
	09/18/90	--	--	--	--	0.88	--	10	24	--	--	--	12	--	--	--
	02/04/91	--	--	--	--	--	--	15	47	--	--	--	14	--	N/A	N/A
	05/01/91	N/A	N/A	N/A	N/A	--	--	12	52	--	--	--	15	--	N/A	N/A
	08/15/91	--	0.6	--	--	0.7	--	13	27	--	--	--	15	--	N/A	N/A
	11/07/91	--	--	--	--	1.4	--	15	28	--	--	--	13	--	N/A	N/A
	01/28/92	0.6	--	--	--	0.8	--	23	120	--	--	0.6	19	--	N/A	N/A
	06/01/92	--	--	--	--	0.8	--	19	61	--	--	--	11	--	N/A	N/A
	08/26/92	--	--	--	--	0.64	--	31	94	--	--	0.93	16	--	N/A	N/A
	10/26/92	--	--	--	--	--	--	26	97	--	--	--	14	--	N/A	N/A
	01/20/93	--	--	--	--	0.60	--	21	78	--	--	--	9.1	--	N/A	N/A
	04/13/93**	700	52	88	47	--	--	23	52	19	--	--	13	--	N/A	N/A
	07/02/93	--	--	--	--	--	--	12.0	30.0	--	--	--	4.7	--	NA	NA
	09/22/93	--	--	--	--	--	--	11	42	--	--	--	2.5	--	N/A	N/A
	01/07/94	--	--	--	--	--	--	12	45	--	--	--	--	--	N/A	N/A
	04/13/94	--	--	--	--	--	--	16	42	--	--	--	2.1	--	N/A	N/A
MW-13	09/13/89	5,700	343	147	--	--	0.8	13.2	--	360	--	--	0.6	--	3100	51000
	11/02/89	6,700	210	88	50	--	--	20	24	270	--	--	--	--	N/A	N/A
	02/15/90	10,500	400	1600	150	--	--	40	55	200	--	--	--	--	N/A	N/A
	05/25/90	12,000	250	530	1200	--	--	35	1.8	250	--	--	--	--	2400	46000
	09/18/90	7,300	310	620	410	--	--	27	15	210	--	--	--	--	--	12000
	02/05/91	10,000	390	600	--	0.6	--	36	25	96	--	--	--	--	N/A	N/A
	04/30/91	7,900	260	520	340	0.5	--	17	14	120	--	--	--	--	N/A	N/A
	08/07/91	11,000	440	760	450	1.1	--	24	9.6	108	--	--	1.5	--	N/A	N/A
	11/07/91	41,000	1,600	3,900	180	--	--	160	210	--	--	--	--	--	N/A	N/A
	02/07/92	11,000	630	1,300	780	--	--	34	31	--	--	5.6	--	--	N/A	N/A
	06/04/92	9900	380	500	570	--	--	35	18	160	--	--	--	--	N/A	N/A
	08/26/92	13,000	340	780	520	--	--	39	13	180	--	--	0.8	--	N/A	N/A
	10/27/92	9,600	330	740	500	--	--	34	13	170	--	--	0.91	--	N/A	N/A
	01/20/93	7,300	290	520	340	--	--	46	8.8	150	--	--	--	--	N/A	N/A
	04/13/93	7,500	340	600	330	--	--	30	8.7	130	--	--	0.68	--	N/A	N/A
	07/02/93	4,900	230	360	290	--	--	26	66	89	--	--	--	--	NA	NA
	09/22/93	3,800	66	110	190	--	--	21	27	81	--	--	6.5	--	N/A	N/A
	01/07/94	4,200	180	280	250	--	--	29	100	73	--	--	16	--	N/A	N/A
	04/13/94	2,200	67	79	130	--	--	40	140	61	--	--	22	--	N/A	N/A

TABLE 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
 ORGANIC COMPOUNDS (ug/l)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-14	09/13/89	--	12.3	--	--	22	7.1	9.4	15.1	3.7	2.5	--	5.6	--	--	100
	11/02/89	--	--	--	--	20	6.3	9.3	75	7.7	2.5	--	4.7	--	N/A	N/A
	02/15/90	3.6	--	0.6	--	8.9	1.1	9.6	380	1.0	--	--	8.0	--	N/A	N/A
	05/22/90	2.2	--	--	--	4.1	--	5.8	11	1.4	--	--	5.9	--	--	--
	09/18/90	--	--	--	--	2.3	--	5.0	47	--	--	--	5.7	--	--	--
	02/04/91	--	--	--	--	1.3	--	4.4	47	--	--	--	6.2	--	N/A	N/A
	05/01/91	--	--	--	--	0.88	--	3.1	18	--	--	--	4.9	--	N/A	N/A
	08/14/91	0.7	--	--	--	1.6	--	4.8	50	--	--	0.6	9.7	--	N/A	N/A
	11/22/91	--	--	--	--	1.9	--	6.3	150	1.5	--	--	5.6	--	N/A	N/A
	02/07/92	--	--	--	--	3.1	--	12	100	--	0.5	0.6	9.4	--	N/A	N/A
	06/01/92	15	--	--	--	5.1	0.7	28	120	3.7	0.8	--	10	--	N/A	N/A
	08/27/92	--	--	--	--	3.3	--	43	142	--	--	--	12	--	N/A	N/A
	10/26/92	--	--	--	--	--	--	36	200	--	--	--	13	--	N/A	N/A
	01/20/93	--	--	--	--	1.7	--	20	140	--	--	0.8	7	--	N/A	N/A
	04/13/93	1.5	--	--	--	1.8	0.59	12	99	--	--	0.65	7.9	--	N/A	N/A
	07/02/93	8.7	--	--	--	--	--	2.1	36.0	--	--	--	0.85	--	N/A	N/A
	09/22/93	0.79	--	--	--	1.0	0.61	7.7	80	0.50	--	1.1	6.0	--	N/A	N/A
	01/07/94	--	--	--	--	--	--	--	42	--	--	--	--	--	N/A	N/A
	04/13/94	0.63	--	--	--	0.58	--	4.9	44	--	--	--	7.8	--	N/A	N/A
MW-15	09/07/89	--	--	--	--	--	--	--	--	--	--	2.2	--	--	--	--
	02/07/90	--	--	--	--	0.5	--	--	5.8	--	--	2.8	--	--	N/A	N/A
	05/16/90	--	--	--	--	--	--	--	--	--	--	3.5	--	--	N/A	N/A
	09/14/90	--	--	--	--	1.1	--	--	0.58	--	--	6.2	--	--	--	--
	01/24/91	N/A	N/A	N/A	N/A	0.7	--	--	1.2	--	--	--	6.8	--	N/A	N/A
	04/25/91	N/A	N/A	N/A	N/A	0.53	--	--	0.82	--	--	--	6.7	--	N/A	N/A
	08/05/91	--	--	--	--	--	--	--	--	--	--	7.8	--	--	N/A	N/A
	11/05/91	N/A	N/A	N/A	N/A	1.3	--	--	2.1	--	--	12	--	--	N/A	N/A
	01/30/92	--	--	--	--	--	--	--	1.6	--	--	10	--	--	N/A	N/A
	08/27/92	--	--	--	--	--	--	--	--	--	--	10	--	--	N/A	N/A
	01/25/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	07/09/93	--	--	--	--	--	--	--	--	--	--	5.8	--	--	N/A	N/A
	01/17/94	--	--	--	--	--	--	--	--	--	--	3.4	--	--	N/A	N/A

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-16	09/07/89	--	3.9	--	--	0.8	--	0.7	--	--	0.5	--	--	--	--	--
	02/07/90	--	--	--	--	2	--	1.8	29	--	--	--	--	--	N/A	N/A
	05/16/90	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	09/14/90	--	--	--	--	1.3	--	--	2.3	--	--	--	--	--	--	--
	01/24/91	N/A	N/A	N/A	N/A	--	--	--	2.6	--	--	--	--	--	N/A	N/A
	04/25/91	N/A	N/A	N/A	N/A	0.83	--	--	2.8	--	--	--	--	--	N/A	N/A
	08/13/91	--	--	--	--	1.5	--	--	8.3	--	--	--	--	--	N/A	N/A
	11/07/91	N/A	N/A	N/A	N/A	1.6	--	--	5.7	--	--	--	--	--	N/A	N/A
	01/30/92	--	--	--	--	0.6	--	--	9.0	--	--	--	--	--	N/A	N/A
	06/04/92	--	--	--	--	1.9	--	--	2.7	--	--	--	--	--	N/A	N/A
	08/27/92	--	--	--	--	--	--	--	3.9	--	--	--	--	--	N/A	N/A
	10/23/92	--	--	--	--	0.81	--	--	3.2	--	--	--	--	--	N/A	N/A
	01/21/93	--	--	--	--	--	--	--	2.6	--	--	--	--	--	N/A	N/A
	04/12/93	N/A	N/A	N/A	N/A	0.64	--	--	--	--	--	--	--	--	N/A	N/A
	06/29/93	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
	01/06/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	04/14/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A
MW-17	09/21/89	--	1.3	--	--	1.1	--	0.5	--	--	2.6	--	0.7	--	--	--
	02/07/90	--	--	--	--	0.8	--	0.6	36	--	--	--	0.5	--	N/A	N/A
	05/18/90	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	09/13/90	--	--	--	--	--	--	--	4.0	--	--	--	--	--	--	--
	01/25/91	--	--	--	--	--	--	--	3.0	--	--	--	--	--	N/A	N/A
	04/29/91	--	--	--	--	--	--	--	3.8	--	--	--	--	--	N/A	N/A
	08/06/91	--	--	--	--	--	--	--	3.7	--	--	--	--	--	N/A	N/A
	11/05/91	N/A	N/A	N/A	N/A	0.6	--	--	2.8	--	--	--	--	--	N/A	N/A
	01/30/92	--	--	--	--	--	--	--	1.2	--	--	--	--	--	N/A	N/A
	08/27/92	--	--	--	--	--	--	--	0.8	--	--	--	--	--	N/A	N/A
	01/25/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	07/09/93	--	--	--	--	--	--	--	1.0	--	--	--	--	--	N/A	N/A
	01/17/94	--	--	--	--	--	--	--	0.61	--	--	1.10	--	--	N/A	N/A

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B	T	X	E	1,1,1-TCA	1,1,2-TCA	1,1-DCA	1,1-DCE	1,2-DCA	Chloroform	PCE	TCE	CCL ₄	TPH	TPH/Gas
		1	1000	1,750	680	200	32	5	6	0.5	100	5	5	0.5	NE	NE
MW-18	09/21/89	--	1.3	--	--	1.9	0.8	3.4	0.5	--	1.5	--	9.4	--	--	50
	11/02/89	--	--	--	--	6.9	1.0	7.8	92	--	0.5	--	13	--	N/A	N/A
	02/07/90	--	--	--	--	4	--	4.8	230	--	--	--	8.1	--	N/A	N/A
	05/18/90	--	--	--	--	2.4	--	2.8	3.2	--	--	1.0	10	--	--	--
	09/13/90	--	--	--	--	3.3	--	3.9	19	--	--	--	4.4	--	--	--
	01/25/91	--	--	--	--	0.90	--	1.4	22	--	--	--	2.9	--	N/A	N/A
	04/29/91	--	--	--	--	0.94	--	1.1	20	--	--	--	2.3	--	N/A	N/A
	08/13/91	--	--	--	--	1.5	--	1.2	18	--	--	--	3.8	--	N/A	N/A
	11/05/91	N/A	N/A	N/A	N/A	2.2	3.8	2.0	18	--	--	--	--	--	N/A	N/A
	01/30/92	--	--	--	--	1.0	--	0.8	25	--	--	--	2.8	--	N/A	N/A
	06/01/92	--	--	--	--	1.4	--	0.6	13	--	--	--	2.2	--	N/A	N/A
	08/27/92	--	--	--	--	0.94	--	--	16	--	--	--	3.2	--	N/A	N/A
	10/26/92	--	--	--	--	2.6	--	--	--	--	--	--	3.0	--	N/A	N/A
	01/21/93	--	--	--	--	0.77	--	--	14	--	--	--	1.6	--	N/A	N/A
	04/14/93	N/A	N/A	N/A	N/A	1.3	--	--	12	--	--	--	1.5	--	N/A	N/A
	06/30/93	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
	01/06/94	--	--	--	--	--	--	--	5.2	--	--	--	0.68	--	N/A	N/A
	04/14/94	N/A	N/A	N/A	N/A	--	--	--	3.7	--	--	--	0.52	--	N/A	N/A
MW-19	09/14/89	--	--	--	--	--	--	--	--	--	0.9	1	--	--	--	--
	05/18/90	--	--	--	--	--	--	--	--	--	--	1.4	--	--	N/A	N/A
	09/07/90	--	--	--	--	--	--	--	6.8	--	--	1.5	--	--	--	--
	01/24/91	N/A	N/A	N/A	N/A	--	--	--	5.9	--	--	--	1.7	--	N/A	N/A
	04/29/91	N/A	N/A	N/A	N/A	--	--	--	4.2	--	--	--	1.9	--	N/A	N/A
	08/05/91	--	--	--	--	--	--	--	2.4	--	--	3.2	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	--	--	--	3.7	--	--	2.8	--	--	N/A	N/A
	01/30/92	--	--	--	--	--	--	--	2.9	--	--	3.6	--	--	N/A	N/A
	08/28/92	--	--	--	--	--	--	--	1.5	--	--	2.0	--	--	N/A	N/A
	01/25/93	--	--	--	--	--	--	--	8.9	--	--	1.5	--	--	N/A	N/A
	07/09/93	--	--	--	--	--	--	--	5.9	--	--	0.8	--	--	N/A	N/A
	01/16/94	--	--	--	--	--	--	--	7.1	--	--	--	--	--	N/A	N/A

TABLE 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
 ORGANIC COMPOUNDS (ug/l)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-20	09/14/89	--	--	--	--	0.7	--	--	--	--	--	--	--	--	--	--
	05/14/90	--	--	--	--	1.4	--	0.9	--	--	--	--	--	--	N/A	N/A
	09/07/90	--	--	--	--	0.92	--	--	9.6	--	--	--	--	--	--	--
	01/24/91	N/A	N/A	N/A	N/A	--	--	--	9.8	--	--	--	--	--	N/A	N/A
	04/29/91	N/A	N/A	N/A	N/A	--	--	--	8.9	--	--	--	--	--	N/A	N/A
	08/14/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	0.7	--	--	11	--	--	--	--	--	N/A	N/A
	01/30/92	--	--	--	--	0.6	--	--	11	--	--	--	--	--	N/A	N/A
	06/02/92	--	--	--	--	0.8	--	--	7.2	--	--	--	--	--	N/A	N/A
	08/28/92	--	--	--	--	--	--	--	8.3	--	--	--	--	--	N/A	N/A
	10/23/92	--	--	--	--	--	--	--	7.3	--	--	--	--	--	N/A	N/A
	01/25/93	--	--	--	--	--	--	--	4.0	--	--	--	--	--	N/A	N/A
	04/13/93	N/A	N/A	N/A	N/A	--	--	--	3.5	--	--	--	--	--	N/A	N/A
	06/29/93	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
	01/06/94	--	--	--	--	--	--	--	0.66	--	--	--	--	--	N/A	N/A
	04/14/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A
MW-21	09/08/89	--	--	--	--	--	--	--	--	--	1.6	--	--	--	--	--
	05/15/90	--	--	--	--	--	--	0.6	--	--	4.2	--	--	--	N/A	N/A
	09/07/90	--	--	--	--	--	--	--	2.1	--	1.9	--	--	--	--	--
	01/23/91	N/A	N/A	N/A	N/A	--	--	--	0.8	--	2.4	--	--	--	N/A	N/A
	04/25/91	N/A	N/A	N/A	N/A	--	--	--	4.7	--	2.5	--	--	--	N/A	N/A
	08/07/91	--	--	--	--	--	--	--	0.9	--	5.1	--	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	--	--	--	--	--	4.8	--	--	--	N/A	N/A
	01/30/92	--	--	--	--	--	--	--	2.7	--	5.1	--	--	--	N/A	N/A
	08/28/92	--	--	--	--	--	--	--	0.6	--	4.0	--	--	--	N/A	N/A
	01/29/93	--	--	--	--	--	--	--	1.3	--	2.0	--	--	--	N/A	N/A
	07/08/93	N/A	N/A	N/A	N/A	--	--	--	--	--	2.4	--	--	--	N/A	N/A
	01/16/94	--	--	--	--	--	--	1.0	6.1	--	1.4	--	--	--	N/A	N/A

TABLE 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
 ORGANIC COMPOUNDS (ug/l)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-22	09/08/89	--	--	--	--	--	--	--	--	--	3.0	--	--	--	--	--
	02/07/90	--	--	--	--	--	--	--	--	--	0.9	--	--	--	N/A	N/A
	05/15/90	--	--	--	--	--	--	--	--	--	5.0	--	--	--	N/A	N/A
	09/07/90	--	--	--	--	--	--	--	--	--	2.6	--	--	--	--	--
	01/23/91	N/A	N/A	N/A	N/A	--	--	--	--	--	5.2	--	--	--	N/A	N/A
	04/25/91	N/A	N/A	N/A	N/A	--	--	--	--	--	4.8	--	--	--	N/A	N/A
	08/14/91	--	--	--	--	--	--	--	--	--	3.9	--	--	--	N/A	N/A
	01/30/92	--	--	--	--	--	--	--	--	--	5.8	--	--	--	N/A	N/A
	01/29/93	--	--	--	--	--	--	--	--	--	1.5	--	--	--	N/A	N/A
	01/16/94	--	--	--	--	--	--	--	--	--	2.0	--	--	--	N/A	N/A
MW-23	09/08/89	--	--	--	--	--	--	--	--	--	--	--	--	--	--	--
	05/15/90	--	--	--	--	--	--	1.3	--	--	10	--	--	--	N/A	N/A
	09/06/90	--	--	--	--	--	--	0.88	0.5	--	4.2	--	--	--	--	--
	04/23/91	N/A	N/A	N/A	N/A	--	--	--	0.67	--	3.0	--	--	--	N/A	N/A
	08/02/91	--	--	--	--	--	--	--	--	--	3.1	--	--	--	N/A	N/A
	11/11/91	N/A	N/A	N/A	N/A	--	--	--	--	--	4.6	0.7	--	--	N/A	N/A
	01/24/92	--	--	--	--	--	--	--	--	--	2.8	--	--	--	N/A	N/A
	08/28/92	--	--	--	--	--	--	1.2	--	--	4.5	--	--	--	N/A	N/A
	01/22/93	--	--	--	--	--	--	--	--	--	2.2	--	--	--	N/A	N/A
	07/08/93	N/A	N/A	N/A	N/A	--	--	--	--	--	2.0	--	--	--	N/A	--
MW-24	01/16/94	--	--	--	--	--	--	0.54	--	--	2.0	--	--	--	N/A	N/A
	09/08/89	--	--	--	--	--	--	--	--	--	2.8	--	--	--	--	--
	05/15/90	--	--	--	--	--	--	--	--	--	11	--	--	--	N/A	N/A
	09/06/90	--	--	--	--	--	--	--	--	--	4.1	--	--	--	--	--
	09/06/90	--	--	--	--	--	--	--	--	--	4.1	--	--	--	--	--
	08/11/91	--	--	--	--	--	--	--	--	--	3.2	--	--	--	N/A	N/A
	01/24/92	--	--	--	--	--	--	--	--	--	2.5	--	--	--	N/A	N/A
	01/22/93	--	--	--	--	--	--	--	--	--	1.7	--	--	--	N/A	N/A
	01/16/94	--	--	--	--	--	--	--	--	--	0.9	--	--	--	N/A	N/A

TABLE 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
 ORGANIC COMPOUNDS (ug/l)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-25	09/11/89	--	4.1	--	--	--	--	1.0	--	--	0.9	--	--	--	--	--
	02/07/90	--	--	--	--	--	--	1.3	7.6	--	1.1	--	--	--	N/A	N/A
	05/16/90	--	--	--	--	--	--	1.3	--	--	1.1	--	--	--	--	--
	09/12/90	--	--	--	--	--	--	1.5	3.1	--	1.3	--	--	--	--	--
	01/29/91	N/A	N/A	N/A	N/A	--	--	1.3	2.3	--	1.1	--	--	--	N/A	N/A
	04/24/91	N/A	N/A	N/A	N/A	--	--	2.1	2.5	--	1.4	--	--	--	N/A	N/A
	08/02/91	--	--	--	--	0.6	--	3.0	5.8	--	1.6	--	--	--	N/A	N/A
	01/23/92	--	--	--	--	2.1	--	6.9	8.7	--	2.2	--	--	--	N/A	N/A
	09/01/92	--	--	--	--	4.4	--	14	22	--	2.8	--	0.65	--	N/A	N/A
	01/27/93	--	--	--	--	2.2	--	10	6.3	0.77	1.6	--	--	--	N/A	N/A
	07/08/93	N/A	N/A	N/A	N/A	2.8	--	12	--	--	2.4	--	--	--	N/A	--
	01/16/94	--	--	--	--	1.3	--	5.9	6.3	--	1.5	--	--	--	N/A	N/A
MW-26	09/11/89	--	--	--	--	--	--	1.0	--	--	2.6	--	--	--	--	50
	02/07/90	--	--	--	--	--	--	3.2	14	--	1.3	--	--	--	N/A	N/A
	05/16/90	--	--	--	--	--	--	1.6	--	--	1.1	--	--	--	--	--
	09/12/90	--	--	--	--	--	--	2.1	5	--	1.6	--	--	--	--	--
	01/29/91	N/A	N/A	N/A	N/A	--	--	1.6	3.6	--	1.0	--	--	--	N/A	N/A
	04/24/91	N/A	N/A	N/A	N/A	--	--	2.4	3.4	--	1.4	--	--	--	N/A	N/A
	08/13/91	--	--	--	--	0.6	--	4.0	8.1	--	1.5	--	--	--	N/A	N/A
	01/27/92	--	1.4	--	--	1.1	--	4.8	5.1	--	2.0	--	--	--	N/A	N/A
	06/04/92	--	--	--	--	4.4	--	8.6	8.2	0.6	2.7	--	--	--	N/A	N/A
	09/01/92	--	--	--	--	3.7	--	12	19	--	3.6	--	--	--	N/A	N/A
	10/23/92	--	--	--	--	2.4	--	10	9.4	--	3.1	--	--	--	N/A	N/A
	01/28/93	--	--	--	--	3.2	--	13	15	0.9	2.5	--	--	--	N/A	N/A
	04/08/93	--	--	--	--	3.9	--	13	9.1	0.78	2.9	--	--	--	N/A	N/A
	07/07/93	--	--	--	--	3.3	--	14	14	--	2.3	--	--	--	N/A	N/A
	09/23/93	N/A	N/A	N/A	N/A	3.0	--	9.4	15	3.6	1.9	--	--	--	N/A	N/A
	01/10/94	--	--	--	--	2.6	--	11	15	0.7	2.0	--	--	--	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

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-27	09/15/89	---	---	---	---	---	---	---	---	---	5.5	---	---	---	---	---
	05/21/90	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---
	09/17/90	---	---	---	---	---	---	---	0.99	---	1.1	---	---	---	---	---
	01/29/91	N/A	N/A	N/A	N/A	---	---	---	---	---	0.7	---	---	---	N/A	N/A
	04/24/91	N/A	N/A	N/A	N/A	---	---	---	1.1	---	1.4	---	---	---	N/A	N/A
	08/13/91	---	---	---	---	---	---	---	---	---	0.9	---	---	---	N/A	N/A
	01/23/92	---	---	---	---	---	---	---	0.83	---	1.3	---	---	---	N/A	N/A
	09/01/92	---	---	---	---	---	---	---	---	---	3.0	---	---	---	N/A	N/A
	01/28/93	---	---	---	---	---	---	---	---	---	1.7	---	---	---	N/A	N/A
	07/08/93	N/A	N/A	N/A	N/A	---	---	---	---	---	3.1	---	---	---	N/A	---
	01/16/94	---	---	---	---	---	---	0.76	1.1	---	2.4	---	---	---	N/A	N/A
MW-28	02/15/90	---	---	---	---	---	---	5.8	1	---	0.7	---	---	---	N/A	---
	05/21/90	---	---	---	---	---	---	9.5	---	---	---	---	---	---	---	---
	09/19/90	---	---	---	---	---	---	9	4	---	---	---	---	---	---	---
	02/01/91	---	---	---	---	---	---	13	4.3	---	---	---	---	---	N/A	N/A
	04/30/91	---	---	---	---	---	---	8.1	3.9	---	---	---	---	---	N/A	N/A
	08/13/91	---	---	---	---	---	---	13	---	---	---	---	---	---	N/A	N/A
	11/05/91	---	---	---	---	---	---	14	9.4	---	---	---	---	---	N/A	N/A
	01/30/92	---	---	---	---	---	---	17	24	---	---	---	---	---	N/A	N/A
	05/28/92	---	---	---	---	---	---	9.5	6.0	---	---	---	---	---	N/A	N/A
	08/31/92	---	---	---	---	---	---	20	31	---	---	---	---	---	N/A	N/A
	10/22/92	---	---	---	---	---	---	18	21	---	---	---	---	---	N/A	N/A
	01/13/93	---	---	---	---	---	---	13	22	---	---	---	---	---	N/A	N/A
	04/12/93	---	---	---	---	---	---	12	11	---	---	---	---	---	N/A	N/A
	06/30/93	---	---	---	---	---	---	4.1	---	---	---	---	---	---	N/A	N/A
	09/28/93	---	---	---	---	---	---	8.6	8.7	---	---	---	---	---	N/A	N/A
	01/11/94	---	---	---	---	---	---	5.9	4.2	---	---	---	---	---	N/A	N/A
	04/25/94	---	---	---	---	---	---	10	17	---	---	---	---	---	N/A	N/A

TABLE 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
 ORGANIC COMPOUNDS (ug/l)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-29	02/15/90	--	--	--	--	8.5	--	10	190	22	1.8	--	0.9	--	N/A	50
	04/23/90	--	--	--	--	5.0	--	14	72	16	1.2	--	0.87	--	N/A	N/A
	05/25/90	6.2	--	--	--	4.6	--	4.1	8.6	14	--	--	--	--	--	--
	09/06/90	--	--	--	--	3.2	--	4.4	38	11	1.3	--	0.76	1.3	--	--
	02/01/91	--	--	--	--	--	--	1.9	33	4.7	--	--	--	--	N/A	N/A
	04/30/91	--	--	--	--	--	--	2.4	16	6.6	0.57	--	--	0.68	N/A	N/A
	08/07/91	--	--	--	--	1.3	--	4.5	29	11	0.9	--	0.9	1.0	N/A	N/A
	11/05/91	--	--	--	--	1.4	--	3.7	21	7.1	1.0	--	0.8	1.1	N/A	N/A
	01/30/92	--	--	--	--	0.7	--	2.0	26	5.2	1.2	--	0.7	1.5	N/A	N/A
	05/29/92	--	--	--	--	1.1	--	4.3	19	--	0.8	--	1.2	--	N/A	N/A
	08/31/92	--	--	--	--	0.91	--	3.9	27	7.9	1.3	--	0.8	--	N/A	N/A
	10/22/92	--	--	--	--	0.87	--	2.3	18	6.1	0.56	--	--	--	N/A	N/A
	01/14/93	--	--	--	--	--	--	1.1	13	3.2	--	--	--	--	--	--
	04/12/93	--	--	--	--	--	--	1.2	5.0	3.0	--	--	0.51	--	N/A	N/A
	06/30/93	--	--	--	--	--	--	--	--	2.3	--	--	--	--	N/A	N/A
	09/28/93	--	--	--	--	--	--	0.81	8.8	2.6	--	--	0.66	--	N/A	N/A
	01/11/94	--	--	--	--	--	--	0.73	7.9	2.3	--	--	0.68	--	N/A	N/A
	04/25/94	--	--	--	--	--	--	1.1	9.0	2.7	2.0	--	--	1.6	N/A	N/A
MW-30	02/15/90	--	--	--	--	4.5	2.3	18	820	--	1.5	--	4.8	--	N/A	60
	04/23/90	1.1	--	--	--	30.0	--	12	470	31	--	--	8.2	--	N/A	N/A
	05/24/90	2.4	--	--	--	22.0	3	19	48	4.8	1.1	--	6.8	--	--	60
	09/05/90	1.2	--	--	--	14.0	--	11	150	--	--	--	--	--	--	--
	02/04/91	--	--	--	--	6.3	--	8.2	160	--	--	--	--	--	N/A	N/A
	04/30/91	--	--	--	--	5.9	--	9.0	75	--	--	--	--	--	N/A	N/A
	08/15/91	--	--	--	--	4.4	--	6.8	84	--	--	--	6.4	--	N/A	N/A
	11/05/91	--	--	--	--	8.5	--	11	88	--	--	--	9.4	--	N/A	N/A
	01/31/92	--	--	--	--	1.8	--	7.0	140	--	--	0.8	8.0	--	N/A	N/A
	05/28/92	--	--	--	--	3.0	--	10	61	--	--	--	9.5	--	N/A	N/A
	08/31/92	--	--	--	--	6.9	--	14	130	--	--	--	10	--	N/A	N/A
	10/22/92	--	--	--	--	3.3	--	17	116	--	--	--	10	--	N/A	N/A
	01/14/93	--	--	--	--	1.3	--	6.2	93	--	--	--	6.3	--	N/A	N/A
	04/12/93	--	--	--	--	1.9	--	8.7	46	--	--	--	8.1	--	N/A	N/A
	07/06/93	--	--	--	--	1.3	--	8.6	78	--	--	--	7.2	--	N/A	N/A
	09/28/93	--	--	--	--	--	--	12	99	--	--	--	6.4	--	N/A	N/A
	01/10/94	--	--	--	--	--	--	7.7	99	--	--	--	6.5	--	N/A	N/A
	04/25/94	--	--	--	--	1.4	--	4.9	66	--	--	--	8.6	--	N/A	N/A

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-31	05/24/90	1.1	--	--	--	39	2.7	22	54	0.6	1.7	--	10	--	--	60
	09/19/90	0.63	--	--	--	20	--	15	160	--	--	--	7.6	--	--	--
	02/01/91	--	--	--	--	--	--	7.6	150	--	--	--	--	--	N/A	N/A
	05/01/91	--	--	--	--	5.9	--	12	110	--	--	--	7.3	--	N/A	N/A
	08/15/91	--	--	--	--	6.2	--	10	120	--	--	--	6.6	--	N/A	N/A
	11/22/91	--	--	--	--	6.3	--	17	140	--	--	0.62	9.3	--	N/A	N/A
	01/31/91	--	--	--	--	4.3	0.6	16	310	--	0.6	1.1	12	--	N/A	N/A
	05/28/92	--	--	--	--	3.5	--	10	130	--	--	--	12	--	N/A	N/A
	08/31/92	--	--	--	--	5.5	--	9.6	170	--	--	--	10	--	N/A	N/A
	10/21/92	--	--	--	--	--	--	7.5	121	--	--	--	11	--	N/A	N/A
	01/21/93	--	--	--	--	2.1	--	8.5	82	--	--	--	12	--	N/A	N/A
	04/12/93	--	--	--	--	1.7	--	4.2	46	--	--	--	8.2	--	N/A	N/A
	07/07/93	--	--	--	--	1.7	--	5.3	43	--	--	0.71	14	--	N/A	N/A
	09/28/93	--	--	--	--	--	--	--	50	--	--	--	--	--	N/A	N/A
	01/11/94	--	--	--	--	--	--	--	54	--	--	--	7.8	--	N/A	N/A
	04/26/94	--	--	--	--	0.65	--	2.5	53	--	--	0.89	11	--	N/A	N/A

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-32	05/24/90	--	--	--	--	20	0.9	21	45	--	0.9	0.6	13	--	--	60
	09/19/90	--	--	--	--	15	--	18	180	--	--	--	11	--	--	--
	02/01/91	--	--	--	--	--	--	6.1	130	--	--	--	5.0	--	N/A	N/A
	05/01/91	--	--	--	--	6.4	--	11	160	--	--	--	11	--	N/A	N/A
	08/16/91	--	--	--	--	5.2	--	7.5	140	--	--	--	8.8	--	N/A	N/A
	11/22/91	--	--	--	--	4.0	--	7.4	88	--	--	--	8.9	--	N/A	N/A
	01/29/92	--	--	--	--	3.3	--	8.7	240	--	--	0.9	16	--	N/A	N/A
	05/29/92	--	--	--	--	3.9	--	8.6	90	--	--	--	15	--	N/A	N/A
	09/04/92	--	--	--	--	--	--	7.1	155	--	--	--	11	--	N/A	N/A
	10/22/92	--	--	--	--	--	--	--	96	--	--	--	11	--	N/A	N/A
	01/26/93	--	--	--	--	1.2	--	4.5	58	--	--	--	8.9	--	N/A	N/A
	04/15/93	--	--	--	--	2	--	3.1	47	--	--	--	9.6	--	N/A	--
	04/18/93	--	--	--	--	1.4	--	2.8	37	--	--	0.5	6.5	--	N/A	--
	04/23/93	--	--	--	--	1.6	--	3.1	40	--	--	--	6.9	--	N/A	--
	04/30/93	--	--	--	--	1.3	--	3.2	45	--	--	--	6.7	--	N/A	N/A
	05/16/93	--	--	--	--	1.3	--	3.8	45	--	--	--	7.3	--	N/A	--
	05/14/93	--	--	--	--	--	--	3.6	44	--	--	--	6.9	--	N/A	--
	06/17/93	--	--	--	--	--	--	3.1	43	--	--	--	7.4	--	N/A	--
	07/12/93	--	--	--	--	0.72	--	2.6	46	--	--	--	5.9	--	N/A	--
	08/03/93	--	--	--	--	--	--	2.7	44	--	--	--	5.3	--	N/A	--
	09/10/93	--	--	--	--	0.90	--	2.8	38	--	--	--	5.1	--	N/A	--
	09/27/93	N/A	N/A	N/A	N/A	--	1.3	4.0	43	--	--	4.6	7.5	--	N/A	N/A
	10/07/93	--	--	--	--	1.3	--	4.2	52	0.60	--	--	7.2	--	N/A	--
	11/08/93	--	--	--	--	1.4	--	4.0	49	0.70	--	--	7.2	--	N/A	--
	01/14/94	--	--	--	--	--	--	--	44	--	--	--	--	--	--	N/A
	04/07/94	--	--	--	--	1.2	--	4.0	52	--	--	--	6.8	--	N/A	--

TABLE 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
 ORGANIC COMPOUNDS (ug/l)
 UNION PACIFIC RAILROAD YARD
 SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-33	05/18/90	--	--	--	--	17	--	8.1	38	--	--	--	1.4	--	--	--
	09/14/90	--	--	--	--	10	--	--	120	--	--	--	--	--	--	--
	01/30/91	--	--	--	--	3.4	--	2.0	31	--	--	--	--	--	N/A	N/A
	04/30/91	--	--	--	--	2.4	--	2.1	33	--	--	--	--	--	N/A	N/A
	08/07/91	--	--	--	--	6.7	--	5.4	85	--	--	--	1.0	--	N/A	N/A
	11/05/91	--	--	--	--	8.1	--	6.2	100	--	--	--	--	--	N/A	N/A
	01/24/92	--	--	--	--	3.0	--	2.7	97	--	--	--	--	--	N/A	N/A
	06/02/92	--	--	--	--	4.4	--	4.6	95	--	--	--	0.8	--	N/A	N/A
	08/26/92	--	--	--	--	3.4	--	7.0	170	--	--	--	1.6	--	N/A	N/A
	10/20/92	--	--	--	--	4.1	--	2.6	131	--	--	--	--	--	N/A	N/A
	01/14/93	--	--	--	--	--	--	--	6.1	--	--	--	--	--	N/A	N/A
	04/09/93	N/A	N/A	N/A	N/A	--	--	--	7.6	--	--	--	--	--	N/A	N/A
	07/02/93	--	--	--	--	2.1	--	3.3	110	--	--	--	--	--	N/A	N/A
	09/22/93	N/A	N/A	N/A	N/A	2.1	--	3.5	92	--	--	--	--	--	N/A	N/A
	01/06/94	--	--	--	--	1.5	--	2.5	75	--	--	--	0.58	--	N/A	N/A
	04/13/94	N/A	N/A	N/A	N/A	1.3	--	2.5	75	--	--	--	0.60	--	N/A	N/A
MW-34	07/02/91	--	--	--	--	17	1.3	17.0	470	--	1.2	--	15	--	N/A	N/A
	08/16/91	--	--	--	--	24	--	20.0	510	--	--	--	--	--	N/A	N/A
	12/12/91	0.9	--	--	--	18	1.1	28.0	318	1.7	2.3	1.4	26	--	N/A	N/A
	01/23/92	--	--	--	--	19	4.9	25.0	370	2.3	1.7	0.86	20	--	N/A	N/A
	06/03/92	--	--	--	--	11	1.2	21	270	0.6	1.2	--	24	--	N/A	N/A
	09/01/92	--	--	--	--	13	--	25	480	--	--	--	30	--	N/A	N/A
	10/26/92	--	--	--	--	--	--	--	380	--	--	--	31	--	N/A	N/A
	01/21/93	--	--	--	--	1.3	--	3.3	68	--	--	--	5.6	--	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
	07/07/93	--	--	--	--	4.1	0.64	13	190	--	--	0.75	24	--	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
	01/12/94	--	--	--	--	2.2 UJF	--	8.7	120	--	--	0.54	17UJF	--	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

TABLE 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994

ORGANIC COMPOUNDS (ug/l)

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-35	07/02/91	--	--	--	--	6.8	--	4.8	220	--	0.7	--	3.8	--	N/A	N/A
	08/08/91	--	--	--	--	40	--	41	880	--	--	--	19	--	N/A	N/A
	12/12/91	--	--	--	--	2.6	--	2.8	92	--	1.9	0.7	2.6	--	N/A	N/A
	01/23/92	--	--	--	--	5.4	--	5.8	140	--	1.0	--	3.9	--	N/A	N/A
	06/01/92	--	--	--	--	2.4	--	2.4	49	--	0.8	--	4.8	--	N/A	N/A
	09/01/92	--	--	--	--	5.8	--	--	135	--	--	--	--	--	N/A	N/A
	10/26/92	--	--	--	--	--	--	--	94	--	--	--	5.8	--	N/A	N/A
	01/21/93	--	--	--	--	1.3	--	2.8	58	--	--	--	3.7	--	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
	07/07/93	--	--	--	--	1.2	--	1.5	45	--	--	--	4.7	--	N/A	N/A
	09/28/93	N/A	N/A	N/A	N/A	0.72	--	0.78	32	--	--	--	3.0	--	N/A	N/A
	01/12/94	--	--	--	--	0.66	--	0.52	27	--	--	--	3.1	--	N/A	N/A
	04/26/94	N/A	N/A	N/A	N/A	--	--	--	10	--	--	--	2.2	--	N/A	N/A
MW-36	12/12/91	--	--	--	--	15	--	12	290	1.6	3.4	0.7	8.8	1.4	N/A	N/A
	01/23/92	0.53	1.4	--	--	21	3.0	13	330	2.7	2.6	--	8.9	--	N/A	N/A
	06/01/92	--	--	--	--	12	--	9.6	180	0.7	2.0	--	8.3	--	N/A	N/A
	09/04/92	--	--	--	--	14	--	--	210	--	--	--	--	--	N/A	N/A
	10/21/92	--	--	--	--	--	--	--	110	--	--	--	--	--	N/A	N/A
	01/27/93	--	--	--	--	4.5	--	5.0	110	1.1	0.66	--	5.8	--	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
	07/07/93	--	--	--	--	2.6	--	3.5	60	--	1.0	--	5.1	--	N/A	N/A
	09/28/93	N/A	N/A	N/A	N/A	--	--	--	53	--	--	--	--	--	N/A	N/A
	01/12/94	--	--	--	--	--	--	--	110	--	--	--	5.8	--	N/A	N/A
	04/26/94	N/A	N/A	N/A	N/A	1.2	--	2.0	76	--	--	--	4.5	--	N/A	N/A
MW-37	12/12/91	--	--	--	--	1.0	--	3.6	9.3	7.1	4.6	0.6	0.6	1.3	N/A	N/A
	01/23/92	--	--	--	--	--	--	4.4	8.5	9.7	3.1	--	--	1.8	N/A	N/A
	06/01/92	--	--	--	--	--	--	2.6	6.0	6.2	3.8	--	0.5	1.5	N/A	N/A
	09/04/92	--	--	--	--	0.95	--	3.6	16	7.4	4.2	--	--	1.4	N/A	N/A
	10/21/92	--	--	--	--	1.1	--	2.9	13	4.9	2.5	--	--	0.84	N/A	N/A
	01/27/93	--	--	--	--	--	--	2.7	9.2	5.5	2.3	--	--	0.61	N/A	N/A
	04/13/93	N/A	N/A	N/A	N/A	--	--	2.9	8.0	6.5	3.9	--	--	0.99	N/A	N/A
	07/07/93	--	--	--	--	--	--	2.8	7.9	5.8	3.1	--	--	0.78	N/A	N/A
	09/28/93	N/A	N/A	N/A	N/A	0.55	--	3.2	16	5.8	2.8	--	0.50	0.84	N/A	N/A
	01/12/94	--	--	--	--	--	--	3.7	20	6.2	2.4	--	0.57	0.61	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

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-38	12/12/91	--	--	--	--	13	--	9.1	260	4.0	4.2	--	8.6	2.2	N/A	N/A
	01/24/92	--	--	--	--	11	--	5.7	250	2.7	2.8	--	5.7	1.3	N/A	N/A
	06/03/92	--	--	--	--	14	--	8.6	150	2.2	3.6	--	8.7	1.9	N/A	N/A
	09/04/92	--	--	--	--	21	--	--	350	--	--	--	--	--	N/A	N/A
	10/27/92	--	--	--	--	22	--	13	230	--	--	--	14	--	N/A	N/A
	01/26/93	--	--	--	--	10	--	7.3	140	1.7	2.4	--	7.7	1.3	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
	07/06/93	--	--	--	--	4.5	--	2.9	140	0.52	1.3	--	4.2	0.76	N/A	N/A
	09/27/93	N/A	N/A	N/A	N/A	8.0	--	--	130	--	--	--	--	--	N/A	N/A
	01/10/94	--	--	--	--	--	--	--	120	--	--	--	--	--	N/A	N/A
	04/15/94	N/A	N/A	N/A	N/A	6.2	--	6.6	130	0.89	2.1 J	--	7.7	0.85	N/A	N/A
MW-39	06/28/91	--	--	--	--	0.6	--	--	0.7	2.9	4.0	--	--	1.8	N/A	N/A
	08/06/91	--	--	--	--	0.6	--	1.0	1.0	2.1	3.3	--	--	2.4	N/A	N/A
	12/12/91	--	--	--	--	1.0	--	1.2	3.2	2.5	4.9	0.6	--	2.4	N/A	N/A
	01/24/92	--	--	--	--	0.7	--	0.8	4.1	1.6	3.1	--	--	1.4	N/A	N/A
	06/03/92	--	--	--	--	1.1	--	1.3	4.1	1.6	3.1	--	--	2.0	N/A	N/A
	09/04/92	--	--	--	--	1.6	--	1.7	12	1.8	4.2	--	--	2.8	N/A	N/A
	10/21/92	--	--	--	--	1.6	--	1.2	7.7	--	2.3	--	--	1.8	N/A	N/A
	01/27/93	--	--	--	--	1.4	--	1.6	11	1.6	2.7	--	--	1.9	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
	07/06/93	--	--	--	--	1.4	--	1.5	18	0.92	2.0	--	--	1.4	N/A	N/A
	09/27/93	N/A	N/A	N/A	N/A	2.0	--	2.0	20	0.95	2.5	--	0.73	1.4	N/A	N/A
	01/12/94	--	--	--	--	2.4	--	2.6	36	1.3	2.5	--	1.2	1.6	N/A	N/A
MW-40	04/15/94	N/A	N/A	N/A	N/A	2.5	--	2.8	34	1.2	2.6 JC	--	1.4	1.8	N/A	N/A
	06/28/91	--	--	--	--	4.0	--	19	110	--	--	--	46	--	N/A	N/A
	08/15/91	--	--	--	--	3.8	--	15	140	--	--	--	30	--	N/A	N/A
	11/22/91	--	--	--	--	2.4	--	12	95	--	--	--	27	--	N/A	N/A
	01/29/92	--	--	--	--	4.2	--	25	190	--	0.6	--	40	--	N/A	N/A
	05/29/92	--	--	--	--	5.2	--	25	170	--	0.6	--	38	--	N/A	N/A
	08/31/92	--	--	--	--	8.4	--	35	370	--	--	--	52	--	N/A	N/A
	10/22/92	--	--	--	--	6.9	--	--	220	29	--	--	49	--	N/A	N/A
	01/26/93	--	--	--	--	3.3	--	27	170	--	--	--	32	--	N/A	N/A
	04/13/93	N/A	N/A	N/A	N/A	3.7	--	26	120	--	--	--	38	--	N/A	N/A
	07/15/93	N/A	N/A	N/A	N/A	1.7	--	17	110	--	--	--	16	--	N/A	N/A
	09/27/93	N/A	N/A	N/A	N/A	--	--	15	120	--	--	16	--	--	N/A	N/A
	01/11/94	--	--	--	--	--	--	11	100	--	--	--	12	--	N/A	N/A
	04/25/94	N/A	N/A	N/A	N/A	0.87	--	11	120	--	--	--	13	--	N/A	N/A

TABLE 3

SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994

ORGANIC COMPOUNDS (ug/l)

UNION PACIFIC RAILROAD YARD

SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-41	06/28/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	08/12/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	11/05/91	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	01/31/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	05/26/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	08/25/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	10/20/92	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	01/20/93	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	06/30/93	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
	01/07/94	--	--	--	--	--	--	--	--	--	--	--	--	--	N/A	N/A
	04/13/94	N/A	N/A	N/A	N/A	--	--	--	--	--	--	--	--	--	N/A	N/A
MW-42	06/28/91	--	--	--	--	11	--	110	340	--	2.0	--	4.0	--	N/A	N/A
	08/08/91	6.3	--	--	--	42.0	8.1	370	1500	--	8.7	--	19.0	--	N/A	N/A
	11/07/91	1.2	--	--	--	6.9	1.9	69	270	--	1.4	1.1	3.9	--	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
	06/04/92	3.3	--	--	--	7.0	2.6	80	220	0.9	2.0	3.4	5.8	--	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
	10/27/92	--	--	--	--	--	--	110	340	--	--	28	--	--	N/A	N/A
	01/19/93	--	--	--	--	5.3	1.2	60	180	--	1.1	3.0	4.3	--	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
	07/01/93	0.72	--	--	--	3.1	0.89	50	120	--	0.76	2.7	--	--	N/A	N/A
	09/21/93	--	--	--	--	3.5	1.1	45	120	--	0.80	2.6	--	--	N/A	N/A
	01/05/94	0.51	--	--	--	4.3	1.8	54	130	--	0.84	4.0	3.2	--	N/A	N/A
	04/12/94	0.54	--	--	--	4.5	1.8	50	120	--	0.90	4.8	3.6	--	N/A	N/A
MW-43	06/28/91	--	--	--	--	--	--	330	33	--	--	--	--	--	N/A	N/A
	08/16/91	--	--	--	--	--	--	200	21	--	--	--	--	--	N/A	N/A
	11/07/91	--	--	--	--	--	2.0	170	30	1.9	--	0.6	2.5	--	N/A	N/A
	02/07/92	--	--	--	--	0.7	2.2	220	45	2.3	--	1.4	4.3	--	N/A	N/A
	06/02/92	--	--	--	--	--	2.5	210	32	2.5	--	--	4.7	--	N/A	N/A
	08/25/92	0.6	--	--	--	--	1.9	260	--	2.0	--	1.1	5.4	--	N/A	N/A
	10/22/92	--	--	--	--	--	--	240	28	--	--	--	--	--	N/A	N/A
	01/19/93	--	--	--	--	--	1.0	110	24	1.1	--	0.9	2.8	--	N/A	N/A
	04/08/93	--	--	--	--	--	3.3	210	33	3.2	--	1.0	4.9	--	N/A	N/A
	07/01/93**	--	--	--	--	--	--	--	25	--	--	--	--	--	N/A	N/A
	09/21/93	0.70	--	--	--	--	2.8	220	23	2.8	--	0.98	--	--	N/A	N/A
	01/05/94	--	--	--	--	--	1.0	290	25	--	--	--	3.7	--	N/A	N/A
	04/12/94	0.55	--	--	--	--	4.3	310	43	3.9	--	1.3	7.4	--	N/A	N/A

TABLE 3
SUMMARY MONITORING WELL GROUNDWATER ANALYTICAL RESULTS, 1988 - 1994
ORGANIC COMPOUNDS (ug/l)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

Monitoring Well	Date Sampled	B 1	T 1000	X 1,750	E 680	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
MW-44	10/27/92	---	---	---	---	---	---	0.69	2.0	4.3	7.2	---	---	9.6	N/A	N/A
	01/26/93	---	---	---	---	---	---	---	0.96	1.9	3.6	---	---	4.1	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
	07/06/93	---	---	---	---	---	---	---	---	2.4	3.6	---	---	5.6	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
	01/10/94	---	---	---	---	---	---	---	0.77	2.1	3.6	---	---	3.9	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

- CCL₄ - Carbon Tetrachloride.
MCL - Maximum Contaminant Level, Drinking Water Standard, EPA or DHS (whichever is more stringent).
AL - Drinking Water Action Level recommended by DHS, Listed in the absence of an MCL.
+ - Detections of Benzene, Toluene, and Xylene appear to be due to field contamination. Analysis of duplicate sample showed no detections.
++ - Detections of Benzene, Toluene, Xylene, and Ethylbenzene appear to be due to field contamination.
Analysis of samples from other monitoring rounds were mostly non-detection for these constituents.
-- - Not Detected.
N/A - Not Analyzed.
** - Vinyl chloride reported at 11 mg/l for the MW-43 sample.
* - At or near detection limits.
UJF,JC - See Table 8 for key to data qualifiers.

TABLE 4
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
SELECTED METALS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-04	MW-32
DATE		04/07/94	04/07/94
QA	MCL		
	ug/L		
NICKEL	100	9.6	18.0

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 8 for key to data qualifiers.

TABLE 5
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-01	FB-02	FB-03	MW-02	MW-04	MW-07	MW-11	MW-12
DATE		04/13/94	04/25/94	04/26/94	04/12/94	04/07/94	04/14/94	04/13/94	04/13/94
QA	MCL ug/L	FIELD BLANK	FIELD BLANK	FIELD BLANK					
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	1.50	< 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	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	3.60	0.59	2.40	16.00
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50	< 0.50	53.00	3.70	18.00	42.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	2.70	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.56	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 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	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.40	< 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 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-01	FB-02	FB-03	MW-02	MW-04	MW-07	MW-11	MW-12
DATE		04/13/94	04/25/94	04/26/94	04/12/94	04/07/94	04/14/94	04/13/94	04/13/94
QA	MCL	FIELD	FIELD	FIELD					
	ug/L	BLANK	BLANK	BLANK					
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
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	1.30	< 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	2.70	< 0.50	1.50	2.10
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.
< = 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 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW-13 04/13/94	MW-14 04/13/94	MW-16 04/14/94	MW-18 04/14/94	MW-20 04/14/94	MW-26 04/14/94	MW-28 04/25/94	MW-29 04/25/94
	MCL ug/L								
1,1,1-TRICHLOROETHANE	200.0	< 5.00	0.58	< 0.50	< 0.50	< 0.50	1.90	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	40.00	4.90	< 0.50	< 0.50	< 0.50	10.00	10.00	1.10
1,1-DICHLOROETHENE	6.0	140.00	44.00	< 0.50	3.70	< 0.50	16.00	17.00	9.00
1,2-DICHLOROBENZENE	600.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	61.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.70
1,2-DICHLOROETHENE	-	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	0.76	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 10.00	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.60
CHLOROBENZENE	30.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	2.40	< 0.50	2.00

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.
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Lab flag|Validation qualifier. See Table 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW-13 04/13/94	MW-14 04/13/94	MW-16 04/14/94	MW-18 04/14/94	MW-20 04/14/94	MW-26 04/14/94	MW-28 04/25/94	MW-29 04/25/94
	MCL ug/L								
CHLOROMETHANE	-	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 5.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	22.00	7.80	< 0.50	0.52	< 0.50	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 10.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 10.00	< 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.

< = 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 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW-30 04/25/94	MW-31 04/26/94	MW-32 04/07/94	MW-33 04/13/94	MW-34 04/26/94	MW-35 04/26/94	MW-36 04/26/94	MW-37 04/26/94
	MCL ug/L								
1,1,1-TRICHLOROETHANE	200.0	1.40	0.65	1.20	1.30	1.40	< 0.50	1.20	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	4.90	2.50	4.00	2.50	6.20	< 0.50	2.00	3.10
1,1-DICHLOROETHENE	6.0	66.00	53.00	52.00	75.00	120.00	10.00	76.00	20.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	7.70
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 1.00	< 1.00	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.55
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	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	2.50

All units reported as ug/L (ppb)

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Lab flag/Validation qualifier. See Table 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW-30 04/25/94	MW-31 04/26/94	MW-32 04/07/94	MW-33 04/13/94	MW-34 04/26/94	MW-35 04/26/94	MW-36 04/26/94	MW-37 04/26/94
	MCL ug/L								
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
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	0.89	< 0.50	< 0.50	0.84	< 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	8.60	11.00	6.80	0.60	16.00	2.20	4.50	< 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.

< = 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 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW-37 04/26/94 DUPLICATE ug/L SAMPLE	MW-38 04/15/94	MW-39 04/15/94	MW-40 04/25/94	MW-41 04/13/94	MW-41 04/13/94 DUPLICATE SAMPLE	MW-42 04/12/94	MW-43 04/12/94
1,1,1-TRICHLOROETHANE	200.0	< 0.50	6.20	2.50	0.87	< 0.50	< 0.50	4.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	1.80	4.30
1,1-DICHLOROETHANE	5.0	3.00	6.60	2.80	11.00	< 0.50	< 0.50	50.00	310.00
1,1-DICHLOROETHENE	6.0	20.00	130.00	34.00	120.00	< 0.50	< 0.50	120.00	43.00
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	0.57
1,2-DICHLOROETHANE	0.5	7.40	0.89	1.20	< 0.50	< 0.50	< 0.50	< 0.50	3.90
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	9.60
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	0.58	0.85	1.80	< 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	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	2.40	2.10	J	2.60	Jc	< 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.

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

Lab flag|Validation qualifier. See Table 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-37	MW-38	MW-39	MW-40	MW-41	MW-41	MW-42	MW-43
DATE		04/26/94	04/15/94	04/15/94	04/25/94	04/13/94	04/13/94	04/12/94	04/12/94
QA	MCL ug/L	DUPLICATE SAMPLE					DUPLICATE SAMPLE		
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
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	< 0.50	< 0.50	4.80	1.30
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	7.70	1.40	13.00	< 0.50	< 0.50	3.60	7.40
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	10.00

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 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW-44 04/15/94	MW-44 04/15/94 DUPLICATE SAMPLE	RB-01 04/13/94 RINSATE BLANK	RB-02 04/25/94 RINSATE BLANK	RB-03 04/26/94 RINSATE BLANK	TB-01 04/12/94 TRIP BLANK	TB-02 04/13/94 TRIP BLANK	TB-03 04/14/94 TRIP BLANK
	MCL ug/L								
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	1.10	1.00	< 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	< 0.50
1,2-DICHLOROETHANE	0.5	2.50	2.10	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 0.50	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 0.50
CARBON TETRACHLORIDE	0.5	6.10	5.80	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	4.40	Jc 4.30	Jc < 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 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		MW-44 04/15/94	MW-44 04/15/94 DUPLICATE SAMPLE	RB-01 04/13/94 RINSATE BLANK	RB-02 04/25/94 RINSATE BLANK	RB-03 04/26/94 RINSATE BLANK	TB-01 04/12/94 TRIP BLANK	TB-02 04/13/94 TRIP BLANK	TB-03 04/14/94 TRIP BLANK
	MCL ug/L								
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00	< 1.00
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	< 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.

< = 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 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE DATE QA		TB-04 04/15/94 TRIP ug/L	TB-05 04/25/94 TRIP BLANK	TB-06 04/26/94 TRIP BLANK
1,1,1-TRICHLOROETHANE	200.0	< 0.50	< 0.50	< 0.50
1,1,2,2-TETRACHLOROETHANE	1.0	< 0.50	< 0.50	< 0.50
1,1,2-TRICHLOROETHANE	32.0	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHANE	5.0	< 0.50	< 0.50	< 0.50
1,1-DICHLOROETHENE	6.0	< 0.50	< 0.50	< 0.50
1,2-DICHLOROBENZENE	600.0	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHANE	0.5	< 0.50	< 0.50	< 0.50
1,2-DICHLOROETHENE	-	< 0.50	< 0.50	< 0.50
1,2-DICHLOROPROPANE	5.0	< 0.50	< 0.50	< 0.50
1,3-DICHLOROBENZENE	-	< 0.50	< 0.50	< 0.50
1,4-DICHLOROBENZENE	5.0	< 0.50	< 0.50	< 0.50
BROMODICHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50
BROMOFORM	100.0	< 0.50	< 0.50	< 0.50
BROMOMETHANE	-	< 0.50	< 1.00	< 1.00
CARBON TETRACHLORIDE	0.5	< 0.50	< 0.50	< 0.50
CHLOROBENZENE	30.0	< 0.50	< 0.50	< 0.50
CHLOROETHANE	-	< 1.00	< 1.00	< 1.00
CHLOROFORM	100.0	< 0.50	< 0.50	< 0.50

All units reported as ug/L (ppb)

QA = Samples taken as part of the quality assurance program. - = Parameter not analyzed. 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 8 for key to data qualifiers.

TABLE 5 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
CHLORINATED VOLATILE ORGANIC COMPOUNDS (EPA METHOD 601)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		TB-04	TB-05	TB-06
DATE		04/15/94	04/25/94	04/26/94
QA	MCL	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK
CHLOROMETHANE	-	< 1.00	< 1.00	< 1.00
CIS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50
DIBROMOCHLOROMETHANE	100.0	< 0.50	< 0.50	< 0.50
METHYLENE CHLORIDE	5.0	< 1.00	< 1.00	< 1.00
TETRACHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50
TRANS-1,3-DICHLOROPROPENE	-	< 0.50	< 0.50	< 0.50
TRICHLOROETHENE	5.0	< 0.50	< 0.50	< 0.50
TRICHLOROFLUOROMETHANE	150.0	< 1.00	< 1.00	< 1.00
VINYL CHLORIDE	0.5	< 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 8 for key to data qualifiers.

TABLE 6
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (EPA METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		FB-01	FB-02	FB-03	MW-04	MW-12	MW-13	MW-14	MW-28
DATE		04/13/94	04/25/94	04/26/94	04/07/94	04/13/94	04/13/94	04/13/94	04/25/94
QA	MCL	FIELD	FIELD	FIELD					
	ug/L	BLANK	BLANK	BLANK					
BENZENE	1	< 0.50	< 0.50	< 0.50	120.00	< 0.50	2200.00	0.63	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	3.70	< 0.50	130.00	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	14.00	< 0.50	67.00	< 0.50	< 0.50
XYLENE	1750	< 0.50	< 0.50	< 0.50	19.00	< 0.50	79.00	< 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 8 for key to data qualifiers.

TABLE 6 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (EPA METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		MW-29	MW-30	MW-31	MW-32	MW-42	MW-43	RB-01	RB-02
DATE		04/25/94	04/25/94	04/26/94	04/07/94	04/12/94	04/12/94	04/13/94	04/25/94
QA	MCL ug/L							RINSATE BLANK	RINSATE BLANK
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	0.54	0.55	< 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	1750	< 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 8 for key to data qualifiers.

TABLE 6 (cont.)
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
AROMATIC COMPOUNDS (EPA METHOD 602)
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE		RB-03	TB-01	TB-02	TB-05	TB-06
DATE		04/26/94	04/12/94	04/13/94	04/25/94	04/26/94
QA	MCL	RINSATE	TRIP	TRIP	TRIP	TRIP
	ug/L	BLANK	BLANK	BLANK	BLANK	BLANK
BENZENE	1	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
ETHYL BENZENE	680	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
TOLUENE	1000	< 0.50	< 0.50	< 0.50	< 0.50	< 0.50
XYLENE	1750	< 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 8 for key to data qualifiers.

TABLE 7
1994 SECOND QUARTER MONITORING WELL GROUNDWATER ANALYTICAL RESULTS
FIELD PARAMETERS AND TPH GASOLINE
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

SAMPLE	DATE	TEMPERATURE	EC-F	pH-F	TURBIDITY	TPH/GASOLINE
		degrees C	umhos/cm		NTU	ug/L (ppb)
MW-02	04/12/94	20.3	595	6.99	0.62	-
MW-04	04/07/94	-	-	-	-	660
MW-07	04/14/94	20.4	1020	7.31	1.22	-
MW-11	04/13/94	19.8	1006	7.38	0.41	-
MW-12	04/13/94	19.8	1301	7.32	0.37	-
MW-13	04/13/94	19.8	836	6.93	0.81	-
MW-14	04/13/94	20.0	1173	7.39	0.59	-
MW-16	04/14/94	19.9	1003	7.29	0.29	-
MW-18	04/14/94	20.0	1266	7.19	0.17	-
MW-20	04/14/94	20.1	1085	7.26	0.06	-
MW-26	04/14/94	20.3	1064	7.27	1.12	-
MW-28	04/25/94	19.3	1322	7.19	0.29	-
MW-29	04/25/94	20.4	857	7.10	0.46	-
MW-30	04/25/94	19.9	1015	7.16	0.29	-
MW-31	04/26/94	20.0	983	7.02	0.53	-
MW-32	04/07/94	-	-	-	-	< 50
MW-33	04/13/94	19.8	556	7.30	1.07	-
MW-34	04/26/94	19.6	856	7.20	1.13	-
MW-35	04/26/94	19.8	964	7.13	0.97	-
MW-36	04/26/94	18.6	789	7.21	2.02	-
MW-37	04/26/94	18.3	882	7.24	1.01	-
MW-38	04/15/94	18.6	852	7.19	0.52	-
MW-39	04/15/94	18.7	879	7.31	0.37	-
MW-40	04/25/94	19.5	1372	7.14	0.19	-
MW-41	04/13/94	19.6	783	7.60	0.49	-
MW-42	04/12/94	21.2	1032	6.78	0.82	-
MW-43	04/12/94	20.7	4300	7.06	0.59	-
MW-44	04/15/94	18.7	817	7.39	0.41	-

DATE refers to date sampled.
- = Parameter not analyzed.

TABLE 8
EXPLANATION OF DATA QUALIFIERS PRESENTED
IN THE TABLES OF ANALYTICAL RESULTS
UNION PACIFIC RAILROAD YARD
SACRAMENTO, CALIFORNIA

KEY →	A	B	C
Example Data →	<	5.200	UJ

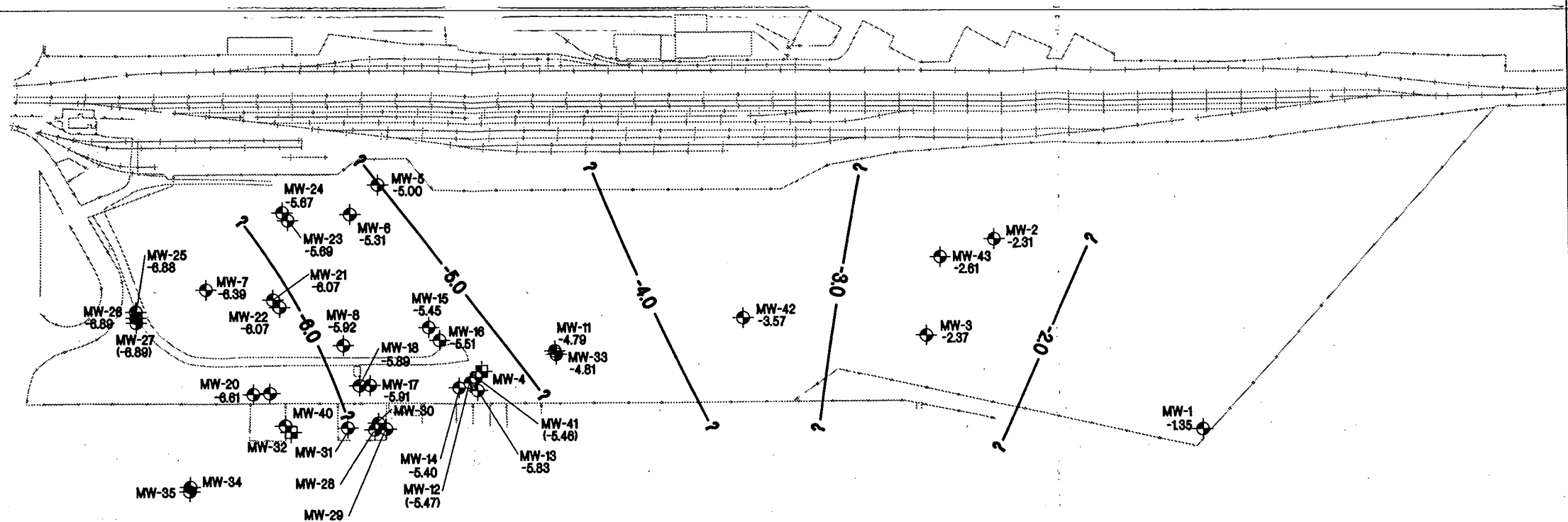
KEY

- A** < Signifies that analyte level is less than indicated value.
- B** Indicated value in units as noted in table footnote.
- C** Data qualifier(s) assigned by data validation team.

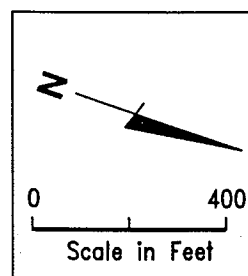
Validation Data Qualifier Explanations

- 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."
- R** The sample results are unreliable 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.
- U** The analyte was analyzed for, but was not detected above the reported sample quantitation limit.
- 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.
- c** Calibration verification failure.
- f** Field replicate or duplicate imprecision.
- l** Laboratory control sample recovery failure.

Figures



EXPLANATION	
	Fence Line
	Monitoring Well Locations
	Extraction Well Locations
	Approximate Groundwater Contour
-5.96	Groundwater Elevation for First Hydrostratigraphic Zone Wells in Feet MSLD
(-5.28)	Groundwater Elevation for Second or Third Hydrostratigraphic Zone Wells in Feet MSLD



SHALLOW GROUNDWATER CONTOURS
APRIL 1994
 Union Pacific Railroad
 Sacramento, California
 FIGURE 1

STANLEY
ATTACHED

ATTACHMENT 1



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

Jim Brake
Dames & Moore-Sacramento
8801 Folsom Blvd - Suite 200
Sacramento, CA 95826

May 9, 1994

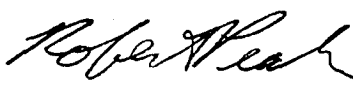
Customer Project: 00173-080-044 UPRR Sacto
Laboratory Job: L9404245

On April 26, 1994 we received 7 sample(s) for analysis.
Samples were analyzed by the following method(s):

Halogenated Volatile Organics (EPA 601/SW 8010A)

Halog. & Aromatic Volatiles (EPA 8010A/8020A)


Project Manager


Laboratory Director
Robert Peak

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: TB-5
 Lab Id: L9404245-1

Collected: 25-APR-94
 Received: 26-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
-----------	-------	-------	-------	-----------	----------

8010/8020W

Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Chloroform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Toluene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94

Surrogate:

4-Bromofluorobenzene (8010)	100.	-	%	03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	102.	-	%	03-MAY-94	03-MAY-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: FB-2
Lab Id: L9404245-2

Collected: 25-APR-94
Received: 26-APR-94
Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Chloroform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Toluene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	94.0	-	%	03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	98.0	-	%	03-MAY-94	03-MAY-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: RB-2
 Lab Id: L9404245-3

Collected: 25-APR-94
 Received: 26-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Chloroform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Toluene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
-	-	-	-	-	-
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	96.0	-	%	03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	100.	-	%	03-MAY-94	03-MAY-94
-	-	-	-	-	-
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-29
 Lab Id: L9404245-4

Collected: 25-APR-94
 Received: 26-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	1.6	0.50	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Chloroform	2.0	0.50	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	1.1	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	2.7	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	9.0	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Toluene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	97.0	-	%	03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	98.0	-	%	03-MAY-94	03-MAY-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-30
 Lab Id: L9404245-5

Collected: 25-APR-94
 Received: 26-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Chloroform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	4.9	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	66.	5.0	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Toluene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	1.4	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	8.6	0.50	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	120.	-	%	03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	117.	-	%	03-MAY-94	03-MAY-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-28
Lab Id: L9404245-6

Collected: 25-APR-94
Received: 26-APR-94
Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Chloroform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	10.	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	17.	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Toluene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94

Surrogate:

4-Bromofluorobenzene (8010)

90.0

%

03-MAY-94 03-MAY-94

4-Bromofluorobenzene (8020)

94.0

%

03-MAY-94 03-MAY-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-40
 Lab Id: L9404245-7

Collected: 25-APR-94
 Received: 26-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Chloroform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	11.	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	120	5.0	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	0.87	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	13.	0.50	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	85.0	-	%	03-MAY-94	03-MAY-94
-	87.	-	%	03-MAY-94	03-MAY-94
Comments:	None				

D&M Laboratories
ANALYTICAL DATA REPORT

Prepared for:
Project Id:
Sample Id: Method Blank
Lab Id: WG4629-4

Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Chloroform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Toluene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94

Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	96.0	-	%	03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	104.	-	%	03-MAY-94	03-MAY-94

Comments: None

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Method Blank Spike

Lab Id: WG4629-5

Reported: 06-MAY-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
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8010/8020W-QC

1,1-Dichloroethene	22.1	ug/L	20	ug/L	110 %	03-MAY-94	03-MAY-94
Trichloroethene	20.2	ug/L	20	ug/L	101 %	03-MAY-94	03-MAY-94
Chlorobenzene-601	22.9	ug/L	20	ug/L	114 %	03-MAY-94	03-MAY-94
Benzene	20.5	ug/L	20	ug/L	102 %	03-MAY-94	03-MAY-94
Toluene	20.6	ug/L	20	ug/L	103 %	03-MAY-94	03-MAY-94
Chlorobenzene-602	20.7	ug/L	20	ug/L	104 %	03-MAY-94	03-MAY-94

Surrogate:

4-Bromofluorobenzene (8010)	107.	%				03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	103.	%				03-MAY-94	03-MAY-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for:

Project Id:

Sample Id: MX

Lab Id: WG4629-1

Reported: 06-MAY-94

Parameter	Value	Unit	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Bromodichloromethane	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	1.00	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.00	ug/L	03-MAY-94	03-MAY-94
Chloroform	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.00	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	10.1	0.500	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	17.2	0.500	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropane	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Ethyl Benzene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.00	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Toluene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	ND <	0.500	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.00	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.00	ug/L	03-MAY-94	03-MAY-94
Xylenes (Total)	ND <	0.500	ug/L	03-MAY-94	03-MAY-94

Surrogate:

4-Bromofluorobenzene (8010)	90.0	-	%	03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	94.0	-	%	03-MAY-94	03-MAY-94

Comments:

MX=L9404245-6 (MW-28)

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Matrix Spike

Lab Id: WG4629-2

Reported: 06-MAY-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
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8010/8020W-QC

1,1-Dichloroethene	35.2	ug/L	20	ug/L	90 %	03-MAY-94	03-MAY-94
Trichloroethene	21.9	ug/L	20	ug/L	110 %	03-MAY-94	03-MAY-94
Chlorobenzene-601	22.1	ug/L	20	ug/L	110 %	03-MAY-94	03-MAY-94
Benzene	19.5	ug/L	20	ug/L	98 %	03-MAY-94	03-MAY-94
Toluene	19.4	ug/L	20	ug/L	97 %	03-MAY-94	03-MAY-94
Chlorobenzene-602	19.7	ug/L	20	ug/L	98 %	03-MAY-94	03-MAY-94

Surrogate:

4-Bromofluorobenzene (8010)	98.0	%				03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	90.0	%				03-MAY-94	03-MAY-94

Comments:

None

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike Dup
Lab Id: WG4629-3

Reported: 06-MAY-94

Parameter	Value	Units	% Rec	RPB	Extracted	Analyzed
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8010/8020W-QC

1,1-Dichloroethene	35.9	ug/L	94 %	2.0	03-MAY-94	03-MAY-94
Trichloroethene	22.3	ug/L	112 %	1.8	03-MAY-94	03-MAY-94
Chlorobenzene-601	23.2	ug/L	116 %	4.9	03-MAY-94	03-MAY-94
Benzene	20.8	ug/L	104 %	6.4	03-MAY-94	03-MAY-94
Toluene	20.8	ug/L	104 %	7.0	03-MAY-94	03-MAY-94
Chlorobenzene-602	21.6	ug/L	108 %	9.2	03-MAY-94	03-MAY-94

Surrogate:

4-Bromofluorobenzene (8010)	98.0	%			03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	95.0	%			03-MAY-94	03-MAY-94

Comments: None

QUALITY CONTROL REPORT

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

The Quality Control samples provide the following QC information:

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

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

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

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

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

$$\text{MBS \% Recovery} = (\text{MBS result} / \text{MBS spike level}) \times 100$$

$$\text{MS \% Recovery} = [(\text{MS result} - \text{MX result}) / \text{MS spike level}] \times 100$$

$$\text{RPD} = \{ | \text{MS result} - \text{MSD result} | / [(\text{MS result} + \text{MSD result}) / 2] \} \times 100$$

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



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P.O. Box 808024, Petaluma, CA 94975-8024
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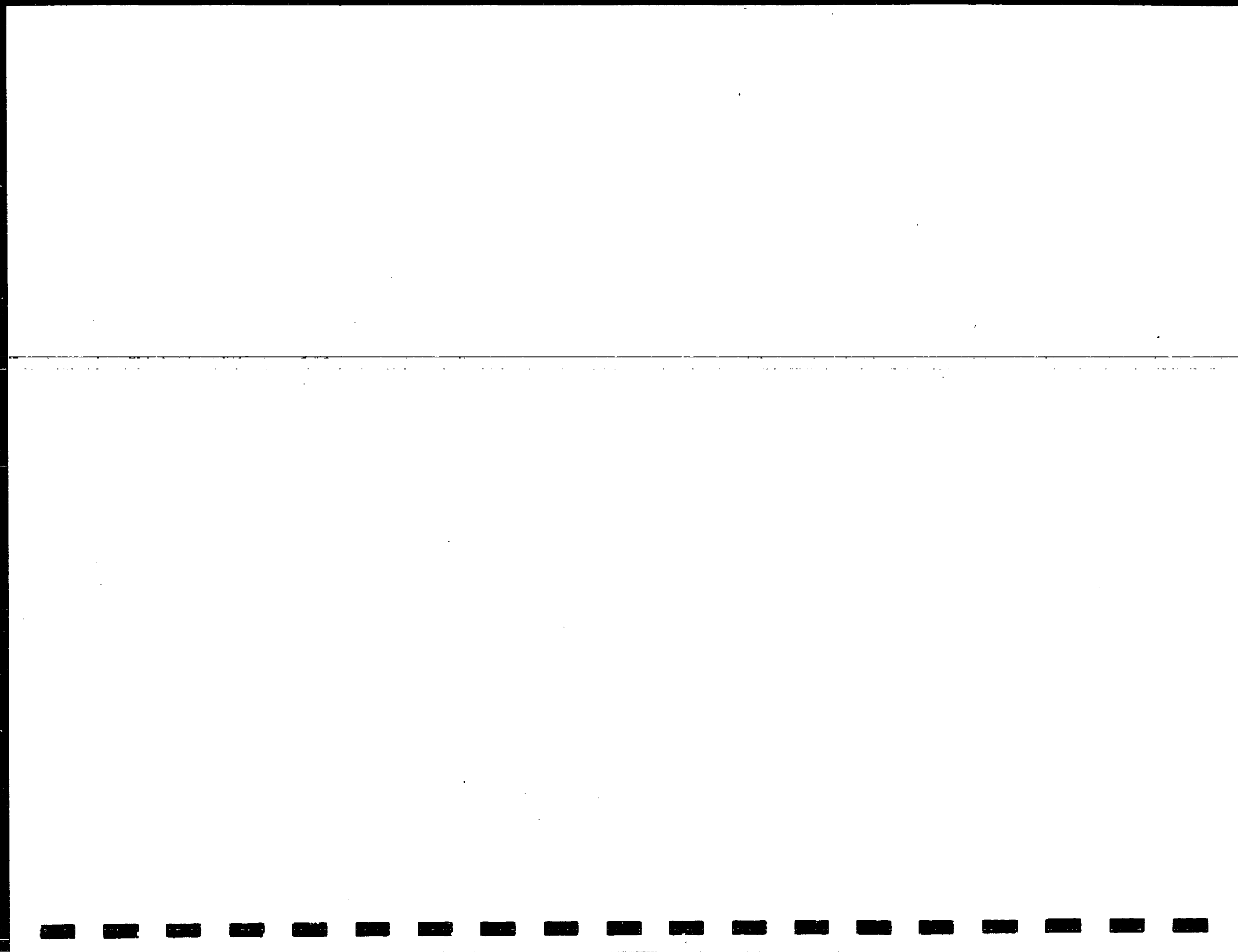
29404245

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name DAMES & MOORE Phone (916) 387-8800
Address 8801 FOLSOM BLVD
City, State, Zip SACRAMENTO, CA
Client's or Representative's Signature Jim Brake
(signature authorizes the work and terms listed below)

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

PROJ. NO. 00173-080 044		PROJECT NAME UP SACRAMENTO		NO. OF CONTAINERS		REMARKS		LAB USE ONLY LAB NO.	
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION				
18-5	4-25-94	0800		✓	Travel blank-5	3	X X		
FB-2		1445		✓	Field blank-2	4	X X		
RB-2		1500		✓	Rinse blank-2	4	X X		
29		1015		✓	MW-29	4	X X		
30		1119		✓	MW-30	4	X X		
28		1204		✓	MW-28	4	X X		
40		1357		✓	MW-40	3	X		
						COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☒			
						COOLER TEMPERATURE <u>Cool</u> °C			
						COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐			
						COOLER TEMPERATURE _____ °C			
						SAMPLES RECEIVED IN GOOD CONDITION NO BROKEN OR LEAKING CONTAINERS			
						UPS RED-26 UOAS-			
Relinquished by: (Signature) <u>Jim Brake</u>		DATE 4-25-94	TIME 1630	Received by: (Signature) <u>UPS #01972128867</u>		General Remarks: <u>preserved with HCl to pH < 2</u>			
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature)					
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature)					





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

Jim Brake
Dames & Moore-Sacramento
8801 Folsom Blvd - Suite 200
Sacramento, CA 95826

May 3, 1994

Customer Project: 00173-080-044 UPRR Sacto
Laboratory Job: L9404101

On April 13, 1994 we received 4 sample(s) for analysis.
Samples were analyzed by the following method(s):

Halogenated Volatile Organics (EPA 8010A)

Halog. & Aromatic Volatiles (EPA 8010A/8020A)

Donna Barry
Project Manager

Robert Peak
Laboratory Director
Robert Peak

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: TRAVEL BLANK
Lab Id: L9404101-1

Collected: 12-APR-94
Received: 13-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromodichloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromoform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromomethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloroethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Chloroform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Dibromochloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Ethyl Benzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Methylene Chloride	ND <	1.0	ug/L	20-APR-94	20-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Tetrachloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Toluene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trichloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Vinyl Chloride	ND <	1.0	ug/L	20-APR-94	20-APR-94
Xylenes (Total)	ND <	0.50	ug/L	20-APR-94	20-APR-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	101.	-	%	20-APR-94	20-APR-94
4-Bromofluorobenzene (8020)	94.0	-	%	20-APR-94	20-APR-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-2
Lab Id: L9404101-2

Collected: 12-APR-94
Received: 13-APR-94
Reported: 02-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromoform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromomethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloroethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Chloroform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Dibromochloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Methylene Chloride	ND <	1.0	ug/L	20-APR-94	20-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Tetrachloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trichloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Vinyl Chloride	ND <	1.0	ug/L	20-APR-94	20-APR-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	97.0	-	%	20-APR-94	20-APR-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-43
Lab Id: L9404101-3

Collected: 12-APR-94
Received: 13-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	0.55	0.50	ug/L	20-APR-94	20-APR-94
Bromodichloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromoform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromomethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloroethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Chloroform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Dibromochloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichlorobenzene	0.57	0.50	ug/L	20-APR-94	20-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethane	310	5.0	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethane	3.9	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethene	43.	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethene (Total)	9.6	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Ethyl Benzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Methylene Chloride	ND <	1.0	ug/L	20-APR-94	20-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Tetrachloroethene	1.3	0.50	ug/L	20-APR-94	20-APR-94
Toluene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,2-Trichloroethane	4.3	0.50	ug/L	20-APR-94	20-APR-94
Trichloroethene	7.4	0.50	ug/L	20-APR-94	20-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Vinyl Chloride	10.	1.0	ug/L	20-APR-94	20-APR-94
Xylenes (Total)	ND <	0.50	ug/L	20-APR-94	20-APR-94

Surrogate:

4-Bromofluorobenzene (8010)	104.	-	%	20-APR-94	20-APR-94
4-Bromofluorobenzene (8020)	89.0	-	%	20-APR-94	20-APR-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-42
Lab Id: L9404101-4

Collected: 12-APR-94
Received: 13-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	0.54	0.50	ug/L	21-APR-94	21-APR-94
Bromodichloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Chloroform	0.90	0.50	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	50.	5.0	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	120	15.	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Ethyl Benzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	4.8	0.50	ug/L	21-APR-94	21-APR-94
Toluene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	4.5	0.50	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	1.8	0.50	ug/L	21-APR-94	21-APR-94
Trichloroethene	3.6	0.50	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
Xylenes (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	101.	-	%	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	90.0	-	%	21-APR-94	21-APR-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for:

Project Id:

Sample Id: Method Blank

Lab Id: WG4527-4

Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromodichloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromoform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromomethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloroethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Chloroform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Dibromochloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Ethyl Benzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Methylene Chloride	ND <	1.0	ug/L	20-APR-94	20-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Tetrachloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Toluene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trichloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Vinyl Chloride	ND <	1.0	ug/L	20-APR-94	20-APR-94
Xylenes (Total)	ND <	0.50	ug/L	20-APR-94	20-APR-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	101.	-	%	20-APR-94	20-APR-94
4-Bromofluorobenzene (8020)	94.0	-	%	20-APR-94	20-APR-94
Comments:	None				

D&H Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Method Blank Spike

Lab Id: WG4527-5

Reported: 29-APR-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020W-QC							
1,1-Dichloroethene	23.4	ug/L	20	ug/L	117 %	20-APR-94	20-APR-94
Trichloroethene	22.9	ug/L	20	ug/L	114 %	20-APR-94	20-APR-94
Chlorobenzene-601	23.0	ug/L	20	ug/L	115 %	20-APR-94	20-APR-94
Benzene	18.8	ug/L	20	ug/L	94 %	20-APR-94	20-APR-94
Toluene	18.7	ug/L	20	ug/L	94 %	20-APR-94	20-APR-94
Chlorobenzene-602	18.8	ug/L	20	ug/L	94 %	20-APR-94	20-APR-94
-	-	-	-	-	-	-	-
Surrogate:	-	-	-	-	-	-	-
4-Bromofluorobenzene (8010)	112.	%	-	-	-	20-APR-94	20-APR-94
4-Bromofluorobenzene (8020)	95.0	%	-	-	-	20-APR-94	20-APR-94
-	-	-	-	-	-	-	-
Comments:	None	-	-	-	-	-	-

D&M Laboratories
ANALYTICAL DATA REPORT

Prepared for:
Project Id:
Sample Id: MX
Lab Id: WG4527-1

Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Bromodichloromethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.500	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.500	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.500	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Ethyl Benzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.00	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Toluene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Trichloroethene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.00	ug/L	21-APR-94	21-APR-94
Xylenes (Total)	ND <	0.500	ug/L	21-APR-94	21-APR-94

Surrogate:

4-Bromofluorobenzene (8010)	96.0	-	%	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	88.0	-	%	21-APR-94	21-APR-94

Comments:

MX=L9404108-6 (MW-41)

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Matrix Spike

Lab Id: WG4527-2

Reported: 29-APR-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
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8010/8020W-QC

1,1-Dichloroethene	25.0	ug/L	20	ug/L	125 %	21-APR-94	21-APR-94
Trichloroethene	25.1	ug/L	20	ug/L	126 %	21-APR-94	21-APR-94
Chlorobenzene-601	25.5	ug/L	20	ug/L	128 %	21-APR-94	21-APR-94
Benzene	19.7	ug/L	20	ug/L	98 %	21-APR-94	21-APR-94
Toluene	19.4	ug/L	20	ug/L	97 %	21-APR-94	21-APR-94
Chlorobenzene-602	19.5	ug/L	20	ug/L	97 %	21-APR-94	21-APR-94

Surrogate:

4-Bromofluorobenzene (8010)	104.	%				21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	88.0	%				21-APR-94	21-APR-94

Comments:

None

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Matrix Spike Dup

Lab Id: WG4527-3

Reported: 29-APR-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
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8010/8020V-QC

1,1-Dichloroethene	24.8	ug/L	124 %	0.80	21-APR-94	21-APR-94
Trichloroethene	24.4	ug/L	122 %	2.8	21-APR-94	21-APR-94
Chlorobenzene-601	24.7	ug/L	124 %	3.2	21-APR-94	21-APR-94
Benzene	18.7	ug/L	94 %	5.2	21-APR-94	21-APR-94
Toluene	18.5	ug/L	92 %	4.7	21-APR-94	21-APR-94
Chlorobenzene-602	18.6	ug/L	93 %	4.7	21-APR-94	21-APR-94

Surrogate:

4-Bromofluorobenzene (8010)	107.	%			21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	90.0	%			21-APR-94	21-APR-94

Comments:

None

QUALITY CONTROL REPORT

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

The Quality Control samples provide the following QC information:

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

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

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

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

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

$$\text{MBS \% Recovery} = (\text{MBS result} / \text{MBS spike level}) \times 100$$

$$\text{MS \% Recovery} = [(\text{MS result} - \text{MX result}) / \text{MS spike level}] \times 100$$

$$\text{RPD} = \{ | \text{MS result} - \text{MSD result} | / [(\text{MS result} + \text{MSD result}) / 2] \} \times 100$$

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



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

29404101

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name DAMES & Moore

Phone (916) 387-8800

Address 8801 FOLSOM BLVD

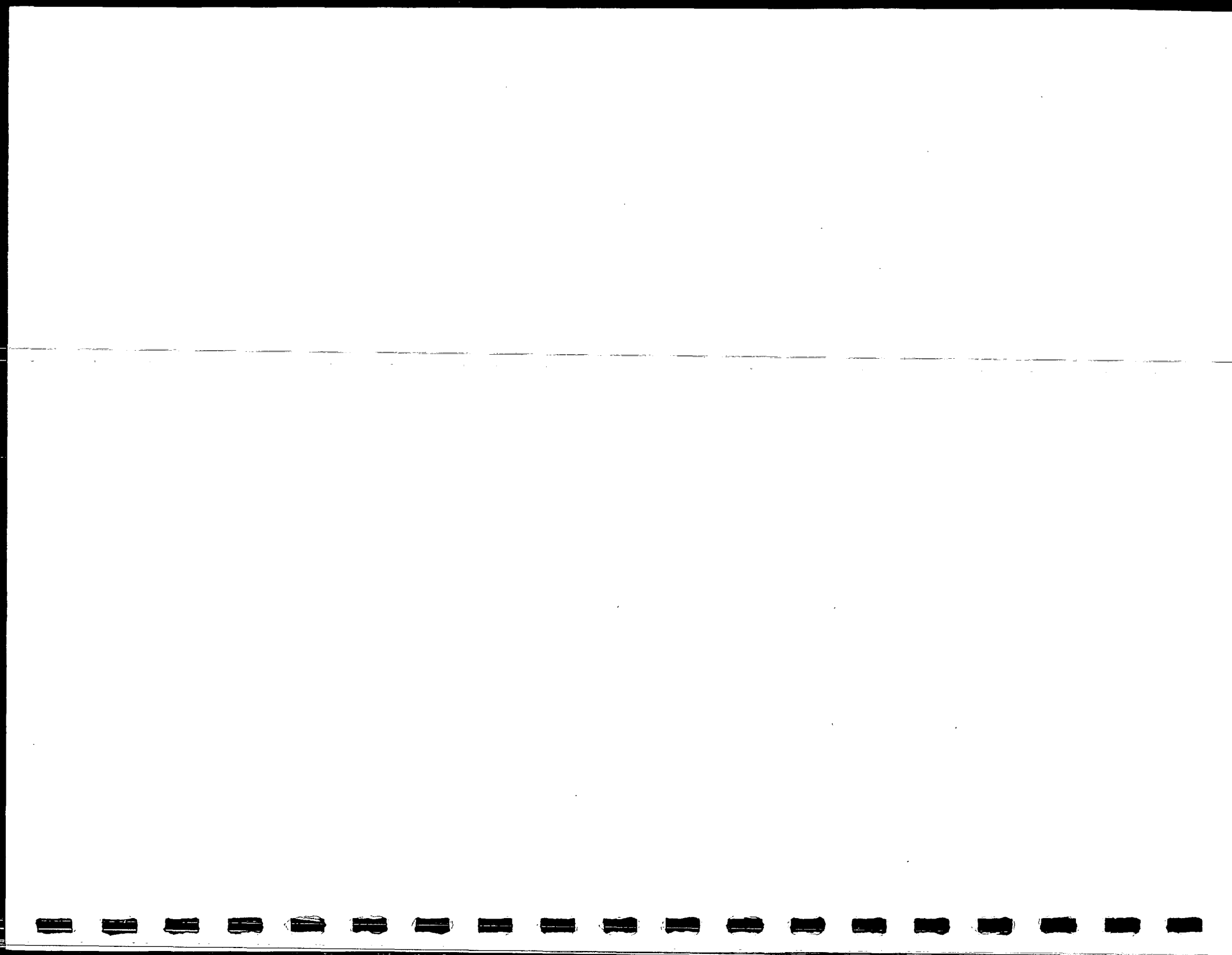
City, State, Zip SAC, Ca 95826

Client's or Representative's Signature Jim Drake

(signature authorizes the work and terms listed below)

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

PROJ. NO. 00173-080 0514		PROJECT NAME UP Sacramento		NO. OF CON-TAINERS		REMARKS		LAB USE ONLY LAB NO.	
SAMPLERS (Signature) <u>Greg Dornald</u>									
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION				
TB-1	4/24	1345			TRACI Blank	2	X	X	
MW-2		1356			MW-2	2	X		
MW-43		1341			MW-43	4	X	X	
MW-46		1421			MW-42	4	X	X	
SAMPLES RECEIVED IN GOOD CONDITION NO BROKEN OR LEAKING CONTAINERS									
COOLER CUSTODY SEALS INTACT ☒ NOT INTACT ☐ 1/1									
COOLER TEMPERATURE <u>12°C</u>									
13 UOA'S - UPS REQ									
Relinquished by: (Signature) <u>Greg Dornald</u>		DATE 4-10-94	TIME 1700	Received by: (Signature) <u>UP 01978121939</u>		General Remarks: <u>Preserved w/ HCl to pH < 2</u>			
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature) <u>Dr. Rance</u>					
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature)					





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FAX (707) 763-4065

Jim Brake
Dames & Moore-Sacramento
8801 Folsom Blvd - Suite 200
Sacramento, CA 95826

May 3, 1994

Customer Project: 00173-080-044 UPRR Sacto
Laboratory Job: L9404108

On April 14, 1994 we received 10 sample(s) for analysis.
Samples were analyzed by the following method(s):

Halogenated Volatile Organics (EPA 8010A)

Halog. & Aromatic Volatiles (EPA 8010A/8020A)

Donna Lerney

Project Manager

Robert Peak

Laboratory Director
Robert Peak

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: TB-2
Lab Id: L9404108-1

Collected: 13-APR-94
Received: 14-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromodichloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Ethyl Benzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Toluene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
Xylenes (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94

Surrogate:

4-Bromofluorobenzene (8010)	104.	-	%	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	91.0	-	%	21-APR-94	21-APR-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-11
Lab Id: L9404108-2

Collected: 13-APR-94
Received: 14-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	2.4	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	18.	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	0.56	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichloroethene	1.5	0.50	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94

Surrogate:

4-Bromofluorobenzene	96.0	-	%	21-APR-94	21-APR-94
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Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-33
Lab Id: L9404108-3

Collected: 13-APR-94
Received: 14-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	2.5	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	75.	5.0	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	1.3	0.50	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichloroethene	0.60	0.50	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94

Surrogate:

4-Bromofluorobenzene	96.0	%	21-APR-94	21-APR-94
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Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-13
Lab Id: L9404108-4

Collected: 13-APR-94
Received: 14-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	2200	50.	ug/L	22-APR-94	22-APR-94
Bromodichloromethane	ND <	5.0	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	5.0	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	10.	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	5.0	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	5.0	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	10.	ug/L	22-APR-94	22-APR-94
Chloroform	ND <	5.0	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	10.	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	5.0	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	5.0	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	5.0	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	5.0	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	40.	5.0	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	61.	5.0	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	140	5.0	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	5.0	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	5.0	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	5.0	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	5.0	ug/L	22-APR-94	22-APR-94
Ethyl Benzene	130	5.0	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	10.	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	5.0	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	5.0	ug/L	22-APR-94	22-APR-94
Toluene	67.	5.0	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	ND <	5.0	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	5.0	ug/L	22-APR-94	22-APR-94
Trichloroethene	22.	5.0	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	10.	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	10.	ug/L	22-APR-94	22-APR-94
Xylenes (Total)	79.	5.0	ug/L	22-APR-94	22-APR-94

Surrogate:

4-Bromofluorobenzene (8010)	95.0	-	%	22-APR-94	22-APR-94
4-Bromofluorobenzene (8020)	82.0	-	%	22-APR-94	22-APR-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-14
 Lab Id: L9404108-5

Collected: 13-APR-94
 Received: 14-APR-94
 Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	0.63	0.50	ug/L	22-APR-94	22-APR-94
Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	4.9	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	44.	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Ethyl Benzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Toluene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	0.58	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	7.8	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
Xylenes (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94

Surrogate:

4-Bromofluorobenzene (8010)	104.	-	%	22-APR-94	22-APR-94
4-Bromofluorobenzene (8020)	85.0	-	%	22-APR-94	22-APR-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-41
Lab Id: L9404108-6

Collected: 13-APR-94
Received: 14-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94

Surrogate:

4-Bromofluorobenzene	96.0	-	%	21-APR-94	21-APR-94
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Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-141
Lab Id: L9404108-7

Collected: 13-APR-94
Received: 14-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94

Surrogate:

4-Bromofluorobenzene

92.0

%

21-APR-94

21-APR-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-12
Lab Id: L9404108-8

Collected: 13-APR-94
Received: 14-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	16.	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	42.	5.0	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Ethyl Benzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Toluene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	2.1	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
Xylenes (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94

Surrogate:

4-Bromofluorobenzene (8010)	99.0	-	%	22-APR-94	22-APR-94
4-Bromofluorobenzene (8020)	83.0	-	%	22-APR-94	22-APR-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: FB-1
 Lab Id: L9404108-9

Collected: 13-APR-94
 Received: 14-APR-94
 Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromodichloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Ethyl Benzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Toluene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
Xylenes (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	99.0	-	%	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	90.0	-	%	21-APR-94	21-APR-94

Comments: None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: R8-1
Lab Id: L9404108-10

Collected: 13-APR-94
Received: 14-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromodichloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.50	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Ethyl Benzene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Toluene	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichloroethene	ND <	0.50	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.0	ug/L	21-APR-94	21-APR-94
Xylenes (Total)	ND <	0.50	ug/L	21-APR-94	21-APR-94

Surrogate:

4-Bromofluorobenzene (8010)	100.	-	%	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	90.0	-	%	21-APR-94	21-APR-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for:

Project Id:

Sample Id: Method Blank

Lab Id: WG4527-4

Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromodichloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromoform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Bromomethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloroethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Chloroform	ND <	0.50	ug/L	20-APR-94	20-APR-94
Chloromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Dibromochloromethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Ethyl Benzene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Methylene Chloride	ND <	1.0	ug/L	20-APR-94	20-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Tetrachloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Toluene	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trichloroethene	ND <	0.50	ug/L	20-APR-94	20-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	20-APR-94	20-APR-94
Vinyl Chloride	ND <	1.0	ug/L	20-APR-94	20-APR-94
Xylenes (Total)	ND <	0.50	ug/L	20-APR-94	20-APR-94

Surrogate:

4-Bromofluorobenzene (8010) 101. - % 20-APR-94 20-APR-94

4-Bromofluorobenzene (8020) 94.0 - % 20-APR-94 20-APR-94

Comments:

None

QUALITY CONTROL REPORT

Reported: 29-APR-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020W-QC							
1,1-Dichloroethene	23.4	ug/L	20	ug/L	117 %	20-APR-94	20-APR-94
Trichloroethene	22.9	ug/L	20	ug/L	114 %	20-APR-94	20-APR-94
Chlorobenzene-601	23.0	ug/L	20	ug/L	115 %	20-APR-94	20-APR-94
Benzene	18.8	ug/L	20	ug/L	94 %	20-APR-94	20-APR-94
Toluene	18.7	ug/L	20	ug/L	94 %	20-APR-94	20-APR-94
Chlorobenzene-602	18.8	ug/L	20	ug/L	94 %	20-APR-94	20-APR-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	112.	%				20-APR-94	20-APR-94
4-Bromofluorobenzene (8020)	95.0	%				20-APR-94	20-APR-94
-	-						
Comments:	None						

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for:

Project Id:

Sample Id: Method Blank

Lab Id: WG4527-6

Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Ethyl Benzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Toluene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
Xylenes (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94

Surrogate:

4-Bromofluorobenzene (8010)

97.0

%

22-APR-94

22-APR-94

4-Bromofluorobenzene (8020)

82.0

%

22-APR-94

22-APR-94

Comments:

None

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Method Blank Spike

Lab Id: WG4527-7

Reported: 02-MAY-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020W-QC							
1,1-Dichloroethene	23.6	ug/L	20	ug/L	118 %	22-APR-94	22-APR-94
Trichloroethene	22.5	ug/L	20	ug/L	112 %	22-APR-94	22-APR-94
Chlorobenzene-601	23.7	ug/L	20	ug/L	118 %	22-APR-94	22-APR-94
Benzene	17.6	ug/L	20	ug/L	88 %	22-APR-94	22-APR-94
Toluene	17.2	ug/L	20	ug/L	86 %	22-APR-94	22-APR-94
Chlorobenzene-602	17.3	ug/L	20	ug/L	86 %	22-APR-94	22-APR-94
Surrogate:							
4-Bromofluorobenzene (8010)	106.	%				22-APR-94	22-APR-94
4-Bromofluorobenzene (8020)	84.0	%				22-APR-94	22-APR-94
Comments:	None						

D&M Laboratories
ANALYTICAL DATA REPORT

Prepared for:
Project Id:
Sample Id: MX
Lab Id: WG4527-1

Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Bromodichloromethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.500	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.500	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.500	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Ethyl Benzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.00	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Toluene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Trichloroethene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.00	ug/L	21-APR-94	21-APR-94
Xylenes (Total)	ND <	0.500	ug/L	21-APR-94	21-APR-94

Surrogate:					
4-Bromofluorobenzene (8010)	96.0	-	%	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	88.0	-	%	21-APR-94	21-APR-94

Comments: MX=L9404108-6 (MW-41)

D&M Laboratories
QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike
Lab Id: WG4527-2

Reported: 29-APR-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020W-QC							
1,1-Dichloroethene	25.0	ug/L	20	ug/L	125 %	21-APR-94	21-APR-94
Trichloroethene	25.1	ug/L	20	ug/L	126 %	21-APR-94	21-APR-94
Chlorobenzene-601	25.5	ug/L	20	ug/L	128 %	21-APR-94	21-APR-94
Benzene	19.7	ug/L	20	ug/L	98 %	21-APR-94	21-APR-94
Toluene	19.4	ug/L	20	ug/L	97 %	21-APR-94	21-APR-94
Chlorobenzene-602	19.5	ug/L	20	ug/L	97 %	21-APR-94	21-APR-94
-	-	-	-	-	-	-	-
Surrogate:	-	-	-	-	-	-	-
4-Bromofluorobenzene (8010)	104.	%	-	-	-	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	88.0	%	-	-	-	21-APR-94	21-APR-94
-	-	-	-	-	-	-	-
Comments:	None						

D&M Laboratories
QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike Dup
Lab Id: WG4527-3

Reported: 29-APR-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
8010/8020W-QC						
1,1-Dichloroethene	24.8	ug/L	124 %	0.80	21-APR-94	21-APR-94
Trichloroethene	24.4	ug/L	122 %	2.8	21-APR-94	21-APR-94
Chlorobenzene-601	24.7	ug/L	124 %	3.2	21-APR-94	21-APR-94
Benzene	18.7	ug/L	94 %	5.2	21-APR-94	21-APR-94
Toluene	18.5	ug/L	92 %	4.7	21-APR-94	21-APR-94
Chlorobenzene-602	18.6	ug/L	93 %	4.7	21-APR-94	21-APR-94
-	-	-	-	-	-	-
Surrogate:	-	-	-	-	-	-
4-Bromofluorobenzene (8010)	107.	%	-	-	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	90.0	%	-	-	21-APR-94	21-APR-94
-	-	-	-	-	-	-
Comments:	None	-	-	-	-	-

QUALITY CONTROL REPORT

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

The Quality Control samples provide the following QC information:

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

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

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

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

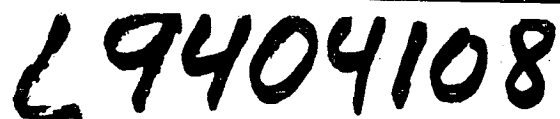
Equations used for determining percent recovery and relative percent difference (RPD) are as follows:

$$\text{MBS \% Recovery} = (\text{MBS result} / \text{MBS spike level}) \times 100$$

$$\text{MS \% Recovery} = [(\text{MS result} - \text{MX result}) / \text{MS spike level}] \times 100$$

$$\text{RPD} = \{ | \text{MS result} - \text{MSD result} | / [(\text{MS result} + \text{MSD result}) / 2] \} \times 100$$

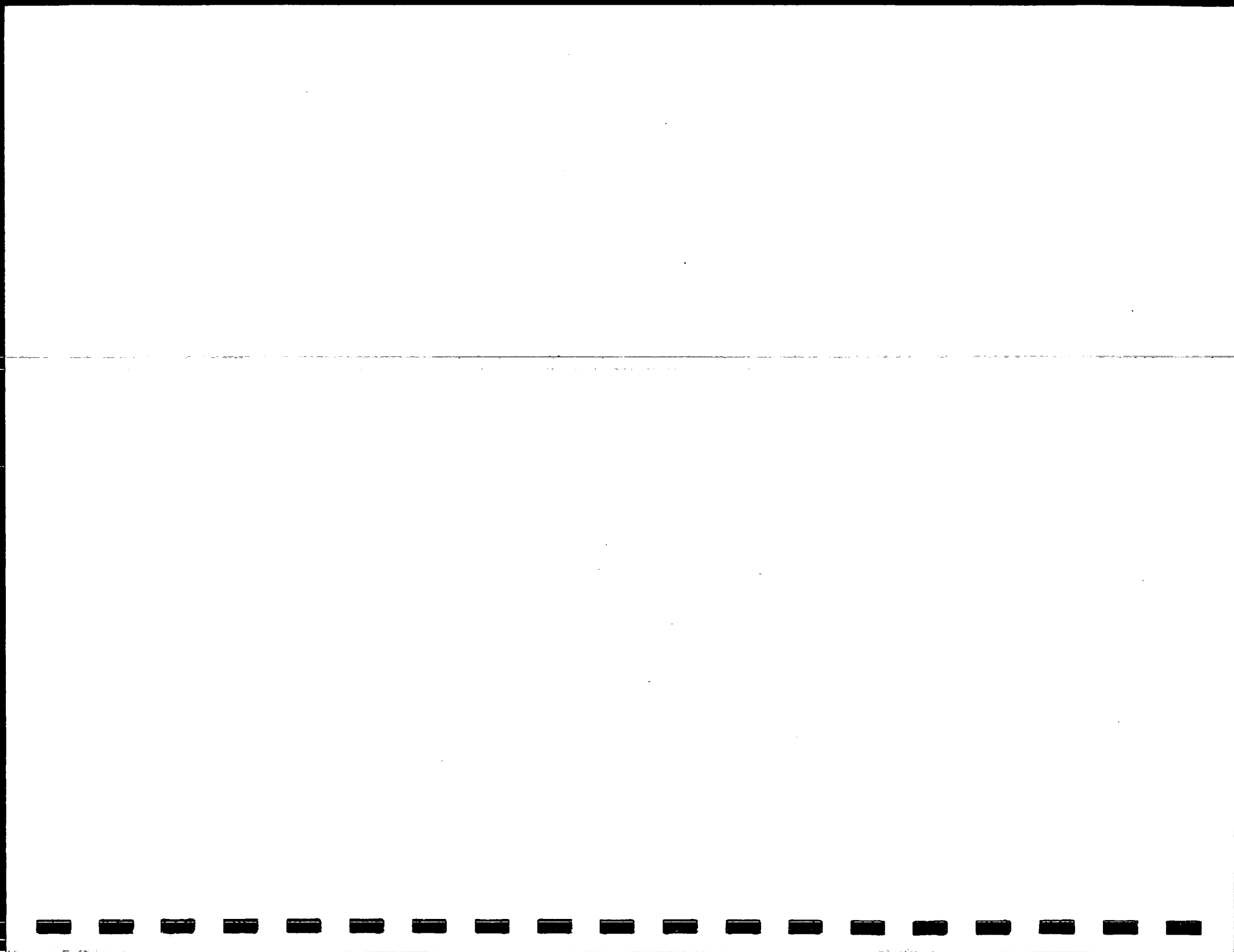
We continue to strive to improve the quality of service to our clients. We welcome any questions or comments you may have about this information, or about D&M Laboratories in general. Please contact a Project Manager for further information.



SAMPLE CHAIN OF CUSTODY / WORK ORDER

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

PART ONE - CLIENT COPY





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P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245
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Jim Brake
Dames & Moore-Sacramento
8801 Folsom Blvd - Suite 200
Sacramento, CA 95826

May 3, 1994

Customer Project: 00173-080-044 UPRR Sacto
Laboratory Job: L9404127

On April 15, 1994 we received 6 sample(s) for analysis.
Samples were analyzed by the following method(s):

Halogenated Volatile Organics (EPA 8010A)

Donna Denney
Project Manager

Robert Peak
Laboratory Director
Robert Peak

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: TRAVEL BLANK
Lab Id: L9404127-1

Collected: 14-APR-94
Received: 15-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94

Surrogate:

4-Bromofluorobenzene

107.

%

22-APR-94

22-APR-94

Comments:

None

O&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-16
 Lab Id: L9404127-2

Collected: 14-APR-94
 Received: 15-APR-94
 Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94

Surrogate:

4-Bromofluorobenzene	102.	-	%	22-APR-94	22-APR-94
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Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-18
Lab Id: L9404127-3

Collected: 14-APR-94
Received: 15-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	3.7	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	0.52	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	99.0	-	%	22-APR-94	22-APR-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-26
 Lab Id: L9404127-4

Collected: 14-APR-94
 Received: 15-APR-94
 Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	2.4	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	10.	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	16.	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	0.76	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	1.9	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	103.	-	%	22-APR-94	22-APR-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-7
Lab Id: L9404127-5

Collected: 14-APR-94
Received: 15-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	2.4	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	0.59	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	3.7	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94

Surrogate:

4-Bromofluorobenzene

90.0

%

22-APR-94 22-APR-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-20
Lab Id: L9404127-6

Collected: 14-APR-94
Received: 15-APR-94
Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94

Surrogate:

4-Bromofluorobenzene

96.0

%

22-APR-94

22-APR-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for:

Project Id:

Sample Id: Method Blank

Lab Id: WG4527-6

Reported: 02-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromodichloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromoform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Bromomethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloroethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Chloroform	ND <	0.50	ug/L	22-APR-94	22-APR-94
Chloromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Dibromochloromethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Ethyl Benzene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Methylene Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Tetrachloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Toluene	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichloroethene	ND <	0.50	ug/L	22-APR-94	22-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	22-APR-94	22-APR-94
Vinyl Chloride	ND <	1.0	ug/L	22-APR-94	22-APR-94
Xylenes (Total)	ND <	0.50	ug/L	22-APR-94	22-APR-94

Surrogate:

4-Bromofluorobenzene (8010)

97.0

%

22-APR-94

22-APR-94

4-Bromofluorobenzene (8020)

82.0

%

22-APR-94

22-APR-94

Comments:

None

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Method Blank Spike

Lab Id: WG4527-7

Reported: 02-MAY-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020W-QC							
1,1-Dichloroethene	23.6	ug/L	20	ug/L	118 %	22-APR-94	22-APR-94
Trichloroethene	22.5	ug/L	20	ug/L	112 %	22-APR-94	22-APR-94
Chlorobenzene-601	23.7	ug/L	20	ug/L	118 %	22-APR-94	22-APR-94
Benzene	17.6	ug/L	20	ug/L	88 %	22-APR-94	22-APR-94
Toluene	17.2	ug/L	20	ug/L	86 %	22-APR-94	22-APR-94
Chlorobenzene-602	17.3	ug/L	20	ug/L	86 %	22-APR-94	22-APR-94
Surrogate:							
4-Bromofluorobenzene (8010)	106.	%				22-APR-94	22-APR-94
4-Bromofluorobenzene (8020)	84.0	%				22-APR-94	22-APR-94
Comments:	None						

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for:

Project Id:

Sample Id: MX

Lab Id: WG4527-1

Reported: 29-APR-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Bromodichloromethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Bromoform	ND <	0.500	ug/L	21-APR-94	21-APR-94
Bromomethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Carbon Tetrachloride	ND <	0.500	ug/L	21-APR-94	21-APR-94
Chlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Chloroethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Chloroform	ND <	0.500	ug/L	21-APR-94	21-APR-94
Chloromethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Dibromochloromethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,3-Dichlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,4-Dichlorobenzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1-Dichloroethene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichloroethene (Total)	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,2-Dichloropropane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Cis-1,3-Dichloropropene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Trans-1,3-Dichloropropene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Ethyl Benzene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Methylene Chloride	ND <	1.00	ug/L	21-APR-94	21-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Tetrachloroethene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Toluene	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1,1-Trichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
1,1,2-Trichloroethane	ND <	0.500	ug/L	21-APR-94	21-APR-94
Trichloroethene	ND <	0.500	ug/L	21-APR-94	21-APR-94
Trichlorofluoromethane	ND <	1.00	ug/L	21-APR-94	21-APR-94
Vinyl Chloride	ND <	1.00	ug/L	21-APR-94	21-APR-94
Xylenes (Total)	ND <	0.500	ug/L	21-APR-94	21-APR-94
Surrogate:					
4-Bromofluorobenzene (8010)	96.0	-	%	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	88.0	-	%	21-APR-94	21-APR-94

Comments:

MX=L9404108-6 (MW-41)

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Matrix Spike

Lab Id: WG4527-2

Reported: 02-MAY-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020W-QC							
1,1-Dichloroethene	25.0	ug/L	20	ug/L	125 %	21-APR-94	21-APR-94
Trichloroethene	25.1	ug/L	20	ug/L	126 %	21-APR-94	21-APR-94
Chlorobenzene-601	25.5	ug/L	20	ug/L	128 %	21-APR-94	21-APR-94
Benzene	19.7	ug/L	20	ug/L	98 %	21-APR-94	21-APR-94
Toluene	19.4	ug/L	20	ug/L	97 %	21-APR-94	21-APR-94
Chlorobenzene-602	19.5	ug/L	20	ug/L	97 %	21-APR-94	21-APR-94
Surrogate:							
4-Bromofluorobenzene (8010)	104.	%				21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	88.0	%				21-APR-94	21-APR-94
Comments:	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Matrix Spike Dup

Lab Id: WG4527-3

Reported: 29-APR-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
8010/8020W-QC						
1,1-Dichloroethene	24.8	ug/L	124 %	0.80	21-APR-94	21-APR-94
Trichloroethene	24.4	ug/L	122 %	2.8	21-APR-94	21-APR-94
Chlorobenzene-601	24.7	ug/L	124 %	3.2	21-APR-94	21-APR-94
Benzene	18.7	ug/L	94 %	5.2	21-APR-94	21-APR-94
Toluene	18.5	ug/L	92 %	4.7	21-APR-94	21-APR-94
Chlorobenzene-602	18.6	ug/L	93 %	4.7	21-APR-94	21-APR-94
-	-	-	-	-	-	-
Surrogate:	-	-	-	-	-	-
4-Bromofluorobenzene (8010)	107.	%	-	-	21-APR-94	21-APR-94
4-Bromofluorobenzene (8020)	90.0	%	-	-	21-APR-94	21-APR-94
-	-	-	-	-	-	-
Comments:	None	-	-	-	-	-

QUALITY CONTROL REPORT

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

The Quality Control samples provide the following QC information:

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

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

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

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

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

$$\text{MBS \% Recovery} = (\text{MBS result} / \text{MBS spike level}) \times 100$$

$$\text{MS \% Recovery} = [(\text{MS result} - \text{MX result}) / \text{MS spike level}] \times 100$$

$$\text{RPD} = \{ | \text{MS result} - \text{MSD result} | / [(\text{MS result} + \text{MSD result}) / 2] \} \times 100$$

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



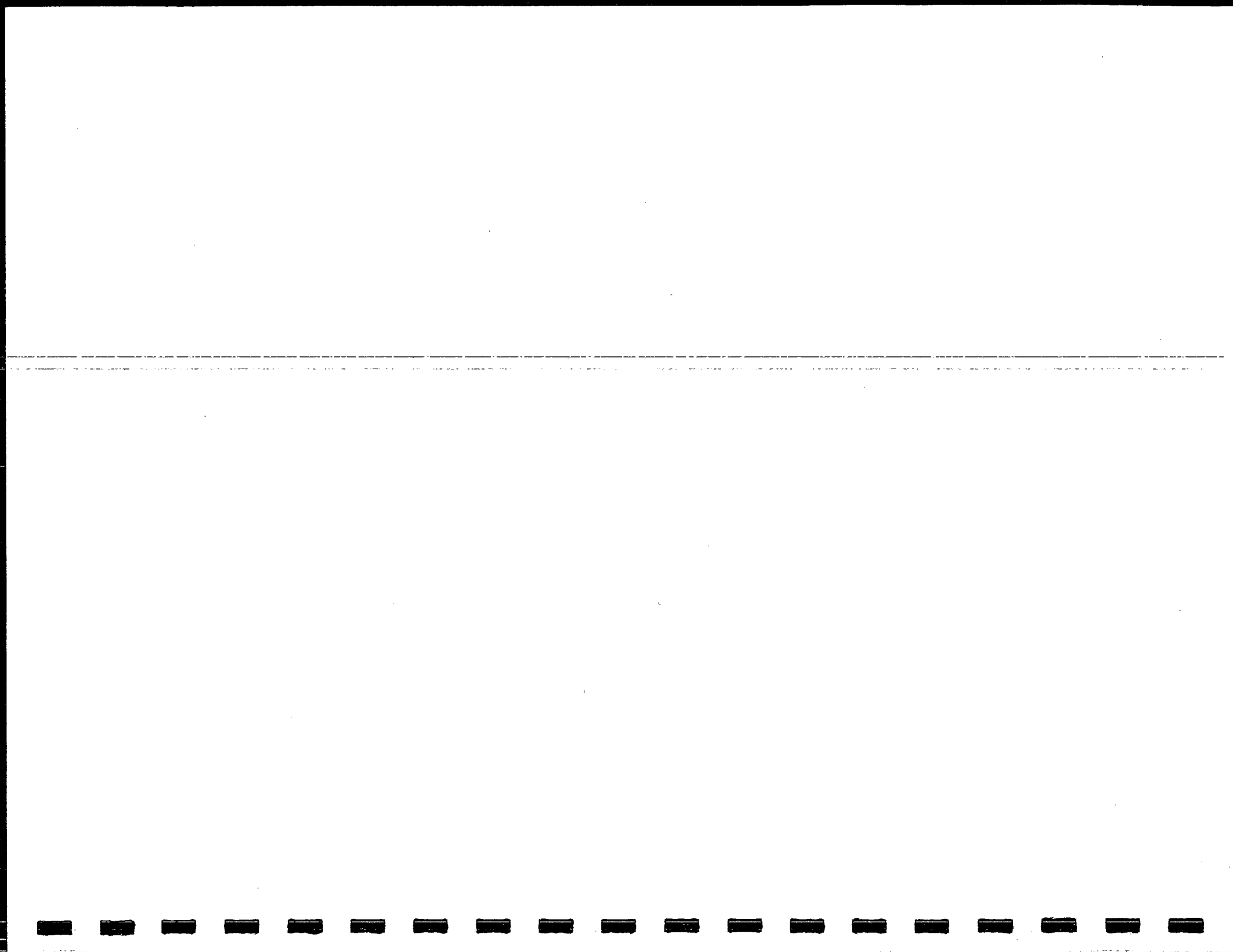
3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 763-8245 Fax: (707) 763-4085

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name Dames & Moore Phone (916) 387-8800
Address 8801 FOLSOM BLVD
City, State, Zip SAC, Ca 95826
Client's or Representative's Signature Jim Brail
(signature authorizes the work and terms listed below)

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

PROJ. NO. 00173-080 044		PROJECT NAME UP SACRAMENTO		NO. OF CONTAINERS		REMARKS		LAB USE ONLY LAB NO.	
SAMPLERS (Signature) <u>Dug Bernall</u>									
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION				
TB-3	4-14-94	0745			Travel Blank	1	X		
16		0910			MW-16	3	X		
18		0945			MW-18	3	X		
26		1042			MW-26	3	X		
7		1122			MW-7	3	X		
20	✓	1200			MW-20	3	X		
SAMPLES RECEIVED IN GOOD CONDITION NO BROKEN OR LEAKING CONTAINERS						COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐ N/A			
						COOLER TEMPERATURE <u>COLD</u> °C			
Relinquished by: (Signature) <u>Dug Bernall</u>		DATE 4-14-94	TIME 1500	Received by: (Signature) <u>UPS # 097-2621-874</u>		General Remarks: <u>Samples preserved w/ HCl to</u> <u>PH < 2</u> <u>16 V D AS - UPS Red.</u>			
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature) <u>Chris Lockman</u>					
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature)					





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

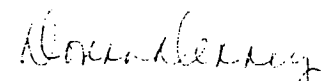
Jim Brake
Dames & Moore-Sacramento
8801 Folsom Blvd - Suite 200
Sacramento, CA 95826

May 3, 1994

Customer Project: 00173-080-044 UPRR Sacto
Laboratory Job: L9404149

On April 18, 1994 we received 5 sample(s) for analysis.
Samples were analyzed by the following method(s):

Halogenated Volatile Organics (EPA 8010A)


Project Manager


Laboratory Director
Robert Peak

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: TRAVEL BLANK-4
Lab Id: L9404149-1

Collected: 15-APR-94
Received: 18-APR-94
Reported: 02-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Bromoform	ND <	0.50	ug/L	25-APR-94	25-APR-94
Bromomethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	25-APR-94	25-APR-94
Chlorobenzene	ND <	0.50	ug/L	25-APR-94	25-APR-94
Chloroethane	ND <	1.0	ug/L	25-APR-94	25-APR-94
Chloroform	ND <	0.50	ug/L	25-APR-94	25-APR-94
Chloromethane	ND <	1.0	ug/L	25-APR-94	25-APR-94
Dibromochloromethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	25-APR-94	25-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	25-APR-94	25-APR-94
Methylene Chloride	ND <	1.0	ug/L	25-APR-94	25-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Tetrachloroethene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Trichloroethene	ND <	0.50	ug/L	25-APR-94	25-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	25-APR-94	25-APR-94
Vinyl Chloride	ND <	1.0	ug/L	25-APR-94	25-APR-94
-	-	-	-	-	-
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	113.	-	%	25-APR-94	25-APR-94
-	-	-	-	-	-
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-44
Lab Id: L9404149-2

Collected: 15-APR-94
Received: 18-APR-94
Reported: 02-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Bromoform	ND <	0.50	ug/L	26-APR-94	26-APR-94
Bromomethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Carbon Tetrachloride	6.1	0.50	ug/L	26-APR-94	26-APR-94
Chlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Chloroethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Chloroform	4.4	0.50	ug/L	26-APR-94	26-APR-94
Chloromethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Dibromochloromethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethane	2.5	0.50	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethene	1.1	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Methylene Chloride	ND <	1.0	ug/L	26-APR-94	26-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Tetrachloroethene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trichloroethene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Vinyl Chloride	ND <	1.0	ug/L	26-APR-94	26-APR-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	109.	-	%	26-APR-94	26-APR-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-144
Lab Id: L9404149-3

Collected: 15-APR-94
Received: 18-APR-94
Reported: 02-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Bromoform	ND <	0.50	ug/L	26-APR-94	26-APR-94
Bromomethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Carbon Tetrachloride	5.8	0.50	ug/L	26-APR-94	26-APR-94
Chlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Chloroethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Chloroform	4.3	0.50	ug/L	26-APR-94	26-APR-94
Chloromethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Dibromochloromethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethane	2.1	0.50	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethene	1.0	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Methylene Chloride	ND <	1.0	ug/L	26-APR-94	26-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Tetrachloroethene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trichloroethene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Vinyl Chloride	ND <	1.0	ug/L	26-APR-94	26-APR-94
-	-	-	-	-	-
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	116.	-	%	26-APR-94	26-APR-94
-	-	-	-	-	-
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-38
Lab Id: L9404149-4

Collected: 15-APR-94
Received: 18-APR-94
Reported: 02-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Bromoform	ND <	0.50	ug/L	26-APR-94	26-APR-94
Bromomethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Carbon Tetrachloride	0.85	0.50	ug/L	26-APR-94	26-APR-94
Chlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Chloroethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Chloroform	2.1	0.50	ug/L	26-APR-94	26-APR-94
Chloromethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Dibromochloromethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethane	6.6	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethane	0.89	0.50	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethene	130	5.0	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Methylene Chloride	ND <	1.0	ug/L	26-APR-94	26-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Tetrachloroethene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1,1-Trichloroethane	6.2	0.50	ug/L	26-APR-94	26-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trichloroethene	7.7	0.50	ug/L	26-APR-94	26-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Vinyl Chloride	ND <	1.0	ug/L	26-APR-94	26-APR-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	123.	-	X	26-APR-94	26-APR-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-39
Lab Id: L9404149-5

Collected: 15-APR-94
Received: 18-APR-94
Reported: 02-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Bromoform	ND <	0.50	ug/L	26-APR-94	26-APR-94
Bromomethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Carbon Tetrachloride	1.8	0.50	ug/L	26-APR-94	26-APR-94
Chlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Chloroethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Chloroform	2.6	0.50	ug/L	26-APR-94	26-APR-94
Chloromethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Dibromochloromethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethane	2.8	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethane	1.2	0.50	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethene	34.	5.0	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	26-APR-94	26-APR-94
Methylene Chloride	ND <	1.0	ug/L	26-APR-94	26-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Tetrachloroethene	ND <	0.50	ug/L	26-APR-94	26-APR-94
1,1,1-Trichloroethane	2.5	0.50	ug/L	26-APR-94	26-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	26-APR-94	26-APR-94
Trichloroethene	1.4	0.50	ug/L	26-APR-94	26-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	26-APR-94	26-APR-94
Vinyl Chloride	ND <	1.0	ug/L	26-APR-94	26-APR-94
-	-	-	-	-	-
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	119.	-	X	26-APR-94	26-APR-94
-	-	-	-	-	-
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for:

Project Id:

Sample Id: Method Blank

Lab Id: WG4573-4

Reported: 02-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Bromoform	ND <	0.50	ug/L	25-APR-94	25-APR-94
Bromomethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Carbon Tetrachloride	ND <	0.50	ug/L	25-APR-94	25-APR-94
Chlorobenzene	ND <	0.50	ug/L	25-APR-94	25-APR-94
Chloroethane	ND <	1.0	ug/L	25-APR-94	25-APR-94
Chloroform	ND <	0.50	ug/L	25-APR-94	25-APR-94
Chloromethane	ND <	1.0	ug/L	25-APR-94	25-APR-94
Dibromochloromethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,1-Dichloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,2-Dichloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,1-Dichloroethene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,2-Dichloropropane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	25-APR-94	25-APR-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	25-APR-94	25-APR-94
Methylene Chloride	ND <	1.0	ug/L	25-APR-94	25-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Tetrachloroethene	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	25-APR-94	25-APR-94
Trichloroethene	ND <	0.50	ug/L	25-APR-94	25-APR-94
Trichlorofluoromethane	ND <	1.0	ug/L	25-APR-94	25-APR-94
Vinyl Chloride	ND <	1.0	ug/L	25-APR-94	25-APR-94
-	-	-	-	-	-
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	105.	-	%	25-APR-94	25-APR-94
-	-	-	-	-	-
Comments:	None				

D&M Laboratories
QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG4573-5

Reported: 02-MAY-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
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8010W-QC

1,1-Dichloroethene	22.9	ug/L	20	ug/L	114 %	25-APR-94	25-APR-94
Trichloroethene	23.1	ug/L	20	ug/L	116 %	25-APR-94	25-APR-94
Chlorobenzene	21.7	ug/L	20	ug/L	108 %	25-APR-94	25-APR-94
-	-	-	-	-	-	-	-
Surrogate:	-	-	-	-	-	-	-
4-Bromofluorobenzene	111.	%	-	-	-	25-APR-94	25-APR-94
-	-	-	-	-	-	-	-
Comments:	-	-	-	-	-	-	-

D&M Laboratories
ANALYTICAL DATA REPORT

Prepared for:
Project Id:
Sample Id: MX
Lab Id: WG4573-1

Reported: 02-MAY-94

Parameter	Value	Ltlt	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.500	ug/L	26-APR-94	26-APR-94
Bromoform	ND <	0.500	ug/L	26-APR-94	26-APR-94
Bromomethane	ND <	0.500	ug/L	26-APR-94	26-APR-94
Carbon Tetrachloride	5.8	0.500	ug/L	26-APR-94	26-APR-94
Chlorobenzene	ND <	0.500	ug/L	26-APR-94	26-APR-94
Chloroethane	ND <	1.00	ug/L	26-APR-94	26-APR-94
Chloroform	4.3	0.500	ug/L	26-APR-94	26-APR-94
Chloromethane	ND <	1.00	ug/L	26-APR-94	26-APR-94
Dibromochloromethane	ND <	0.500	ug/L	26-APR-94	26-APR-94
1,2-Dichlorobenzene	ND <	0.500	ug/L	26-APR-94	26-APR-94
1,3-Dichlorobenzene	ND <	0.500	ug/L	26-APR-94	26-APR-94
1,4-Dichlorobenzene	ND <	0.500	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethane	ND <	0.500	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethane	2.1	0.500	ug/L	26-APR-94	26-APR-94
1,1-Dichloroethene	1.0	0.500	ug/L	26-APR-94	26-APR-94
1,2-Dichloroethene (Total)	ND <	0.500	ug/L	26-APR-94	26-APR-94
1,2-Dichloropropane	ND <	0.500	ug/L	26-APR-94	26-APR-94
Cis-1,3-Dichloropropene	ND <	0.500	ug/L	26-APR-94	26-APR-94
Trans-1,3-Dichloropropene	ND <	0.500	ug/L	26-APR-94	26-APR-94
Methylene Chloride	ND <	1.00	ug/L	26-APR-94	26-APR-94
1,1,2,2-Tetrachloroethane	ND <	0.500	ug/L	26-APR-94	26-APR-94
Tetrachloroethene	ND <	0.500	ug/L	26-APR-94	26-APR-94
1,1,1-Trichloroethane	ND <	0.500	ug/L	26-APR-94	26-APR-94
1,1,2-Trichloroethane	ND <	0.500	ug/L	26-APR-94	26-APR-94
Trichloroethene	ND <	0.500	ug/L	26-APR-94	26-APR-94
Trichlorofluoromethane	ND <	1.00	ug/L	26-APR-94	26-APR-94
Vinyl Chloride	ND <	1.00	ug/L	26-APR-94	26-APR-94

Surrogate:
4-Bromofluorobenzene 116. % 26-APR-94 26-APR-94

Comments: MX=L9404149-3 (MW-144)

D&M Laboratories
QUALITY CONTROL REPORT

Prepared for:
Project Id:
Sample Id: Matrix Spike
Lab Id: WG4573-2

Reported: 02-MAY-94

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
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8010W-QC

1,1-Dichloroethene	23.6	ug/L	20	ug/L	113 %	26-APR-94	26-APR-94
Trichloroethene	23.2	ug/L	20	ug/L	116 %	26-APR-94	26-APR-94
Chlorobenzene	23.0	ug/L	20	ug/L	115 %	26-APR-94	26-APR-94
-	-	-	-	-	-	-	-
Surrogate:	-	-	-	-	-	-	-
4-Bromofluorobenzene	114.	%	-	-	-	26-APR-94	26-APR-94
-	-	-	-	-	-	-	-
Comments:	-	-	-	-	-	-	-

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Matrix Spike Dup

Lab Id: WG4573-3

Reported: 02-MAY-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
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8010W-QC

1,1-Dichloroethene

23.8

ug/L

114 %

0.80

26-APR-94 26-APR-94

Trichloroethene

23.1

ug/L

116 %

0.40

26-APR-94 26-APR-94

Chlorobenzene

22.9

ug/L

114 %

0.40

26-APR-94 26-APR-94

Surrogate:

4-Bromofluorobenzene

115.

%

26-APR-94 26-APR-94

Comments:

QUALITY CONTROL REPORT

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

The Quality Control samples provide the following QC information:

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

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

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

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

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

$$\text{MBS \% Recovery} = (\text{MBS result} / \text{MBS spike level}) \times 100$$

$$\text{MS \% Recovery} = [(\text{MS result} - \text{MX result}) / \text{MS spike level}] \times 100$$

$$\text{RPD} = \{ | \text{MS result} - \text{MSD result} | / [(\text{MS result} + \text{MSD result}) / 2] \} \times 100$$

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



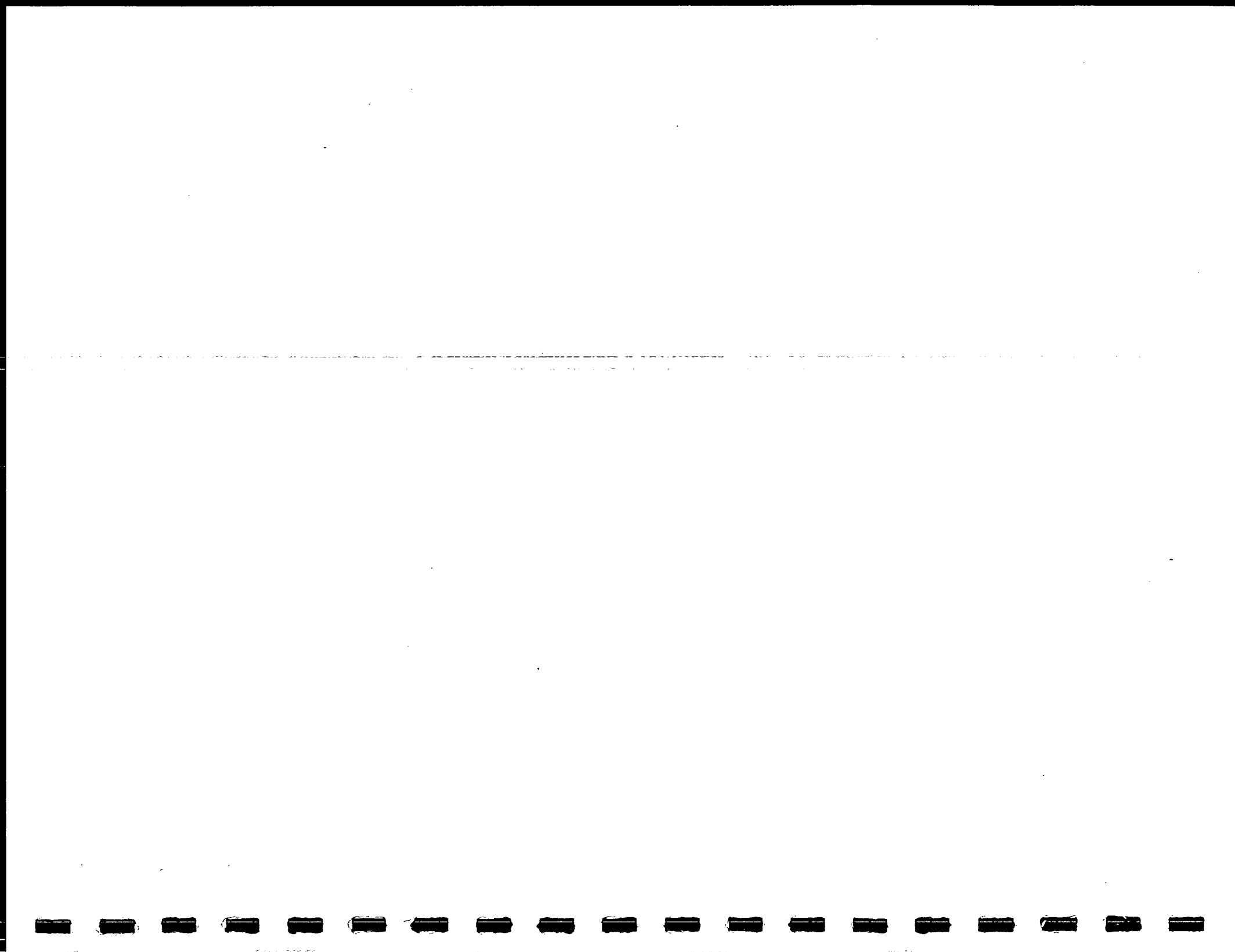
3700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Telephone: (707) 783-8245 Fax: (707) 783-4085

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name Dames & Moore Phone (916) 387-8800
Address 8801 FOLSOM BLVD
City, State, Zip SAC, Ca 95826
Client's or Representative's Signature Jim Brall
(signature authorizes the work and terms listed below)

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

PROJ. NO. 00173-080 044		PROJECT NAME UP SACRAMENTO		NO. OF CON-TAINERS		REMARKS		LAB USE ONLY LAB NO.	
SAMPLERS (Signature) <i>Raymond</i>									
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION				
18-3	4-14-91	0745			TRAVEL Blank	1	X		
16		0910			MW-16	3	X		
18		0945			MW-18	3	X		
26		1042			MW-26	3	X		
7		1122			MW-7	3	X		
20	✓	1200			MW-20	3	X		
SAMPLER RECEIVED IN GOOD CONDITION NO BROKEN OR LEAKING CONTAINERS									
COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐ N/A									
COOLER TEMPERATURE <u>COLD</u> °C									
Relinquished by: (Signature) <i>Raymond</i>		DATE 4-14-91	TIME 1500	Received by: (Signature) <i>UPS # 097-2621-899</i>		General Remarks: <i>Samples preserved w/ HCl to PH < 2 16 VDAS - UPS Red.</i>			
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature) <i>Cherry Lockman</i>					
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature)					





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

Jim Brake
Dames & Moore-Sacramento
8801 Folsom Blvd - Suite 200
Sacramento, CA 95826

May 9, 1994

Customer Project: 00173-080-044 UPRR Sacto
Laboratory Job: L9404261

On April 27, 1994 we received 9 sample(s) for analysis.
Samples were analyzed by the following method(s):

Halogenated Volatile Organics (EPA 8010A)

Halog. & Aromatic Volatiles (EPA 8010A/8020A)


Project Manager


Laboratory Director
Robert Peak

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: TB-6
 Lab Id: L9404261-1

Collected: 26-APR-94
 Received: 27-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Toluene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94

Surrogate:

4-Bromofluorobenzene (8010)	89.0	-	%	04-MAY-94	04-MAY-94
4-Bromofluorobenzene (8020)	99.0	-	%	04-MAY-94	04-MAY-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: FB-3
Lab Id: L9404261-2

Collected: 26-APR-94
Received: 27-APR-94
Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Toluene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	85.0	-	%	04-MAY-94	04-MAY-94
4-Bromofluorobenzene (8020)	90.0	-	%	04-MAY-94	04-MAY-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: RB-3
 Lab Id: L9404261-3

Collected: 26-APR-94
 Received: 27-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Toluene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94

Surrogate:

4-Bromofluorobenzene (8010)	106.	-	%	04-MAY-94	04-MAY-94
4-Bromofluorobenzene (8020)	109.	-	%	04-MAY-94	04-MAY-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-37
 Lab Id: L9404261-4

Collected: 26-APR-94
 Received: 27-APR-94
 Reported: 06-MAY-94

Parameter	Value	Unit	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	0.55	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	2.5	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	3.1	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	7.7	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	20.	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94

Surrogate:	-	-	-	04-MAY-94	04-MAY-94
4-Bromofluorobenzene	94.0	-	%	04-MAY-94	04-MAY-94

Comments:	None
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D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-137
 Lab Id: L9404261-5

Collected: 26-APR-94
 Received: 27-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	0.58	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	2.4	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	3.0	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	7.4	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	20.	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94

Surrogate:

4-Bromofluorobenzene	101.	-	%	04-MAY-94	04-MAY-94
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Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-36
Lab Id: L9404261-6

Collected: 26-APR-94
Received: 27-APR-94
Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	2.0	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	76.	5.0	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	1.2	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	4.5	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
-	-	-	-	-	-
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	95.0	-	%	04-MAY-94	04-MAY-94
-	-	-	-	-	-
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-31
 Lab Id: L9404261-7

Collected: 26-APR-94
 Received: 27-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	2.5	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	53.	5.0	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	0.89	0.50	ug/L	04-MAY-94	04-MAY-94
Toluene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	0.65	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	11.	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Surrogate:					
4-Bromofluorobenzene (8010)	99.0	-	%	04-MAY-94	04-MAY-94
4-Bromofluorobenzene (8020)	100.	-	%	04-MAY-94	04-MAY-94

Comments:

None

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
Project Id: 00173-080-044 UPRR Sacto
Sample Id: MW-35
Lab Id: L9404261-8

Collected: 26-APR-94
Received: 27-APR-94
Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010W

Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	10.	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	2.2	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	96.0	-	%	04-MAY-94	04-MAY-94
Comments:	None				

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for: Dames & Moore-Sacramento
 Project Id: 00173-080-044 UPRR Sacto
 Sample Id: MW-34
 Lab Id: L9404261-9

Collected: 26-APR-94
 Received: 27-APR-94
 Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010W					
Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	6.2	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	120	5.0	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	0.84	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	1.4	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	16.	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
-	-	-	-	-	-
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene	85.0	-	%	04-MAY-94	04-MAY-94
-	-	-	-	-	-
Comments:	None	-	-	-	-

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for:

Project Id:

Sample Id: Method Blank

Lab Id: WG4629-6

Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
8010/8020W					
Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromoform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Bromomethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloroethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Chloroform	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Chloromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1-Dichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Methylene Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Toluene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichloroethene	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	04-MAY-94	04-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	04-MAY-94	04-MAY-94
Surrogate:	-	-	-	-	-
4-Bromofluorobenzene (8010)	106.	-	%	04-MAY-94	04-MAY-94
4-Bromofluorobenzene (8020)	104.	-	%	04-MAY-94	04-MAY-94
Comments:	None				

Prepared for:
Project Id:
Sample Id: Method Blank Spike
Lab Id: WG4629-7

Parameter	Value	Units	Spfka	Units	% Rec	Extracted	Analyzed
8010/8020W-QC							
1,1-Dichloroethene	22.0	ug/L	20	ug/L	110 %	04-MAY-94	04-MAY-94
Trichloroethene	21.6	ug/L	20	ug/L	108 %	04-MAY-94	04-MAY-94
Chlorobenzene-601	23.7	ug/L	20	ug/L	118 %	04-MAY-94	04-MAY-94
Benzene	20.4	ug/L	20	ug/L	102 %	04-MAY-94	04-MAY-94
Toluene	20.7	ug/L	20	ug/L	104 %	04-MAY-94	04-MAY-94
Chlorobenzene-602	22.0	ug/L	20	ug/L	110 %	04-MAY-94	04-MAY-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	112.	%				04-MAY-94	04-MAY-94
4-Bromofluorobenzene (8020)	106.	%				04-MAY-94	04-MAY-94
-	-						
Comments:	None						

D&M Laboratories

ANALYTICAL DATA REPORT

Prepared for:

Project Id:

Sample Id: MX

Lab Id: WG4629-1

Reported: 06-MAY-94

Parameter	Value	Limit	Units	Extracted	Analyzed
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8010/8020W

Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromodichloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromoform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Bromomethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Carbon Tetrachloride	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloroethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Chloroform	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Chloromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Dibromochloromethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,3-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,4-Dichlorobenzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethane	10.1	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1-Dichloroethene	17.2	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloroethene (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,2-Dichloropropane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Cis-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trans-1,3-Dichloropropene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Ethyl Benzene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Methylene Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
1,1,2,2-Tetrachloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Tetrachloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Toluene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,1-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
1,1,2-Trichloroethane	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichloroethene	ND <	0.50	ug/L	03-MAY-94	03-MAY-94
Trichlorofluoromethane	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Vinyl Chloride	ND <	1.0	ug/L	03-MAY-94	03-MAY-94
Xylenes (Total)	ND <	0.50	ug/L	03-MAY-94	03-MAY-94

Surrogate:

4-Bromofluorobenzene (8010)	90.0	-	%	03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	94.0	-	%	03-MAY-94	03-MAY-94

Comments:

MX=L9404245-6 (MW-28)

Prepared for:
Project Id:
Sample Id: Matrix Spike
Lab Id: WG4629-2

Parameter	Value	Units	Spike	Units	% Rec	Extracted	Analyzed
8010/8020W-qc							
1,1-Dichloroethene	35.2	ug/L	20	ug/L	90 %	03-MAY-94	03-MAY-94
Trichloroethene	21.9	ug/L	20	ug/L	110 %	03-MAY-94	03-MAY-94
Chlorobenzene-601	22.1	ug/L	20	ug/L	110 %	03-MAY-94	03-MAY-94
Benzene	19.5	ug/L	20	ug/L	98 %	03-MAY-94	03-MAY-94
Toluene	19.4	ug/L	20	ug/L	97 %	03-MAY-94	03-MAY-94
Chlorobenzene-602	19.7	ug/L	20	ug/L	98 %	03-MAY-94	03-MAY-94
-	-						
Surrogate:	-						
4-Bromofluorobenzene (8010)	98.0	%				03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	90.0	%				03-MAY-94	03-MAY-94
-	-						
Comments:	None						

D&M Laboratories

QUALITY CONTROL REPORT

Prepared for:

Project Id:

Sample Id: Matrix Spike Dup

Lab Id: WG4629-3

Reported: 06-MAY-94

Parameter	Value	Units	% Rec	RPD	Extracted	Analyzed
8010/8020W-QC						
1,1-Dichloroethene	35.9	ug/L	94 %	2.0	03-MAY-94	03-MAY-94
Trichloroethene	22.3	ug/L	112 %	1.8	03-MAY-94	03-MAY-94
Chlorobenzene-601	23.2	ug/L	116 %	4.9	03-MAY-94	03-MAY-94
Benzene	20.8	ug/L	104 %	6.4	03-MAY-94	03-MAY-94
Toluene	20.8	ug/L	104 %	7.0	03-MAY-94	03-MAY-94
Chlorobenzene-602	21.6	ug/L	108 %	9.2	03-MAY-94	03-MAY-94
-	-	-	-	-	-	-
Surrogate:	-	-	-	-	-	-
4-Bromofluorobenzene (8010)	98.0	%	-	-	03-MAY-94	03-MAY-94
4-Bromofluorobenzene (8020)	95.0	%	-	-	03-MAY-94	03-MAY-94
-	-	-	-	-	-	-
Comments:	None					

QUALITY CONTROL REPORT

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

The Quality Control samples provide the following QC information:

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

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

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

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

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

$$\text{MBS \% Recovery} = (\text{MBS result} / \text{MBS spike level}) \times 100$$

$$\text{MS \% Recovery} = [(\text{MS result} - \text{MX result}) / \text{MS spike level}] \times 100$$

$$\text{RPD} = \{ | \text{MS result} - \text{MSD result} | / [(\text{MS result} + \text{MSD result}) / 2] \} \times 100$$

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



SAMPLE CHAIN OF CUSTODY / WORK ORDER

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

PART ONE - CLIENT COPY



700 Lakeville Highway, Petaluma, CA 94954
P.O. Box 808024, Petaluma, CA 94975-8024
Phone: (707) 763-8245 Fax: (707) 763-4065

L9404261

RECEIVED MAY 02 1994

SAMPLE CHAIN OF CUSTODY / WORK ORDER

Client's Name Dames & Moore Phone (916) 387-8800
Address 8801 FOLSOM BLVD
City, State, Zip SAC, Ca.

Client's or Representative's Signature Jim Brane
Signature authorizes the work and terms listed below)

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

PROJ. NO. 00173-080		PROJECT NAME UP SACRAMENTO		NO. OF CONTAINERS		REMARKS		LAB USE ONLY LAB NO.	
AMPLERS (Signature) <u>Dug Jernald</u>									
STA. NO.	DATE	TIME	COMP	GRAB	STATION LOCATION				
TB-6	4-26-94	0600		✓	TRAVEL Blank	3	✓	✓	
FB-3		1100		✓	Field Blank	4	✓	✓	
RB-3		1130		✓	Rinse Blank	4	✓	✓	
37		0659		✓	MW-37	3	✓		
137		0705		✓	MW-137	3	✓		
36		0737		✓	MW-36	3	✓		
31		0900		✓	MW-31	4	✓	✓	
35		0950		✓	MW-35	3	✓		
34		1011		✓	MW-34	3	✓		
COOLER CUSTODY SEALS INTACT ☐ NOT INTACT ☐ N/A									
COOLER TEMPERATURE <u>COOL</u> °C									
SAMPLES RECEIVED IN GOOD CONDITION NO BROKEN OR LEAKING CONTAINERS									
Relinquished by: (Signature) <u>Dug Jernald</u>		DATE 4-26-94	TIME 1500	Received by: (Signature) <u>Fed X #1483818273</u>		General Remarks: <u>Samples preserved w/ HCl to pH < 2</u>			
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature) <u>Christy Lockman</u>		30 V OAS (FedEx)			
Relinquished by: (Signature)		DATE	TIME	Received by: (Signature)					