

**INTERIM MONTH REPORT  
FOR JUNE 1 – JUNE 10, 2005**

**EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019 and 1-2000-0014**

**MASSACHUSETTS MILITARY RESERVATION  
TRAINING RANGE AND IMPACT AREA**

The following summary of progress is for the period from June 1 through June 10, 2005.

**1. SUMMARY OF REMEDIATION ACTIONS**

The following is a description of remediation actions taken as part of or in preparation for Rapid Response Action (RRA) Plans for various Areas of Concern at Camp Edwards through June 10, 2005. A Rapid Response Action is an interim action that may be conducted prior to risk assessments or remedial investigations to address a known, ongoing threat of contamination to groundwater and/or soil.

Demo Area 1 Groundwater RRA

The Demo Area 1 Groundwater RRA consists of the removal and treatment of contaminated groundwater to control further migration of explosives and perchlorate. Extraction, treatment, and recharge systems (ETR) at Frank Perkins Road and Pew Road include single extraction wells, ex-situ treatment processes to remove explosives and perchlorate from the groundwater, and injection wells to return treated water to the aquifer.

The Pew Road ETR continues operation at a flow rate of 100 gallons per minute (gpm). Perchlorate and hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) have been detected in influent samples. The Granular Activated Carbon (GAC) media was exchanged in the first and second pair of treatment vessels on March 9, 2005. Perchlorate breakthrough was detected after the first pair of GAC vessels and has not been detected after the second pair of GAC vessels. RDX has not been detected in any mid-fluent samples. Perchlorate and RDX have not been detected in samples collected from the effluent. The next GAC exchange will be scheduled after breakthrough at the second pair of GAC vessels. Based on past operational history, this second GAC exchange is anticipated to be required in June or July 2005. As of June 10, 2005, approximately 37 million gallons of water have been treated and re-injected at the Pew Road ETR System.

The Frank Perkins Road ETR continues operation at a flow rate of 220 gpm. Perchlorate, RDX, and octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) have been detected in influent samples. Perchlorate was detected in mid-fluent samples collected after the first pair of GAC vessels in each of the three treatment containers. The GAC vessels are followed by ion exchange (IX) vessels, which are designed for treatment of perchlorate. Perchlorate and RDX have not been detected in mid-fluent samples collected after the IX vessels or in effluent samples. As of June 10, 2005, approximately 78 million gallons of water had been treated and re-injected at the Frank Perkins Road ETR System.

Demo Area 1 Soil RRA

The Demo Area 1 Soil RRA consists of the removal of all geophysical anomalies within the perimeter road (7.4 acres) and the removal and thermal treatment of contaminated soil from in and around the Demo 1 kettle hole. A total of 16,641 cubic yards of soil was excavated at Demo Area 1, with an additional 195 cubic yards excavated at Demo Area 1 burn pits.

Investigation and removal of unexploded ordnance (UXO) anomalies at targets identified during the EM-61 survey continued during early June.

#### Impact Area Soil RRA

The Impact Area Soil RRA consists of the removal and treatment of contaminated soil and targets at Targets 23 and 42. A total of 590 cubic yards was removed from Target 23 and a total of 796 cubic yards was removed from Target 42 and treated in the Thermal Treatment Unit.

Two broken lysimeters were reinstalled at Target 42 as part of the Central Impact Area Focused Investigation.

#### J-2 Range Soil RRA

The J-2 Range Soil RRA consists of the removal and treatment of soil in six general areas within the J-2 Range that contain explosives and perchlorate. Soil removal locations include Twin Berms Area, Berm 2, Berm 5, Fixed Firing Points 3 and 4 (FFP-3 and 4) and adjacent Range Road Burn Area (RRBA), Disposal Area 1, and Disposal Area 2. A total of 6,236 cubic yards of soil was excavated and treated in the Thermal Treatment Unit.

UXO clearance and soil removal continued at the J-2 Range Polygon 2 from an additional (one-foot) cut. A second additional (one-foot) of soil was excavated from the northeastern half of Berm 5. The soil is being managed for off-site disposal.

#### J-3 Range Soil RRA

The J-3 Range Soil RRA consists of the removal and treatment of contaminated soil from the Demolition Area and Melt/Pour Building Area. A total of 1,085 cubic yards of soil was excavated from the Demolition Area. A total of 1,146 cubic yards of soil was excavated from the Melt/Pour Building Area. Soil has been treated in the Thermal Treatment Unit or containerized for off-site disposal.

Site work was not conducted for the J-3 Range soil RRA during early June.

## **2. SUMMARY OF ACTIONS TAKEN**

Drilling progress as of June 10, 2005 is summarized in Table 1.

<b>Boring Number</b>	<b>Purpose of Boring/Well</b>	<b>Total Depth (ft bgs)</b>	<b>Depth to Water Table (ft bgs)</b>	<b>Completed Well Screens (ft bgs)</b>
MW-369	J-1 Range (J1P-26)	306	116	175-185; 215-225; 253-263
MW-370	J-1 Range (J1P-28)	313	122	185-195; 215-225; 245-255
DP-371	J-2 Range (J2E-DP1)	212	100	
MW-372	J-2 Range (J2P-55)	315	108	
DP-373	J-2 Range (CP-32B1)	191	83	
DP-377	J-2 Range (J2E-DP2)	191	59	
DP-378	J-1 Range (J1E-DP1)	171	82	
DP-379	J-1 Range (J1E-DP2)	67		

ft bgs = feet below ground surface

Completed well installation at MW-369 (J1P-26) and MW-370 (J1P-28) and commenced well installation at MW-372 (J2P-55). Completed drilling at DP-377 (J2E-DP2) and DP-378 (J1E-DP1) and commenced drilling at DP-379 (J1E-DP2). Well development of recently installed wells was conducted.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from DP-377 and DP-378. Groundwater samples were collected as part of the April round of the 2005 Long-Term Groundwater Monitoring (LTGM) Plan. Supplemental soil samples were collected at Demo Area 1 from a BIP crater. Surface water samples were collected near a public beach, a private beach, and near the spit at Snake Pond.

### 3. SUMMARY OF DATA RECEIVED

Table 3 summarizes the detections that exceeded an EPA Maximum Contaminant Level (MCL) or Health Advisory (HA) for drinking water for explosives, or exceeded a 4 ppb concentration for perchlorate received for the reporting period of May 27, 2005 through June 10, 2005.

Table 4 summarizes first-time validated detections of explosives below the MCL/HA for drinking water or of perchlorate below a 4 ppb concentration received from May 27, 2005 through June 10, 2005.

First time validated detections of explosives and perchlorate in groundwater compared to the MCL/HAs are summarized below:

#### Explosives in Groundwater Compared to MCL/HAs

For validated data received from May 27, 2005 through June 10, 2005, no wells had first-time validated detections of explosives above the MCL/HAs. One well, MW-346M3 (J-1 Range), had a first-time validated detection of RDX below the HA of 2 ug/L.

#### Perchlorate in Groundwater Compared to MCL/HAs

For validated data received from May 27, 2005 through June 10, 2005, one well, MW-346M3 (J-1 Range), had a first-time validated detection of perchlorate above the concentration of 4 ppb. No wells had first-time validated detections of perchlorate below the concentration of 4 ppb.

Rush data are summarized in Table 5. These data are for analyses that are performed on a fast turn around time, typically 1-10 days. Perchlorate and explosive analyses for monitoring wells, and perchlorate, explosive and volatile organic compound (VOC) analyses for groundwater profile samples, are conducted in this timeframe, as well as any analyses pursuant to a special request. The rush data are not validated, but are provided as an indication of the most recent preliminary results. Table 5 summarizes only detects, and does not show samples with non-detects.

The status of the explosive detections with respect to confirmation using Photo Diode Array (PDA) spectra is indicated in Table 5. PDA is a procedure that has been implemented for the explosive analysis, to reduce the likelihood of false positive identifications. Where the PDA status is "YES" in Table 5, the detected compound is verified as properly identified. Where the status is "NO", the identification of an explosive has been determined to be a false positive. Where the status is blank, PDA has not yet been used to evaluate the detection, or PDA is not applicable because the analyte is a VOC or perchlorate. Most explosive detections verified by PDA are confirmed to be present upon completion of validation.

Table 5 includes detections from the following areas:

Demo Area 1

- Groundwater samples from MW-258M1, M2 and M3 had detections of perchlorate which were similar to previous sampling rounds for M1 and M3. The detection of perchlorate at MW-258M2 exceeds the previously reported concentration by approximately two-fold.
- Process water samples collected from the Frank Perkins Road ETR system influent (FPR-INF) and mid-fluent (FPR-MID-1) had detections of perchlorate. A process water sample collected from the influent (FPR-INF) also had detections of RDX and HMX, which were confirmed by PDA spectra.
- Process water samples collected from the Pew Road ETR system influent (PR-INF) and mid-fluent (PR-MID-1) had detections of perchlorate. A process water sample collected from the influent (PR-INF) also had a detection of RDX, which was confirmed by PDA spectra.

**4. DELIVERABLES SUBMITTED**

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**5. SCHEDULED ACTIONS**

Scheduled actions through the end of June include complete well installation at MW-372 (J2P-55) and commence drilling at D2P-7, J3P-41, J1E-DP3, J1E-DP4 and J2P-56. Groundwater sampling of recently installed wells and as part of the April round of the 2005 LTGM Plan will continue. Well development will continue for recently installed wells. Activities conducted as part of the Demo 1 soil and groundwater RRAs and J-2 Range soil RRA will continue.

**TABLE 2  
SAMPLING PROGRESS  
INTERIM MONTHLY 06/01/2005 - 06/10/2005**

SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
90LWA0007-A	90LWA0007	L RANGE	06/07/2005	GROUNDWATER	92	102	0	10
90MW0003-A	90MW0003	L RANGE	06/01/2005	GROUNDWATER	144	149	52.11	57.11
90MW0005-A	90MW0005	L RANGE	06/01/2005	GROUNDWATER	184	189	89.03	94.03
90MW0006-A	90MW0006	L RANGE	06/02/2005	GROUNDWATER	129	134	52.85	57.85
90MW0009-A	90MW0009	L RANGE	06/01/2005	GROUNDWATER	119	124	54.33	59.33
90MW0009-D	90MW0009	L RANGE	06/01/2005	GROUNDWATER	119	124	54.33	59.33
90MW0014-A	90MW0014	J-3 RANGE	06/09/2005	GROUNDWATER	103	108	78	83
90MW0019-A	90MW0019	L RANGE	06/02/2005	GROUNDWATER	161	166	78	83
90MW0022-A	90MW0022	J-3 RANGE	06/09/2005	GROUNDWATER	112	117	72.79	77.79
90MW0022-A-QA	90MW0022	J-3 RANGE	06/09/2005	GROUNDWATER	112	117	72.79	77.79
90MW0031-A	90MW0031	L RANGE	06/01/2005	GROUNDWATER	195.32	200.22	112	117
90MW0041-A	90MW0041	L RANGE	06/09/2005	GROUNDWATER	125.37	130.23	31.5	36.5
90MW0041-D	90MW0041	L RANGE	06/09/2005	GROUNDWATER	125.37	130.23	31.5	36.5
90MW0070-A	90MW0070	L RANGE	06/01/2005	GROUNDWATER	132.5	137.5	78	83
90MW0071-A	90MW0071	L RANGE	06/01/2005	GROUNDWATER	150	155	82	87
90MW0071-D	90MW0071	L RANGE	06/01/2005	GROUNDWATER	150	155	82	87
90PZ0201-A	90PZ0201	J-3 RANGE	06/02/2005	GROUNDWATER	78.2	107.1	65.3	94.2
90PZ0204-A	90PZ0204	J-3 RANGE	06/02/2005	GROUNDWATER	80	85	72.1	77.1
90PZ0208-A	90PZ0208	J-3 RANGE	06/02/2005	GROUNDWATER	90	95	72.8	77.8
90PZ0208-D	90PZ0208	J-3 RANGE	06/02/2005	GROUNDWATER	90	95	72.8	77.8
90PZ0211B-A	90PZ0211	J-3 RANGE	06/02/2005	GROUNDWATER	93	93	86.85	86.85
90PZ0211B-A-QA	90PZ0211	J-3 RANGE	06/02/2005	GROUNDWATER	93	93	86.85	86.85
90PZ0211C-A	90PZ0211	J-3 RANGE	06/02/2005	GROUNDWATER	103	103	96.85	96.85
90PZ0211C-A-QA	90PZ0211	J-3 RANGE	06/02/2005	GROUNDWATER	103	103	96.85	96.85
ASPWELL-A	ASPWELL	OTHER	06/08/2005	GROUNDWATER	0	0		
LRMW0003-A	LRMW0003	OTHER	06/02/2005	GROUNDWATER	95	105	69.68	94.68
W02-02M1A	02-02	WESTERN BOU	05/31/2005	GROUNDWATER	114.5	124.5	63.5	73.5
W02-03M3A	02-03	WESTERN BOU	06/07/2005	GROUNDWATER	75	85	31.05	41.05
W02-05M1A	02-05	WESTERN BOU	06/10/2005	GROUNDWATER	110	120	81.44	91.44
W02-05M2A	02-05	WESTERN BOU	06/10/2005	GROUNDWATER	92	102	63.41	73.41
W02-05M3A	02-05	WESTERN BOU	06/10/2005	GROUNDWATER	70	80	41.37	51.37
W02-07M2A	02-07	WESTERN BOU	06/10/2005	GROUNDWATER	107	117	72.86	82.86
W02-07M3A	02-07	WESTERN BOU	06/10/2005	GROUNDWATER	47	57	13	23
W02-08M1A	02-08	WESTERN BOU	05/31/2005	GROUNDWATER	108	113	86.56	91.56
W02-08M2A	02-08	WESTERN BOU	05/31/2005	GROUNDWATER	82	87	60.65	65.65
W02-08M3A	02-08	WESTERN BOU	06/01/2005	GROUNDWATER	62	67	40.58	45.58
W02-08M3D	02-08	WESTERN BOU	06/01/2005	GROUNDWATER	62	67	40.58	45.58
W02-09M1A	02-09	WESTERN BOU	06/10/2005	GROUNDWATER	74	84	65.26	75.26

**Profiling methods may include: Volatiles, Explosives, and Perchlorate**  
**Groundwater methods include: Volatiles, Semivolatiles, Explosives,**  
**Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry**  
**Other Sample Types methods are variable**  
**SBD = Sample Begin Depth, measured in feet bgs**  
**SED = Sample End Depth, measured in feet bgs**  
**BWTS = Depth below water table, start depth, measured in feet**  
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SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W02-09M1A-QA	02-09	WESTERN BOU	06/10/2005	GROUNDWATER	74	84	65.26	75.26
W02-09M2A	02-09	WESTERN BOU	06/10/2005	GROUNDWATER	59	69	50.3	60.3
W02-09M2A-QA	02-09	WESTERN BOU	06/10/2005	GROUNDWATER	59	69	50.3	60.3
W02-09SSA	02-09	WESTERN BOU	06/10/2005	GROUNDWATER	7	17	0	10
W130SSA-QA	MW-130	J-2 RANGE	05/31/2005	GROUNDWATER	103	113	0	10
W136M1A	MW-136	J-1 RANGE	06/01/2005	GROUNDWATER	124	134	17	27
W136SSA	MW-136	J-1 RANGE	06/09/2005	GROUNDWATER	107	117	0	10
W142M1A	MW-142	J-3 RANGE	06/03/2005	GROUNDWATER	225	235	185	195
W142M2A	MW-142	J-3 RANGE	06/03/2005	GROUNDWATER	140	150	100	110
W142M2A-QA	MW-142	J-3 RANGE	06/03/2005	GROUNDWATER	140	150	100	110
W142SSA	MW-142	J-3 RANGE	06/06/2005	GROUNDWATER	42	52	2	12
W157DDA	MW-157	J-3 RANGE	06/02/2005	GROUNDWATER	209	219	199	209
W157M1A	MW-157	J-3 RANGE	06/03/2005	GROUNDWATER	154	164	144	154
W157M1A-QA	MW-157	J-3 RANGE	06/03/2005	GROUNDWATER	154	164	144	154
W157M2A	MW-157	J-3 RANGE	06/03/2005	GROUNDWATER	110	120	100	110
W157M2A-QA	MW-157	J-3 RANGE	06/03/2005	GROUNDWATER	110	120	100	110
W157M3A	MW-157	J-3 RANGE	06/03/2005	GROUNDWATER	70	80	53.94	63.94
W157M3A-QA	MW-157	J-3 RANGE	06/03/2005	GROUNDWATER	70	80	53.94	63.94
W158M1A	MW-158	J-2 RANGE	05/31/2005	GROUNDWATER	176.5	186.5	89	99
W158M2A	MW-158	J-2 RANGE	06/01/2005	GROUNDWATER	124.5	134.5	37	47
W158SSA	MW-158	J-2 RANGE	06/01/2005	GROUNDWATER	89	99	2	12
W160SSA	MW-160	DEMO 2	06/08/2005	GROUNDWATER	137.5	147.5	5	15
W161SSA	MW-161	DEMO 2	06/09/2005	GROUNDWATER	145.5	155.5	6	16
W161SSA-QA	MW-161	DEMO 2	06/09/2005	GROUNDWATER	145.5	155.5	6	16
W163SSA	MW-163	J-3 RANGE	06/08/2005	GROUNDWATER	38	48	0	10
W163SSA-QA	MW-163	J-3 RANGE	06/08/2005	GROUNDWATER	38	48	0	10
W166M1A	MW-166	J-1 RANGE	06/09/2005	GROUNDWATER	218	223	112	117
W166M2A	MW-166	J-1 RANGE	06/09/2005	GROUNDWATER	150	160	44	54
W166M3A	MW-166	J-1 RANGE	06/09/2005	GROUNDWATER	125	135	19	29
W166M3A-QA	MW-166	J-1 RANGE	06/09/2005	GROUNDWATER	125	135	19	29
W191M1A	MW-191	J-1 RANGE	06/06/2005	GROUNDWATER	137	142	25.2	30.2
W191M2A	MW-191	J-1 RANGE	06/06/2005	GROUNDWATER	120	130	8.4	18.4
W191M2D	MW-191	J-1 RANGE	06/06/2005	GROUNDWATER	120	130	8.4	18.4
W191SSA	MW-191	J-1 RANGE	06/06/2005	GROUNDWATER	106	116	0	10
W197M1A	MW-197	J-3 RANGE	06/07/2005	GROUNDWATER	120	125	99.6	104.6
W197M2A	MW-197	J-3 RANGE	06/07/2005	GROUNDWATER	80	85	59.3	64.3
W197M3A	MW-197	J-3 RANGE	06/07/2005	GROUNDWATER	60	65	39.4	44.4
W213M1A	MW-213	WESTERN BOU	06/06/2005	GROUNDWATER	133	143	85.01	95.01

**Profiling methods may include: Volatiles, Explosives, and Perchlorate**  
**Groundwater methods include: Volatiles, Semivolatiles, Explosives,**  
**Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry**  
**Other Sample Types methods are variable**  
**SBD = Sample Begin Depth, measured in feet bgs**  
**SED = Sample End Depth, measured in feet bgs**  
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SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W213M2A	MW-213	WESTERN BOU	06/06/2005	GROUNDWATER	89	99	41.15	51.15
W213M3A	MW-213	WESTERN BOU	06/06/2005	GROUNDWATER	77	82	29.38	34.38
W216M1A	MW-216	WESTERN BOU	06/09/2005	GROUNDWATER	253	263	51.19	61.19
W216M2A	MW-216	WESTERN BOU	06/08/2005	GROUNDWATER	236	246	34.17	44.17
W216SSA	MW-216	WESTERN BOU	06/08/2005	GROUNDWATER	199	209	0	7.13
W216SSA-QA	MW-216	WESTERN BOU	06/08/2005	GROUNDWATER	199	209	0	7.13
W217M1A	MW-217	J-3 RANGE	06/09/2005	GROUNDWATER	148	153	143	148
W217M2A	MW-217	J-3 RANGE	06/09/2005	GROUNDWATER	138	143	133	138
W217M2A-QA	MW-217	J-3 RANGE	06/09/2005	GROUNDWATER	138	143	133	138
W217M3A	MW-217	J-3 RANGE	06/09/2005	GROUNDWATER	101	106	96	101
W218M1A	MW-218	J-3 RANGE	06/08/2005	GROUNDWATER	128	133	123	128
W218M1A-QA	MW-218	J-3 RANGE	06/08/2005	GROUNDWATER	128	133	123	128
W218M2A	MW-218	J-3 RANGE	06/08/2005	GROUNDWATER	98	103	93	98
W218M3A	MW-218	J-3 RANGE	06/08/2005	GROUNDWATER	78	83	73	78
W220DDA	MW-220	J-1 RANGE	06/01/2005	GROUNDWATER	299	309	171.83	181.83
W220M1A	MW-220	J-1 RANGE	06/01/2005	GROUNDWATER	248	258	120.85	130.85
W226M1A	MW-226	WESTERN BOU	06/01/2005	GROUNDWATER	285	295	172	182
W226M2A	MW-226	WESTERN BOU	06/01/2005	GROUNDWATER	175	185	61.7	71.7
W226M3A	MW-226	WESTERN BOU	06/01/2005	GROUNDWATER	135	145	21.53	31.53
W227M1A	MW-227	J-3 RANGE	06/06/2005	GROUNDWATER	130	140	76.38	86.38
W227M1A-QA	MW-227	J-3 RANGE	06/06/2005	GROUNDWATER	130	140	76.38	86.38
W227M2A	MW-227	J-3 RANGE	06/06/2005	GROUNDWATER	110	120	56.38	66.38
W227M2A-QA	MW-227	J-3 RANGE	06/06/2005	GROUNDWATER	110	120	56.38	66.38
W227M3A	MW-227	J-3 RANGE	06/06/2005	GROUNDWATER	65	75	11.39	21.39
W230M1A	MW-230	J-2 RANGE	05/31/2005	GROUNDWATER	130	140	23.82	33.82
W230M2A	MW-230	J-2 RANGE	05/31/2005	GROUNDWATER	110	120	3.76	13.76
W232M1A	MW-232	J-3 RANGE	06/07/2005	GROUNDWATER	77.5	82.5	34.94	39.94
W232M2A	MW-232	J-3 RANGE	06/07/2005	GROUNDWATER	61	66	18.41	23.41
W233M1A	MW-233	WESTERN BOU	06/01/2005	GROUNDWATER	356	366	157.8	167.8
W233M2A	MW-233	WESTERN BOU	06/01/2005	GROUNDWATER	331	341	132.8	142.8
W233M3A	MW-233	WESTERN BOU	06/01/2005	GROUNDWATER	231	241	32.8	42.8
W233M3A-QA	MW-233	WESTERN BOU	06/01/2005	GROUNDWATER	231	241	32.8	42.8
W237M1A	MW-237	J-3 RANGE	06/02/2005	GROUNDWATER	80	90	28.5	38.5
W237SSA	MW-237	J-3 RANGE	06/02/2005	GROUNDWATER	49	59	0	10
W238M1A	MW-238	L RANGE	06/08/2005	GROUNDWATER	183	193	85.46	95.46
W238M2A	MW-238	L RANGE	06/08/2005	GROUNDWATER	125	135	27.55	37.55
W238M2D	MW-238	L RANGE	06/08/2005	GROUNDWATER	125	135	27.55	37.55
W239M1A	MW-239	J-3 RANGE	06/09/2005	GROUNDWATER	180	190	159.8	169.8

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Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry  
Other Sample Types methods are variable  
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**TABLE 2  
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INTERIM MONTHLY 06/01/2005 - 06/10/2005**

SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W239M2A	MW-239	J-3 RANGE/L RA	06/09/2005	GROUNDWATER	150	160	129.85	139.85
W239M3A	MW-239	L RANGE	06/09/2005	GROUNDWATER	60	70	39.85	49.85
W243M1A	MW-243	J-3 RANGE	06/02/2005	GROUNDWATER	114.5	124.5	48.85	58.85
W243M2A	MW-243	J-3 RANGE	06/02/2005	GROUNDWATER	84.5	94.5	15.82	25.82
W243M3A	MW-243	J-3 RANGE	06/02/2005	GROUNDWATER	69.5	79.5	0.81	10.81
W246M1A	MW-246	L RANGE	06/04/2005	GROUNDWATER	178	188	116.2	126.2
W247M2A	MW-247	J-3 RANGE	06/01/2005	GROUNDWATER	125	135	102.78	112.78
W247M2A-QA	MW-247	J-3 RANGE	06/01/2005	GROUNDWATER	125	135	102.78	112.78
W247M3A	MW-247	J-3 RANGE	06/03/2005	GROUNDWATER	95	105	72.8	82.8
W249M1A	MW-249	CIA	06/02/2005	GROUNDWATER	243	253	101.95	111.95
W249M2A	MW-249	FORMER A	06/02/2005	GROUNDWATER	174	184	32.9	42.9
W249M3A	MW-249	FORMER A	06/06/2005	GROUNDWATER	154	164	12.9	22.9
W250M1A	MW-250	J-3 RANGE	06/04/2005	GROUNDWATER	185	195	174.65	184.65
W250M2A	MW-250	J-3 RANGE	06/04/2005	GROUNDWATER	145	155	134.82	144.82
W250M2A-QA	MW-250	J-3 RANGE	06/04/2005	GROUNDWATER	145	155	134.82	144.82
W250M3A	MW-250	J-3 RANGE	06/04/2005	GROUNDWATER	95	105	84.85	94.85
W250M3A-QA	MW-250	J-3 RANGE	06/04/2005	GROUNDWATER	95	105	84.85	94.85
W258M1A	MW-258	DEMO 1	06/08/2005	GROUNDWATER	109	119	64.1	74.1
W258M2A	MW-258	DEMO 1	06/08/2005	GROUNDWATER	87	92	42.2	47.2
W258M3A	MW-258	DEMO 1	06/08/2005	GROUNDWATER	77	82	32.25	37.25
W258M3D	MW-258	DEMO 1	06/08/2005	GROUNDWATER	77	82	32.25	37.25
W259M1A	MW-259	DEMO 2	06/09/2005	GROUNDWATER	189	199	7.62	17.62
W259M1A-QA	MW-259	DEMO 2	06/09/2005	GROUNDWATER	189	199	7.62	17.62
W259M1D	MW-259	DEMO 2	06/09/2005	GROUNDWATER	189	199	7.62	17.62
W262M1A	MW-262	DEMO 2	06/09/2005	GROUNDWATER	226	236	7.02	17.02
W269M1A	MW-269	WESTERN BOU	06/06/2005	GROUNDWATER	207	217	30.79	40.79
W269M2A	MW-269	WESTERN BOU	06/06/2005	GROUNDWATER	186	196	9.85	19.85
W270DDA	MW-270	NW CORNER	06/08/2005	GROUNDWATER	132	137	108.96	113.96
W270M1A	MW-270	NW CORNER	06/08/2005	GROUNDWATER	74	79	50.89	55.89
W270SSA	MW-270	NW CORNER	06/08/2005	GROUNDWATER	22	32	0	10
W282M1A	MW-282	WESTERN BOU	06/06/2005	GROUNDWATER	310	320	122.88	132.88
W282M2A	MW-282	WESTERN BOU	06/07/2005	GROUNDWATER	206	216	18.84	28.84
W282M2D	MW-282	WESTERN BOU	06/07/2005	GROUNDWATER	206	216	18.84	28.84
W284M1A	MW-284	NW CORNER	06/10/2005	GROUNDWATER	115	125	90.55	100.55
W284M2A	MW-284	NW CORNER	06/10/2005	GROUNDWATER	45	55	21.2	31.2
W284M2D	MW-284	NW CORNER	06/10/2005	GROUNDWATER	45	55	21.2	31.2
W288M1A	MW-288	L RANGE	06/06/2005	GROUNDWATER	190	200	102.19	112.19
W288M1A-QA	MW-288	L RANGE	06/06/2005	GROUNDWATER	190	200	102.19	112.19

**Profiling methods may include: Volatiles, Explosives, and Perchlorate**  
**Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry**  
**Other Sample Types methods are variable**  
**SBD = Sample Begin Depth, measured in feet bgs**  
**SED = Sample End Depth, measured in feet bgs**  
**BWTS = Depth below water table, start depth, measured in feet**  
**BWTE = Depth below water table, end depth, measured in feet**  
**AOC = Area of Concern**  
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**TABLE 2  
SAMPLING PROGRESS  
INTERIM MONTHLY 06/01/2005 - 06/10/2005**

SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W289M1A-QA	MW-289	J-2 RANGE	05/31/2005	GROUNDWATER	305	315	203	213
W289M2A-QA	MW-289	J-2 RANGE	05/31/2005	GROUNDWATER	162	172	59.7	69.7
W292M1A	MW-292	J-2 RANGE	05/31/2005	GROUNDWATER	282	292	187	197
W292M2A	MW-292	J-2 RANGE	05/31/2005	GROUNDWATER	155	165	59.4	69.4
W292M2D	MW-292	J-2 RANGE	05/31/2005	GROUNDWATER	155	165	59.4	69.4
W303M1A	MW-303	J-1 RANGE	06/07/2005	GROUNDWATER	300	310	187	197
W303M2A	MW-303	J-1 RANGE	06/07/2005	GROUNDWATER	235	245	122	132
W303M2A-QA	MW-303	J-1 RANGE	06/07/2005	GROUNDWATER	235	245	122	132
W303M3A	MW-303	J-1 RANGE	06/08/2005	GROUNDWATER	140	150	27	37
W303M3A-QA	MW-303	J-1 RANGE	06/08/2005	GROUNDWATER	140	150	27	37
W308M1A	MW-308	WESTERN BOU	06/07/2005	GROUNDWATER	325	335	57.38	67.38
W308M1D	MW-308	WESTERN BOU	06/07/2005	GROUNDWATER	325	335	57.38	67.38
W308M2A	MW-308	WESTERN BOU	06/07/2005	GROUNDWATER	255	265	57.38	67.38
W309M1A	MW-309	NW CORNER	06/10/2005	GROUNDWATER	65	75	31.91	41.91
W309SSA	MW-309	NW CORNER	06/10/2005	GROUNDWATER	32	42	0	10
W311M1A	MW-311	DEMO 2	06/07/2005	GROUNDWATER	222	232	24.89	34.89
W311M2A	MW-311	DEMO 2	06/07/2005	GROUNDWATER	200	210	2.75	12.75
W314M1A	MW-314	NW CORNER	06/10/2005	GROUNDWATER	45	55	18.83	28.83
W314SSA	MW-314	NW CORNER	06/10/2005	GROUNDWATER	24	34	0	10
W45M2A	MW-45	L RANGE	06/06/2005	GROUNDWATER	110	120	18	28
W45SSA	MW-45	L RANGE	06/06/2005	GROUNDWATER	89	99	0	10
W57M2A	MW-57	J-2 RANGE	06/06/2005	GROUNDWATER	148	158	62	72
W57M3A	MW-57	J-2 RANGE	06/07/2005	GROUNDWATER	117	127	31	41
W57M3D	MW-57	J-2 RANGE	06/07/2005	GROUNDWATER	117	127	31	41
W58SSA	MW-58	J-1 RANGE	06/07/2005	GROUNDWATER	100	110	0	10
W70SSA	MW-70	GUN & MORTAR	06/09/2005	GROUNDWATER	132	142	4	14
W81DDA	MW-81	WESTERN BOU	06/03/2005	GROUNDWATER	184	194	156	166
W81M1A	MW-81	WESTERN BOU	06/03/2005	GROUNDWATER	128	138	100	110
W81M2A	MW-81	WESTERN BOU	06/03/2005	GROUNDWATER	83	93	55	65
W81M3A	MW-81	WESTERN BOU	06/03/2005	GROUNDWATER	53	58	25	30
W81SSA	MW-81	WESTERN BOU	06/03/2005	GROUNDWATER	25	35	0	10
DP-377-01	DP-377		05/31/2005	PROFILE	59	64	0	5
DP-377-02	DP-377		05/31/2005	PROFILE	69	74	10	15
DP-377-03	DP-377		05/31/2005	PROFILE	79	84	20	25
DP-377-03FD	DP-377		05/31/2005	PROFILE	79	84	20	25
DP-377-04	DP-377		05/31/2005	PROFILE	89	94	30	35
DP-377-05	DP-377		06/01/2005	PROFILE	99	104	40	45
DP-377-06	DP-377		06/01/2005	PROFILE	109	114	50	55

Profiling methods may include: Volatiles, Explosives, and Perchlorate  
Groundwater methods include: Volatiles, Semivolatiles, Explosives,  
Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry  
Other Sample Types methods are variable  
**SBD = Sample Begin Depth, measured in feet bgs**  
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**TABLE 2  
SAMPLING PROGRESS  
INTERIM MONTHLY 06/01/2005 - 06/10/2005**

SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
DP-377-07	DP-377		06/01/2005	PROFILE	119	124	60	65
DP-377-08	DP-377		06/01/2005	PROFILE	129	134	70	75
DP-377-09	DP-377		06/02/2005	PROFILE	139	144	80	85
DP-377-10	DP-377		06/02/2005	PROFILE	149	154	90	95
DP-377-11	DP-377		06/02/2005	PROFILE	159	164	100	105
DP-377-12	DP-377		06/02/2005	PROFILE	169	174	110	115
DP-377-13	DP-377		06/03/2005	PROFILE	179	184	120	125
DP-377-13FD	DP-377		06/03/2005	PROFILE	179	184	120	125
DP-377-14	DP-377		06/03/2005	PROFILE	185	190	126	131
DP-378-01	DP-378		06/06/2005	PROFILE	80	85	-1.7	3.3
DP-378-02	DP-378		06/06/2005	PROFILE	90	95	8.3	13.3
DP-378-03	DP-378		06/07/2005	PROFILE	100	105	18.3	23.3
DP-378-03FD	DP-378		06/07/2005	PROFILE	100	105	18.3	23.3
DP-378-04	DP-378		06/07/2005	PROFILE	110	115	28.3	33.3
DP-378-05	DP-378		06/07/2005	PROFILE	120	125	38.3	43.3
DP-378-06	DP-378		06/07/2005	PROFILE	130	135	48.3	53.3
DP-378-07	DP-378		06/07/2005	PROFILE	140	145	58.3	63.3
DP-378-09	DP-378		06/08/2005	PROFILE	150	155	68.3	73.3
DP-378-10	DP-378		06/08/2005	PROFILE	160	165	78.3	83.3
DP-378-11	DP-378		06/09/2005	PROFILE	166	171	84.3	89.3
SSD1D5022-SS1	SSD1D5022		06/08/2005	SOIL GRAB	0	0.2		
SSD1D5022-SS2	SSD1D5022		06/08/2005	SOIL GRAB	0	0.2		
SSD1D5022-SS2 FD	SSD1D5022		06/08/2005	SOIL GRAB	0	0.2		
SSD1D5022-SS3	SSD1D5022		06/08/2005	SOIL GRAB	0	0.2		
SSD1D5022-SS4	SSD1D5022		06/08/2005	SOIL GRAB	0	0.2		
SSD1D5022-SS5	SSD1D5022		06/08/2005	SOIL GRAB	0	0.2		
SSD1D5022-SS6	SSD1D5022		06/08/2005	SOIL GRAB	0	0.2		
SSD1D5022-SS7	SSD1D5022		06/08/2005	SOIL GRAB	0	0.2		
SSD1D5022-SS8	SSD1D5022		06/08/2005	SOIL GRAB	0	0.2		
LKSNK0005AAA	LKSNK0005		06/02/2005	SURFACE WATER	0	0		
LKSNK0006AAA	LKSNK0006		06/02/2005	SURFACE WATER	0	0		
LKSNK0007AAA	LKSNK0007		06/02/2005	SURFACE WATER	0	0		

Profiling methods may include: Volatiles, Explosives, and Perchlorate  
Groundwater methods include: Volatiles, Semivolatiles, Explosives,  
Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry  
Other Sample Types methods are variable  
**SBD = Sample Begin Depth, measured in feet bgs**  
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**TABLE 3  
VALIDATED DETECTS EXCEEDING MCLs OR  
HEALTH ADVISORY LIMITS  
INTERIM MONTHLY  
DATA RECEIVED 05/27/05-06/10/05**

WELL/LOCID	SAMPLE ID	SAMPLED	AOC	METHOD	ANALYTE	CONC.	FLAG	UNITS	BWTS	BWTE	DW LIMIT	>DW LIMIT
MW-114	W114M2A	04/13/2005	DEMO 1	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	140		UG/L	39	49	2	X
MW-165	W165M2A	04/14/2005	DEMO 1	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	23		UG/L	46	56	2	X
MW-176	W176M1A	04/04/2005	CIA	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	7.9		UG/L	158.55	168.55	2	X
MW-76	W76SSA	04/13/2005	DEMO 1	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	3.9	J	UG/L	18	28	2	X
MW-76	W76M2A	04/13/2005	DEMO 1	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	62	J	UG/L	38	48	2	X
MW-76	W76M1A	04/14/2005	DEMO 1	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	13		UG/L	58	68	2	X
MW-86	W86SSA	03/31/2005	CIA	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	3.1		UG/L	1	11	2	X
MW-346	MW-346M3-	05/18/2005	J-1 RANGE	E314.0	PERCHLORATE	8.5		UG/L	60	70	4	X
MW-76	W76M2A	04/13/2005	DEMO 1	E314.0	PERCHLORATE	25	J	UG/L	38	48	4	X

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BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET  
 BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET  
 DW LIMIT = EITHER THE MCL OR LOWEST HEALTH ADVISORY CONCENTRATION (CHILD, ADULT OR LIFETIME)  
 >DW LIMIT = EQUALS OR EXCEEDS EITHER THE MCL OR LOWEST HEALTH ADVISORY CONCENTRATION (CHILD, ADULT, OR LIFETIME)  
 J = ESTIMATED DETECT  
 AOC = Area of Concern  
 CIA = Central Impact Area

**TABLE 4  
 VALIDATED DETECTS BELOW MCLs OR HEALTH ADVISORY  
 LIMITS NOT PREVIOUSLY DETECTED  
 INTERIM MONTHLY  
 DATA RECEIVED 05/27/05-06/10/05**

WELL/LOCID	SAMPLE ID	SAMPLED	AOC	METHOD	ANALYTE	CONC.	FLAG	UNITS	BWTS	BWTE	DW LIMIT	>DW LIMIT
MW-346M3	MW-346M3-	05/18/2005	J-1 RANGE	SW8330	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	0.47		UG/L	60	70	2	

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BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET  
 BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET  
 DW LIMIT = EITHER THE MCL OR LOWEST HEALTH ADVISORY CONCENTRATION (CHILD, ADULT OR LIFETIME)  
 >DW LIMIT = EQUALS OR EXCEEDS EITHER THE MCL OR LOWEST HEALTH ADVISORY CONCENTRATION (CHILD, ADULT, OR LIFETIME)  
 J = ESTIMATED DETECT  
 AOC = Area of Concern  
 CIA = Central Impact Area

**TABLE 5  
DETECTED COMPOUNDS-UNVALIDATED  
INTERIM MONTHLY FOR 06/01/05 - 06/10/05**

SAMPLE ID	LOCID OR WELL	SAMPLED	SAMP TYPE	AOC	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
W258M1A	MW-258	06/08/2005	GROUNDWATER	DEMO 1	109	119	64.1	74.1	E314.0	PERCHLORATE	
W258M2A	MW-258	06/08/2005	GROUNDWATER	DEMO 1	87	92	42.2	47.2	E314.0	PERCHLORATE	
W258M3A	MW-258	06/08/2005	GROUNDWATER	DEMO 1	77	82	32.25	37.25	E314.0	PERCHLORATE	
W258M3D	MW-258	06/08/2005	GROUNDWATER	DEMO 1	77	82	32.25	37.25	E314.0	PERCHLORATE	
FPR-INF-28A	FPR-INF	05/24/2005	PROCESS WATER		0	0			8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
FPR-INF-28A	FPR-INF	05/24/2005	PROCESS WATER		0	0			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
FPR-INF-28A	FPR-INF	05/24/2005	PROCESS WATER		0	0			E314.0	PERCHLORATE	
FPR-MID-1A-28A	FPR-MID-1	05/24/2005	PROCESS WATER		0	0			E314.0	PERCHLORATE	
FPR-MID-1A-28D	FPR-MID-1	05/24/2005	PROCESS WATER		0	0			E314.0	PERCHLORATE	
FPR-MID-1B-28A	FPR-MID-1	05/24/2005	PROCESS WATER		0	0			E314.0	PERCHLORATE	
FPR-MID-1C-28A	FPR-MID-1	05/24/2005	PROCESS WATER		0	0			E314.0	PERCHLORATE	
PR-INF-30A	PR-INF	05/26/2005	PROCESS WATER		0	0			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
PR-INF-30A	PR-INF	05/26/2005	PROCESS WATER		0	0			E314.0	PERCHLORATE	
PR-MID-1-30A	PR-MID-1	05/26/2005	PROCESS WATER		0	0			E314.0	PERCHLORATE	

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES RECEIVED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.

SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BELOW GROUND SURFACE

SED = SAMPLE COLLECTION END DEPTH IN FEET BELOW GROUND SURFACE

BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET

BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET

PDA/YES = Photo Diode Array, Detect Confirmed

PDA/NO = Photo Diode Array, Detect Not Confirmed

AOC = Area of Concern

CIA = Central Impact Area

+ = Interference in sample