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IBM

Rt. 100
Somers, NY 10589

January 6, 2000

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 43
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from December 1, 1999 through December 31, 1999 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of January 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system was shut down during December. As discussed in a meeting with NYSDEC on September 9, 1999, the SVE system was shut down on December 2, 1999. Soil samples were collected on December 28 from the 10 locations that exceeded the ROD soil cleanup goals during the most recent soil sampling event (July 1997). Mr. Jim Schrier of NYSDEC was present during the soil sampling.

- Through November 4, 1999, approximately 1.47 pounds of VOCs have been recovered from the groundwater recovered by the SVE system. The data are summarized in Table 1 and presented graphically on Figure 1. The data for groundwater recovered from the SVE system is attached in Appendix A.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated approximately 42% of the time during December. Downtime was attributed to a clogged flow meter, which was replaced on December 28.

- Dames & Moore performed site visits on December 2, 16, 21, and 28.

- During this period, the GWTS recovered approximately 233 gallons of groundwater from well MW-12B at an average rate of 0.01 gpm; 74,110 gallons of groundwater from well MW-15B at an average rate of 3.4 gpm; and 6,304 gallons of groundwater from well MW-9B at an average rate of 0.3 gpm. Due to the low recovery rate, the pump in well MW-12B was replaced on December 21. Since start up in February 1996, the GWTS has recovered approximately 2,216,141 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 3,864,842 gallons of groundwater from well MW-15B at an average rate of 3.1 gpm; and approximately 429,757 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 76 pounds of VOCs have been recovered by the GWTS through November 4, 1999. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 2, 3, and 4, respectively. The data for groundwater recovered from wells MW-12B, MW-15B, MW-9B during November are attached in Appendix A. Figure 2 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- Dames & Moore collected groundwater samples on December 2 and 16. The results of these groundwater analyses will be reported in O&M Progress Report No. 44. The treated groundwater analytical results for November 1999 are reported in Table 5 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 7,005,463 gallons of water at an average rate of 5,239 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filters 1 and 2 were changed on December 2, 16, and 21.

B. Deliverables

- Treated groundwater quality monitoring results for November 1999 included as Table 5 and Appendices A and B.

C. Actions Anticipated For January 2000

SVE System

- Receive and analyze the soil sampling results.

Groundwater Treatment System

- Routine O&M activities.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of December included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of Dames & Moore at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Louis P. Olivia, Esq. - NYSDEC, White Plains
Joe Tarsavage - Dames & Moore
Alison Spare - Dames & Moore
Bob Conley - Corporate Environmental Services

IBM

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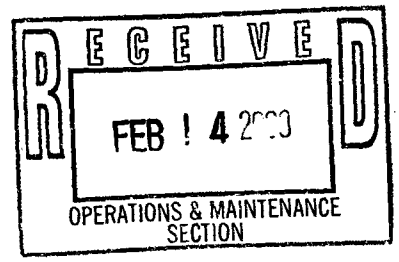
Somers, NY 10589

February 8, 2000



Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 44
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from January 1, 2000 through January 31, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of February 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down.
- Through December 2, 1999, approximately 1.47 pounds of VOCs have been recovered from the groundwater recovered by the SVE system. The data are summarized in Table 1 and presented graphically on Figure 1. The data for groundwater recovered from the SVE system is attached in Appendix A.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated approximately 50% of the time during January. Downtime was attributed to a malfunctioning discharge pump, which was replaced on February 4.
- Dames & Moore performed site visits on January 17 and 27.
- During this period, the GWTS recovered approximately 24,026 gallons of

groundwater from well MW-12B at an average rate of 1.1 gpm; 93,371 gallons of groundwater from well MW-15B at an average rate of 4.3 gpm; and 4,774 gallons of groundwater from well MW-9B at an average rate of 0.2 gpm. Since start up in February 1996, the GWTS has recovered approximately 2,240,167 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 3,958,213 gallons of groundwater from well MW-15B at an average rate of 3.2 gpm; and approximately 434,531 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 78 pounds of VOCs have been recovered by the GWTS through December 2, 1999. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 2, 3, and 4, respectively. The data for groundwater recovered from wells MW-12B, MW-15B, MW-9B during December are attached in Appendix A. Figure 2 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- Dames & Moore collected groundwater samples on January 17 and 27. The results of these groundwater analyses will be reported in O&M Progress Report No. 45. The treated groundwater analytical results for December 1999 are reported in Table 5 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 7,111,983 gallons of water at an average rate of 5,260 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filters 1 and 2 were changed on January 17 and 27.

B. Deliverables

- Treated groundwater quality monitoring results for December 1999 included as Table 5 and Appendices A and B.

C. Actions Anticipated For February 2000

SVE System

- Submit soil sampling results to NYSDEC.

Groundwater Treatment System

- Routine O&M activities.
- Perform annual groundwater monitoring sampling.
- Change out the carbon in the primary carbon unit.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of January included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of Dames & Moore at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Louis P. Olivia, Esq. - NYSDEC, White Plains
Joe Tarsavage - Dames & Moore
Alison Spare - Dames & Moore
Bob Conley - Corporate Environmental Services

Table 1
VOC Mass Removal from SVE System Recovered Groundwater
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from SVE System (gal)	Concentration (ug/L)					Cumulative VOC Mass Removed (lb)					Cumulative Total VOC Mass Removed (lb)
				1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	0.0	0	-	-	-	-	-	0.000	0	0	0	0	0
2/28/96	On	3.6	1,453	95	0	700	780	680	0.001	0	0.008	0.009	0.008	0.027
3/12/96	On	41.2	11,813	55	0	580	220	110	0.006	0	0.059	0.028	0.018	0.111
3/27/96	On	193.1	25,696	54	0	270	550	490	0.012	0	0.090	0.092	0.074	0.269
4/5/96	On	308.9	38,950	0	0	420	120	65	0.012	0	0.136	0.105	0.082	0.336
4/17/96	On	587.0	49,116	0	0	45	420	40	0.012	0	0.140	0.141	0.085	0.378
5/1/96	On	757.5	83,630	0	0	15	0	15	0.012	0	0.144	0.141	0.089	0.387
5/29/96	On	1,019.2	109,780	9	0	17	31	21	0.014	0	0.148	0.148	0.094	0.404
6/13/96	On	1,239.7	125,650	100	0	175	250	45	0.027	0	0.171	0.181	0.100	0.479
6/27/96	On	1,545.2	137,910	300	0	140	300	85	0.058	0	0.186	0.212	0.109	0.564
7/19/96	On	1,864.1	158,447	33	6	73	130	20	0.064	0.001	0.198	0.234	0.112	0.609
7/25/96	On	2,007.1	160,000	31	0	46	110	16	0.064	0.001	0.199	0.235	0.112	0.611
8/8/96	On	2,168.5	162,076	73	0	120	280	25	0.065	0.001	0.201	0.240	0.113	0.620
8/22/96	On	2,241.2	166,680	18	0	40	76	8	0.066	0.001	0.202	0.243	0.113	0.625
9/12/96	On	2,553.1	174,100	0	0	33	71	52	0.066	0.001	0.204	0.247	0.116	0.635
9/26/96	On	2,852.5	182,490	0	0	13	10	18	0.066	0.001	0.205	0.248	0.117	0.638
10/10/96	On	2,997.5	194,720	0	0	25	25	13	0.066	0.001	0.208	0.251	0.119	0.644
10/24/96	On	3,272.7	216,140	67	8	110	290	23	0.078	0.002	0.227	0.302	0.123	0.733
11/14/96	On	3,570.7	252,940	0	0	35	36	29	0.078	0.002	0.238	0.313	0.132	0.764
11/21/96	On	3,734.3	258,910	0	0	41	47	41	0.078	0.002	0.240	0.316	0.134	0.770
12/4/96	On	4,133.6	286,760	32	18	68	520	36	0.085	0.007	0.256	0.437	0.142	0.927
12/18/96	On	4,466.7	348,590	0	0	31	26	20	0.085	0.007	0.272	0.450	0.153	0.967
1/15/97	On	5,068.4	406,000	0	0	13	13	7	0.085	0.007	0.278	0.456	0.156	0.982
1/22/97	On	5,201.6	411,550	11	7	64	89	71	0.086	0.007	0.281	0.460	0.159	0.994
2/5/97	On	5,534.1	424,630	0	0	41	39	21	0.086	0.007	0.286	0.465	0.161	1.005
2/19/97	On	5,861.8	440,730	0	0	36	35	23	0.086	0.007	0.291	0.469	0.165	1.017
3/12/97	On	6,169.7	460,540	14	9.8	220	170	86	0.088	0.009	0.327	0.497	0.179	1.100
3/26/97	On	6,438.5	491,250	12	6.8	36	100	32	0.091	0.010	0.336	0.523	0.187	1.148
4/9/97	On	6,525.4	507,940	20	11	100	200	66	0.094	0.012	0.350	0.551	0.196	1.203
4/24/97	On	6,877.4	563,113	2.7	2.5	19	31	14	0.095	0.013	0.359	0.565	0.203	1.235
5/8/97	On	7,095.5	598,750	3.8	3.3	22	32	16	0.096	0.014	0.365	0.575	0.207	1.258
6/19/97	On	7,899.5	644,360	1.8	1.1	12	16	5.7	0.097	0.014	0.370	0.581	0.209	1.272
7/22/97	On	8,465.7	655,968	8.5	5.6	78	62	47	0.098	0.015	0.377	0.587	0.214	1.291
8/28/97	On	9,240.9	676,112	2	0	9.2	13	5.1	0.098	0.015	0.379	0.589	0.215	1.296
9/25/97	On	9,542.1	691,600	11	4.7	90	67	54	0.100	0.016	0.391	0.598	0.222	1.325
10/10/97	On	9,898.7	704,950	2.3	1.3	9.5	10	6.1	0.100	0.016	0.392	0.599	0.223	1.329
11/6/97	On	10,524.7	719,012	2.1	1.5	13	12	6.9	0.100	0.016	0.393	0.600	0.223	1.333
5/7/98	On	10,637.3	726,417	63	9.6	240	340	67	0.104	0.016	0.408	0.621	0.227	1.377
6/2/98	On	11,252.0	796,446	2.7	1.6	22	14	6.6	0.106	0.017	0.421	0.629	0.231	1.405
7/8/98	On	11,701.1	829,578	10	2.9	33	29	11	0.108	0.018	0.430	0.637	0.234	1.428
11/5/98	On	12,544.0	847,323	4.1	1.3	21	12	4.7	0.109	0.018	0.433	0.639	0.235	1.435
12/3/98	On	13,175.2	856,065	3.9	1.6	32	23	9.2	0.109	0.019	0.435	0.641	0.236	1.440
9/2/99	On	13,195.1	863,753	42	3.5	120	78	12	0.112	0.019	0.443	0.646	0.237	1.456
10/7/99	On	14,556.1	873,287	9.6	3.6	47	26	16	0.113	0.019	0.447	0.648	0.238	1.464
11/4/99	On	15,126.9	873,623	25	4.9	60	30	12	0.113	0.019	0.447	0.648	0.238	1.465
12/2/99	On	15,631.1	876,849	3.2	1.5	15	12	5.7	0.113	0.019	0.447	0.648	0.238	1.466

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.

Table 2
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95

Table 2
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38

Notes: 1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 3
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 4
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

Table 5
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	12/2/99	12/16/99
pH	6.0-9.0	SU	7.93	7.31
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	232	227
Aluminum, Total (1)	2.7	mg/l	<0.125	NS
Arsenic, Total (1)	0.15	mg/l	<0.0064	NS
Iron, Total (1)	0.6	mg/l	1.82	NS
Lead, Total (1)	0.04	mg/l	<0.0046	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	<0.3	NS
1,2-Dichloroethane	10	µg/l	<0.3	NS
1,1-Dichloroethylene	10	µg/l	<0.5	NS
1,2-Dichloroethylene	10	µg/l	<0.4	NS
Methylene Chloride	10	pg/l	<1	NS
Tetrachloroethylene	2	µg/l	<0.1	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	pg/l	<0.3	NS
Trichloroethylene	10	pg/l	<0.3	NS
Vinyl Chloride	10	µg/l	<0.5	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figure 1
Total VOC Mass Removed from SVE System Recovered Groundwater
Mead Property Site

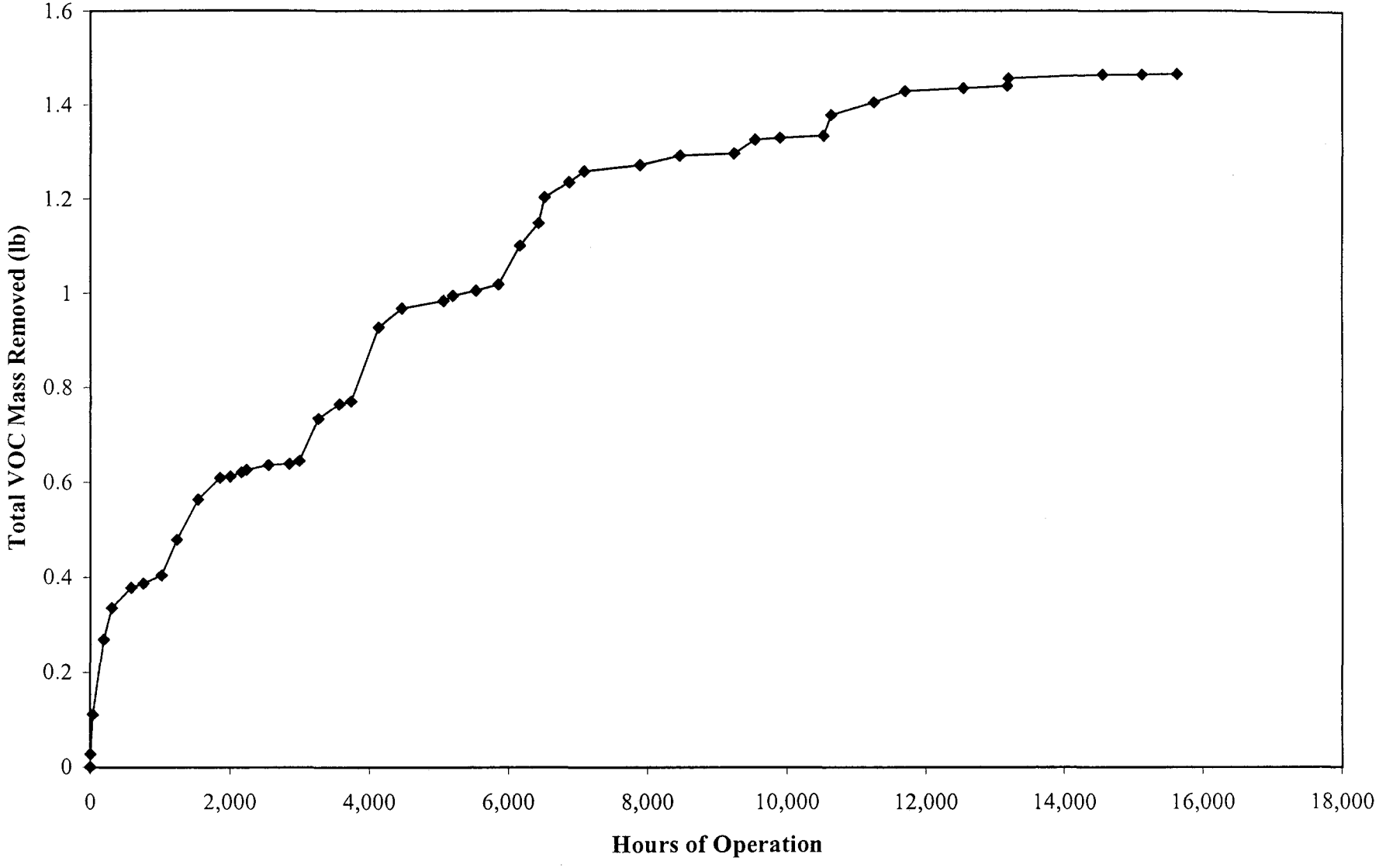
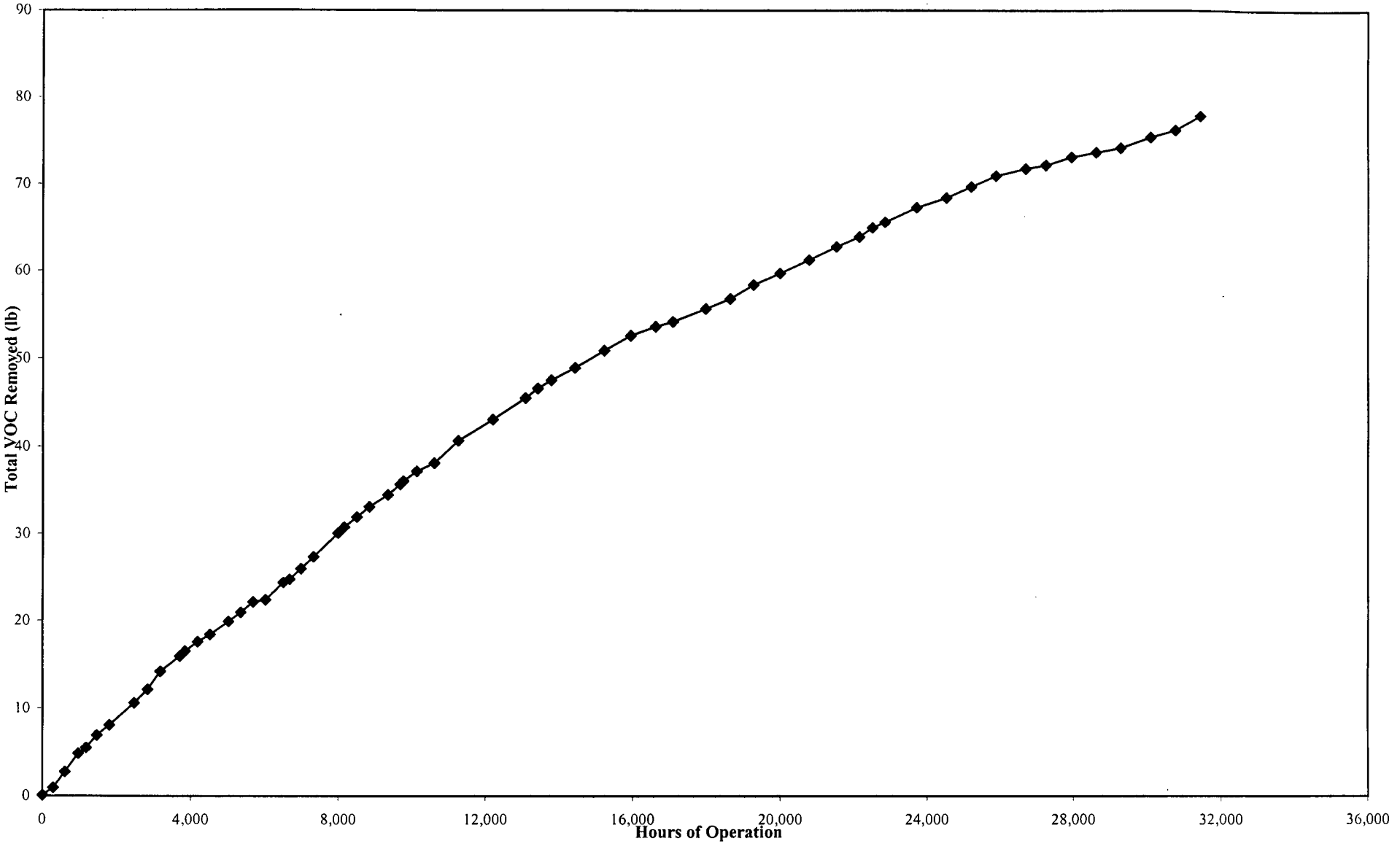


Figure 2
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Carbon-2**
Site: IBM Mead Property

Lab Sample No: **172735**
Lab Job No: V817

Date Sampled: 12/02/99
Date Received: 12/03/99
Date Analyzed: 12/14/99
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v10617a.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Client ID: **Carbon-2**
Site: **IBM Mead Property**

Lab Sample No: 172735
Lab Job No: V817

Date Sampled: 12/02/99
Date Received: 12/03/99

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	125	P
Arsenic	ND	6.4	P
Iron	1820	78.4	P
Lead	ND	4.6	P

M Column - Method Code (See Section 2 of Report)

Envirotech
a division of Severn Trent Laboratories, Inc.

Site: IBM Mead Property

Lab Job No: V817

Date Sampled: 12/2/99
Date Received: 12/3/99
Matrix: WATER

Date Analyzed: 12/8/99
QA Batch: 1659

TOTAL DISSOLVED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
172735	Carbon-2	1.0	232

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

Site: IBM Mead Property

Lab Job No: V817

Date Sampled: 12/2/99
Date Received: 12/3/99
Matrix: WATER

Date Analyzed: 12/6/99
QA Batch: 1476

TOTAL SUSPENDED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
172735	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Carbon-1**
Site: IBM Mead Property

Lab Sample No: **172736**
Lab Job No: V817

Date Sampled: 12/02/99
Date Received: 12/03/99
Date Analyzed: 12/13/99
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v10626.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	ND	0.5
1,1-Dichloroethane	23	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	2.1	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

STL Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **MW-15B**
Site: IBM Mead Property

Lab Sample No: **172737**
Lab Job No: V817

Date Sampled: 12/02/99
Date Received: 12/03/99
Date Analyzed: 12/13/99
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v10627.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	12	0.5
1,1-Dichloroethane	64	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	22	0.4
1,2-Dichloroethane	1.2	0.3
1,1,1-Trichloroethane	120	0.3
Trichloroethene	10	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Envirotech
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Client ID: **MW-12B**
Site: IBM Mead Property

Lab Sample No: **172738**
Lab Job No: V817

Date Sampled: 12/02/99
Date Received: 12/03/99
Date Analyzed: 12/13/99
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v10628.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	4.5
Chloroethane	ND	4.1
Methylene Chloride	ND	9.9
1,1-Dichloroethene	110	4.9
1,1-Dichloroethane	600	2.9
trans-1,2-Dichloroethene	ND	4.5
cis-1,2-Dichloroethene	960	3.7
1,2-Dichloroethane	78	2.9
1,1,1-Trichloroethane	850	3.0
Trichloroethene	150	3.1
Benzene	ND	3.3
Tetrachloroethene	ND	1.4
Toluene	ND	2.6
Chlorobenzene	ND	1.9
1,2-Dichlorobenzene	ND	2.2

Client ID: **MW-9B**
Site: IBM Mead Property

Lab Sample No: **172739**
Lab Job No: V817

Date Sampled: 12/02/99
Date Received: 12/03/99
Date Analyzed: 12/13/99
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v10629.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	4.5
Chloroethane	ND	4.1
Methylene Chloride	ND	9.9
1,1-Dichloroethene	67	4.9
1,1-Dichloroethane	66	2.9
trans-1,2-Dichloroethene	ND	4.5
cis-1,2-Dichloroethene	44	3.7
1,2-Dichloroethane	5.5	2.9
1,1,1-Trichloroethane	1100	3.0
Trichloroethene	100	3.1
Benzene	ND	3.3
Tetrachloroethene	ND	1.4
Toluene	ND	2.6
Chlorobenzene	ND	1.9
1,2-Dichlorobenzene	ND	2.2

Client ID: **SVE**
Site: IBM Mead Property

Lab Sample No: **172740**
Lab Job No: V817

Date Sampled: 12/02/99
Date Received: 12/03/99
Date Analyzed: 12/13/99
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v10632.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	0.9	0.5
1,1-Dichloroethane	3.2	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	15	0.4
1,2-Dichloroethane	1.5	0.3
1,1,1-Trichloroethane	12	0.3
Trichloroethene	5.7	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

STL Envirotech
a division of Severn Trent Laboratories, Inc

Site: Mead Property

Lab Job No: W217

Date Sampled: 12/16/99
Date Received: 12/17/99
Matrix: WATER

Date Analyzed: 12/21/99
QA Batch: 1661

TOTAL DISSOLVED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
175678	Carbon-2	1.0	227

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

Site: Mead Property

Lab Job No: W217

Date Sampled: 12/16/99
Date Received: 12/17/99
Matrix: WATER

Date Analyzed: 12/20/99
QA Batch: 1481

TOTAL SUSPENDED SOLIDS

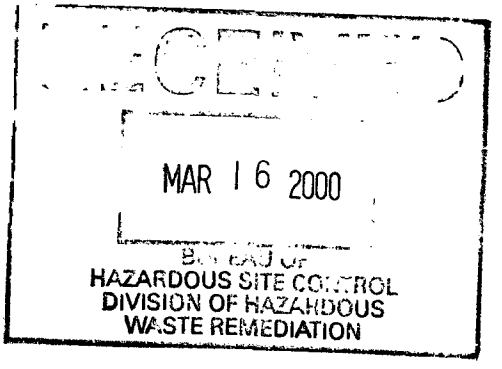
STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
175678	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

Route 100, MD 2393
Somers, NY 10589-0100

March 8, 2000

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010



Re: O&M Progress Report No. 45
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from February 1, 2000 through February 29, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of March 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down and will be decommissioned in accordance with the letter sent to NYSDEC on February 25, 2000.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during February. Wells MW-12B and MW-15B operated 100% of the time. Well MW-9B ceased to operate during February. The reason for the shutdown is currently being investigated.

- Dames & Moore performed site visits on February 4, 23, and 24.

- During this period, the GWTS recovered approximately 46,885 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; 174,415 gallons of groundwater from well MW-15B at an average rate of 4.5 gpm; and 0 gallons of groundwater from well MW-9B. Since start up in February 1996, the GWTS has

recovered approximately 2,287,052 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 4,132,628 gallons of groundwater from well MW-15B at an average rate of 3.2 gpm; and approximately 434,531 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 80 pounds of VOCs have been recovered by the GWTS through January 17, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-12B and MW-15B during January are attached in Appendix A. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- Dames & Moore collected groundwater samples on February 4 and 24. The results of these groundwater analyses will be reported in O&M Progress Report No. 46. The treated groundwater analytical results for January 1999 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 7,297,902 gallons of water at an average rate of 5,292 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filters 1 and 2 were changed on February 4 and 24.

- Performed annual groundwater monitoring sampling on February 23 and 24.

B. Deliverables

- Treated groundwater quality monitoring results for January 2000 included as Table 4 and Appendices A and B.

C. Actions Anticipated For March 2000

SVE System

- None.

Groundwater Treatment System

- Routine O&M activities.
- Change out the carbon in the primary carbon unit.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of February included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of Dames & Moore at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Louis P. Olivia, Esq. - NYSDEC, White Plains
Joe Tarsavage - Dames & Moore
Alison Spare - Dames & Moore
Bob Conley - Corporate Environmental Services

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Honrs of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52

Notes: 1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	On	8,997	434,563	67	66	5.5	44	1100	100	0.294	0.162	0.007	0.064	3.576	0.238	4.34

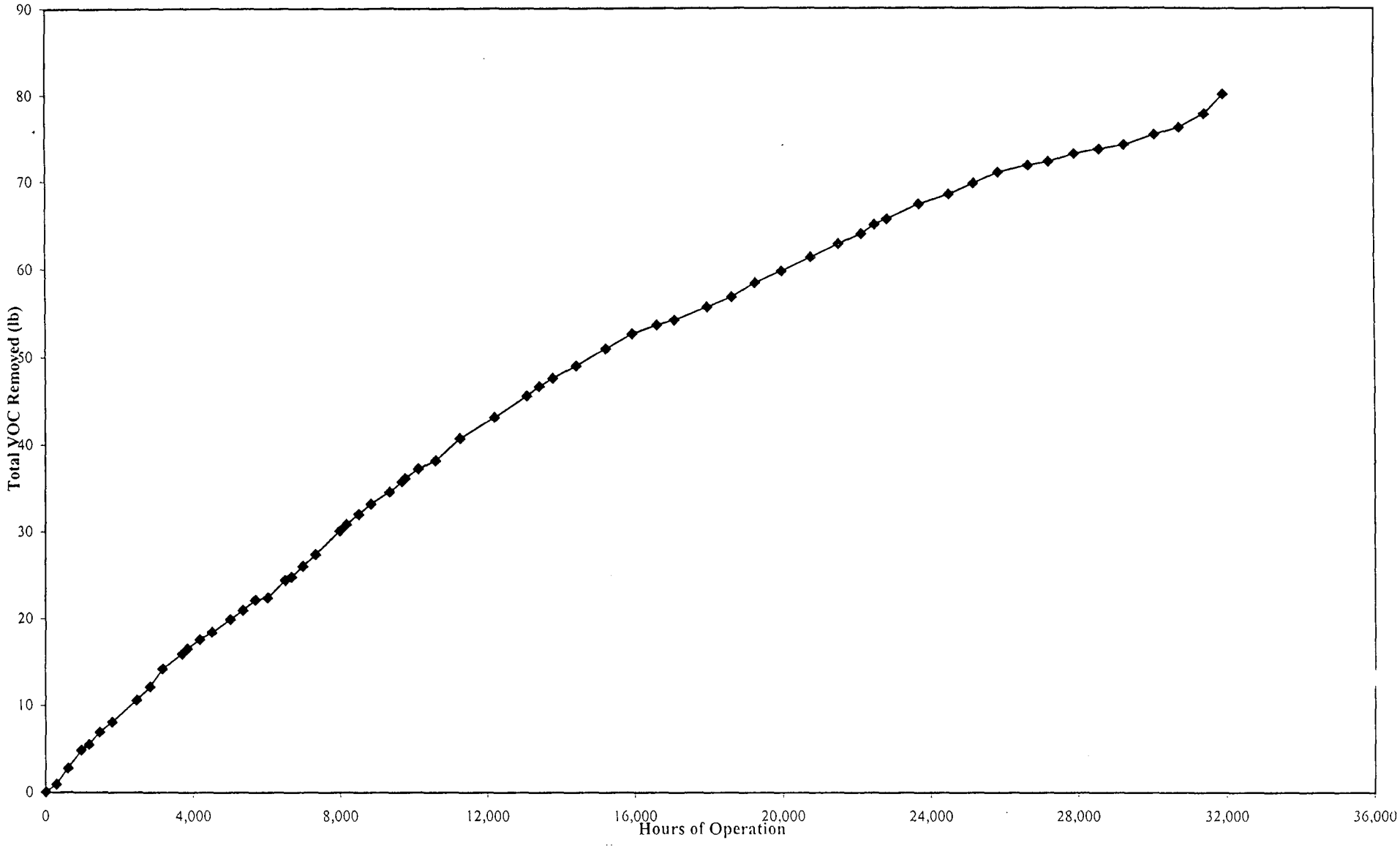
Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	1/17/00	1/27/00
pH	6.0-9.0	SU	7.61	7.58
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	298	155
Aluminum, Total (1)	2.7	mg/l	<0.0586	NS
Arsenic, Total (1)	0.15	mg/l	<0.0036	NS
Iron, Total (1)	0.6	mg/l	0.116	NS
Lead, Total (1)	0.04	mg/l	<0.0029	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	<0.3	NS
1,2-Dichloroethane	10	µg/l	<0.3	NS
1,1-Dichloroethylene	10	µg/l	<0.5	NS
1,2-Dichloroethylene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<1	NS
Tetrachloroethylene	2	µg/l	<0.1	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	<0.3	NS
Trichloroethylene	10	µg/l	<0.3	NS
Vinyl Chloride	10	µg/l	<0.5	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site

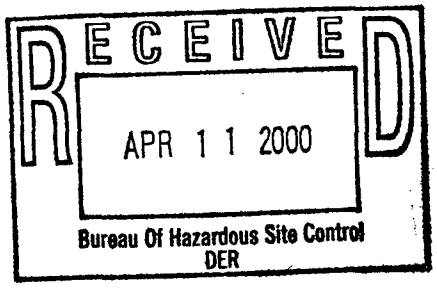


IBM

Sue PMA 4/13

Rt. 100
Somers, NY 10589

April 6, 2000



Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 46
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from March 1, 2000 through March 31, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of April 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down and will be decommissioned in accordance with the letter sent to NYSDEC on February 25, 2000. The SVE system decommissioning will commence in late spring or early summer (May or June 2000).

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during March. Wells MW-12B and MW-15B operated 100% of the time. Well MW-9B operated approximately 25% of the time during March because of broken piping. The piping was repaired on March 22 and the pump in well MW-9B was restarted.

- Dames & Moore performed site visits on March 9, 22, and 23.

- During this period, the GWTS recovered approximately 55,503 gallons of groundwater from well MW-12B at an average rate of 1.4 gpm; 166,144 gallons of

groundwater from well MW-15B at an average rate of 4.1 gpm; and 0 gallons of groundwater from well MW-9B (through March 22, 2000). Since start up in February 1996, the GWTS has recovered approximately 2,342,555 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 4,298,772 gallons of groundwater from well MW-15B at an average rate of 3.2 gpm; and approximately 434,531 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 81 pounds of VOCs have been recovered by the GWTS through February 4, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-12B and MW-15B during February are attached in Appendix A. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- Dames & Moore collected groundwater samples on March 9 and 23. The results of these groundwater analyses will be reported in O&M Progress Report No. 47. The treated groundwater analytical results for February 1999 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 7,490,735 gallons of water at an average rate of 5,324 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filters 1 and 2 were changed on March 9 and 22.

B. Deliverables

- Treated groundwater quality monitoring results for February 2000 included as Table 4 and Appendices A and B.

C. Actions Anticipated For April 2000

SVE System

- None.

Groundwater Treatment System

- Routine O&M activities.
- Change out the carbon in the primary carbon unit.
- Prepare annual groundwater sampling report.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of March included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of Dames & Moore at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Louis P. Olivia, Esq. - NYSDEC, White Plains
Joe Tarsavage - Dames & Moore
Alison Spare - Dames & Moore
Bob Conley - Corporate Environmental Services

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
2/4/00	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99

Notes: 1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.294	0.162	0.007	0.064	3.576	0.238	4.34
2/4/00	Pump not operating.															

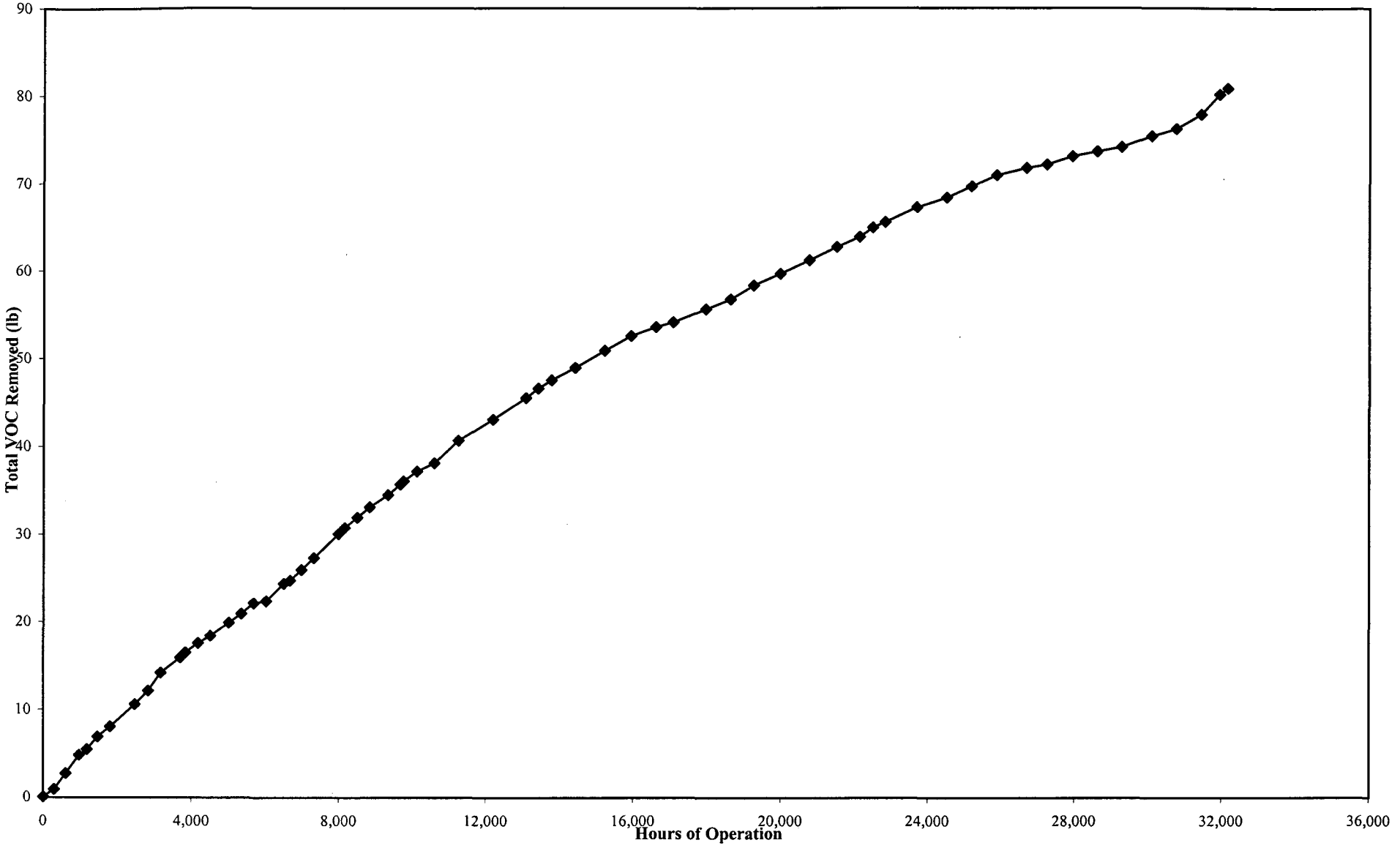
Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	2/4/00	2/24/00
pH	6.0-9.0	SU	7.87	7.65
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	235	228
Aluminum, Total (1)	2.7	mg/l	<0.0586	NS
Arsenic, Total (1)	0.15	mg/l	<0.0036	NS
Iron, Total (1)	0.6	mg/l	<0.0371	NS
Lead, Total (1)	0.04	mg/l	<0.0021	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	<0.3	NS
1,2-Dichloroethane	10	µg/l	<0.3	NS
1,1-Dichloroethylene	10	µg/l	<0.5	NS
1,2-Dichloroethylene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<1	NS
Tetrachloroethylene	2	µg/l	<0.1	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	<0.3	NS
Trichloroethylene	10	µg/l	<0.3	NS
Vinyl Chloride	10	µg/l	<0.5	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Carbon-2**
Site: Mead Property

Lab Sample No: **182464**
Lab Job No: X249

Date Sampled: 02/04/00
Date Received: 02/07/00
Date Analyzed: 02/10/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v12760.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Carbon-2**
Site: **Mead Property**

Lab Sample No: 182464
Lab Job No: X249

Date Sampled: 02/04/00
Date Received: 02/07/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	58.6	P
Arsenic	ND	3.6	P
Iron	ND	37.1	P
Lead	ND	2.1	P

M Column - Method Code (See Section 2 of Report)

Site: Mead Property

Lab Job No: X249

Date Sampled: 2/4/00
Date Received: 2/7/00
Matrix: WATER

Date Analyzed: 2/10/00
QA Batch: 1672

TOTAL DISSOLVED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
182464	Carbon-2	1.0	235

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

Site: Mead Property

Lab Job No: X249

Date Sampled: 2/4/00
Date Received: 2/7/00
Matrix: WATER

Date Analyzed: 2/10/00
QA Batch: 1491

TOTAL SUSPENDED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
182464	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

Client ID: **Carbon-1**
Site: Mead Property

Lab Sample No: 182465
Lab Job No: X249

Date Sampled: 02/04/00
Date Received: 02/07/00
Date Analyzed: 02/10/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v12761.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	0.6	0.5
1,1-Dichloroethane	40	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	7.9	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Client ID: **MW-12B**
Site: Mead Property

Lab Sample No: **182466**
Lab Job No: **X249**

Date Sampled: 02/04/00
Date Received: 02/07/00
Date Analyzed: 02/10/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v12783.d

Matrix: **WATER**
Level: **LOW**
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	4.5
Chloroethane	ND	4.1
Methylene Chloride	ND	9.9
1,1-Dichloroethene	72	4.9
1,1-Dichloroethane	390	2.9
trans-1,2-Dichloroethene	ND	4.5
cis-1,2-Dichloroethene	660	3.7
1,2-Dichloroethane	63	2.9
1,1,1-Trichloroethane	650	3.0
Trichloroethene	100	3.1
Benzene	ND	3.3
Tetrachloroethene	ND	1.4
Toluene	ND	2.6
Chlorobenzene	ND	1.9
1,2-Dichlorobenzene	ND	2.2

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Client ID: **MW-15B**
Site: Mead Property

Lab Sample No: **182467**
Lab Job No: **X249**

Date Sampled: 02/04/00
Date Received: 02/07/00
Date Analyzed: 02/10/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v12786.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 2.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.9
Chloroethane	ND	0.8
Methylene Chloride	ND	2.0
1,1-Dichloroethene	13	1.0
1,1-Dichloroethane	56	0.6
trans-1,2-Dichloroethene	ND	0.9
cis-1,2-Dichloroethene	27	0.7
1,2-Dichloroethane	1.8	0.6
1,1,1-Trichloroethane	130	0.6
Trichloroethene	13	0.6
Benzene	ND	0.7
Tetrachloroethene	ND	0.3
Toluene	ND	0.5
Chlorobenzene	ND	0.4
1,2-Dichlorobenzene	ND	0.4

Site: Mead Property

Lab Job No: X736

Date Sampled: 2/24/00
Date Received: 2/25/00
Matrix: WATER

Date Analyzed: 2/29/00
QA Batch: 1677

TOTAL DISSOLVED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
185917	Carbon-2	1.0	228

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

Site: Mead Property

Lab Job No: X736

Date Sampled: 2/24/00
Date Received: 2/25/00
Matrix: WATER

Date Analyzed: 2/29/00
QA Batch: 1498

TOTAL SUSPENDED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
185917	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

IBM

May 5, 2000

Rt. 100
Somers, NY 10589

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 47
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from April 1, 2000 through April 30, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of May 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down and will be decommissioned in accordance with the letter sent to NYSDEC on February 25, 2000. The SVE system decommissioning will commence in early summer (June 2000).

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during April. Wells MW-9B, MW-12B, and MW-15B operated 100% of the time.

- Dames & Moore performed site visits on April 6, 12, and 13.

- During this period, the GWTS recovered approximately 80,628 gallons of groundwater from well MW-12B at an average rate of 1.4 gpm; 218,006 gallons of groundwater from well MW-15B at an average rate of 3.8 gpm; and 57,130 gallons of groundwater from well MW-9B at an average rate of 1.0 gpm. Since start up in

February 1996, the GWTS has recovered approximately 2,423,184 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 4,516,778 gallons of groundwater from well MW-15B at an average rate of 3.2 gpm; and approximately 492,670 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 82 pounds of VOCs have been recovered by the GWTS through March 9, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B during March are attached in Appendix A. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- Dames & Moore collected groundwater samples on April 6 and 13. The results of these groundwater analyses will be reported in O&M Progress Report No. 48. The treated groundwater analytical results for March 2000 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 7,922,022 gallons of water at an average rate of 5,474 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filters 1 and 2 were changed on April 6 and 13.

B. Deliverables

- Treated groundwater quality monitoring results for March 2000 included as Table 4 and Appendices A and B.

C. Actions Anticipated For May 2000

SVE System

- None.

Groundwater Treatment System

- Routine O&M activities.
- Perform quarterly groundwater sampling.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and will be decommissioned beginning in June 2000.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of April included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of Dames & Moore at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Louis P. Olivia, Esq. - NYSDEC, White Plains
Joe Tarsavage - Dames & Moore
Alison Spare - Dames & Moore
Bob Conley - Corporate Environmental Services

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
2/4/00	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99
3/9/00	On	32,975	2,316,232	64	380	52	620	980	100	1.263	10.525	0.917	16.192	33.671	2.582	65.15

Notes: 1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
3/9/00	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
2/4/00	Pump not operating.															
3/23/00	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344

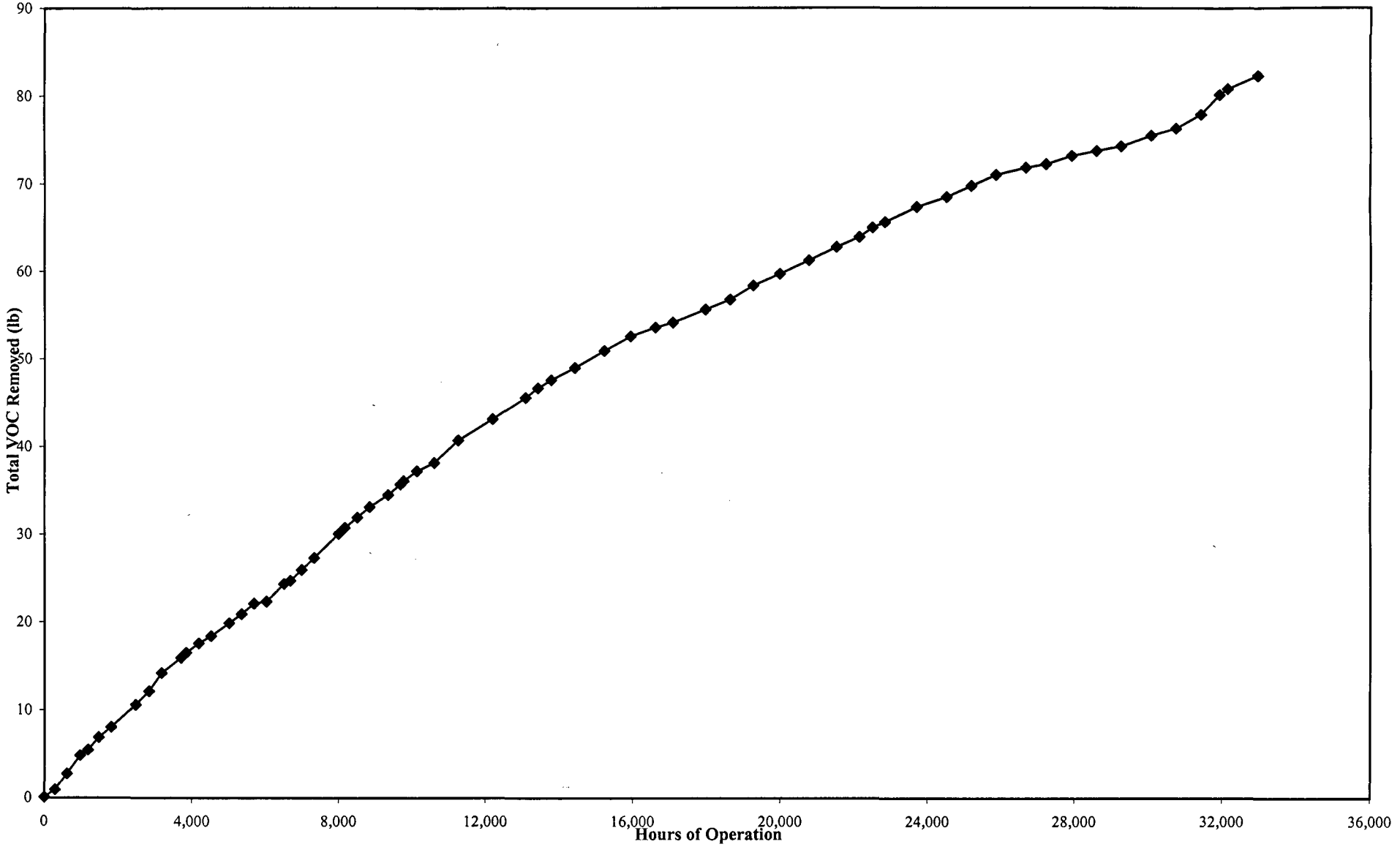
Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	3/9/00	3/23/00
pH	6.0-9.0	SU	7.61	7.49
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	246	240
Aluminum, Total (1)	2.7	mg/l	<0.0586	NS
Arsenic, Total (1)	0.15	mg/l	<0.0036	NS
Iron, Total (1)	0.6	mg/l	<0.0371	NS
Lead, Total (1)	0.04	mg/l	<0.0021	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	<0.3	NS
1,2-Dichloroethane	10	µg/l	<0.3	NS
1,1-Dichloroethylene	10	µg/l	<0.5	NS
1,2-Dichloroethylene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<1	NS
Tetrachloroethylene	2	µg/l	<0.1	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	<0.3	NS
Trichloroethylene	10	µg/l	<0.3	NS
Vinyl Chloride	10	µg/l	<0.5	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Carbon-2**
Site: IBM Mead

Lab Sample No: **188895**
Lab Job No: **Y154**

Date Sampled: 03/09/00
Date Received: 03/10/00
Date Analyzed: 03/15/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v13773.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: Carbon-2
Site: IBM Mead

Lab Sample No: 188895
Lab Job No: Y154

Date Sampled: 03/09/00
Date Received: 03/10/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	58.6	P
Arsenic	ND	3.6	P
Iron	ND	37.1	P
Lead	ND	2.1	P

M Column - Method Code (See Section 2 of Report)

Envirotech
a division of Severn Trent Laboratories, Inc.

Site: IBM Mead

Lab Job No: Y154

Date Sampled: 3/9/00
Date Received: 3/10/00
Matrix: WATER

Date Analyzed: 3/15/00
QA Batch: 1686

TOTAL DISSOLVED SOLIDS

Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
188895	Carbon-2	1.0	246

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

Envirotech
a division of Severn Trent Laboratories, Inc.

Site: IBM Mead

Lab Job No: Y154

Date Sampled: 3/9/00
Date Received: 3/10/00
Matrix: WATER

Date Analyzed: 3/15/00
QA Batch: 1505

TOTAL SUSPENDED SOLIDS

Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
188895	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **Carbon-1**
Site: IBM Mead

Lab Sample No: **188896**
Lab Job No: Y154

Date Sampled: 03/09/00
Date Received: 03/10/00
Date Analyzed: 03/15/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v13774.d

Matrix: **WATER**
Level: **LOW**
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	0.8	0.5
1,1-Dichloroethane	72	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	32	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Client ID: MW-12B
Site: IBM Mead

Lab Sample No: 188898
Lab Job No: Y154

Date Sampled: 03/09/00
Date Received: 03/10/00
Date Analyzed: 03/17/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v13880.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	4.5
Chloroethane	ND	4.1
Methylene Chloride	ND	9.9
1,1-Dichloroethene	64	4.9
1,1-Dichloroethane	380	2.9
trans-1,2-Dichloroethene	ND	4.5
cis-1,2-Dichloroethene	620	3.7
1,2-Dichloroethane	52	2.9
1,1,1-Trichloroethane	980	3.0
Trichloroethene	100	3.1
Benzene	ND	3.3
Tetrachloroethene	ND	1.4
Toluene	ND	2.6
Chlorobenzene	ND	1.9
1,2-Dichlorobenzene	ND	2.2

Client ID: MW-15B
Site: IBM Mead

Lab Sample No: 188899
Lab Job No: Y154

Date Sampled: 03/09/00
Date Received: 03/10/00
Date Analyzed: 03/15/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v13792.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 2.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.9
Chloroethane	ND	0.8
Methylene Chloride	ND	2.0
1,1-Dichloroethene	6.0	1.0
1,1-Dichloroethane	44	0.6
trans-1,2-Dichloroethene	ND	0.9
cis-1,2-Dichloroethene	30	0.7
1,2-Dichloroethane	1.8	0.6
1,1,1-Trichloroethane	110	0.6
Trichloroethene	14	0.6
Benzene	ND	0.7
Tetrachloroethene	ND	0.3
Toluene	ND	0.5
Chlorobenzene	ND	0.4
1,2-Dichlorobenzene	ND	0.4

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **MW-9B**
Site: IBM Mead

Lab Sample No: **192357**
Lab Job No: Y615

Date Sampled: 03/23/00
Date Received: 03/24/00
Date Analyzed: 04/02/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v14385.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	2.2
Chloroethane	ND	2.0
Methylene Chloride	ND	5.0
1,1-Dichloroethene	8.6	2.4
1,1-Dichloroethane	23	1.4
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	6.0	1.8
1,2-Dichloroethane	ND	1.4
1,1,1-Trichloroethane	350	1.5
Trichloroethene	35	1.6
Benzene	ND	1.6
Tetrachloroethene	ND	0.7
Toluene	ND	1.3
Chlorobenzene	ND	0.9
1,2-Dichlorobenzene	ND	1.1

Envirotech
a division of Severn Trent Laboratories, Inc.

Site: IBM Mead

Lab Job No: Y615

Date Sampled: 3/23/00
Date Received: 3/24/00
Matrix: WATER

Date Analyzed: 3/28/00
QA Batch: 1689

TOTAL DISSOLVED SOLIDS

Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
192358	Carbon-2	1.0	240

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

Envirotech
a division of Severn Trent Laboratories, Inc.

Site: IBM Mead

Lab Job No: Y6I5

Date Sampled: 3/23/00
Date Received: 3/24/00
Matrix: WATER

Date Analyzed: 3/29/00
QA Batch: 1508

TOTAL SUSPENDED SOLIDS

Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
192358	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/1 for an undiluted sample.

IBM

Rt. 100
Somers, NY 10589

June 9, 2000

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 48
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019
(Note: the attachments for this submittal are being sent under separate cover by Dames and Moore)

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from May 1, 2000 through May 31, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of June 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down and will be decommissioned in accordance with the letter sent to NYSDEC on February 25, 2000. The SVE system decommissioning will commence in summer 2000.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during May 2000. Wells MW-9B, MW-12B, and MW-15B operated 100% of the time.

- Dames & Moore performed site visits on May 1, 2, and 18.

- During this period, the GWTS recovered approximately 56,540 gallons of groundwater from well MW-12B at an average rate of 1.3 gallons per minute (gpm); 169,163 gallons of groundwater from well MW-15B at an average rate of 3.8 gpm; and 46,425 gallons of groundwater from well MW-9B at an average rate of 1.0 gpm. Since start up in February 1996, the GWTS has recovered approximately 2,479,723 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 4,685,941 gallons of groundwater from well MW-15B at an average rate of 3.3 gpm; and approximately 539,095 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 87 pounds of VOCs have been recovered by the GWTS through April 6, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B during April are attached in Appendix A. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- Dames & Moore collected groundwater samples on May 2 and 18. The results of these groundwater analyses will be reported in O&M Progress Report No. 49. The treated groundwater analytical results for April 2000 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 8,128,472 gallons of water at an average rate of 5,500 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filter in Particulate Filter 1 was changed on May 2 and Particulate Filter 2 was repaired and placed in service on May 2.

- Changed out carbon the in the primary carbon unit. Changed flow so that former secondary carbon unit is now the primary carbon unit, and the changed out unit (new carbon) is now the secondary carbon unit.

B. Deliverables

- Treated groundwater quality monitoring results for April 2000 included as Table 4 and in Appendices A and B.

C. Actions Anticipated For June 2000

SVE System

- Initiate decommissioning of the SVE system.

Groundwater Treatment System

- Routine O&M activities.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and will be decommissioned beginning in summer 2000.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of May included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of Dames & Moore at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

(Note : attachments under separate cover from Dames and Moore)

cc: Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Louis P. Olivia, Esq. - NYSDEC, White Plains
Joe Tarsavage - Dames & Moore
Alison Spare - Dames & Moore
Bob Conley - Corporate Environmental Services

IBM

Rt. 100
Somers, NY 10589

George FYA orlog. 7/17

July 10, 2000

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 49
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from June 1, 2000 through June 15, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of July 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down and will be decommissioned in accordance with the letter sent to NYSDEC on February 25, 2000. The SVE system decommissioning will commence in early summer (July 2000).

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during the period of June 1 through 15, 2000. Wells MW-9B, MW-12B, and MW-15B operated 100% of the time.

- URS performed site visits on June 1 and 15.

- During this period, the GWTS recovered approximately 27,721 gallons of groundwater from well MW-12B at an average rate of 1.4 gallons per minute (gpm); 80,469 gallons of groundwater from well MW-15B at an average rate of 4 gpm; and 22,873 gallons of groundwater from well MW-9B at an average rate of 1.1 gpm. Since start up in February 1996, the GWTS has recovered approximately 2,507,444 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 4,766,410 gallons of groundwater from well MW-15B at an average rate of 3.3 gpm; and approximately 561,968 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 88 pounds of VOCs have been recovered by the GWTS through May 2, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B during May are attached in Appendix A. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- URS collected groundwater samples on June 1 and 15. The results of these groundwater analyses will be reported in O&M Progress Report No. 50. The treated groundwater analytical results for May 2000 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 8,259,535 gallons of water at an average rate of 5,536 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filter 1 and Particulate Filter 2 were changed on June 1 and 15.

B. Deliverables

- Treated groundwater quality monitoring results for May 2000 included as Table 4 and in Appendices A and B. The results indicate that 1,1-DCA was detected at a concentration exceeding the effluent limit. The carbon in the primary carbon unit was changed out on May 1, 2000, and the flow was switched so that the former secondary unit is now the primary unit. The potential exists that the samples from the influent and effluent were mislabeled due to the reversal of flow. The corresponding samples identified as exiting the primary unit had 1,1-DCA concentrations below the laboratory method detection limit. Preliminary results have been received from the June sampling, and they indicate that the concentration of 1,1-DCA in the effluent is well below the discharge limit.

C. Actions Anticipated For July 2000

SVE System

- Initiate decommissioning of the SVE system.

Groundwater Treatment System

- Routine O&M activities.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and will be decommissioned beginning in July 2000.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of May included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of URS Corporation at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Louis P. Olivia, Esq. - NYSDEC, White Plains
Joe Tarsavage - URS
Alison Spare - URS
Bob Conley - Corporate Environmental Services

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site

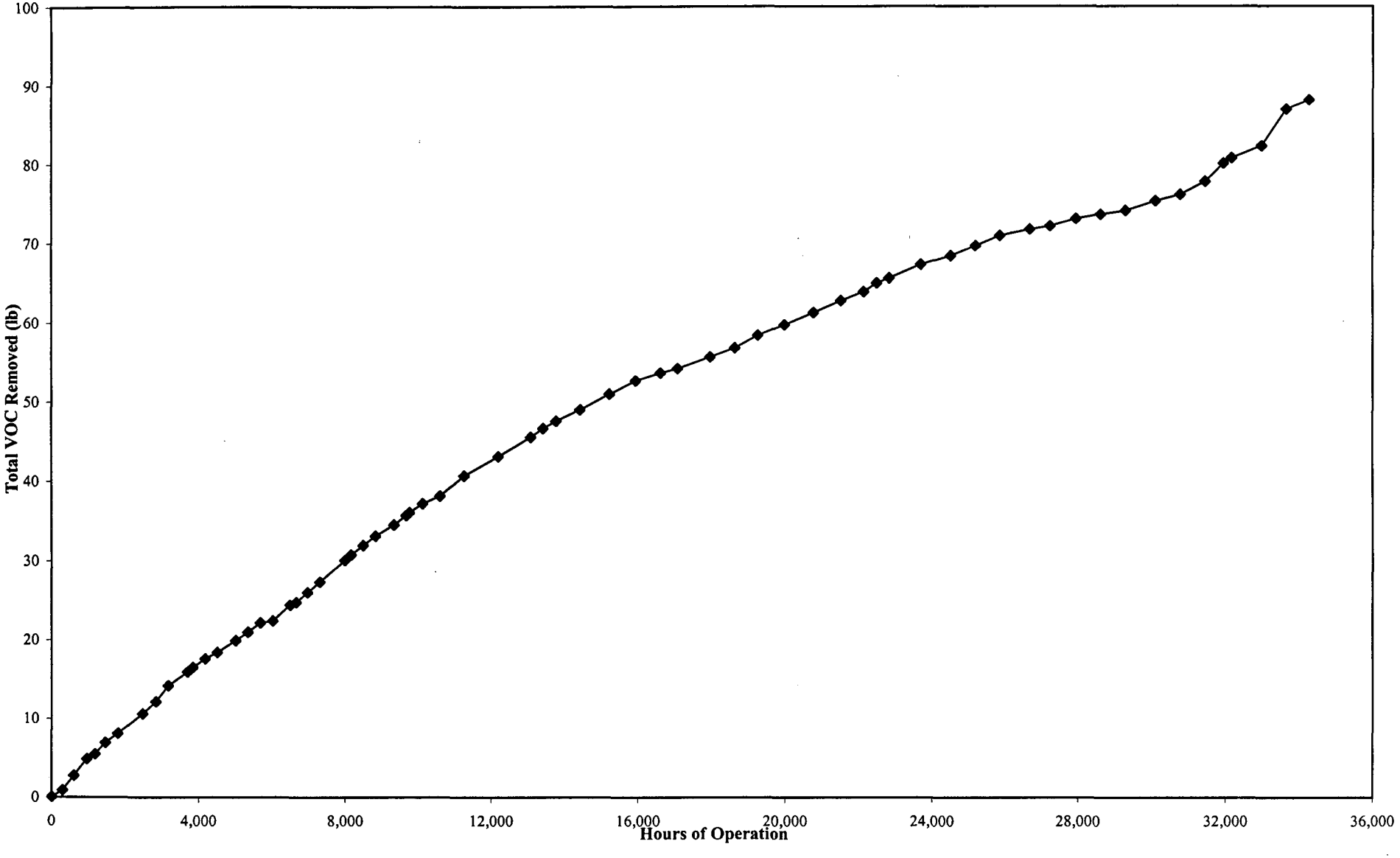


Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
3/9/00	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81
4/6/00	On	22,130	4,685,941	9	69	1.3	25	120	9.2	0.550	2.600	0.071	1.737	7.521	1.254	13.73
5/2/00	On	22,754	4,766,410	10	73	1.6	29	120	14	0.557	2.649	0.072	1.756	7.602	1.263	13.90

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
2/4/00	Pump not operating.															
3/23/00	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344
4/6/00	On	9,513	539,095	30	50	2.7	19	860	63	0.1349	0.2248	0.0121	0.0854	3.8666	0.2833	4.607
5/2/00	On	10,137	561,968	27	39	0	16	640	58	0.3225	0.2032	0.0071	0.0807	4.2535	0.2992	5.166

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	5/2/00	5/18/00
pH	6.0-9.0	SU	7.72	7.81
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	196	253
Aluminum, Total (1)	2.7	mg/l	0.554	NS
Arsenic, Total (1)	0.15	mg/l	0.081	NS
Iron, Total (1)	0.6	mg/l	<0.078	NS
Lead, Total (1)	0.04	mg/l	<0.005	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	15	NS
1,2-Dichloroethane	10	µg/l	<0.3	NS
1,1-Dichloroethylene	10	µg/l	<0.5	NS
1,2-Dichloroethylene	10	µg/l	0.9	NS
Methylene Chloride	10	µg/l	<1	NS
Tetrachloroethylene	2	µg/l	<0.1	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	6.2	NS
Trichloroethylene	10	µg/l	<0.3	NS
Vinyl Chloride	10	µg/l	<0.5	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: Carbon-2
Site: Mead Property

Lab Sample No: 201994
Lab Job No: Z865

Date Sampled: 05/02/00
Date Received: 05/03/00
Date Analyzed: 05/08/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v15905.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	ND	0.5
1,1-Dichloroethane	15	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	0.9	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	6.2	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Client ID: **Carbon-2**
Site: **Mead Property**

Lab Sample No: 201994
Lab Job No: Z865

Date Sampled: 05/02/00
Date Received: 05/03/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	554	125	P
Arsenic	81.1	6.4	P
Iron	ND	78.4	P
Lead	ND	4.6	P

M Column - Method Code (See Section 2 of Report)

Envirotech
a division of Severn Trent Laboratories, Inc.

Site: Mead Property

Lab Job No: Z865

Date Sampled: 5/2/00
Date Received: 5/3/00
Matrix: WATER

Date Analyzed: 5/3/00
QA Batch: 1698

TOTAL DISSOLVED SOLIDS

Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
201994	Carbon-2	1.0	196

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

Envirotech
a division of Severn Trent Laboratories, Inc.

Site: Mead Property

Lab Job No: Z865

Date Sampled: 5/2/00
Date Received: 5/3/00
Matrix: WATER

Date Analyzed: 5/8/00
QA Batch: 1524

TOTAL SUSPENDED SOLIDS

Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
201994	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

Client ID: Carbon-1
Site: Mead Property

Lab Sample No: 201995
Lab Job No: Z865

Date Sampled: 05/02/00
Date Received: 05/03/00
Date Analyzed: 05/08/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v15906.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: MW-12B
Site: Mead Property

Lab Sample No: 201996
Lab Job No: Z865

Date Sampled: 05/02/00
Date Received: 05/03/00
Date Analyzed: 05/08/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v15907.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	4.5
Chloroethane	ND	4.1
Methylene Chloride	ND	9.9
1,1-Dichloroethene	54	4.9
1,1-Dichloroethane	420	2.9
trans-1,2-Dichloroethene	ND	4.5
cis-1,2-Dichloroethene	590	3.7
1,2-Dichloroethane	60	2.9
1,1,1-Trichloroethane	800	3.0
Trichloroethene	97	3.1
Benzene	ND	3.3
Tetrachloroethene	ND	1.4
Toluene	ND	2.6
Chlorobenzene	ND	1.9
1,2-Dichlorobenzene	ND	2.2

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: MW-15B
Site: Mead Property

Lab Sample No: 201997
Lab Job No: Z865

Date Sampled: 05/02/00
Date Received: 05/03/00
Date Analyzed: 05/08/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v15910.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	10	0.5
1,1-Dichloroethane	73	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	29	0.4
1,2-Dichloroethane	1.6	0.3
1,1,1-Trichloroethane	120	0.3
Trichloroethene	14	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: MW-9B
Site: Mead Property

Lab Sample No: 201998
Lab Job No: Z865

Date Sampled: 05/02/00
Date Received: 05/03/00
Date Analyzed: 05/08/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v15911.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	4.5
Chloroethane	ND	4.1
Methylene Chloride	ND	9.9
1,1-Dichloroethene	27	4.9
1,1-Dichloroethane	39	2.9
trans-1,2-Dichloroethene	ND	4.5
cis-1,2-Dichloroethene	16	3.7
1,2-Dichloroethane	ND	2.9
1,1,1-Trichloroethane	640	3.0
Trichloroethene	58	3.1
Benzene	ND	3.3
Tetrachloroethene	ND	1.4
Toluene	ND	2.6
Chlorobenzene	ND	1.9
1,2-Dichlorobenzene	ND	2.2

Client ID: **MW-7B**
Site: Mead Property

Lab Sample No: **206174**
Lab Job No: A399

Date Sampled: 05/18/00
Date Received: 05/19/00
Date Analyzed: 05/24/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v16512.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 2.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.9
Chloroethane	ND	0.8
Methylene Chloride	ND	2.0
1,1-Dichloroethene	17	1.0
1,1-Dichloroethane	64	0.6
trans-1,2-Dichloroethene	7.8	0.9
cis-1,2-Dichloroethene	380	0.7
1,2-Dichloroethane	19	0.6
1,1,1-Trichloroethane	380	0.6
Trichloroethene	200	0.6
Benzene	ND	0.7
Tetrachloroethene	1.6	0.3
Toluene	ND	0.5
Chlorobenzene	ND	0.4
1,2-Dichlorobenzene	ND	0.4

Envirotech
a division of Severn Trent Laboratories, Inc.

Client ID: **MW-18B**
Site: Mead Property

Lab Sample No: **206175**
Lab Job No: A399

Date Sampled: 05/18/00
Date Received: 05/19/00
Date Analyzed: 05/24/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v16513.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	2.2
Chloroethane	ND	2.0
Methylene Chloride	ND	5.0
1,1-Dichloroethene	5.1	2.4
1,1-Dichloroethane	18	1.4
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	ND	1.8
1,2-Dichloroethane	ND	1.4
1,1,1-Trichloroethane	380	1.5
Trichloroethene	6.0	1.6
Benzene	ND	1.6
Tetrachloroethene	ND	0.7
Toluene	ND	1.3
Chlorobenzene	ND	0.9
1,2-Dichlorobenzene	ND	1.1

Client ID: **Field_Blank**
Site: Mead Property

Lab Sample No: **206176**
Lab Job No: A399

Date Sampled: 05/18/00
Date Received: 05/19/00
Date Analyzed: 05/24/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v16519.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Client ID: **Dimetro**
Site: Mead Property

Lab Sample No: **206177**
Lab Job No: A399

Date Sampled: 05/18/00
Date Received: 05/19/00
Date Analyzed: 05/24/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v16514.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	1.4	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	2.6	0.5
1,1-Dichloroethane	31	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	0.4	0.4
1,2-Dichloroethane	3.3	0.3
1,1,1-Trichloroethane	50	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Client ID: **MW-9B**
Site: Mead Property

Lab Sample No: 206178
Lab Job No: A399

Date Sampled: 05/18/00
Date Received: 05/19/00
Date Analyzed: 05/24/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v16515.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	4.5
Chloroethane	ND	4.1
Methylene Chloride	ND	9.9
1,1-Dichloroethene	25	4.9
1,1-Dichloroethane	68	2.9
trans-1,2-Dichloroethene	ND	4.5
cis-1,2-Dichloroethene	41	3.7
1,2-Dichloroethane	ND	2.9
1,1,1-Trichloroethane	890	3.0
Trichloroethene	82	3.1
Benzene	ND	3.3
Tetrachloroethene	ND	1.4
Toluene	ND	2.6
Chlorobenzene	ND	1.9
1,2-Dichlorobenzene	ND	2.2

Client ID: **MW-15B**
Site: Mead Property

Lab Sample No: **206179**
Lab Job No: A399

Date Sampled: 05/18/00
Date Received: 05/19/00
Date Analyzed: 05/24/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v16516.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	9.4	0.5
1,1-Dichloroethane	72	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	50	0.4
1,2-Dichloroethane	2.2	0.3
1,1,1-Trichloroethane	160	0.3
Trichloroethene	32	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

Client ID: **Duplicate**
Site: Mead Property

Lab Sample No: **206180**
Lab Job No: A399

Date Sampled: 05/18/00
Date Received: 05/19/00
Date Analyzed: 05/24/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v16517.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	4.5
Chloroethane	ND	4.1
Methylene Chloride	ND	9.9
1,1-Dichloroethene	30	4.9
1,1-Dichloroethane	79	2.9
trans-1,2-Dichloroethene	ND	4.5
cis-1,2-Dichloroethene	48	3.7
1,2-Dichloroethane	ND	2.9
1,1,1-Trichloroethane	1000	3.0
Trichloroethene	92	3.1
Benzene	ND	3.3
Tetrachloroethene	ND	1.4
Toluene	ND	2.6
Chlorobenzene	ND	1.9
1,2-Dichlorobenzene	ND	2.2

Site: Mead Property

Lab Job No: A399

Date Sampled: 5/18/00
Date Received: 5/19/00
Matrix: WATER

Date Analyzed: 5/25/00
QA Batch: 1707

TOTAL DISSOLVED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
206181	Carbon-2	1.0	253

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

Site: Mead Property

Lab Job No: A399

Date Sampled: 5/18/00
Date Received: 5/19/00
Matrix: WATER

Date Analyzed: 5/24/00
QA Batch: 1529

TOTAL SUSPENDED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
206181	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

Client ID: **Trip_Blank**
Site: Mead Property

Lab Sample No: **206182**
Lab Job No: A399

Date Sampled: 05/10/00
Date Received: 05/19/00
Date Analyzed: 05/24/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v16518.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.5
Chloroethane	ND	0.4
Methylene Chloride	ND	1.0
1,1-Dichloroethene	ND	0.5
1,1-Dichloroethane	ND	0.3
trans-1,2-Dichloroethene	ND	0.5
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.3
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.3
Benzene	ND	0.3
Tetrachloroethene	ND	0.1
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.2

URS

August 10, 2000

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: Tables, Figure, and Appendices
O&M Progress Report No. 50
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

At the request of Mr. Tom Morris of IBM Corporation, I have enclosed one (1) copy of the referenced information that goes along with the July 2000 Monthly Progress Report.

If you have any questions or comments, or require additional information, please contact me at (215) 657-5000.

Sincerely,

URS CORPORATION

Vince Piazza

Vince Piazza
Project Manager

cc: Tom Morris – IBM Corporation
Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Louis P. Olivia, Esq. - NYSDEC, White Plains
Alison Spare - URS
Bob Conley - Corporate Environmental Services

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2325 Maryland Road, 2nd Floor
Willow Grove, PA 19090
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Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
2/4/00	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99
3/9/00	On	32,975	2,316,232	64	380	52	620	980	100	1.263	10.525	0.917	16.192	33.671	2.582	65.15
4/6/00	On	33,647	2,479,723	75	520	62	680	1100	120	1.365	11.234	1.002	17.120	35.171	2.746	68.64
5/2/00	On	34,680	2,507,444	54	420	60	590	800	97	1.378	11.331	1.016	17.256	35.356	2.768	69.10
6/1/00	On	35,520	2,568,455	57	460	55	610	850	100	1.407	11.565	1.044	17.566	35.788	2.819	70.19

Notes: 1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
3/9/00	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81
4/6/00	On	22,130	4,685,941	9	69	1.3	25	120	9.2	0.550	2.600	0.071	1.737	7.521	1.254	13.73
5/2/00	On	22,754	4,766,410	10	73	1.6	29	120	14	0.557	2.649	0.072	1.756	7.602	1.263	13.90
6/1/00	On	25,080	4,969,539	6	52	1.4	22	65	10	0.567	2.738	0.075	1.793	7.712	1.280	14.16

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
2/4/00	*Pump not operating.*															
3/23/00	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344
4/6/00	On	9,513	539,095	30	50	2.7	19	860	63	0.1349	0.2248	0.0121	0.0854	3.8666	0.2833	4.607
5/2/00	On	10,137	561,968	27	39	0	16	640	58	0.3225	0.2032	0.0071	0.0807	4.2535	0.2992	5.166
6/1/00	On	11,341	622,288	33	90	7	64	1000	110	0.1578	0.2872	0.0170	0.1298	4.5604	0.3596	5.512

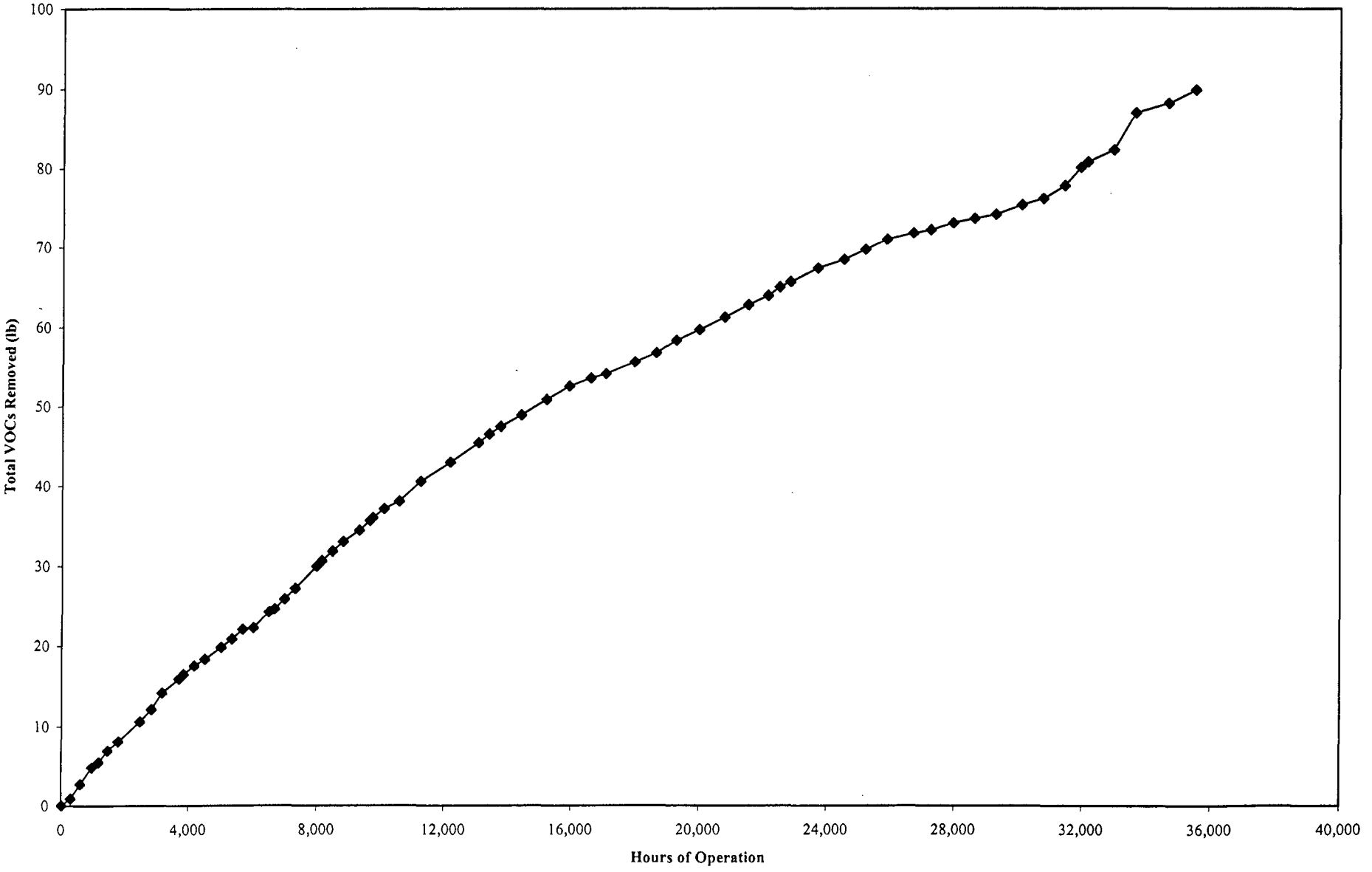
Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	6/1/00	6/15/00
pH	6.0-9.0	SU	7.75	7.64
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	124	182
Aluminum, Total (1)	2.7	mg/l	<0.059	NS
Arsenic, Total (1)	0.15	mg/l	<0.004	NS
Iron, Total (1)	0.6	mg/l	<0.037	NS
Lead, Total (1)	0.04	mg/l	<0.002	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	1.7	NS
1,2-Dichloroethane	10	µg/l	<0.2	NS
1,1-Dichloroethylene	10	µg/l	<0.4	NS
1,2-Dichloroethylene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<0.8	NS
Tetrachloroethylene	2	µg/l	<0.3	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	0.7	NS
Trichloroethylene	10	µg/l	<0.4	NS
Vinyl Chloride	10	µg/l	<0.7	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



Client ID: **Carbon-2**
Site: Mead Property

Lab Sample No: **208752**
Lab Job No: A776

Date Sampled: 06/01/00
Date Received: 06/02/00
Date Analyzed: 06/09/00
GC Column: DB624
Instrument ID: VOAMS4.i
Lab File ID: d11966.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.7
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	1.7	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	0.7	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

Client ID: **Carbon-2**
Site: **Mead Property**

Lab Sample No: 208752
Lab Job No: A776

Date Sampled: 06/01/00
Date Received: 06/02/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	58.6	P
Arsenic	ND	3.6	P
Iron	ND	37.1	P
Lead	ND	2.1	P

M Column - Method Code (See Section 2 of Report)

Site: Mead Property

Lab Job No: A776

Date Sampled: 6/1/00
Date Received: 6/2/00
Matrix: WATER

Date Analyzed: 6/5/00
QA Batch: 1710

TOTAL DISSOLVED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
208752	Carbon-2	1.0	124

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

Site: Mead Property

Lab Job No: A776

Date Sampled: 6/1/00
Date Received: 6/2/00
Matrix: WATER

Date Analyzed: 6/5/00
QA Batch: 1531

TOTAL SUSPENDED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
208752	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

Client ID: **Carbon-1**
Site: Mead Property

Lab Sample No: 208753
Lab Job No: A776

Date Sampled: 06/01/00
Date Received: 06/02/00
Date Analyzed: 06/11/00
GC Column: DB624
Instrument ID: VOAMS4.i
Lab File ID: d12029.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.7
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

Client ID: **MW-15B**
Site: Mead Property

Lab Sample No: 208754
Lab Job No: A776

Date Sampled: 06/01/00
Date Received: 06/02/00
Date Analyzed: 06/09/00
GC Column: DB624
Instrument ID: VOAMS4.i
Lab File ID: d11968.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.7
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	6.0	0.4
1,1-Dichloroethane	52	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	22	0.4
1,2-Dichloroethane	1.4	0.2
1,1,1-Trichloroethane	65	0.3
Trichloroethene	10	0.4
Benzene	ND	0.3
Tetrachloroethene	0.5	0.3
Toluene	2.2	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

Client ID: **MW-12B**
Site: Mead Property

Lab Sample No: **208755**
Lab Job No: A776

Date Sampled: 06/01/00
Date Received: 06/02/00
Date Analyzed: 06/11/00
GC Column: DB624
Instrument ID: VOAMS4.i
Lab File ID: d12030.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	6.5
Chloroethane	ND	4.4
Methylene Chloride	ND	8.5
1,1-Dichloroethene	57	4.1
1,1-Dichloroethane	460	3.7
trans-1,2-Dichloroethene	ND	4.4
cis-1,2-Dichloroethene	610	3.9
1,2-Dichloroethane	55	2.4
1,1,1-Trichloroethane	850	3.3
Trichloroethene	100	4.1
Benzene	ND	2.6
Tetrachloroethene	ND	3.2
Toluene	ND	3.0
Chlorobenzene	ND	2.3
1,2-Dichlorobenzene	ND	3.0

Client ID: **MW-9B**
Site: Mead Property

Lab Sample No: **208756**
Lab Job No: A776

Date Sampled: 06/01/00
Date Received: 06/02/00
Date Analyzed: 06/11/00
GC Column: DB624
Instrument ID: VOAMS4.i
Lab File ID: d12031.d

Matrix: **WATER**
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	6.5
Chloroethane	ND	4.4
Methylene Chloride	ND	8.5
1,1-Dichloroethene	33	4.1
1,1-Dichloroethane	90	3.7
trans-1,2-Dichloroethene	ND	4.4
cis-1,2-Dichloroethene	64	3.9
1,2-Dichloroethane	7.0	2.4
1,1,1-Trichloroethane	1000	3.3
Trichloroethene	110	4.1
Benzene	ND	2.6
Tetrachloroethene	ND	3.2
Toluene	ND	3.0
Chlorobenzene	ND	2.3
1,2-Dichlorobenzene	ND	3.0

SEVERN TRENT SERVICES

Site: IBM Mead

Lab Job No: B261

Date Sampled: 6/15/00
Date Received: 6/19/00
Matrix: WATER

Date Analyzed: 6/20/00
QA Batch: 1715

TOTAL DISSOLVED SOLIDS

Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
211923	Carbon-2	1.0	182

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

SEVERN TRENT SERVICES

Site: IBM Mead

Lab Job No: B261

Date Sampled: 6/15/00
Date Received: 6/19/00
Matrix: WATER

Date Analyzed: 6/22/00
QA Batch: 1536

TOTAL SUSPENDED SOLIDS

Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
211923	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

Mleorge

September 8, 2000

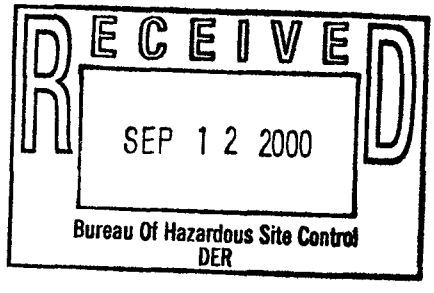
TO: Mr. Gerald Rider, Chief
New York State Dept. of Environmental Conservation

FROM: Tom Morris
IBM Corporation

RE: O&M Progress Report No. 51 - Appendix

The appendix for the O&M Progress Report No. 51, will be sent to you under separate cover.

TM/jb



Rt. 100
Somers, NY 10589

September 7, 2000

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 51
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from July 21, 2000 through August 16, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of September 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down. It is anticipated that the SVE system will be decommissioned pending NYSDEC review of IBM's closure request.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during the period of July 21 through August 17, 2000. Wells MW-9B, MW-12B, and MW-15B operated 100% of the time.

- URS performed a site visit on August 16 and 17.

- During this period, the GWTS recovered approximately 39,812 gallons of groundwater from well MW-12B at an average rate of 1.02 gallons per minute (gpm); 158,810 gallons of groundwater from well MW-15B at an average rate of 4.09 gpm; and 42,245 gallons of groundwater from well MW-9B at an average rate of 1.09 gpm. Since start up in February 1996, the GWTS has recovered approximately 2,608,267 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 5,128,349 gallons of groundwater from well MW-15B at an average

rate of 3.3 gpm; and approximately 664,533 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 92 pounds of VOCs have been recovered by the GWTS through July 7, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B during July are attached in Appendix A. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- URS collected groundwater samples on August 6 and 16. The results of these groundwater analyses will be reported in O&M Progress Report No. 52. The treated groundwater analytical results for July 2000 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 8,814,862 gallons of water at an average rate of 5,672 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filter 1 and Particulate Filter 2 were changed on August 16.

B. Deliverables

- Treated groundwater quality monitoring results for July 2000 are included as Table 4 and in Appendices A and B.

C. Actions Anticipated For September 2000

SVE System

- Initiate decommissioning of the SVE system upon approval from NYSDEC.

Groundwater Treatment System

- Routine O&M activities.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and is scheduled to be decommissioned upon approval from NYSDEC.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of August included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of URS Corporation at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Denise D'Ambrosio – NYSDEC, Tarrytown
Joe Tarsavage - URS
Alison Spare - URS
Bob Conley - Corporate Environmental Services

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
2/4/00	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99
3/9/00	On	32,975	2,316,232	64	380	52	620	980	100	1.263	10.525	0.917	16.192	33.671	2.582	65.15
4/6/00	On	33,647	2,479,723	75	520	62	680	1100	120	1.365	11.234	1.002	17.120	35.171	2.746	68.64
5/2/00	On	34,680	2,507,444	54	420	60	590	800	97	1.378	11.331	1.016	17.256	35.356	2.768	69.10
6/1/00	On	35,328	2,568,455	160	430	43	610	1000	100	1.459	11.550	1.037	17.566	35.865	2.819	70.30
7/6/00	On	36,168	2,608,267	160	430	43	610	1000	100	1.512	11.693	1.052	17.769	36.197	2.852	71.07

Notes: 1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
3/9/00	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81
4/6/00	On	22,130	4,685,941	9	69	1.3	25	120	9.2	0.550	2.600	0.071	1.737	7.521	1.254	13.73
5/2/00	On	22,754	4,766,410	10	73	1.6	29	120	14	0.557	2.649	0.072	1.756	7.602	1.263	13.90
6/1/00	On	25,080	4,969,539	6	52	1.4	22	65	10	0.567	2.738	0.075	1.793	7.712	1.280	14.16
7/6/00	On	25,728	5,128,349	19	64	1.1	28	100	13	0.592	2.822	0.076	1.830	7.845	1.297	14.46

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
2/4/00	Pump not operating.															
3/23/00	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344
4/6/00	On	9,513	539,095	30	50	2.7	19	860	63	0.3199	0.2053	0.0094	0.0803	4.3214	0.2925	5.229
5/2/00	On	10,137	561,968	27	39	0	16	640	58	0.3251	0.2127	0.0094	0.0833	4.4435	0.3035	5.378
6/1/00	On	11,341	622,288	33	90	7	64	1000	110	0.3417	0.2580	0.0129	0.1155	5.0153	0.3589	6.102
7/6/00	On	11,989	664,533	140	84	0	58	1100	110	0.3910	0.2876	0.0129	0.1359	5.4028	0.3976	6.628

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

TABLE 1

SUMMARY OF GROUNDWATER ANALYTICAL RESULTS
TOLUENE AREA WELLS
MOTIVA ENTERPRISES LLC - DELAWARE CITY REFINERY
APRIL 14, 2000

URS Sample ID		D-1	D-2	D-2 Duplicate	D-15	Crude South	Crude West	Field Blank	Trip Blank
Sample Date		4/14/2000	4/14/2000	4/14/2000	4/14/2000	4/14/2000	4/14/2000	4/14/2000	4/14/2000
Laboratory Sample ID		K0418-04	K0418-04	K0418-04	K0418-04	K0418-04	K0418-04	K0418-04	K0418-04
Analytical Constituents	**Units**								
Benzene	µg/l	87	255	155	119,000	136	181	<1 U	<1 U
Ethylbenzene	µg/l	58	229	132	1,850	< 1 U	8.7	<1 U	<1 U
Toluene	µg/l	7.3	<10 U	<10 U	90,500	1.7	7.9	<1 U	<1 U
Xylene	µg/l	18	183	103	4,880	1.8	4.8	<1 U	<1 U
Total BTEX	µg/l	170.3	667	390	216,230	139.5	202.4	<1 U	<1 U
Total Petroleum Hydrocarbons	mg/l	1.3	6.5	1.4	<1 U	<1 U	1.3	<1 U	NA
Total Organic Carbon	mg/l	10	18	18	26	4	4	1	NA

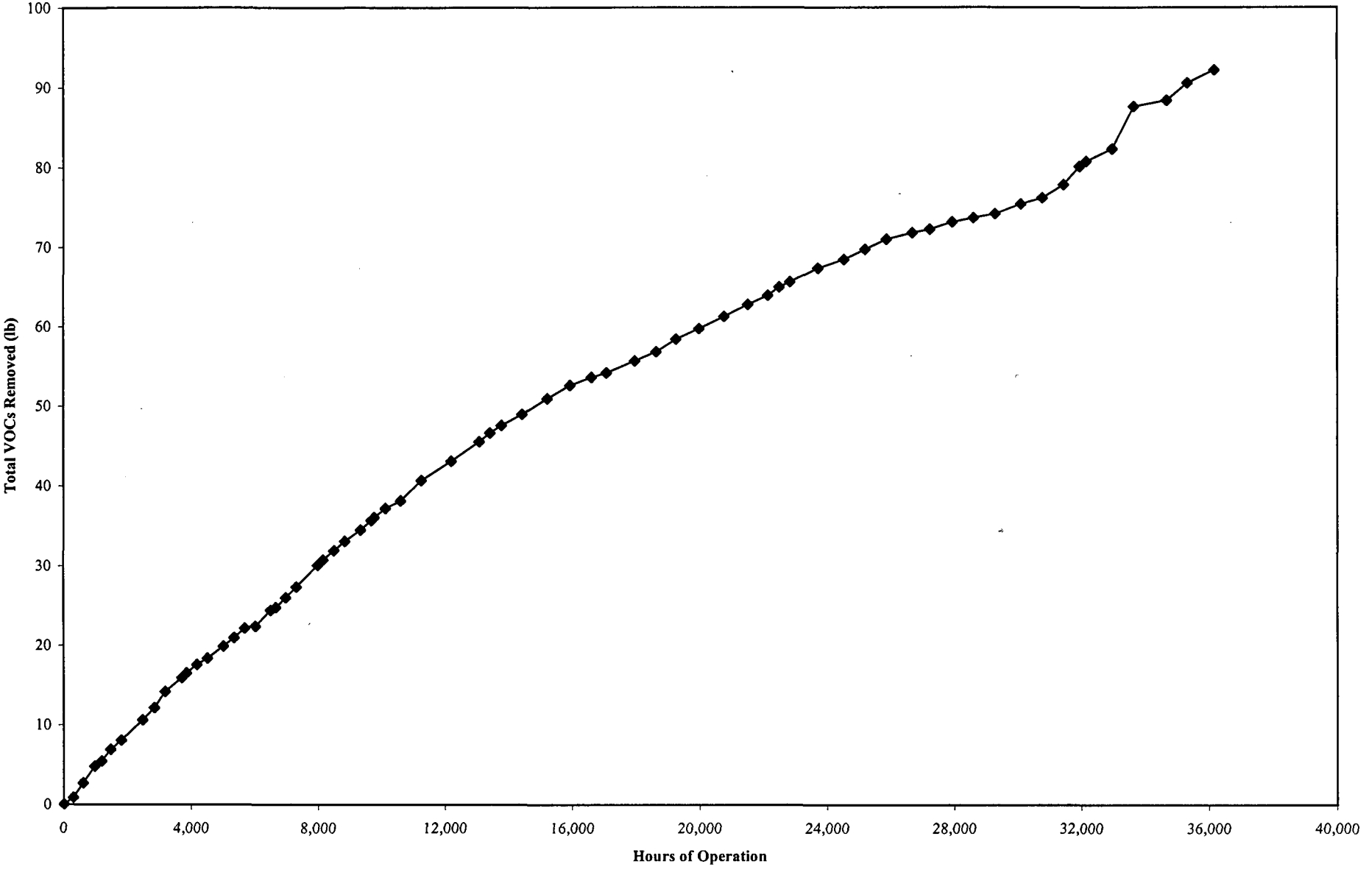
Notes:
1) Groundwater samples analyzed for volatile organic compounds by method 8260B.
2) Groundwater samples analyzed for total petroleum hydrocarbons by method 418.1.
3) Groundwater samples analyzed for total organic carbon by method 5310B.
4) µg/l - micrograms per liter.
5) mg/l - milligrams per liter.
6) U - not detected above the method detection limit.
7) NA - not analyzed for this constituent.

Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	7/6/00	7/20/00
pH	6.0-9.0	SU	7.69	7.1
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	193	243
Aluminum, Total (1)	2.7	mg/l	<0.059	NS
Arsenic, Total (1)	0.15	mg/l	<0.004	NS
Iron, Total (1)	0.6	mg/l	<0.037	NS
Lead, Total (1)	0.04	mg/l	<0.002	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	<0.4	NS
1,2-Dichloroethane	10	µg/l	<0.2	NS
1,1-Dichloroethylene	10	µg/l	<0.4	NS
1,2-Dichloroethylene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<0.8	NS
Tetrachloroethylene	2	µg/l	<0.3	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	<0.3	NS
Trichloroethylene	10	µg/l	<0.4	NS
Vinyl Chloride	10	µg/l	<0.7	NS

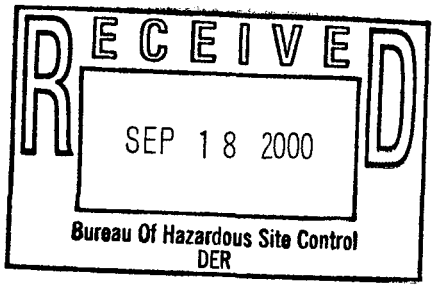
(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



George

URS



September 12, 2000

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: Appendices
O&M Progress Report No. 51
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

At the request of Mr. Tom Morris of IBM Corporation, I have enclosed one (1) copy of the referenced information that goes along with the August 2000 Monthly Progress Report.

If you have any questions or comments, or require additional information, please contact me at (215) 657-5000.

Sincerely,

URS CORPORATION

Vince Piazza

Vince Piazza
Project Manager

cc: Tom Morris – IBM Corporation
Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Denise D'Ambrosio - NYSDEC, Tarrytown
Alison Spare - URS
Bob Conley - Corporate Environmental Services

URS Corporation
2325 Maryland Road, 2nd Floor
Willow Grove, PA 19090
Tel: 215.657.5000
Fax: 215.657.5454

APPENDIX A

SEVERN TRENT SERVICES

Client ID: **MW-15B**
Site: Mead Property

Lab Sample No: 215593
Lab Job No: B777

Date Sampled: 07/06/00
Date Received: 07/07/00
Date Analyzed: 07/15/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f14959.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.7
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	19	0.4
1,1-Dichloroethane	64	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	28	0.4
1,2-Dichloroethane	1.1	0.2
1,1,1-Trichloroethane	100	0.3
Trichloroethene	13	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **MW-12B**
Site: Mead Property

Lab Sample No: 215594
Lab Job No: B777

Date Sampled: 07/06/00
Date Received: 07/07/00
Date Analyzed: 07/15/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f14960.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	6.5
Chloroethane	ND	4.4
Methylene Chloride	ND	8.5
1,1-Dichloroethene	160	4.1
1,1-Dichloroethane	430	3.7
trans-1,2-Dichloroethene	ND	4.4
cis-1,2-Dichloroethene	610	3.9
1,2-Dichloroethane	43	2.4
1,1,1-Trichloroethane	1000	3.3
Trichloroethene	100	4.1
Benzene	ND	2.6
Tetrachloroethene	ND	3.2
Toluene	ND	3.0
Chlorobenzene	ND	2.3
1,2-Dichlorobenzene	ND	3.0

SEVERN TRENT SERVICES

Client ID: **MW-9B**
Site: Mead Property

Lab Sample No: 215595
Lab Job No: B777

Date Sampled: 07/06/00
Date Received: 07/07/00
Date Analyzed: 07/15/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f14961.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	6.5
Chloroethane	ND	4.4
Methylene Chloride	ND	8.5
1,1-Dichloroethene	140	4.1
1,1-Dichloroethane	84	3.7
trans-1,2-Dichloroethene	ND	4.4
cis-1,2-Dichloroethene	58	3.9
1,2-Dichloroethane	ND	2.4
1,1,1-Trichloroethane	1100	3.3
Trichloroethene	110	4.1
Benzene	ND	2.6
Tetrachloroethene	ND	3.2
Toluene	ND	3.0
Chlorobenzene	ND	2.3
1,2-Dichlorobenzene	ND	3.0

SEVERN TRENT SERVICES

Client ID: **Carbon-1**
Site: Mead Property

Lab Sample No: 215596
Lab Job No: B777

Date Sampled: 07/06/00
Date Received: 07/07/00
Date Analyzed: 07/15/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f14962.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.7
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **Carbon-2**
Site: Mead Property

Lab Sample No: 215597
Lab Job No: B777

Date Sampled: 07/06/00
Date Received: 07/07/00
Date Analyzed: 07/15/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f14963.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.7
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: Carbon-2
Site: Mead Property

Lab Sample No: 215597
Lab Job No: B777

Date Sampled: 07/06/00
Date Received: 07/07/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	58.6	P
Arsenic	ND	3.6	P
Iron	ND	37.1	P
Lead	ND	2.1	P

M Column - Method Code (See Section 2 of Report)

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: B777

Date Sampled: 7/6/00
Date Received: 7/7/00
Matrix: WATER

Date Analyzed: 7/12/00
QA Batch: 1541

TOTAL SUSPENDED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
215597	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: B777

Date Sampled: 7/6/00
Date Received: 7/7/00
Matrix: WATER

Date Analyzed: 7/13/00
QA Batch: 1721

TOTAL DISSOLVED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
215597	Carbon-2	1.0	193

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

APPENDIX B

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: C178

Date Sampled: 7/20/00
Date Received: 7/21/00
Matrix: WATER

Date Analyzed: 7/26/00
QA Batch: 1724

TOTAL DISSOLVED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
218492	Carbon-2	1.0	243

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: C178

Date Sampled: 7/20/00
Date Received: 7/21/00
Matrix: WATER

Date Analyzed: 7/25/00
QA Batch: 1544

TOTAL SUSPENDED SOLIDS

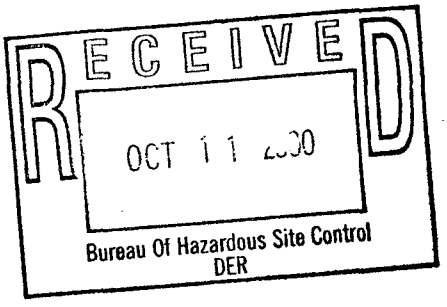
STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
218492	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

IBM George

Rt. 100
Somers, NY 10589

October 6, 2000



Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 52
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from August 17, 2000 through September 25, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of October 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down. It is anticipated that the SVE system will be decommissioned pending NYSDEC review of IBM's closure request.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during the period of August 17 through September 25, 2000. Wells MW-9B, MW-12B, and MW-15B operated 100% of the time.

- URS performed site visits on September 7 and 25.

- During this period, the GWTS recovered approximately 48,514 gallons of groundwater from well MW-12B at an average rate of 0.84 gallons per minute (gpm); 221,082 gallons of groundwater from well MW-15B at an average rate of 3.84 gpm; and 58,108 gallons of groundwater from well MW-9B at an average rate of 1.01 gpm. Since start up in February 1996, the GWTS has recovered approximately 2,656,781 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 5,349,431 gallons of groundwater from well MW-15B at an average

rate of 3.3 gpm; and approximately 722,641 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 94 pounds of VOCs have been recovered by the GWTS through September 25, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B are also attached in Appendices A and B. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- URS collected groundwater samples on September 7 and 25. The results of these groundwater analyses will be reported in O&M Progress Report No. 53. The treated groundwater analytical results for August 2000 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 9,142,566 gallons of water at an average rate of 5,735 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filter 1 and Particulate Filter 2 were changed on September 7 and 25.

- Quarterly groundwater samples were collected on August 16 and 17.

B. Deliverables

- Treated groundwater quality monitoring results for August 2000 are included as Table 4 and in Appendices A and B.

C. Actions Anticipated For October 2000

SVE System

- Meet with NYSDEC to discuss decommissioning of the SVE system.

Groundwater Treatment System

- Routine O&M activities.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and is scheduled to be decommissioned upon approval from NYSDEC.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of September included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of URS Corporation at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: Sue Lasdin - NYSDEC
G. Anders Carlson, Ph.D. - N.Y. Department of Health
Marc Moran - NYSDEC, Region III
Denise D'Ambrosio – NYSDEC, Tarrytown
Joe Tarsavage - URS
Alison Spare - URS
Bob Conley - Corporate Environmental Services

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
02/16/1996	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
02/28/1996	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
03/12/1996	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
03/27/1996	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
04/05/1996	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
04/17/1996	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
05/01/1996	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
05/29/1996	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
06/13/1996	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
06/27/1996	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
07/19/1996	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
07/25/1996	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
08/08/1996	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
08/22/1996	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
09/12/1996	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
09/26/1996	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/1996	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/1996	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/1996	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/1996	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/04/1996	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/1996	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
01/15/1997	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
01/22/1997	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
02/05/1997	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
02/19/1997	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
03/12/1997	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
03/26/1997	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
04/09/1997	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
04/24/1997	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
05/08/1997	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
06/05/1997	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
07/22/1997	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
08/28/1997	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
09/11/1997	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/1997	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/06/1997	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/09/1997	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
01/08/1998	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
02/05/1998	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
03/03/1998	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
04/09/1998	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
05/07/1998	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
06/02/1998	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
07/08/1998	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
08/10/1998	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
09/10/1998	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/06/1998	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/03/1998	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95
01/08/1999	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
02/11/1999	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
03/11/1999	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
04/08/1999	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86
05/12/1999	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
06/04/1999	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
07/08/1999	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
08/05/1999	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
09/02/1999	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/07/1999	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/04/1999	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/02/1999	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
01/17/2000	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
02/04/2000	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99
03/09/2000	On	32,975	2,316,232	64	380	52	620	980	100	1.263	10.525	0.917	16.192	33.671	2.582	65.15
04/06/2000	On	33,647	2,479,723	75	520	62	680	1100	120	1.365	11.234	1.002	17.120	35.171	2.746	68.64
05/02/2000	On	34,680	2,507,444	54	420	60	590	800	97	1.378	11.331	1.016	17.256	35.356	2.768	69.10
06/01/2000	On	35,328	2,568,455	160	430	43	610	1000	100	1.459	11.550	1.037	17.566	35.865	2.819	70.30
07/06/2000	On	36,168	2,608,267	160	430	43	610	1000	100	1.512	11.693	1.052	17.769	36.197	2.852	71.07
08/01/2000	On	37,128	2,656,781	160	620	62	900	810	140	1.577	11.944	1.077	18.133	36.525	2.909	72.16

Notes:
1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

IBM

Rt. 100
Somers, NY 10589

November 7, 2000

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 53
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from September 26, 2000 through October 25, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of November 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down. It is anticipated that the SVE system will be decommissioned pending NYSDEC review of IBM's closure request.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during the period of September 26 through October 25, 2000. Wells MW-9B, MW-12B, and MW-15B operated 100% of the time.

- URS performed site visits on October 5 and 25.

- During this period, the GWTS recovered approximately 31,945 gallons of groundwater from well MW-12B at an average rate of 0.80 gallons per minute (gpm); 164,480 gallons of groundwater from well MW-15B at an average rate of 4.10 gpm; and 32,929 gallons of groundwater from well MW-9B at an average rate of 0.82 gpm. Since start up in February 1996, the GWTS has recovered approximately 2,688,726 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 5,513,911 gallons of groundwater from well MW-15B at an average

rate of 3.4 gpm; and approximately 755,570 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 96 pounds of VOCs have been recovered by the GWTS through October 25, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B are also attached in Appendices A and B. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- URS collected groundwater samples on October 5 and 25. The results of these groundwater analyses will be reported in O&M Progress Report No. 54. The treated groundwater analytical results for September 2000 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 9,371,920 gallons of water at an average rate of 5,778 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filter 1 and Particulate Filter 2 were changed on October 5 and 25.

B. Deliverables

- Treated groundwater quality monitoring results for September 2000 are included as Table 4 and in Appendices A and B.

C. Actions Anticipated For November 2000

SVE System

- None.

Groundwater Treatment System

- Routine O&M activities.

- Perform quarterly groundwater monitoring.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and is scheduled to be decommissioned upon approval from NYSDEC.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities for the month of September included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of URS Corporation at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: George Mamberger, NYSDEC
Marc Moran - NYSDEC, Region III
Denise D'Ambrosio – NYSDEC, Tarrytown
Joe Tarsavage - URS
Alison Sparc - URS
Bob Conley - Corporate Environmental Services

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
2/4/00	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99
3/9/00	On	32,975	2,316,232	64	380	52	620	980	100	1.263	10.525	0.917	16.192	33.671	2.582	65.15
4/6/00	On	33,647	2,479,723	75	520	62	680	1100	120	1.365	11.234	1.002	17.120	35.171	2.746	68.64
5/2/00	On	34,680	2,507,444	54	420	60	590	800	97	1.378	11.331	1.016	17.256	35.356	2.768	69.10
6/1/00	On	35,328	2,568,455	160	430	43	610	1000	100	1.459	11.550	1.037	17.566	35.865	2.819	70.30
7/6/00	On	36,168	2,608,267	160	430	43	610	1000	100	1.512	11.693	1.052	17.769	36.197	2.852	71.07
8/1/00	On	37,128	2,656,781	160	620	62	900	810	140	1.577	11.944	1.077	18.133	36.525	2.909	72.16
9/7/00	On	38,016	2,688,726	63	470	62	694	850	120	1.594	12.069	1.093	18.318	36.751	2.941	72.77

Notes:
1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2

VOC Mass Removal from Groundwater (MW-15B)

Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
3/9/00	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81
4/6/00	On	22,130	4,685,941	9	69	1.3	25	120	9.2	0.550	2.600	0.071	1.737	7.521	1.254	13.73
5/2/00	On	22,754	4,766,410	10	73	1.6	29	120	14	0.557	2.649	0.072	1.756	7.602	1.263	13.90
6/1/00	On	25,080	4,969,539	6	52	1.4	22	65	10	0.567	2.738	0.075	1.793	7.712	1.280	14.16
7/6/00	On	25,728	5,128,349	19	64	1.1	28	100	13	0.592	2.822	0.076	1.830	7.845	1.297	14.46
8/1/00	On	26,688	5,349,431	14	59	1	22	81	9.2	0.618	2.931	0.078	1.871	7.994	1.314	14.81
9/7/00	On	27,576	5,513,911	10	68	1.8	23	130	13	0.631	3.024	0.080	1.902	8.172	1.332	15.14

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3

VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
2/4/00	Pump not operating.															
3/23/00	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344
4/6/00	On	9,513	539,095	30	50	2.7	19	860	63	0.3199	0.2053	0.0094	0.0803	4.3214	0.2925	5.229
5/2/00	On	10,137	561,968	27	39	0	16	640	58	0.3251	0.2127	0.0094	0.0833	4.4435	0.3035	5.378
6/1/00	On	11,341	622,288	33	90	7	64	1000	110	0.3417	0.2580	0.0129	0.1155	5.0153	0.3589	6.102
7/6/00	On	12,205	664,533	140	84	0	58	1100	110	0.3910	0.2876	0.0129	0.1359	5.4028	0.3976	6.628
8/1/00	On	12,829	722,641	120	110	6.4	80	970	130	0.4492	0.3409	0.0160	0.1747	5.8729	0.4606	7.314
9/7/00	On	13,717	755,570	42	86	6.2	66	1200	110	0.4607	0.3645	0.0177	0.1928	6.2025	0.4909	7.729

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

Table 4
GWTS Effluent Quality Data
Mead Property Site

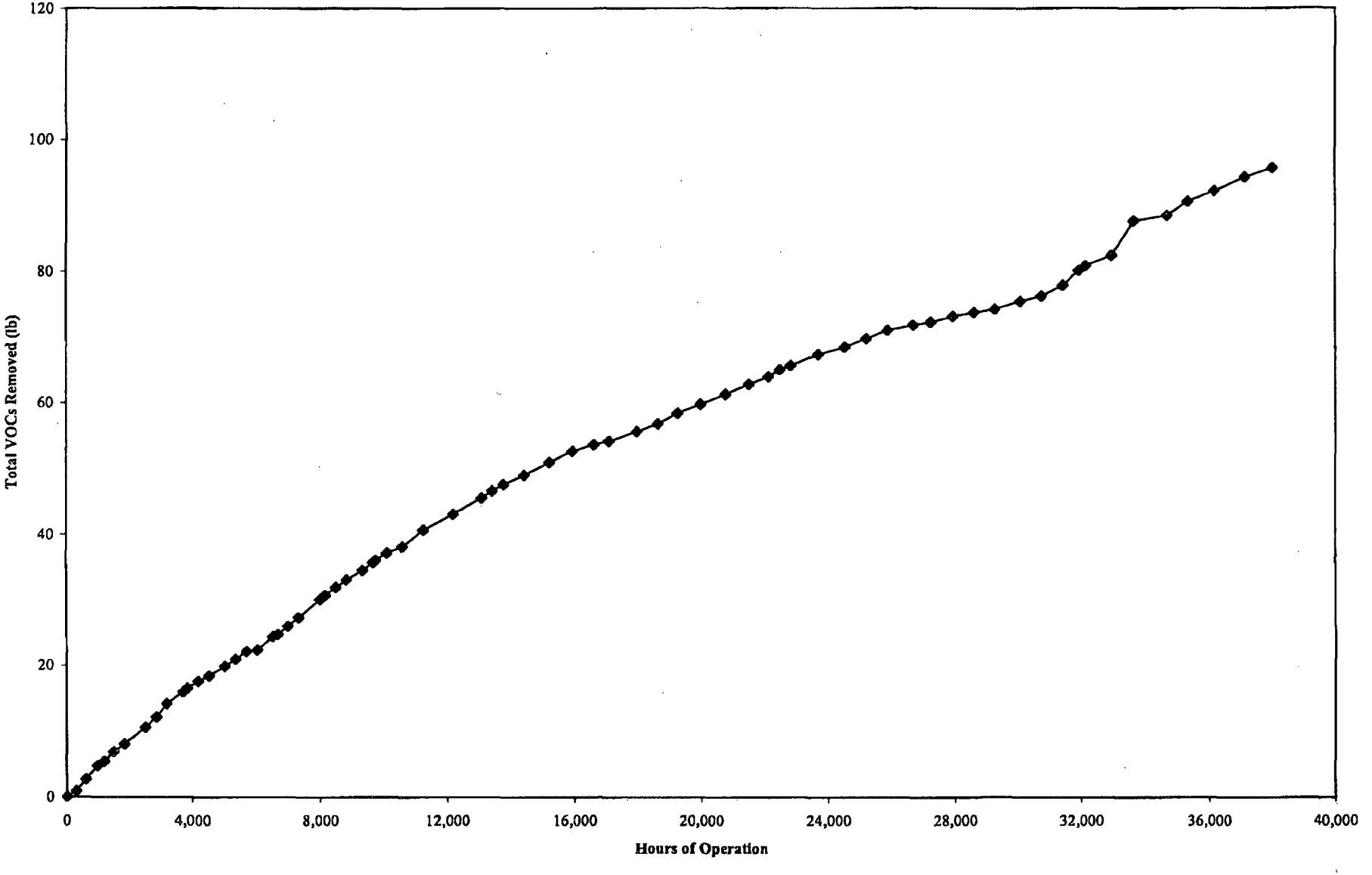
Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	9/7/00	9/25/00
pH	6.0-9.0	SU	7.2	7.22
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	230	228
Aluminum, Total (1)	2.7	mg/l	<0.063	NS
Arsenic, Total (1)	0.15	mg/l	<0.003	NS
Iron, Total (1)	0.6	mg/l	<0.039	NS
Lead, Total (1)	0.04	mg/l	<0.002	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	1.0	NS
1,2-Dichloroethane	10	µg/l	<0.2	NS
1,1-Dichloroethylene	10	µg/l	<0.4	NS
1,2-Dichloroethylene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<0.8	NS
Tetrachloroethylene	2	µg/l	<0.3	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	0.6	NS
Trichloroethylene	10	µg/l	<0.4	NS
Vinyl Chloride	10	µg/l	<0.6	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figure 1

VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)

Mead Property Site



APPENDIX A

SEVERN TRENT SERVICES

Client ID: Carbon2
Site: Mead Property

Lab Sample No: 227937
Lab Job No: D580

Date Sampled: 09/07/00
Date Received: 09/08/00
Date Analyzed: 09/15/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v20756.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	1.0	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	0.6	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: Carbon2
Site: Mead Property

Lab Sample No: 227937
Lab Job No: D580

Date Sampled: 09/07/00
Date Received: 09/08/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	62.6	P
Arsenic	ND	3.2	P
Iron	ND	39.2	P
Lead	ND	2.3	P

M Column - Method Code (See Section 2 of Report)

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: D580

Date Sampled: 9/7/00
Date Received: 9/8/00
Matrix: WATER

Date Analyzed: 9/11/00
QA Batch: 1741

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
227937	Carbon2	1.0	230

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: D580

Date Sampled: 9/7/00
Date Received: 9/8/00
Matrix: WATER

Date Analyzed: 9/8/00
QA Batch: 1559

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
227937	Carbon2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Client ID: Carbon1
Site: Mead Property

Lab Sample No: 227938
Lab Job No: D580

Date Sampled: 09/07/00
Date Received: 09/08/00
Date Analyzed: 09/15/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v20757.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: MW-9B
Site: Mead Property

Lab Sample No: 227939
Lab Job No: D580

Date Sampled: 09/07/00
Date Received: 09/08/00
Date Analyzed: 09/21/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v21033.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	3.2
Chloroethane	ND	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	42	2.0
1,1-Dichloroethane	86	1.8
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	66	2.0
1,2-Dichloroethane	6.2	1.2
1,1,1-Trichloroethane	*	1.6
Trichloroethene	110	2.0
Benzene	ND	1.3
Tetrachloroethene	ND	1.6
Toluene	ND	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

*See dilution

SEVERN TRENT SERVICES

Client ID: MW-9BD1
Site: Mead Property

Lab Sample No: 227939D1
Lab Job No: D580

Date Sampled: 09/07/00
Date Received: 09/08/00
Date Analyzed: 09/15/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v20758.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
1,1,1-Trichloroethane	1200	3.3

SEVERN TRENT SERVICES

Client ID: MW-12B
Site: Mead Property

Lab Sample No: 227940
Lab Job No: D580

Date Sampled: 09/07/00
Date Received: 09/08/00
Date Analyzed: 09/21/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v21034.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	3.5	3.2
Chloroethane	3.1	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	63	2.0
1,1-Dichloroethane	470	1.8
trans-1,2-Dichloroethene	4.0	2.2
cis-1,2-Dichloroethene	690	2.0
1,2-Dichloroethane	62	1.2
1,1,1-Trichloroethane	850	1.6
Trichloroethene	120	2.0
Benzene	ND	1.3
Tetrachloroethene	ND	1.6
Toluene	ND	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

SEVERN TRENT SERVICES

Client ID: MW-15B
Site: Mead Property

Lab Sample No: 227941
Lab Job No: D580

Date Sampled: 09/07/00
Date Received: 09/08/00
Date Analyzed: 09/15/00
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v20760.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	9.5	0.4
1,1-Dichloroethane	68	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	23	0.4
1,2-Dichloroethane	1.8	0.2
1,1,1-Trichloroethane	130	0.3
Trichloroethene	13	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

APPENDIX B

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: E105

Date Sampled: 9/25/00
Date Received: 9/26/00
Matrix: WATER

Date Analyzed: 9/28/00
QA Batch: 1563

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
231386	Carbon_2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: E105

Date Sampled: 9/25/00
Date Received: 9/26/00
Matrix: WATER

Date Analyzed: 9/27/00
QA Batch: 1746

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
231386	Carbon_2	1.0	228

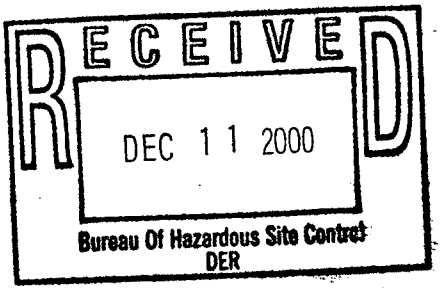
Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

Merge

IBM

Rt. 100
Somers, NY 10589

December 8, 2000



Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 54
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from October 26, 2000 through November 13, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of December 2000. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down. It is anticipated that the SVE system will be decommissioned pending NYSDEC review of IBM's closure request.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during the period of October 26 through November 13, 2000. Wells MW-12B and MW-15B operated 100% of the time. Well MW-9B operated approximately 3% of the time due to wire connections that had vibrated loose. The wires were repaired on November 13, 2000, and the pump in well MW-9B was re-started.

- URS performed site visits on November 13.

- During this period, the GWTS recovered approximately 16,276 gallons of groundwater from well MW-12B at an average rate of 0.63 gallons per minute (gpm); 109,236 gallons of groundwater from well MW-15B at an average rate of 4.20 gpm; and 307 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Since start up in February 1996, the GWTS has recovered approximately 2,705,002 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 5,623,147 gallons of groundwater from well MW-15B at an average rate of 3.4 gpm; and approximately 755,877 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 97 pounds of VOCs have been recovered by the GWTS through October 25, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B are also attached in Appendices A and B. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- URS collected groundwater samples on November 13. The results of these groundwater analyses will be reported in O&M Progress Report No. 55. The treated groundwater analytical results for October 2000 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 9,497,739 gallons of water at an average rate of 5,791 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filter 1 and Particulate Filter 2 were changed on November 13.

B. Deliverables

- Treated groundwater quality monitoring results for October 2000 are included as Table 4 and in Appendices A and B.

C. Actions Anticipated For November 2000

SVE System

- None.

Groundwater Treatment System

- Routine O&M activities.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and is scheduled to be decommissioned upon approval from NYSDEC.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities during the reporting period included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of URS Corporation at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: George Mamberger, NYSDEC
Marc Moran - NYSDEC, Region III
Denise D'Ambrosio – NYSDEC, Tarrytown
Joe Tarsavage - URS
Alison Spare - URS
Bob Conley - Corporate Environmental Services□

O&M Progress Report No. 54 Appendices
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Tables

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
2/4/00	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99
3/9/00	On	32,975	2,316,232	64	380	52	620	980	100	1.263	10.525	0.917	16.192	33.671	2.582	65.15
4/6/00	On	33,647	2,479,723	75	520	62	680	1100	120	1.365	11.234	1.002	17.120	35.171	2.746	68.64
5/2/00	On	34,680	2,507,444	54	420	60	590	800	97	1.378	11.331	1.016	17.256	35.356	2.768	69.10
6/1/00	On	35,328	2,568,455	160	430	43	610	1000	100	1.459	11.550	1.037	17.566	35.865	2.819	70.30
7/6/00	On	36,168	2,608,267	160	430	43	610	1000	100	1.512	11.693	1.052	17.769	36.197	2.852	71.07
8/1/00	On	37,128	2,656,781	160	620	62	900	810	140	1.577	11.944	1.077	18.133	36.525	2.909	72.16
9/7/00	On	38,016	2,688,726	63	470	62	694	850	120	1.594	12.069	1.093	18.318	36.751	2.941	72.77
10/5/00	On	38,232	2,705,002	79	540	62	840	810	140	1.604	12.142	1.102	18.432	36.861	2.960	73.10

Notes:
1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
3/9/00	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81
4/6/00	On	22,130	4,685,941	9	69	1.3	25	120	9.2	0.550	2.600	0.071	1.737	7.521	1.254	13.73
5/2/00	On	22,754	4,766,410	10	73	1.6	29	120	14	0.557	2.649	0.072	1.756	7.602	1.263	13.90
6/1/00	On	25,080	4,969,539	6	52	1.4	22	65	10	0.567	2.738	0.075	1.793	7.712	1.280	14.16
7/6/00	On	25,728	5,128,349	19	64	1.1	28	100	13	0.592	2.822	0.076	1.830	7.845	1.297	14.46
8/1/00	On	26,688	5,349,431	14	59	1	22	81	9.2	0.618	2.931	0.078	1.871	7.994	1.314	14.81
9/7/00	On	27,576	5,513,911	10	68	1.8	23	130	13	0.631	3.024	0.080	1.902	8.172	1.332	15.14
10/5/00	On	27,792	5,623,147	11	72	1.4	33	120	16	0.641	3.090	0.082	1.933	8.282	1.346	15.37

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
2/4/00	Pump not operating.															
3/23/00	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344
4/6/00	On	9,513	539,095	30	50	2.7	19	860	63	0.3199	0.2053	0.0094	0.0803	4.3214	0.2925	5.229
5/2/00	On	10,137	561,968	27	39	0	16	640	58	0.3251	0.2127	0.0094	0.0833	4.4435	0.3035	5.378
6/1/00	On	11,341	622,288	33	90	7	64	1000	110	0.3417	0.2580	0.0129	0.1155	5.0153	0.3589	6.102
7/6/00	On	12,205	664,533	140	84	0	58	1100	110	0.3910	0.2876	0.0129	0.1359	5.4028	0.3976	6.628
8/1/00	On	12,829	722,641	120	110	6.4	80	970	130	0.4492	0.3409	0.0160	0.1747	5.8729	0.4606	7.314
9/7/00	On	13,717	755,570	42	86	6.2	66	1200	110	0.4607	0.3645	0.0177	0.1928	6.2025	0.4909	7.729
10/5/00	On	14,149	791,858	53	110	0	88	1100	130	0.4767	0.3978	0.0177	0.2195	6.5354	0.5302	8.177

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

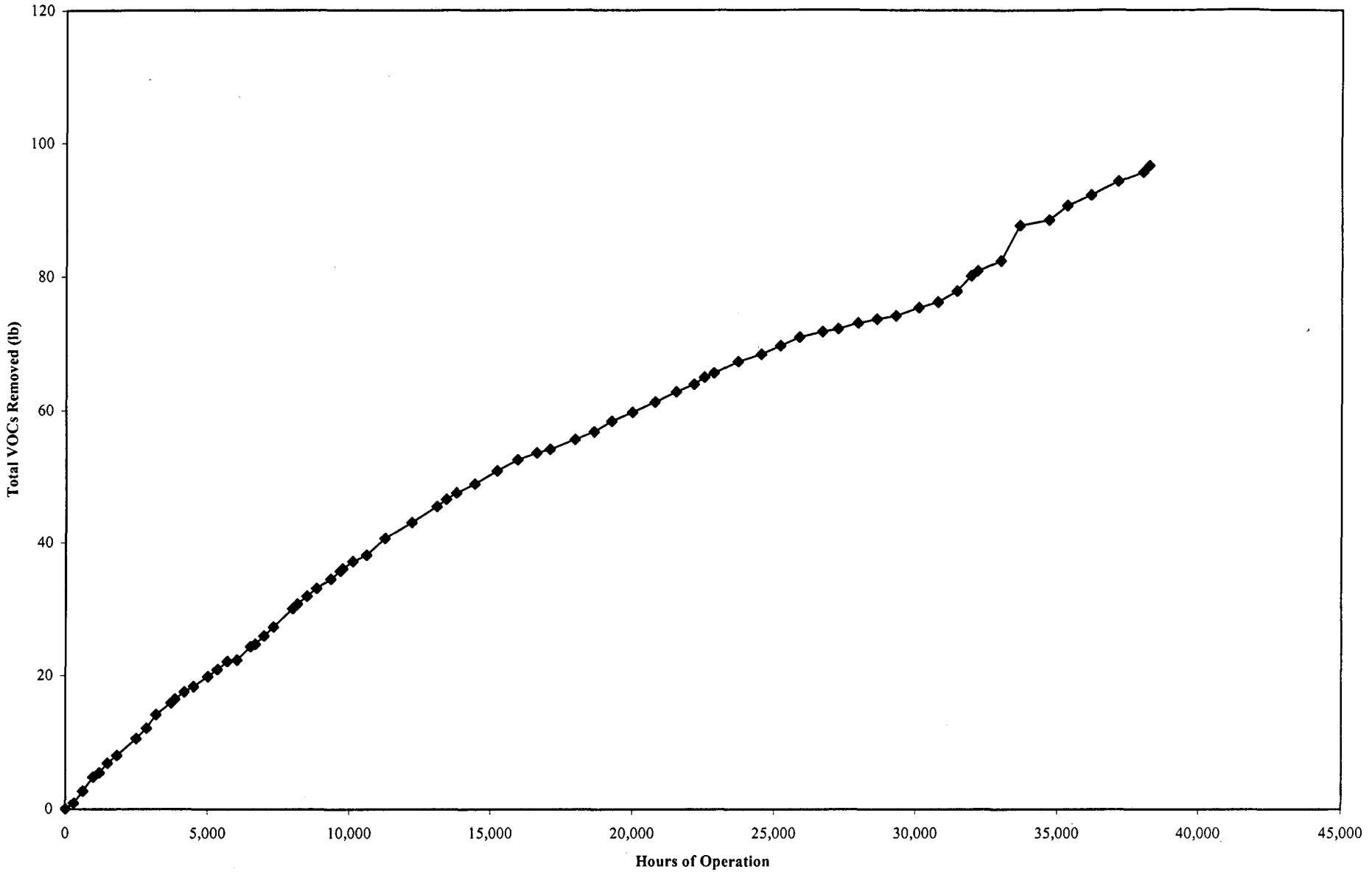
Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	10/5/00	10/25/00
pH	6.0-9.0	SU	7.82	7.94
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	261	217
Aluminum, Total (1)	2.7	mg/l	<0.059	NS
Arsenic, Total (1)	0.15	mg/l	<0.003	NS
Iron, Total (1)	0.6	mg/l	<0.037	NS
Lead, Total (1)	0.04	mg/l	<0.002	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	0.8	NS
1,2-Dichloroethane	10	µg/l	<0.2	NS
1,1-Dichloroethylene	10	µg/l	<0.4	NS
1,2-Dichloroethylene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<0.8	NS
Tetrachloroethylene	2	µg/l	<0.3	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	0.4	NS
Trichloroethylene	10	µg/l	<0.4	NS
Vinyl Chloride	10	µg/l	<0.6	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figures

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



Appendix A

SEVERN TRENT SERVICES

Client ID: CARBON_2
Site: Mead Property

Lab Sample No: 234065
Lab Job No: E495

Date Sampled: 10/05/00
Date Received: 10/06/00
Date Analyzed: 10/18/00
GC Column: DB624
Instrument ID: VOAMS8.i
Lab File ID: j15047.d

Matrix: WATFR
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	0.8	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	0.4	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **CARBON 2**
Site: **Mead Property**

Lab Sample No: 234065
Lab Job No: E495

Date Sampled: 10/05/00
Date Received: 10/06/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	58.6	P
Arsenic	ND	3.6	P
Iron	ND	37.1	P
Lead	ND	2.1	P

M Column - Method Code (See Section 2 of Report)

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: E495

Date Sampled: 10/5/00
Date Received: 10/6/00
Matrix: WATER

Date Analyzed: 10/12/00
QA Batch: 1750

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
234065	CARBON_2	1.0	261

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: E495

Date Sampled: 10/5/00
Date Received: 10/6/00
Matrix: WATER

Date Analyzed: 10/10/00
QA Batch: 1566

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
234065	CARBON_2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Client ID: CARBON_1
Site: Mead Property

Lab Sample No: 234066
Lab Job No: E495

Date Sampled: 10/05/00
Date Received: 10/06/00
Date Analyzed: 10/18/00
GC Column: DB624
Instrument ID: VOAMS8.i
Lab File ID: j15048.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **MW-15B**
Site: Mead Property

Lab Sample No: 234067
Lab Job No: E495

Date Sampled: 10/05/00
Date Received: 10/06/00
Date Analyzed: 10/18/00
GC Column: DB624
Instrument ID: VOAMS8.i
Lab File ID: j15049.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 2.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	1.3
Chloroethane	ND	0.9
Methylene Chloride	ND	1.7
1,1-Dichloroethene	11	0.8
1,1-Dichloroethane	72	0.7
trans-1,2-Dichloroethene	ND	0.9
cis-1,2-Dichloroethene	33	0.8
1,2-Dichloroethane	1.4	0.5
1,1,1-Trichloroethane	120	0.7
Trichloroethene	16	0.8
Benzene	ND	0.5
Tetrachloroethene	ND	0.6
Toluene	ND	0.6
Chlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.6

SEVERN TRENT SERVICES

Client ID: MW-12B
Site: Mead Property

Lab Sample No: 234068
Lab Job No: E495

Date Sampled: 10/05/00
Date Received: 10/06/00
Date Analyzed: 10/18/00
GC Column: DB624
Instrument ID: VOAMS8.i
Lab File ID: j15050.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	6.5
Chloroethane	ND	4.4
Methylene Chloride	ND	8.5
1,1-Dichloroethene	79	4.1
1,1-Dichloroethane	540	3.7
trans-1,2-Dichloroethene	ND	4.4
cis-1,2-Dichloroethene	840	3.9
1,2-Dichloroethane	62	2.4
1,1,1-Trichloroethane	810	3.3
Trichloroethene	140	4.1
Benzene	ND	2.6
Tetrachloroethene	ND	3.2
Toluene	ND	3.0
Chlorobenzene	ND	2.3
1,2-Dichlorobenzene	ND	3.0

SEVERN TRENT SERVICES

Client ID: MW-9B
Site: Mead Property

Lab Sample No: 234069
Lab Job No: E495

Date Sampled: 10/05/00
Date Received: 10/06/00
Date Analyzed: 10/18/00
GC Column: DB624
Instrument ID: VOAMS8.i
Lab File ID: j15053.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 20.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	13
Chloroethane	ND	8.8
Methylene Chloride	ND	17
1,1-Dichloroethene	53	8.2
1,1-Dichloroethane	110	7.4
trans-1,2-Dichloroethene	ND	8.8
cis-1,2-Dichloroethene	88	7.8
1,2-Dichloroethane	ND	4.8
1,1,1-Trichloroethane	1100	6.6
Trichloroethene	130	8.2
Benzene	ND	5.2
Tetrachloroethene	ND	6.4
Toluene	ND	6.0
Chlorobenzene	ND	4.6
1,2-Dichlorobenzene	ND	6.0

Appendix B

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: F077

Date Sampled: 10/25/00
Date Received: 10/26/00
Matrix: WATER

Date Analyzed: 11/1/00
QA Batch: 1758

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
237642	Carbon-2	1.0	217

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: F0[illegible]

Date Sampled: 10/25/00
Date Received: 10/26/00
Matrix: WATER

Date Analyzed: 10/30/00
QA Batch: 1573

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
237642	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

P.O. Box 100
Somers, NY 10589

January 8, 2001

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 55
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from November 14, 2000 through December 20, 2000 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of January 2001. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down. It is anticipated that the SVE system will be decommissioned pending NYSDEC review of IBM's closure request.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during the period of November 14 through December 20, 2000. Wells MW-9B and MW-15B operated 100% of the time. Well MW-12B operated approximately 16% of the time due to wire connections that had vibrated loose. The wires were repaired on December 20, 2000, and the pump in well MW-12B was re-started.

- URS performed site visits on November 21, December 5 and December 20, 2000.

- During this period, the GWTS recovered approximately 8,488 gallons of groundwater from well MW-12B at an average rate of 0.16 gallons per minute (gpm); 134,171 gallons of groundwater from well MW-15B at an average rate of 2.52 gpm; and 53,280 gallons of groundwater from well MW-9B at an average rate of 0.56 gpm. Since start up in February 1996, the GWTS has

recovered approximately 2,713,490 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 5,757,318 gallons of groundwater from well MW-15B at an average rate of 3.4 gpm; and approximately 785,510 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 97 pounds of VOCs have been recovered by the GWTS through November 13, 2000. The data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B are also attached in Appendices A and B. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- URS collected groundwater samples on December 5 and 20. The results of these groundwater analyses will be reported in O&M Progress Report No. 56. The treated groundwater analytical results for November 2000 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 9,670,031 gallons of water at an average rate of 5,766 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filter 1 and Particulate Filter 2 were changed on November 21, December 5 and December 20.

B. Deliverables

- Treated groundwater quality monitoring results for November 2000 are included as Table 4 and in Appendices A and B.

C. Actions Anticipated For January 2001

SVE System

- None.

Groundwater Treatment System

- Routine O&M activities.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and is scheduled to be decommissioned upon approval from NYSDEC.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities during the reporting period included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of URS Corporation at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: George Momberger, NYSDEC
Marc Moran - NYSDEC, Region III
Denise D'Ambrosio – NYSDEC, Tarrytown
Joe Tarsavage - URS
Alison Spare - URS
Bob Conley - Corporate Environmental Services

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
2/4/00	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99
3/9/00	On	32,975	2,316,232	64	380	52	620	980	100	1.263	10.525	0.917	16.192	33.671	2.582	65.15
4/6/00	On	33,647	2,479,723	75	520	62	680	1100	120	1.365	11.234	1.002	17.120	35.171	2.746	68.64
5/2/00	On	34,680	2,507,444	54	420	60	590	800	97	1.378	11.331	1.016	17.256	35.356	2.768	69.10
6/1/00	On	35,328	2,568,455	160	430	43	610	1000	100	1.459	11.550	1.037	17.566	35.865	2.819	70.30
7/6/00	On	36,168	2,608,267	160	430	43	610	1000	100	1.512	11.693	1.052	17.769	36.197	2.852	71.07
8/1/00	On	37,128	2,656,781	160	620	62	900	810	140	1.577	11.944	1.077	18.133	36.525	2.909	72.16
9/7/00	On	38,016	2,688,726	63	470	62	694	850	120	1.594	12.069	1.093	18.318	36.751	2.941	72.77
10/5/00	On	38,232	2,705,002	79	540	62	840	810	140	1.604	12.142	1.102	18.432	36.861	2.960	73.10
11/13/00	On	39,258	2,713,490	68	570	58	940	940	150	1.609	12.183	1.106	18.499	36.928	2.970	73.29

Notes:
1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
3/9/00	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81
4/6/00	On	22,130	4,685,941	9	69	1.3	25	120	9.2	0.550	2.600	0.071	1.737	7.521	1.254	13.73
5/2/00	On	22,754	4,766,410	10	73	1.6	29	120	14	0.557	2.649	0.072	1.756	7.602	1.263	13.90
6/1/00	On	25,080	4,969,539	6	52	1.4	22	65	10	0.567	2.738	0.075	1.793	7.712	1.280	14.16
7/6/00	On	25,728	5,128,349	19	64	1.1	28	100	13	0.592	2.822	0.076	1.830	7.845	1.297	14.46
8/1/00	On	26,688	5,349,431	14	59	1	22	81	9.2	0.618	2.931	0.078	1.871	7.994	1.314	14.81
9/7/00	On	27,576	5,513,911	10	68	1.8	23	130	13	0.631	3.024	0.080	1.902	8.172	1.332	15.14
10/5/00	On	27,792	5,623,147	11	72	1.4	33	120	16	0.641	3.090	0.082	1.933	8.282	1.346	15.37
11/13/00	On	28,728	5,757,318	7	75	0	28	0	13	0.649	3.174	0.082	1.964	8.282	1.361	15.51

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
2/4/00	Pump not operating.															
3/23/00	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344
4/6/00	On	9,513	539,095	30	50	2.7	19	860	63	0.3199	0.2053	0.0094	0.0803	4.3214	0.2925	5.229
5/2/00	On	10,137	561,968	27	39	0	16	640	58	0.3251	0.2127	0.0094	0.0833	4.4435	0.3035	5.378
6/1/00	On	11,341	622,288	33	90	7	64	1000	110	0.3417	0.2580	0.0129	0.1155	5.0153	0.3589	6.102
7/6/00	On	12,205	664,533	140	84	0	58	1100	110	0.3910	0.2876	0.0129	0.1359	5.4028	0.3976	6.628
8/1/00	On	12,829	722,641	120	110	6.4	80	970	130	0.4492	0.3409	0.0160	0.1747	5.8729	0.4606	7.314
9/7/00	On	13,717	755,570	42	86	6.2	66	1200	110	0.4607	0.3645	0.0177	0.1928	6.2025	0.4909	7.729
10/5/00	On	14,149	791,858	53	110	0	88	1100	130	0.4767	0.3978	0.0177	0.2195	6.5354	0.5302	8.177
11/13/00	On	15,085	821,491	20	46	0	18	680	85	0.4817	0.4092	0.0177	0.2239	6.7034	0.5512	8.387

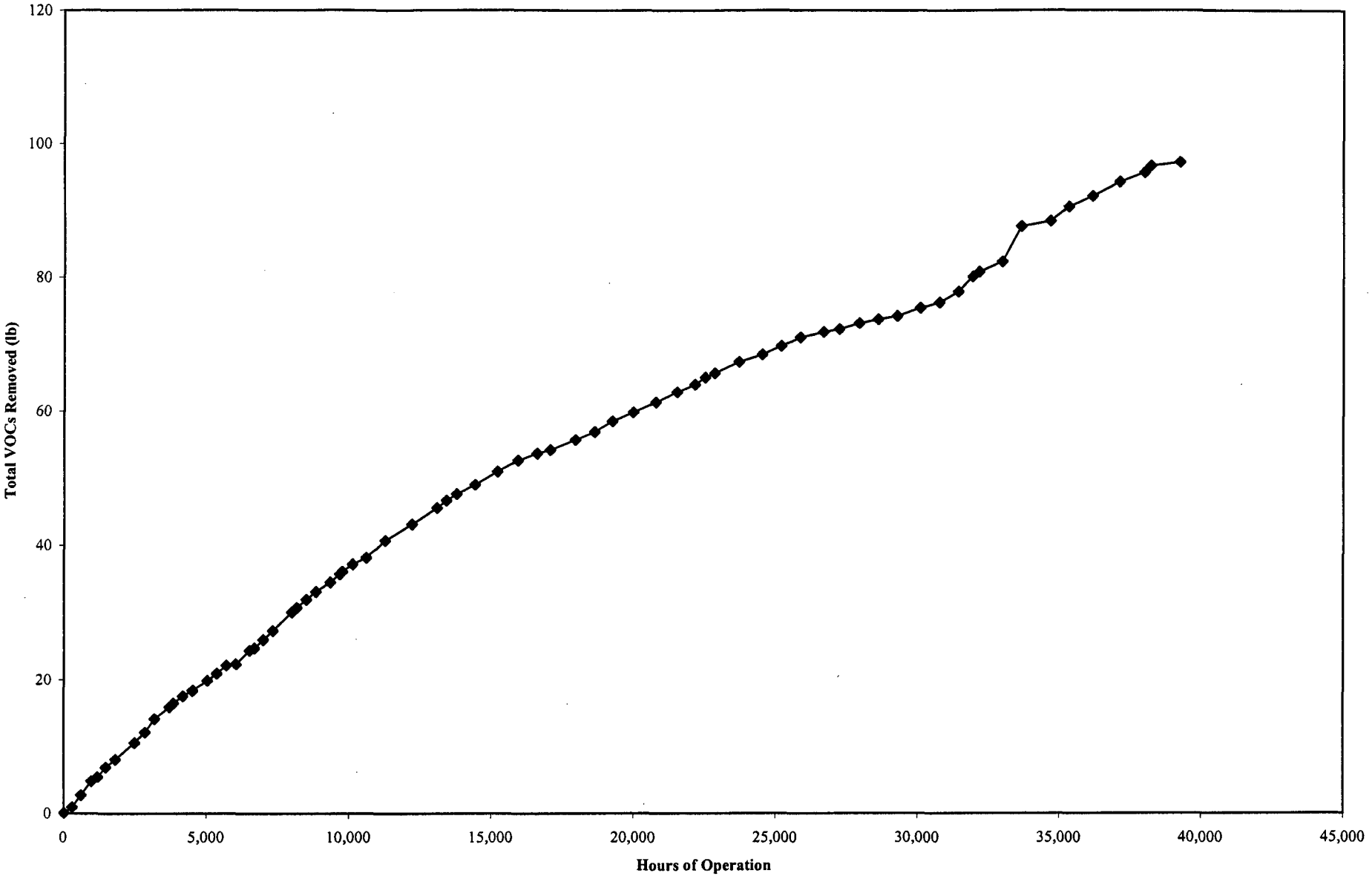
Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	11/13/00	11/21/00
pH	6.0-9.0	SU	7.86	7.92
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	311	223
Aluminum, Total (1)	2.7	mg/l	<0.077	NS
Arsenic, Total (1)	0.15	mg/l	<0.003	NS
Iron, Total (1)	0.6	mg/l	<0.038	NS
Lead, Total (1)	0.04	mg/l	<0.002	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	<0.4	NS
1,2-Dichloroethane	10	µg/l	<0.2	NS
1,1-Dichloroethene	10	µg/l	<0.4	NS
1,2-Dichloroethene	10	µg/l	<0.4	NS
Methylene Chloride	10	pg/l	<0.8	NS
Tetrachloroethene	2	pg/l	<0.3	NS
Toluene	10	pg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	<0.3	NS
Trichloroethene	10	µg/l	<0.4	NS
Vinyl Chloride	10	µg/l	<0.6	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



Appendix "A"

SEVERN TRENT SERVICES

Client ID: **Carbon-2**
Site: Mead Property

Lab Sample No: **241391**
Lab Job No: F643

Date Sampled: 11/13/00
Date Received: 11/14/00
Date Analyzed: 11/17/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f17725.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **Carbon-2**
Site: **Mead Property**

Lab Sample No: 241391
Lab Job No: F643

Date Sampled: 11/13/00
Date Received: 11/14/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	77.4	P
Arsenic	ND	3.4	P
Iron	ND	39.7	P
Lead	ND	2.2	P

M Column - Method Code (See Section 2 of Report)

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: F643

Date Sampled: 11/13/00
Date Received: 11/14/00
Matrix: WATER

Date Analyzed: 11/20/00
QA Batch: 1763

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
241391	Carbon-2	1.0	311

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: F643

Date Sampled: 11/13/00
Date Received: 11/14/00
Matrix: WATER

Date Analyzed: 11/16/00
QA Batch: 1578

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
241391	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Client ID: **Carbon-1**
Site: Mead Property

Lab Sample No: **241392**
Lab Job No: F643

Date Sampled: 11/13/00
Date Received: 11/14/00
Date Analyzed: 11/17/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f17726.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **MW-15B**
Site: Mead Property

Lab Sample No: **241393**
Lab Job No: F643

Date Sampled: 11/13/00
Date Received: 11/14/00
Date Analyzed: 11/17/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f17727.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 2.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	1.3
Chloroethane	ND	0.9
Methylene Chloride	ND	1.7
1,1-Dichloroethene	7.0	0.8
1,1-Dichloroethane	75	0.7
trans-1,2-Dichloroethene	ND	0.9
cis-1,2-Dichloroethene	28	0.8
1,2-Dichloroethane	ND	0.5
1,1,1-Trichloroethane	ND	0.7
Trichloroethene	13	0.8
Benzene	ND	0.5
Tetrachloroethene	ND	0.6
Toluene	ND	0.6
Chlorobenzene	ND	0.5
1,2-Dichlorobenzene	ND	0.6

SEVERN TRENT SERVICES

Client ID: **MW-12B**
Site: Mead Property

Lab Sample No: **241394**
Lab Job No: F643

Date Sampled: 11/13/00
Date Received: 11/14/00
Date Analyzed: 11/21/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f17837.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	3.2
Chloroethane	ND	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	68	2.0
1,1-Dichloroethane	570	1.8
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	940	2.0
1,2-Dichloroethane	58	1.2
1,1,1-Trichloroethane	940	1.6
Trichloroethene	150	2.0
Benzene	ND	1.3
Tetrachloroethene	ND	1.6
Toluene	ND	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

SEVERN TRENT SERVICES

Client ID: **MW-9B**
Site: Mead Property

Lab Sample No: **241395**
Lab Job No: F643

Date Sampled: 11/13/00
Date Received: 11/14/00
Date Analyzed: 11/17/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f17729.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	3.2
Chloroethane	ND	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	20	2.0
1,1-Dichloroethane	46	1.8
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	18	2.0
1,2-Dichloroethane	ND	1.2
1,1,1-Trichloroethane	680	1.6
Trichloroethene	85	2.0
Benzene	ND	1.3
Tetrachloroethene	ND	1.6
Toluene	ND	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

Appendix "B"

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: F945

Date Sampled: 11/21/00
Date Received: 11/22/00
Matrix: WATER

Date Analyzed: 11/27/00
QA Batch: 1764

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
243296	Carbon-2	1.0	223

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: F945

Date Sampled: 11/21/00
Date Received: 11/22/00
Matrix: WATER

Date Analyzed: 11/27/00
QA Batch: 1582

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
243296	Carbon-2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
03/12/1997	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
03/26/1997	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
04/09/1997	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
04/24/1997	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
05/08/1997	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
06/05/1997	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
07/31/1997	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
08/28/1997	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
09/11/1997	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/1997	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
03/03/1998	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
04/09/1998	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
04/28/1998	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
06/02/1998	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
07/08/1998	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
08/10/1998	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
09/10/1998	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/06/1998	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/05/1998	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/03/1998	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
01/08/1999	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
02/11/1999	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
03/11/1999	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
04/08/1999	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
05/12/1999	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
06/04/1999	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
07/08/1999	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
08/05/1999	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
09/02/1999	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/07/1999	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/04/1999	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/02/1999	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
01/17/2000	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
02/04/2000	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
03/09/2000	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81
04/06/2000	On	22,130	4,685,941	9	69	1.3	25	120	9.2	0.550	2.600	0.071	1.737	7.521	1.254	13.73
05/02/2000	On	22,754	4,766,410	10	73	1.6	29	120	14	0.557	2.649	0.072	1.756	7.602	1.263	13.90
06/01/2000	On	25,080	4,969,539	6	52	1.4	22	65	10	0.567	2.738	0.075	1.793	7.712	1.280	14.16
07/06/2000	On	25,728	5,128,349	19	64	1.1	28	100	13	0.592	2.822	0.076	1.830	7.845	1.297	14.46
08/01/2000	On	26,688	5,349,431	14	59	1	22	81	9.2	0.618	2.931	0.078	1.871	7.994	1.314	14.81

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
05/07/1998	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
07/08/1998	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
08/10/1998	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
09/10/1998	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/06/1998	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/05/1998	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/03/1998	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
08/05/1999	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
09/02/1999	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/07/1999	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/04/1999	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/02/1999	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
02/04/2000	Pump not operating.															
03/23/2000	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344
04/06/2000	On	9,513	539,095	30	50	2.7	19	860	63	0.3199	0.2053	0.0094	0.0803	4.3214	0.2925	5.229
05/02/2000	On	10,137	561,968	27	39	0	16	640	58	0.3251	0.2127	0.0094	0.0833	4.4435	0.3035	5.378
06/01/2000	On	11,341	622,288	33	90	7	64	1000	110	0.3417	0.2580	0.0129	0.1155	5.0153	0.3589	6.102
07/06/2000	On	11,989	664,533	140	84	0	58	1100	110	0.3910	0.2876	0.0129	0.1359	5.4028	0.3976	6.628
08/01/2000	On	12,949	722,641	120	110	6.4	80	970	130	0.4492	0.3409	0.0160	0.1747	5.8729	0.4606	7.314

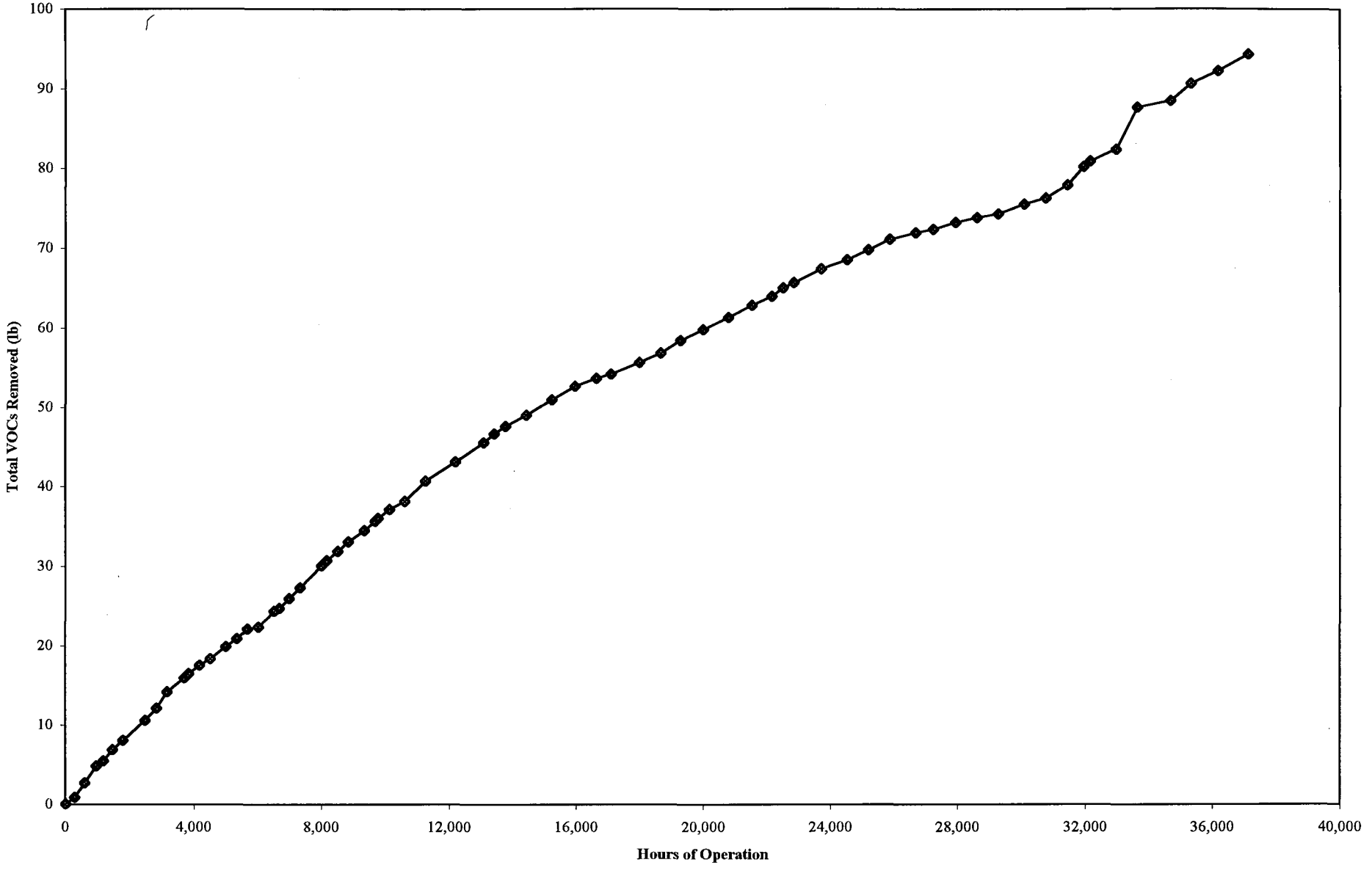
Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	08/01/2000	08/17/2000
pH	6.0-9.0	SU	7.81	7.1
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	246	238
Aluminum, Total (1)	2.7	mg/l	<0.059	NS
Arsenic, Total (1)	0.15	mg/l	<0.004	NS
Iron, Total (1)	0.6	mg/l	<0.037	NS
Lead, Total (1)	0.04	mg/l	<0.002	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	1.0	NS
1,2-Dichloroethane	10	µg/l	<0.2	NS
1,1-Dichloroethylene	10	µg/l	<0.4	NS
1,2-Dichloroethylene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<0.8	NS
Tetrachloroethylene	2	µg/l	<0.3	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	0.4	NS
Trichloroethylene	10	µg/l	<0.4	NS
Vinyl Chloride	10	µg/l	<0.7	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not Sampled

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



APPENDIX A

SEVERN TRENT SERVICES

Client ID: Carbon2
Site: Mead Property

Lab Sample No: 220942
Lab Job No: C534

Date Sampled: 08/02/00
Date Received: 08/02/00
Date Analyzed: 08/08/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f15908.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	1.0	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	0.4	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **Carbon2**
Site: **Mead Property**

Lab Sample No: 220942
Lab Job No: C534

Date Sampled: 08/02/00
Date Received: 08/02/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	58.6	P
Arsenic	ND	3.6	P
Iron	ND	37.1	P
Lead	ND	2.1	P

M Column - Method Code (See Section 2 of Report)

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: C534

Date Sampled: 8/2/00
Date Received: 8/2/00
Matrix: WATER

Date Analyzed: 8/6/00
QA Batch: 1729

TOTAL DISSOLVED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
220942	Carbon2	1.0	246

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l for an undiluted sample.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: C534

Date Sampled: 8/2/00
Date Received: 8/2/00
Matrix: WATER

Date Analyzed: 8/7/00
QA Batch: 1548

TOTAL SUSPENDED SOLIDS

STL-Envirotech Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
220942	Carbon2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l for an undiluted sample.

SEVERN TRENT SERVICES

Client ID: Carbon1
Site: Mead Property

Lab Sample No: 220943
Lab Job No: C534

Date Sampled: 08/02/00
Date Received: 08/02/00
Date Analyzed: 08/08/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f15909.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: MW-15B
Site: Mead Property

Lab Sample No: 220944
Lab Job No: C534

Date Sampled: 08/02/00
Date Received: 08/02/00
Date Analyzed: 08/08/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f15910.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	14	0.4
1,1-Dichloroethane	59	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	22	0.4
1,2-Dichloroethane	1.0	0.2
1,1,1-Trichloroethane	81	0.3
Trichloroethene	9.2	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: MW-12B
Site: Mead Property

Lab Sample No: 220945
Lab Job No: C534

Date Sampled: 08/02/00
Date Received: 08/02/00
Date Analyzed: 08/08/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f15911.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	3.2
Chloroethane	ND	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	160	2.0
1,1-Dichloroethane	620	1.8
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	900	2.0
1,2-Dichloroethane	62	1.2
1,1,1-Trichloroethane	*	1.6
Trichloroethene	140	2.0
Benzene	ND	1.3
Tetrachloroethene	ND	1.6
Toluene	ND	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

*See dilution

SEVERN TRENT SERVICES

Client ID: MW-12BD1
Site: Mead Property

Lab Sample No: 220945D1
Lab Job No: C534

Date Sampled: 08/02/00
Date Received: 08/02/00
Date Analyzed: 08/09/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f15951.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
1,1,1-Trichloroethane	810	3.3

SEVERN TRENT SERVICES

Client ID: MW-9B
Site: Mead Property

Lab Sample No: 220946
Lab Job No: C534

Date Sampled: 08/02/00
Date Received: 08/02/00
Date Analyzed: 08/08/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f15912.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	3.2
Chloroethane	ND	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	120	2.0
1,1-Dichloroethane	110	1.8
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	80	2.0
1,2-Dichloroethane	6.4	1.2
1,1,1-Trichloroethane	*	1.6
Trichloroethene	130	2.0
Benzene	ND	1.3
Tetrachloroethene	ND	1.6
Toluene	ND	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

*See dilution

SEVERN TRENT SERVICES

Client ID: MW-9BD1
Site: Mead Property

Lab Sample No: 220946D1
Lab Job No: C534

Date Sampled: 08/02/00
Date Received: 08/02/00
Date Analyzed: 08/09/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f15952.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
1,1,1-Trichloroethane	970	3.3

APPENDIX B

SEVERN TRENT SERVICES

Site: IBM Mead

Lab Job No: C970

Date Sampled: 8/17/00
Date Received: 8/18/00
Matrix: WATER

Date Analyzed: 8/24/00
QA Batch: 1733

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
223806	Carbon_2	1.0	238

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: IBM Mead

Lab Job No: C970

Date Sampled: 8/17/00
Date Received: 8/18/00
Matrix: WATER

Date Analyzed: 8/23/00
QA Batch: 1553

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
223806	Carbon_2	1.0	ND

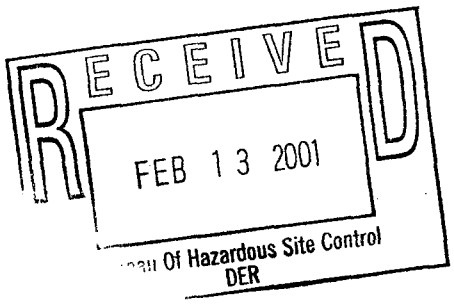
Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

IBM

P.O. Box 100
Somers, NY 10589

February 9, 2001

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010



Re: O&M Progress Report No. 56
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from December 21, 2000 through January 23, 2001 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of February 2001. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down. It is anticipated that the SVE system will be decommissioned pending NYSDEC review of IBM's closure request.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during the period of December 21, 2000 through January 23, 2001. Wells MW-9B and MW-15B operated 100% of the time. Well MW-12B was not operational during this time. The pump was pulled from MW-12B on January 23, 2001. The impellers of the pump were blocked. URS is currently evaluating the condition of the pump to determine if it should be repaired or replaced. Well rehabilitation options are also being evaluated. It is anticipated that MW-12B will be re-started during the month of February.

- URS performed site visits on January 10 and 23, 2001.

- During this period, the GWTS recovered approximately 278,763 gallons of groundwater from well MW-15B at an average rate of 3.41 gpm and 65,176 gallons of groundwater from well MW-9B at an average rate of 0.90 gpm. Since start up in February 1996, the GWTS has recovered approximately 2,713,919 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 6,036,081 gallons of groundwater from well MW-15B at an average rate of 3.4 gpm; and approximately 850,686 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 99 pounds of VOCs have been recovered by the GWTS through December 5, 2000. Analytical data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B are also attached in Appendices A and B. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- URS collected groundwater samples on January 10 and 23, 2001. The results of these groundwater analyses will be reported in O&M Progress Report No. 57. The treated groundwater analytical results for December 2000 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of 10,062,405 gallons of water at an average rate of 5,881 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filter 1 and Particulate Filter 2 were changed on January 10 and 23, 2001.

B. Deliverables

- Treated groundwater quality monitoring results for December 2000 are included as Table 4 and in Appendices A and B.

C. Actions Anticipated For January 2001

SVE System

- None.

Groundwater Treatment System

- Routine O&M activities.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and is scheduled to be decommissioned upon approval from NYSDEC.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities during the reporting period included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of URS Corporation at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: George Momberger, NYSDEC
Marc Moran - NYSDEC, Region III
Denise D'Ambrosio - NYSDEC, Tarrytown
Joe Tarsavage - URS
Alison Spare - URS
Bob Conley - Corporate Environmental Services

APPENDIX A

SEVERN TRENT SERVICES

Client ID: MW-1213
Site: IBM Mead Property

Lab Sample No: 246320
Lab Job No: G414

Date Sampled: 12/05/00
Date Received: 12/09/00
Date Analyzed: 12/16/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f18696.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	3.2
Chloroethane	ND	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	73	2.0
1,1-Dichloroethane	610	1.8
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	*	2.0
1,2-Dichloroethane	70	1.2
1,1,1-Trichloroethane	740	1.6
Trichloroethene	150	2.0
Benzene	2.5	1.3
Tetrachloroethene	ND	1.6
Toluene	2.0	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

*See dilution

SEVERN TRENT SERVICES

Client ID: MW-1213D1
Site: IBM Mead Property

Lab Sample No: 246320D1
Lab Job No: G414

Date Sampled: 12/05/00
Date Received: 12/09/00
Date Analyzed: 12/17/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f18710.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
cis-1,2-Dichloroethene	1400	3.9

SEVERN TRENT SERVICES

Client ID: MW-1513
Site: IBM Mead Property

Lab Sample No: 246321
Lab Job No: G414

Date Sampled: 12/05/00
Date Received: 12/09/00
Date Analyzed: 12/16/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f18697.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.6
1,1-Dichloroethene	9.7	0.4
1,1-Dichloroethane	73	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	30	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	150	0.3
Trichloroethene	11	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: MW-9B
Site: IBM Mead Property

Lab Sample No: 246322
Lab Job No: G414

Date Sampled: 12/05/00
Date Received: 12/09/00
Date Analyzed: 12/16/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f18698.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	3.2
Chloroethane	ND	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	48	2.0
1,1-Dichloroethane	110	1.8
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	80	2.0
1,2-Dichloroethane	7.0	1.2
1,1,1-Trichloroethane	*	1.6
Trichloroethene	140	2.0
Benzene	ND	1.3
Tetrachloroethene	ND	1.6
Toluene	ND	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

*See dilution

SEVERN TRENT SERVICES

Client ID: MW-9BD1
Site: IBM Mead Property

Lab Sample No: 246322D1
Lab Job No: G414

Date Sampled: 12/05/00
Date Received: 12/09/00
Date Analyzed: 12/17/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f18711.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
1,1,1-Trichloroethane	1300	3.3

SEVERN TRENT SERVICES

Client ID: CARBON_1
Site: IBM Mead Property

Lab Sample No: 246323
Lab Job No: G414

Date Sampled: 12/05/00
Date Received: 12/09/00
Date Analyzed: 12/17/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f18712.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: CARBON_2
Site: IBM Mead Property

Lab Sample No: 246324
Lab Job No: G414

Date Sampled: 12/05/00
Date Received: 12/09/00
Date Analyzed: 12/17/00
GC Column: DB624
Instrument ID: VOAMS6.i
Lab File ID: f18713.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: CARBON 2
Site: IBM Mead Property

Lab Sample No: 246324
Lab Job No: G414

Date Sampled: 12/05/00
Date Received: 12/09/00

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	62.6	P
Arsenic	ND	3.2	P
Iron	ND	39.2	P
Lead	ND	2.3	P

M Column - Method Code (See Section 2 of Report)

SEVERN TRENT SERVICES

Site: IBM Mead Property

Lab Job No: G414

Date Sampled: 12/5/00
Date Received: 12/9/00
Matrix: WATER

Date Analyzed: 12/11/00
QA Batch: 1766

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
246324	CARBON_2	1.0	230

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: IBM Mead Property

Lab Job No: G414

Date Sampled: 12/5/00
Date Received: 12/9/00
Matrix: WATER

Date Analyzed: 12/11/00
QA Batch: 1587

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
246324	CARBON_2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

APPENDIX B

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: G789

Date Sampled: 12/20/00
Date Received: 12/21/00
Matrix: WATER

Date Analyzed: 12/22/00
QA Batch: 1770

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
248798	Carbon2	1.0	244

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

Site: Mead Property

Lab Job No: G789

Date Sampled: 12/20/00
Date Received: 12/21/00
Matrix: WATER

Date Analyzed: 12/22/00
QA Batch: 1592

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
248798	Carbon2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

TABLES

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
2/4/00	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99
3/9/00	On	32,975	2,316,232	64	380	52	620	980	100	1.263	10.525	0.917	16.192	33.671	2.582	65.15
4/6/00	On	33,647	2,479,723	75	520	62	680	1100	120	1.365	11.234	1.002	17.120	35.171	2.746	68.64
5/2/00	On	34,680	2,507,444	54	420	60	590	800	97	1.378	11.331	1.016	17.256	35.356	2.768	69.10
6/1/00	On	35,328	2,568,455	160	430	43	610	1000	100	1.459	11.550	1.037	17.566	35.865	2.819	70.30
7/6/00	On	36,168	2,608,267	160	430	43	610	1000	100	1.512	11.693	1.052	17.769	36.197	2.852	71.07
8/1/00	On	37,128	2,656,781	160	620	62	900	810	140	1.577	11.944	1.077	18.133	36.525	2.909	72.16
9/7/00	On	38,016	2,688,726	63	470	62	694	850	120	1.594	12.069	1.093	18.318	36.751	2.941	72.77
10/5/00	On	38,232	2,705,002	79	540	62	840	810	140	1.604	12.142	1.102	18.432	36.861	2.960	73.10
11/13/00	On	39,258	2,713,490	68	570	58	940	940	150	1.609	12.183	1.106	18.499	36.928	2.970	73.29
12/5/00	On	39,786	2,745,170	73	610	70	1400	740	150	1.628	12.344	1.124	18.868	37.123	3.010	74.10

Notes:
1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
3/9/00	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81
4/6/00	On	22,130	4,685,941	9	69	1.3	25	120	9.2	0.550	2.600	0.071	1.737	7.521	1.254	13.73
5/2/00	On	22,754	4,766,410	10	73	1.6	29	120	14	0.557	2.649	0.072	1.756	7.602	1.263	13.90
6/1/00	On	25,080	4,969,539	6	52	1.4	22	65	10	0.567	2.738	0.075	1.793	7.712	1.280	14.16
7/6/00	On	25,728	5,128,349	19	64	1.1	28	100	13	0.592	2.822	0.076	1.830	7.845	1.297	14.46
8/1/00	On	26,688	5,349,431	14	59	1	22	81	9.2	0.618	2.931	0.078	1.871	7.994	1.314	14.81
9/7/00	On	27,576	5,513,911	10	68	1.8	23	130	13	0.631	3.024	0.080	1.902	8.172	1.332	15.14
10/5/00	On	27,792	5,623,147	11	72	1.4	33	120	16	0.641	3.090	0.082	1.933	8.282	1.346	15.37
11/13/00	On	28,728	5,757,318	7	75	0	28	0	13	0.649	3.174	0.082	1.964	8.282	1.361	15.51
12/5/00	On	29,256	5,861,862	10	73	0	30	150	11	0.657	3.238	0.082	1.990	8.412	1.371	15.75

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
2/4/00	Pump not operating.															
3/23/00	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344
4/6/00	On	9,513	539,095	30	50	2.7	19	860	63	0.3199	0.2053	0.0094	0.0803	4.3214	0.2925	5.229
5/2/00	On	10,137	561,968	27	39	0	16	640	58	0.3251	0.2127	0.0094	0.0833	4.4435	0.3035	5.378
6/1/00	On	11,341	622,288	33	90	7	64	1000	110	0.3417	0.2580	0.0129	0.1155	5.0153	0.3589	6.102
7/6/00	On	12,205	664,533	140	84	0	58	1100	110	0.3910	0.2876	0.0129	0.1359	5.4028	0.3976	6.628
8/1/00	On	12,829	722,641	120	110	6.4	80	970	130	0.4492	0.3409	0.0160	0.1747	5.8729	0.4606	7.314
9/7/00	On	13,717	755,570	42	86	6.2	66	1200	110	0.4607	0.3645	0.0177	0.1928	6.2025	0.4909	7.729
10/5/00	On	14,149	791,858	53	110	0	88	1100	130	0.4767	0.3978	0.0177	0.2195	6.5354	0.5302	8.177
11/13/00	On	15,085	821,491	20	46	0	18	680	85	0.4817	0.4092	0.0177	0.2239	6.7034	0.5512	8.387
12/5/00	On	15,613	886,667	48	110	7	80	1300	140	0.5078	0.4690	0.0215	0.2674	7.4101	0.6273	9.303

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

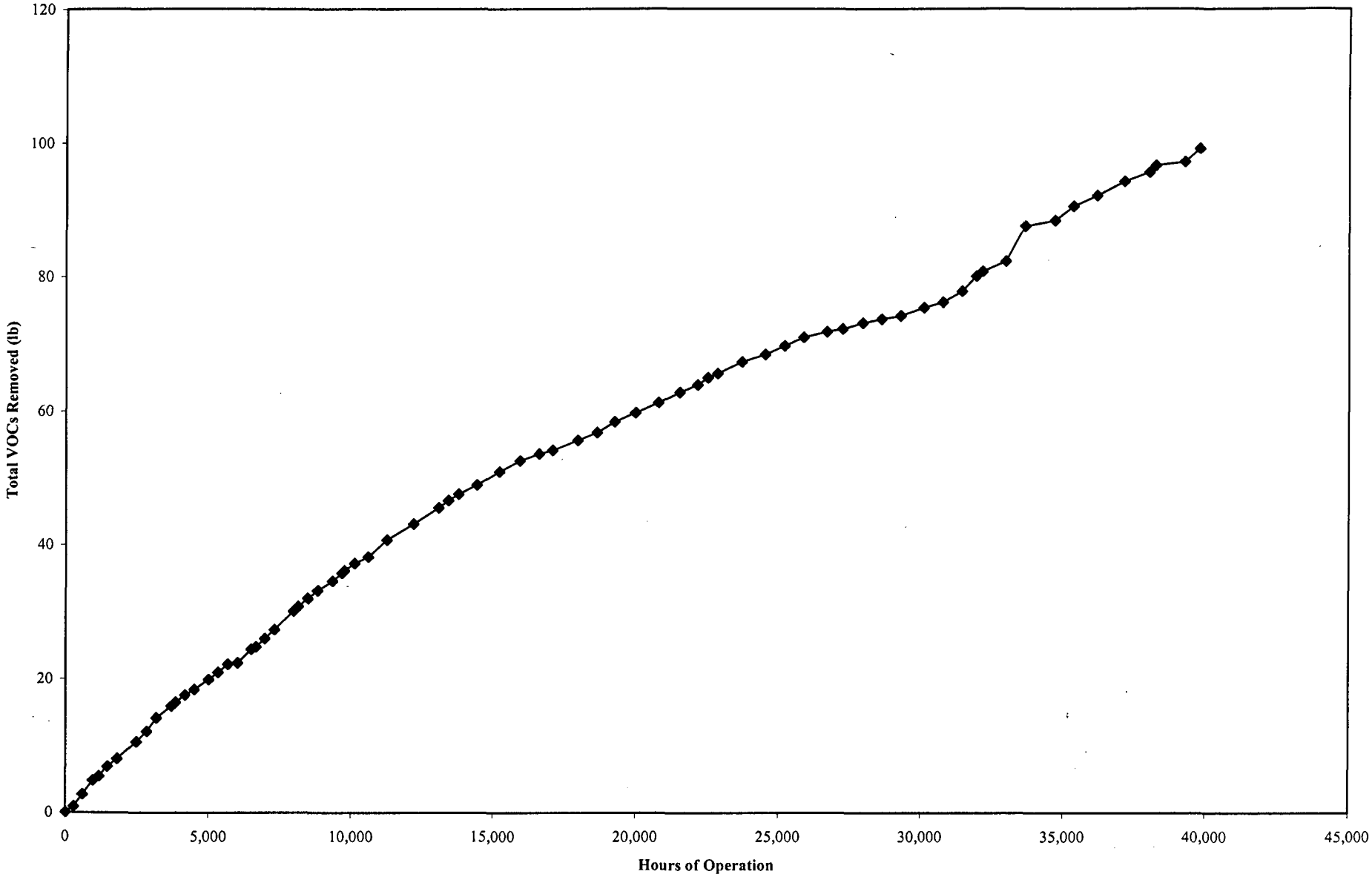
Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	12/5/00	12/20/00
pH	6.0-9.0	SU	7.81	7.63
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	230	244
Aluminum, Total (1)	2.7	mg/l	<0.063	NS
Arsenic, Total (1)	0.15	mg/l	<0.003	NS
Iron, Total (1)	0.6	mg/l	<0.039	NS
Lead, Total (1)	0.04	mg/l	<0.002	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	<0.4	NS
1,2-Dichloroethane	10	µg/l	<0.2	NS
1,1-Dichloroethene	10	µg/l	<0.4	NS
1,2-Dichloroethene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<0.8	NS
Tetrachloroethene	2	µg/l	<0.3	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	<0.3	NS
Trichloroethene	10	µg/l	<0.4	NS
Vinyl Chloride	10	µg/l	<0.6	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not sampled. Samples for analysis of VOCs and metals are collected once a month.

FIGURES

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



Mead

IBM

Route 100
Somers, NY 10589 0100

March 5, 2001

Mr. Gerald Rider, Chief
New York State Department of
Environmental Conservation
Operation and Maintenance Section
Bureau of Hazardous Site Control
Division of Environmental Remediation
50 Wolf Road
Albany, New York 12233-7010

Re: O&M Progress Report No. 57
SVE and Groundwater Treatment Systems
Mead Property Site
Ulster County, New York
NYSDEC Site Code No. 3-56-019

Dear Mr. Rider:

International Business Machines Corporation (IBM) is submitting this monthly progress report in accordance with the New York State Department of Environmental Conservation (NYSDEC) Order on Consent W3-0084-87-09, Section II. This progress report covers the work performed at the Mead Property Site (Site) from January 24 through February 28, 2001 in order to fulfill the obligations mandated by the Order, and the work anticipated during the month of March 2001. The format of this report follows the sequence presented in the Order with modifications to present appropriate operations and maintenance data.

A. Actions During the Previous Month

SVE System Routine O&M

- The SVE system is shut down. It is anticipated that the SVE system will be decommissioned pending NYSDEC review of IBM's closure request.

Groundwater Treatment System (GWTS) Scheduled Maintenance

- The GWTS operated 100% of the time during the period of January 24 through February 16, 2001. Wells MW-9B and MW-15B operated 100% of the time. Well MW-12B operated approximately 50% of the time during this time. The pump in MW-12B was replaced and restarted on February 12, 2001.

- URS performed site visits on February 16 and 28, 2001.

- During this period, the GWTS recovered approximately 22,012 gallons of groundwater from well MW-12B at an average rate of 1.2gpm, approximately 200,200 gallons of groundwater from well MW-15B at an average rate of 3.4 gpm, and 40,257 gallons of groundwater from well MW-9B at an average rate of 0.89 gpm. Since start up in February 1996, the GWTS has

recovered approximately 2,735,931 gallons of groundwater from well MW-12B at an average rate of 1.2 gpm; approximately 6,236,281 gallons of groundwater from well MW-15B at an average rate of 3.4 gpm; and approximately 890,943 gallons of groundwater from well MW-9B at an average rate of 0.9 gpm. Approximately 100 pounds of VOCs have been recovered by the GWTS through January 10, 2000. Analytical data for groundwater recovered from wells MW-12B, MW-15B, and MW-9B are summarized in Tables 1, 2, and 3, respectively. The data for groundwater recovered from wells MW-9B, MW-12B, and MW-15B are also attached in Appendices A and B. Figure 1 presents the cumulative mass of VOCs recovered from wells MW-12B, MW-15B, and MW-9B.

- URS collected groundwater samples on February 16 and 28, 2001. The results of these groundwater analyses will be reported in O&M Progress Report No. 58. The treated groundwater analytical results for January 2001 are reported in Table 4 and attached in Appendices A and B.

- The GWTS has treated and discharged a total of approximately 10,324,874 gallons of water at an average rate of 5,910 gallons per day (gpd). The treated water consists of recovered groundwater from wells MW-9B, MW-12B, MW-15B, recovered groundwater from the SVE system, and purge water from groundwater sampling events.

- Bag filters in Particulate Filter 1 and Particulate Filter 2 were changed on February 16 and 28, 2001.

B. Deliverables

- Treated groundwater quality monitoring results for January 2001 are included as Table 4 and in Appendices A and B.

C. Actions Anticipated For March 2001

SVE System

- None.

Groundwater Treatment System

- Routine O&M activities.

D. Schedule

The Groundwater Treatment System is in the O & M Phase. Routine O & M will be performed and reported on a monthly basis. The SVE system is currently shut down and is scheduled to be decommissioned upon approval from NYSDEC.

E. Proposed Modifications

- None.

F. Citizen Participation

Citizen participation activities during the reporting period included:

- Communication with team members regarding Site progress

Citizen participation activities for the next reporting period are anticipated to include:

- Communication with team members regarding Site progress

If you have any questions or comments or require additional information, please contact Joe Tarsavage of URS Corporation at (215) 657-5000 or me at (914) 766-2739.

Sincerely,

Tom Morris, P.E.
Program Manager
Corporate Environmental Programs

cc: George Momberger, NYSDEC
Marc Moran - NYSDEC, Region III
Denise D'Ambrosio – NYSDEC, Tarrytown
Joe Tarsavage - URS
Alison Spare - URS
Bob Conley - Corporate Environmental Services

Tables

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
2/16/96	On	8	1,778	0	0	0	2100	2100	80	0.000	0.000	0.000	0.031	0.031	0.001	0.06
2/28/96	On	296	32,020	0	660	87	780	1700	100	0.000	0.166	0.022	0.228	0.460	0.026	0.90
3/12/96	On	608	68,729	100	1300	0	2400	2000	120	0.031	0.564	0.022	0.963	1.072	0.063	2.72
3/27/96	On	968	105,093	120	1800	0	2600	2300	130	0.067	1.110	0.022	1.751	1.770	0.103	4.82
4/5/96	On	1,184	118,508	0	760	0	3400	1600	0	0.067	1.195	0.022	2.132	1.949	0.103	5.47
4/17/96	On	1,472	154,361	200	960	100	1200	2200	140	0.127	1.482	0.052	2.490	2.607	0.144	6.90
5/1/96	On	1,808	193,720	0	0	0	1000	2400	120	0.127	1.482	0.052	2.819	3.394	0.184	8.06
5/29/96	On	2,480	279,880	0	400	0	800	2200	120	0.127	1.770	0.052	3.393	4.975	0.270	10.59
6/13/96	On	2,840	323,040	100	840	0	1200	2000	140	0.163	2.072	0.052	3.825	5.695	0.320	12.13
6/27/96	On	3,176	366,820	320	1700	0	1100	2300	180	0.280	2.693	0.052	4.227	6.535	0.386	14.17
7/19/96	On	3,704	415,910	0	650	70	1000	2400	160	0.280	2.959	0.081	4.636	7.518	0.452	15.92
7/25/96	On	3,848	433,240	0	660	0	790	2300	160	0.280	3.054	0.081	4.751	7.850	0.475	16.49
8/8/96	On	4,184	470,050	0	560	0	670	2100	160	0.280	3.226	0.081	4.956	8.495	0.524	17.56
8/22/96	On	4,520	493,280	0	640	70	930	2400	170	0.280	3.350	0.094	5.137	8.960	0.557	18.38
9/12/96	On	5,024	549,580	0	460	0	570	2000	140	0.280	3.566	0.094	5.404	9.899	0.623	19.87
9/26/96	On	5,360	588,080	0	480	50	600	2000	150	0.280	3.720	0.110	5.597	10.541	0.671	20.92
10/10/96	On	5,696	623,850	0	610	70	850	2500	0	0.280	3.902	0.131	5.850	11.287	0.671	22.12
10/24/96	On	6,032	655,720	0	0	0	290	320	220	0.280	3.902	0.131	5.927	11.372	0.729	22.34
11/14/96	On	6,507	712,810	0	570	70	990	2400	190	0.280	4.174	0.164	6.399	12.514	0.820	24.35
11/21/96	On	6,675	731,610	0	620	80	1100	260	240	0.280	4.271	0.177	6.571	12.555	0.857	24.71
12/4/96	On	6,987	767,520	0	560	0	1000	2400	190	0.280	4.439	0.177	6.871	13.274	0.914	25.95
12/18/96	On	7,323	805,450	0	600	80	980	2400	190	0.280	4.629	0.202	7.181	14.033	0.974	27.30
1/15/97	On	7,995	881,140	0	680	80	960	2400	250	0.280	5.058	0.253	7.787	15.548	1.132	30.06
1/22/97	On	8,163	900,260	0	670	70	860	2400	240	0.280	5.165	0.264	7.924	15.931	1.170	30.73
2/5/97	On	8,499	937,350	0	510	60	840	2200	190	0.280	5.322	0.282	8.184	16.611	1.229	31.91
2/19/97	On	8,835	974,080	0	620	80	860	2100	210	0.280	5.512	0.307	8.447	17.255	1.294	33.09
3/12/97	On	9,339	1,021,570	94	520	67	940	1600	140	0.317	5.718	0.333	8.820	17.888	1.349	34.43
3/26/97	On	9,675	1,058,380	110	520	68	750	2000	160	0.351	5.878	0.354	9.050	18.502	1.398	35.53
4/9/97	On	9,762	1,069,133	120	630	80	1000	1700	160	0.361	5.934	0.361	9.139	18.655	1.412	35.86
4/24/97	On	10,122	1,107,550	100	480	51	780	1500	130	0.393	6.088	0.378	9.389	19.136	1.454	36.84
5/8/97	On	10,602	1,132,753	74	550	72	810	2000	170	0.409	6.204	0.393	9.560	19.556	1.490	37.61
6/5/97	On	11,262	1,202,500	79	540	63	800	2100	160	0.455	6.518	0.430	10.025	20.777	1.583	39.79
7/22/97	On	12,198	1,289,528	45	360	45	620	1100	84	0.488	6.779	0.462	10.475	21.576	1.644	41.42
8/28/97	On	13,086	1,358,742	98	550	55	780	2500	170	0.544	7.097	0.494	10.925	23.019	1.742	43.82
9/11/97	On	13,422	1,384,653	80	510	49	660	2600	160	0.561	7.207	0.505	11.068	23.581	1.777	44.70
10/10/97	On	13,782	1,413,710	140	480	58	720	2300	150	0.595	7.323	0.519	11.242	24.138	1.813	45.63
11/6/97	On	14,430	1,459,330	64	430	51	610	1900	120	0.620	7.487	0.538	11.474	24.861	1.859	46.84
12/9/97	On	15,222	1,509,539	80	580	71	900	1600	140	0.653	7.730	0.568	11.851	25.531	1.917	48.25
1/8/98	On	15,942	1,547,630	100	610	84	1000	1900	160	0.685	7.924	0.594	12.169	26.135	1.968	49.47
2/5/98	On	16,614	1,581,929	89	530	65	820	1600	140	0.710	8.075	0.613	12.404	26.592	2.008	50.40
3/3/98	On	17,082	1,597,260	95	450	66	880	1300	140	0.723	8.133	0.622	12.516	26.759	2.026	50.78
4/9/98	On	17,970	1,640,689	80	440	66	770	960	110	0.752	8.292	0.645	12.795	27.106	2.066	51.66
5/7/98	On	18,642	1,659,511	160	600	69	950	1200	140	0.777	8.386	0.656	12.944	27.295	2.088	52.15
6/2/98	On	19,266	1,680,039	98	490	57	1000	1200	99	0.793	8.470	0.666	13.115	27.500	2.105	52.65
7/8/98	On	19,986	1,722,656	87	520	65	810	1200	130	0.824	8.655	0.689	13.403	27.927	2.151	53.65
8/10/98	On	20,778	1,771,180	140	350	47	590	1100	88	0.881	8.797	0.708	13.642	28.372	2.187	54.59
9/10/98	On	21,522	1,824,372	67	350	40	520	1300	77	0.911	8.952	0.726	13.873	28.948	2.221	55.63
10/6/98	On	22,146	1,855,060	140	380	37	490	1400	79	0.947	9.049	0.735	13.998	29.307	2.241	56.28
11/5/98*	Off	22,506	1,873,049	140	380	37	490	1400	79	0.968	9.106	0.741	14.072	29.517	2.253	56.66
12/3/98	On	22,842	1,888,649	100	340	30	370	1400	59	0.981	9.150	0.745	14.120	29.699	2.260	56.95
1/8/99	On	23,706	1,929,156	120	360	35	450	2300	80	1.021	9.272	0.757	14.272	30.476	2.287	58.08
2/11/99	On	24,522	1,967,601	66	460	56	650	1700	99	1.042	9.419	0.775	14.480	31.021	2.319	59.06
3/11/99	On	25,194	2,007,080	110	450	50	640	1400	98	1.079	9.568	0.791	14.691	31.482	2.352	59.96
4/8/99	On	25,866	2,048,080	94	420	50	580	1400	96	1.111	9.711	0.808	14.889	31.961	2.384	60.86

Table 1
VOC Mass Removal from Groundwater (MW-12B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW12B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/12/99	On	26,682	2,091,590	14	170	25	240	470	36	1.116	9.773	0.817	14.976	32.131	2.397	61.21
6/4/99	On	27,234	2,104,384	28	210	40	380	410	47	1.119	9.795	0.821	15.017	32.175	2.402	61.33
7/8/99	On	27,936	2,127,570	85	390	46	570	1100	93	1.135	9.871	0.830	15.127	32.388	2.420	61.77
8/5/99	On	28,608	2,136,911	110	440	44	590	1500	100	1.144	9.905	0.834	15.173	32.505	2.428	61.99
9/2/99	On	29,280	2,157,730	7.8	22	2.2	25	100	5.2	1.145	9.909	0.834	15.177	32.522	2.429	62.02
10/7/99	On	30,095	2,174,316	170	590	64	1000	1000	120	1.169	9.990	0.843	15.316	32.660	2.446	62.42
11/4/99	On	30,767	2,174,549	91	550	77	910	820	140	1.169	9.992	0.843	15.317	32.662	2.446	62.43
12/2/99	On	31,439	2,215,908	110	600	78	960	850	150	1.207	10.198	0.870	15.649	32.955	2.498	63.38
1/17/00	On	31,943	2,223,579	73	480	66	860	620	110	1.211	10.229	0.874	15.704	32.995	2.505	63.52
2/4/00	On	32,159	2,252,939	72	390	63	660	650	100	1.229	10.325	0.890	15.865	33.154	2.529	63.99
3/9/00	On	32,975	2,316,232	64	380	52	620	980	100	1.263	10.525	0.917	16.192	33.671	2.582	65.15
4/6/00	On	33,647	2,479,723	75	520	62	680	1100	120	1.365	11.234	1.002	17.120	35.171	2.746	68.64
5/2/00	On	34,680	2,507,444	54	420	60	590	800	97	1.378	11.331	1.016	17.256	35.356	2.768	69.10
6/1/00	On	35,328	2,568,455	160	430	43	610	1000	100	1.459	11.550	1.037	17.566	35.865	2.819	70.30
7/6/00	On	36,168	2,608,267	160	430	43	610	1000	100	1.512	11.693	1.052	17.769	36.197	2.852	71.07
8/1/00	On	37,128	2,656,781	160	620	62	900	810	140	1.577	11.944	1.077	18.133	36.525	2.909	72.16
9/7/00	On	38,016	2,688,726	63	470	62	694	850	120	1.594	12.069	1.093	18.318	36.751	2.941	72.77
10/5/00	On	38,232	2,705,002	79	540	62	840	810	140	1.604	12.142	1.102	18.432	36.861	2.960	73.10
11/13/00	On	39,258	2,713,490	68	570	58	940	940	150	1.609	12.183	1.106	18.499	36.928	2.970	73.29
12/5/00	On	39,786	2,745,170	73	610	70	1400	740	150	1.628	12.344	1.124	18.868	37.123	3.010	74.10
1/10/01	Off	40,650	2,745,170	100	640	73	1573	770	160	Pump not operational.						74.10

Notes:
1) If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
2) Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-12B was not collected in November 1998 because the pump in the well was not working. Concentrations from October 1998 were assumed in calculations.

Table 2
VOC Mass Removal from Groundwater (MW-15B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW15B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
3/12/97	On	360	43,870	6.2	76	0	15	96	11	0.002	0.028	0.000	0.005	0.035	0.004	0.07
3/26/97	On	696	85,400	8.6	78	0	16	120	13	0.005	0.055	0.000	0.011	0.077	0.009	0.16
4/9/97	On	783	97,271	9.8	100	1.7	30	130	11	0.006	0.065	0.000	0.014	0.090	0.010	0.18
4/24/97	On	1,143	193,450	8.2	64	0	9.7	88	7.2	0.013	0.116	0.000	0.022	0.160	0.015	0.33
5/8/97	On	1,479	264,753	5.0	56	2.3	39	160	31	0.016	0.149	0.002	0.045	0.255	0.034	0.50
6/5/97	On	2,139	461,090	8.2	71	0.8	13	120	7.4	0.029	0.266	0.003	0.066	0.452	0.046	0.86
7/31/97	On	3,075	700,203	7.8	67	2.6	58	220	44	0.045	0.399	0.008	0.182	0.891	0.134	1.66
8/28/97	On	3,243	725,301	7.5	66	0.7	16	120	10	0.046	0.413	0.008	0.185	0.916	0.136	1.70
9/11/97	On	3,579	813,850	6.6	63	1.5	31	160	22	0.051	0.460	0.009	0.208	1.034	0.152	1.91
10/10/97	On	3,849	815,955	5.9	62	2.2	33	180	33	0.051	0.461	0.009	0.209	1.037	0.153	1.92
11/6/97*	On	4,353	890,220	5.9	62	2.2	33	180	33	0.055	0.499	0.011	0.229	1.148	0.173	2.12
12/9/97	On	4,761	1,057,117	11	74	0	43	230	38	0.070	0.602	0.011	0.289	1.469	0.226	2.67
1/8/98	On	5,481	1,234,637	9.8	69	0	22	190	17	0.085	0.704	0.011	0.322	1.750	0.251	3.12
2/5/98	On	6,153	1,255,998	9.4	78	4.2	57	230	39	0.086	0.718	0.011	0.332	1.791	0.258	3.20
3/3/98	On	6,309	1,321,582	13	63	1.5	29	200	25	0.094	0.753	0.012	0.348	1.900	0.272	3.38
4/9/98	On	7,197	1,520,961	14	66	0	36	220	32	0.117	0.862	0.012	0.407	2.266	0.325	3.99
4/28/98	On	7,653	1,577,147	14	66	0	36	220	32	0.123	0.893	0.012	0.424	2.369	0.340	4.16
Pump was turned off on April 28 and restarted on May 21. Concentrations from April 9 were assumed for April 28 for calculation purposes.																
6/2/98	On	7,941	1,601,917	110	220	22	480	1900	510	0.146	0.939	0.017	0.524	2.762	0.445	4.83
7/8/98	On	8,661	1,667,777	14	79	2.3	43	180	33	0.154	0.982	0.018	0.547	2.861	0.463	5.03
8/10/98	On	9,453	1,713,390	14	44	2.4	36	140	24	0.159	0.999	0.019	0.561	2.914	0.473	5.12
9/10/98	On	9,621	1,714,415	22	88	6.8	120	540	81	0.159	1.000	0.019	0.562	2.918	0.473	5.13
10/6/98	On	9,933	1,867,830	12	55	1.1	22	70	14	0.175	1.070	0.020	0.590	3.008	0.491	5.35
11/5/98	On	10,653	2,028,454	21	66	1.9	36	140	28	0.203	1.158	0.023	0.638	3.196	0.529	5.75
12/3/98	On	11,325	2,112,538	11	45	1.3	56	97	56	0.211	1.190	0.024	0.677	3.264	0.568	5.93
1/8/99	On	12,189	2,289,365	14	62	1.7	25	180	19	0.231	1.281	0.026	0.714	3.529	0.596	6.38
2/11/99	On	13,005	2,412,975	3.3	27	0.8	12	75	8.6	0.235	1.309	0.027	0.727	3.606	0.605	6.51
3/11/99	On	13,677	2,562,050	9	57	1.7	36	170	25	0.246	1.380	0.029	0.771	3.818	0.636	6.88
4/8/99	On	14,349	2,689,320	13	64	2	38	200	26	0.260	1.448	0.031	0.812	4.030	0.663	7.24
5/12/99	On	15,165	2,830,690	10	75	2.6	49	220	31	0.271	1.536	0.035	0.870	4.289	0.700	7.70
6/4/99	On	15,717	2,894,197	19	75	3.8	75	340	63	0.281	1.576	0.037	0.909	4.469	0.733	8.01
7/8/99	On	16,419	3,073,910	14	63	1.8	37	180	19	0.302	1.671	0.039	0.965	4.739	0.762	8.48
8/5/99	On	17,091	3,199,671	16	64	1.8	35	180	18	0.319	1.738	0.041	1.001	4.928	0.781	8.81
9/2/99	On	17,763	3,325,546	11	56	2.6	43	150	30	0.331	1.796	0.044	1.047	5.085	0.812	9.12
10/7/99	On	18,578	3,482,363	20	56	1.3	42	130	24	0.357	1.870	0.046	1.102	5.255	0.844	9.47
11/4/99	On	19,250	3,638,658	15	68	1.9	47	190	34	0.376	1.958	0.048	1.163	5.503	0.888	9.94
12/2/99	On	19,922	3,790,732	12	64	1.2	22	120	10	0.392	2.040	0.050	1.191	5.655	0.901	10.23
1/17/00	On	20,426	3,899,336	110	180	13	410	1200	310	0.491	2.203	0.061	1.562	6.742	1.181	12.24
2/4/00	On	20,642	4,008,545	13	56	1.8	27	130	13	0.503	2.254	0.063	1.587	6.861	1.193	12.46
3/9/00	On	21,458	4,214,464	6	44	1.8	30	110	14	0.513	2.329	0.066	1.638	7.050	1.217	12.81
4/6/00	On	22,130	4,685,941	9	69	1.3	25	120	9.2	0.550	2.600	0.071	1.737	7.521	1.254	13.73
5/2/00	On	22,754	4,766,410	10	73	1.6	29	120	14	0.557	2.649	0.072	1.756	7.602	1.263	13.90
6/1/00	On	25,080	4,969,539	6	52	1.4	22	65	10	0.567	2.738	0.075	1.793	7.712	1.280	14.16
7/6/00	On	25,728	5,128,349	19	64	1.1	28	100	13	0.592	2.822	0.076	1.830	7.845	1.297	14.46
8/1/00	On	26,688	5,349,431	14	59	1	22	81	9.2	0.618	2.931	0.078	1.871	7.994	1.314	14.81
9/7/00	On	27,576	5,513,911	10	68	1.8	23	130	13	0.631	3.024	0.080	1.902	8.172	1.332	15.14
10/5/00	On	27,792	5,623,147	11	72	1.4	33	120	16	0.641	3.090	0.082	1.933	8.282	1.346	15.37
11/13/00	On	28,728	5,757,318	7	75	0	28	0	13	0.649	3.174	0.082	1.964	8.282	1.361	15.51
12/5/00	On	29,256	5,861,862	10	73	0	30	150	11	0.657	3.238	0.082	1.990	8.412	1.371	15.75
1/10/01	On	30,120	6,039,155	13	84	1.5	34	140	12	0.676	3.362	0.084	2.040	8.619	1.388	16.17

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-15B was not collected in November. Concentrations from October were assumed for calculation purposes.

Table 3
VOC Mass Removal from Groundwater (MW-9B)
Mead Property Site

Date	Status	Hours of Operation	Groundwater Recovered from MW9B (gal)	Concentration (ug/L)						Cumulative Mass Removed (lb)						Total VOC Mass Removed (lb)
				1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	1,1 DCE	1,1 DCA	1,2 DCA	1,2 DCE	TCA	TCE	
5/7/98	On	384	33,867	140	51	0	0	1500	42	0.040	0.014	0.000	0.000	0.424	0.012	0.49
6/2/98	On	1,008	70,008	77	42	3.2	0	1200	55	0.063	0.027	0.001	0.000	0.785	0.028	0.90
7/8/98	On	1,728	83,251	56	36	0	0	1200	46	0.069	0.031	0.001	0.000	0.918	0.034	1.05
8/10/98	On	2,520	136,720	93	44	0	19	920	58	0.110	0.051	0.001	0.008	1.328	0.059	1.56
9/10/98	On	3,264	183,604	37	46	3.1	22	1000	73	0.125	0.069	0.002	0.017	1.719	0.088	2.02
10/6/98	On	3,888	213,850	83	40	3.2	13	830	69	0.146	0.079	0.003	0.020	1.929	0.105	2.28
11/5/98	On	4,608	247,376	130	39	3.4	15	820	68	0.182	0.090	0.004	0.025	2.158	0.124	2.58
12/3/98	On	5,280	269,255	48	32	0	12	680	56	0.191	0.095	0.004	0.027	2.282	0.135	2.73
1/8/99*	Off	5,656	289,586	48	32	0	12	680	56	0.199	0.101	0.004	0.029	2.397	0.144	2.87
8/5/99	On	5,662	289,916	37	19	0	2.6	600	30	0.199	0.101	0.004	0.029	2.399	0.144	2.88
9/2/99	On	6,334	319,851	26	26	0	7.9	560	27	0.206	0.107	0.004	0.031	2.539	0.151	3.04
10/7/99	On	7,149	355,792	160	53	0	27	1200	83	0.254	0.123	0.004	0.039	2.898	0.176	3.49
11/4/99	On	7,821	389,631	54	49	3.8	30	940	87	0.269	0.137	0.005	0.047	3.164	0.200	3.82
12/2/99	On	8,493	423,453	67	66	5.5	44	1100	100	0.288	0.156	0.007	0.060	3.474	0.229	4.21
01/17/00*	Off	8,997	434,563	67	66	5.5	44	1100	100	0.2940	0.1619	0.0071	0.0638	3.5759	0.2378	4.340
2/4/00	Pump not operating.															
3/23/00	On	9,177	435,540	9	23	0	6	350	35	0.2940	0.1621	0.0071	0.0638	3.5787	0.2381	4.344
4/6/00	On	9,513	539,095	30	50	2.7	19	860	63	0.3199	0.2053	0.0094	0.0803	4.3214	0.2925	5.229
5/2/00	On	10,137	561,968	27	39	0	16	640	58	0.3251	0.2127	0.0094	0.0833	4.4435	0.3035	5.378
6/1/00	On	11,341	622,288	33	90	7	64	1000	110	0.3417	0.2580	0.0129	0.1155	5.0153	0.3589	6.102
7/6/00	On	12,205	664,533	140	84	0	58	1100	110	0.3910	0.2876	0.0129	0.1359	5.4028	0.3976	6.628
8/1/00	On	12,829	722,641	120	110	6.4	80	970	130	0.4492	0.3409	0.0160	0.1747	5.8729	0.4606	7.314
9/7/00	On	13,717	755,570	42	86	6.2	66	1200	110	0.4607	0.3645	0.0177	0.1928	6.2025	0.4909	7.729
10/5/00	On	14,149	791,858	53	110	0	88	1100	130	0.4767	0.3978	0.0177	0.2195	6.5354	0.5302	8.177
11/13/00	On	15,085	821,491	20	46	0	18	680	85	0.4817	0.4092	0.0177	0.2239	6.7034	0.5512	8.387
12/5/00	On	15,613	886,667	48	110	7	80	1300	140	0.5078	0.4690	0.0215	0.2674	7.4101	0.6273	9.303
1/10/01	On	16,477	933,323	64	120	7.1	100	1100	130	0.5327	0.5157	0.0243	0.3063	7.8381	0.6779	9.895

Notes: If laboratory analyses were below detection limits, the concentration is assumed to be 0 ug/L for the purposes of this estimate.
Only compounds detected above laboratory detection limits are used in this calculation.
* A groundwater sample from well MW-9B was not collected in January. Concentrations from December were assumed for calculation purposes.

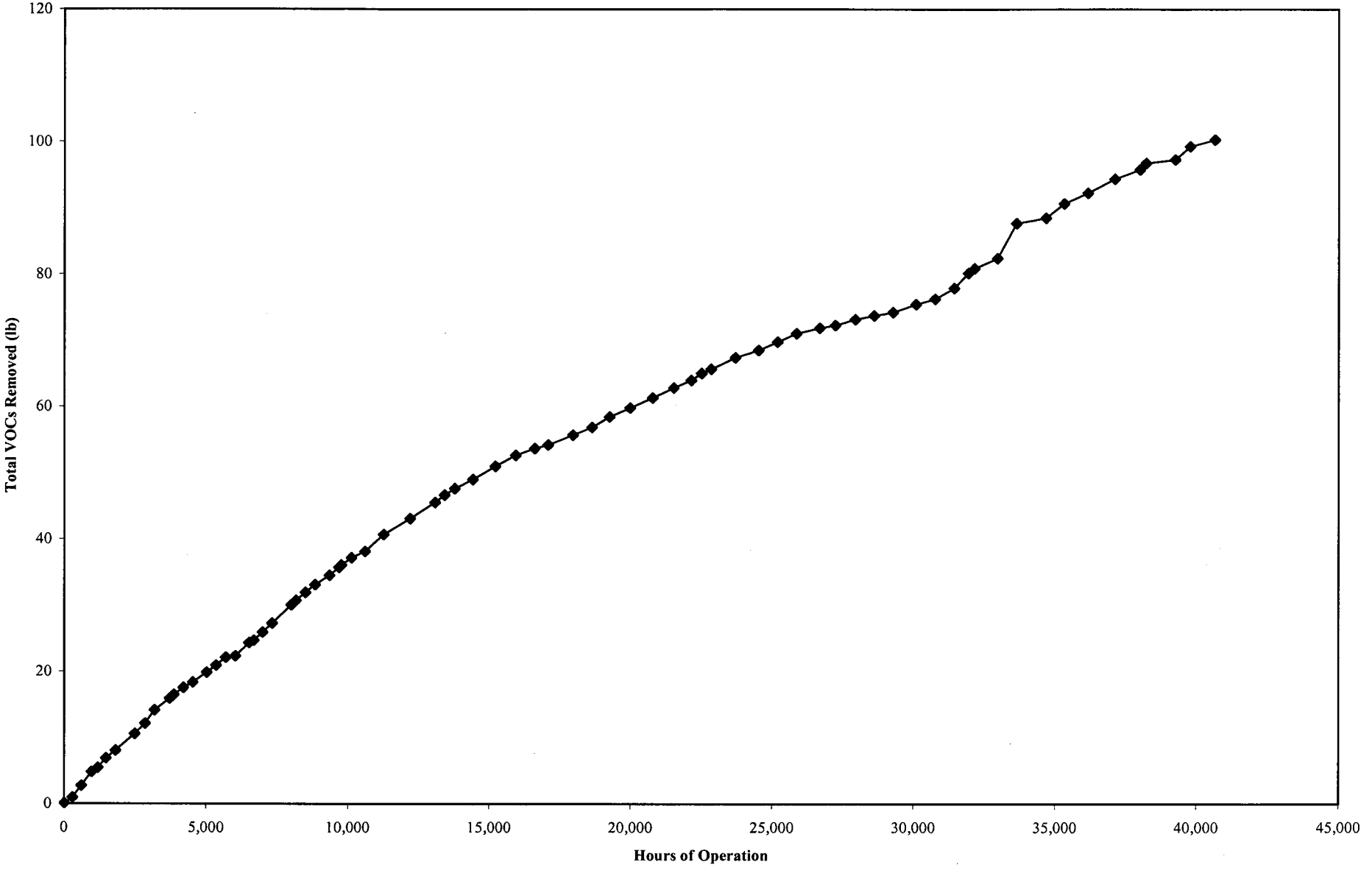
Table 4
GWTS Effluent Quality Data
Mead Property Site

Sampling Parameters	Discharge Limitations (2)		Sample Date	
	Daily Max.	Units	1/10/01	1/23/01
pH	6.0-9.0	SU	7.73	7.93
Solids, Suspended (1)	10	mg/l	<10	<10
Solids, Dissolved	Monitor	mg/l	221	211
Aluminum, Total (1)	2.7	mg/l	<0.155	NS
Arsenic, Total (1)	0.15	mg/l	<0.007	NS
Iron, Total (1)	0.6	mg/l	<0.079	NS
Lead, Total (1)	0.04	mg/l	<0.004	NS
Benzene	10	µg/l	<0.3	NS
Chloroethane	10	µg/l	<0.4	NS
Chlorobenzene	10	µg/l	<0.2	NS
1,1-Dichloroethane	10	µg/l	<0.4	NS
1,2-Dichloroethane	10	µg/l	<0.2	NS
1,1-Dichloroethene	10	µg/l	<0.4	NS
1,2-Dichloroethene	10	µg/l	<0.4	NS
Methylene Chloride	10	µg/l	<0.8	NS
Tetrachloroethene	2	µg/l	<0.3	NS
Toluene	10	µg/l	<0.3	NS
1,1,1-Trichloroethane	10	µg/l	<0.3	NS
Trichloroethene	10	µg/l	<0.4	NS
Vinyl Chloride	10	µg/l	<0.6	NS

(1) The limitation for this parameter becomes effective 30 days after the Department has received the sampling results (excluding start up) of the first 6 months and determined that applicable law and regulation require imposition of a limit.
(2) Final effluent limitations and monitoring requirements issued by the NYSDEC and effective January 1, 1996.
NS - Not sampled. Samples for analysis of VOCs and metals are collected once a month.

Figures

Figure 1
VOC Mass Removal from Groundwater (MW-12B, MW-15B, MW-9B)
Mead Property Site



Appendices

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: H556

Date Sampled: 1/23/01
Date Received: 1/24/01
Matrix: WATER

Date Analyzed: 1/25/01
QA Batch: 1776

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
253337	Carbon_2	1.0	211

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: H556

Date Sampled: 1/23/01
Date Received: 1/24/01
Matrix: WATER

Date Analyzed: 1/25/01
QA Batch: 1602

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
253337	Carbon_2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Client ID: **CARBON_2**
Site: Mead Property

Lab Sample No: **251591**
Lab Job No: H283

Date Sampled: 01/10/01
Date Received: 01/12/01
Date Analyzed: 01/15/01
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v25485.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	ND	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **CARBON 2**
Site: **Mead Property**

Lab Sample No: 251591
Lab Job No: H283

Date Sampled: 01/10/01
Date Received: 01/12/01

Matrix: WATER
Level: LOW

METALS ANALYSIS

Analyte	Analytical Result Units: ug/l	Instrument Detection Limit	M
Aluminum	ND	155	P
Arsenic	ND	6.8	P
Iron	ND	79.4	P
Lead	ND	4.4	P

M Column - Method Code (See Section 2 of Report)

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: H283

Date Sampled: 1/10/01
Date Received: 1/12/01
Matrix: WATER

Date Analyzed: 1/16/01
QA Batch: 1774

TOTAL DISSOLVED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
251591	CARBON_2	1.0	221

Quantitation Limit for Total Dissolved Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Site: Mead Property

Lab Job No: H283

Date Sampled: 1/10/01
Date Received: 1/12/01
Matrix: WATER

Date Analyzed: 1/15/01
QA Batch: 1596

TOTAL SUSPENDED SOLIDS

STL Edison Sample #	Client ID	Dilution Factor	Analytical Result Units: mg/l
251591	CARBON_2	1.0	ND

Quantitation Limit for Total Suspended Solids is 10.0 mg/l.

SEVERN TRENT SERVICES

Client ID: CARBON_1
Site: Mead Property

Lab Sample No: 251592
Lab Job No: H283

Date Sampled: 01/10/01
Date Received: 01/12/01
Date Analyzed: 01/15/01
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v25489.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	ND	0.4
1,1-Dichloroethane	5.5	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	ND	0.4
1,2-Dichloroethane	ND	0.2
1,1,1-Trichloroethane	ND	0.3
Trichloroethene	ND	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **MW-15B**
Site: Mead Property

Lab Sample No: **251593**
Lab Job No: **H283**

Date Sampled: 01/10/01
Date Received: 01/12/01
Date Analyzed: 01/16/01
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v25490.d

Matrix: **WATER**
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 1.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	0.6
Chloroethane	ND	0.4
Methylene Chloride	ND	0.8
1,1-Dichloroethene	13	0.4
1,1-Dichloroethane	84	0.4
trans-1,2-Dichloroethene	ND	0.4
cis-1,2-Dichloroethene	34	0.4
1,2-Dichloroethane	1.5	0.2
1,1,1-Trichloroethane	140	0.3
Trichloroethene	12	0.4
Benzene	ND	0.3
Tetrachloroethene	ND	0.3
Toluene	ND	0.3
Chlorobenzene	ND	0.2
1,2-Dichlorobenzene	ND	0.3

SEVERN TRENT SERVICES

Client ID: **MW-12B**
Site: Mead Property

Lab Sample No: **251594**
Lab Job No: H283

Date Sampled: 01/10/01
Date Received: 01/12/01
Date Analyzed: 01/20/01
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v25659.d

Matrix: **WATER**
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	6.3	3.2
Chloroethane	8.5	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	100	2.0
1,1-Dichloroethane	640	1.8
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	*	2.0
1,2-Dichloroethane	73	1.2
1,1,1-Trichloroethane	770	1.6
Trichloroethene	160	2.0
Benzene	ND	1.3
Tetrachloroethene	ND	1.6
Toluene	ND	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

*See dilution

SEVERN TRENT SERVICES

Client ID: **MW-12BD1**
Site: Mead Property

Lab Sample No: **251594D1**
Lab Job No: H283

Date Sampled: 01/10/01
Date Received: 01/12/01
Date Analyzed: 01/16/01
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v25491.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
cis-1,2-Dichloroethene	1500	3.9

SEVERN TRENT SERVICES

Client ID: **MW-9B**
Site: Mead Property

Lab Sample No: **251595**
Lab Job No: H283

Date Sampled: 01/10/01
Date Received: 01/12/01
Date Analyzed: 01/20/01
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v25660.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 5.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
Vinyl Chloride	ND	3.2
Chloroethane	ND	2.2
Methylene Chloride	ND	4.2
1,1-Dichloroethene	64	2.0
1,1-Dichloroethane	120	1.8
trans-1,2-Dichloroethene	ND	2.2
cis-1,2-Dichloroethene	100	2.0
1,2-Dichloroethane	7.1	1.2
1,1,1-Trichloroethane	*	1.6
Trichloroethene	130	2.0
Benzene	ND	1.3
Tetrachloroethene	ND	1.6
Toluene	ND	1.5
Chlorobenzene	ND	1.2
1,2-Dichlorobenzene	ND	1.5

*See dilution

SEVERN TRENT SERVICES

Client ID: **MW-9BD1**
Site: Mead Property

Lab Sample No: **251595D1**
Lab Job No: H283

Date Sampled: 01/10/01
Date Received: 01/12/01
Date Analyzed: 01/16/01
GC Column: DB624
Instrument ID: VOAMS7.i
Lab File ID: v25492.d

Matrix: WATER
Level: LOW
Purge Volume: 5.0 ml
Dilution Factor: 10.0

VOLATILE ORGANICS - GC/MS
METHOD 624

Parameter	Analytical Result Units: ug/l	Method Detection Limit Units: ug/l
1,1,1-Trichloroethane	1100	3.3