

**WEEKLY PROGRESS UPDATE
FOR JUNE 2 – JUNE 6, 2003**

**EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019, 1-2000-0014,
& BOURNE-BWSC 4-15031**

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

The following summary of progress is for the period from June 2 through June 6, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of June 6 is summarized in Table 1.

Table 1. Drilling progress as of June 6, 2003				
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
Well 272	Demo Area 1 Injection Well (IW-D1-2)	110	15	
MW-276	Bourne Area (BP-3)	360	177	
MW-277	Northwest Corner (NWP-4)	140	34	
bgs = below ground surface bwt = below water table				

Continued drilling of Well 272 (IW-D1-2) and MW-276 (BP-3) and commenced drilling of MW-277 (NWP-4). Well development continued for newly installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from Well 272, MW-276, and MW-277. Groundwater samples were collected from Bourne water supply and monitoring wells, recently installed wells, from Snake Pond drive points, and as part of the April Long-Term Groundwater Monitoring Plan. Soil samples were collected from the spoils piles of newly installed wells. Supplemental soil sampling was conducted at BIP craters.

2. SUMMARY OF DATA RECEIVED

Rush data are summarized in Table 3. These data are for analyses that are performed on a fast turn around time, typically 1-5 days. Explosive analyses for monitoring wells, and 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 3 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 3. 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 3, 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 3 includes the following detections:

Table 3 includes detections from the following areas:

Bourne Area

- Groundwater samples from 97-2 had a detection of perchlorate. This is the first perchlorate detection in this well since October 2002.
- Groundwater samples from 97-5 had a detection of perchlorate. The result were similar to the previous sampling rounds.

Northwest Corner

- Groundwater samples from RSNW03 had a detection of perchlorate. The results were similar to the previous sampling round.
- Groundwater samples from RSNW06 had a detection of perchlorate and RDX. This is the first sampling event at this well.

DELIVERABLES SUBMITTED

MSP3 Ammunitions Supply Point Final Letter Report	06/03/2003
Weekly Progress Update for May 26 – May 30, 2003	06/06/2003
Monthly Progress Report for May 2003	06/06/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of June 9 include complete drilling of injection well IW-D1-2 in Demo Area 1, BP-3, and NWP-4. Groundwater sampling at Bourne water supply and monitoring wells, recently installed wells, and as part of the April Long-Term Groundwater Monitoring Plan will continue.

4. SUMMARY OF ACTIVITIES FOR DEMO AREA 1

Pumping and treating groundwater near the toe of the Demo Area 1 plume and at Frank Perkins Road has been selected as an Interim Action to address the Demo Area 1 Groundwater Operable Unit. Efforts to resolve EPA and DEP comments on the Draft RRA/RAM Plan for the Groundwater Operable Unit are ongoing. Responses to EPA and MADEP comments on the Soil RRA/RAM Plan are being developed. Installation at Well 271 is on hold until comments are received from the agencies. Drilling of Injection Well 272 (IW-D1-2) continued.

**TABLE 2
SAMPLING PROGRESS
06/01/2003 - 06/07/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HDGTRB200027	GTR.B.2.00027	06/05/2003	CRATER GRID	0	0.16		
HDGTRB200027	GTR.B.2.00027	06/05/2003	CRATER GRID	0	0.16		
HDGTRB200027	GTR.B.2.00027	06/05/2003	CRATER GRID	0	0.16		
HDGTRB200027	GTR.B.2.00027	06/05/2003	CRATER GRID	0	0.16		
HDGTRB200027	GTR.B.2.00027	06/05/2003	CRATER GRID	0	0.16		
HDGTRB200027	GTR.B.2.00027	06/05/2003	CRATER GRID	0	0.16		
HDGTRB200027	GTR.B.2.00027	06/05/2003	CRATER GRID	0	0.16		
HDGTRB200027	GTR.B.2.00027	06/05/2003	CRATER GRID	0	0.16		
HDGTRB200027	GTR.B.2.00027	06/05/2003	CRATER GRID	0	0.16		
58MW0018A-E	FIELDQC	06/02/2003	FIELDQC	0	0		
G272DAE	FIELDQC	06/02/2003	FIELDQC	0	0		
G276DHT	FIELDQC	06/03/2003	FIELDQC	0	0		
G276DJE	FIELDQC	06/03/2003	FIELDQC	0	0		
G276DKT	FIELDQC	06/04/2003	FIELDQC	0	0		
G276DNT	FIELDQC	06/05/2003	FIELDQC	0	0		
G276DOE	FIELDQC	06/05/2003	FIELDQC	0	0		
G276DPE	FIELDQC	06/05/2003	FIELDQC	0	0		
G276DRT	FIELDQC	06/06/2003	FIELDQC	0	0		
G277DCE	FIELDQC	06/06/2003	FIELDQC	0	0		
HDGTRB200027	FIELDQC	06/05/2003	FIELDQC	0	0		
M-3D-E	FIELDQC	06/05/2003	FIELDQC	0	0		
TW1-88B-E	FIELDQC	06/03/2003	FIELDQC	0	0		
W193SSE	FIELDQC	06/05/2003	FIELDQC	0	0		
W198M2E	FIELDQC	06/04/2003	FIELDQC	0	0		
W245M1T	FIELDQC	06/02/2003	FIELDQC	0	0		
4036000-01G-A	4036000-01G	06/03/2003	GROUNDWATER	38	69.8	6	12
4036000-03G-A	4036000-03G	06/03/2003	GROUNDWATER	50	60	6	12
4036000-04G-A	4036000-04G	06/03/2003	GROUNDWATER	54.6	64.6	6	12
4036000-06G-A	4036000-06G	06/03/2003	GROUNDWATER	108	128	6	12
58MW0018A-A	58MW0018A	06/02/2003	GROUNDWATER	202.7	211.7	60.85	69.85
58MW0018A-A-	58MW0018A	06/02/2003	GROUNDWATER	202.7	211.7	60.85	69.85
58MW0018B-A	58MW0018B	06/02/2003	GROUNDWATER	175.9	185.58	34.55	44.55
58MW0018B-A-	58MW0018B	06/02/2003	GROUNDWATER	175.9	185.58	34.55	44.55
58MW0018C-A	58MW0018C	06/02/2003	GROUNDWATER	149.92	159.6	0	10

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, 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

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SAMPLING PROGRESS
06/01/2003 - 06/07/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
LRMW0003-A	LRMW0003	06/05/2003	GROUNDWATER	95	105	69.68	94.68
M-3B-A	M-3	06/05/2003	GROUNDWATER	65	65	6.8	6.8
M-3C-A	M-3	06/05/2003	GROUNDWATER	75	75	16.8	16.8
M-3D-A	M-3	06/05/2003	GROUNDWATER	85	85	26.8	26.8
M-6B-A	M-6	06/05/2003	GROUNDWATER	59	59	7.3	7.3
M-6C-A	M-6	06/05/2003	GROUNDWATER	69	69	17.3	17.3
M-6D-A	M-6	06/05/2003	GROUNDWATER	79	79	27.3	27.3
M-6D-D	M-6	06/05/2003	GROUNDWATER	79	79	27.3	27.3
TW1-88B-A	1-88	06/03/2003	GROUNDWATER	105.5	105.5	69.6	69.6
W02-07M1A	02-07	06/04/2003	GROUNDWATER	135	145	101.14	111.14
W02-07M2A	02-07	06/04/2003	GROUNDWATER	107	117	72.86	82.86
W02-07M3A	02-07	06/04/2003	GROUNDWATER	47	57	13	23
W02-12M1A	02-12	06/04/2003	GROUNDWATER	109	119	58.35	68.35
W02-12M2A	02-12	06/04/2003	GROUNDWATER	94	104	43.21	53.21
W02-12M3A	02-12	06/04/2003	GROUNDWATER	79	89	28.22	38.22
W02-13M1A	02-13	06/03/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	06/03/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	06/03/2003	GROUNDWATER	68	78	28.3	38.3
W05DDA	MW-05	06/02/2003	GROUNDWATER	335	340	223	228
W05M1A	MW-05	06/06/2003	GROUNDWATER	210	215	98	103
W05M2A	MW-05	06/06/2003	GROUNDWATER	170	175	58	63
W100M1A	MW-100	06/05/2003	GROUNDWATER	179	189	45	55
W100M2A	MW-100	06/06/2003	GROUNDWATER	164	174	30	40
W108M1A	MW-108	06/04/2003	GROUNDWATER	297	307	133	143
W108M2A	MW-108	06/03/2003	GROUNDWATER	282	292	118	128
W108M3A	MW-108	06/03/2003	GROUNDWATER	262	272	98	108
W108M4A	MW-108	06/03/2003	GROUNDWATER	240	250	76	86
W108M4A-QA	MW-108	06/03/2003	GROUNDWATER	240	250	76	86
W143M1A	MW-143	06/02/2003	GROUNDWATER	144	154	114	124
W143M1A-QA	MW-143	06/02/2003	GROUNDWATER	144	154	114	124
W143M2A	MW-143	06/02/2003	GROUNDWATER	117	122	87	92
W143M2A-QA	MW-143	06/02/2003	GROUNDWATER	117	122	87	92
W143M3A	MW-143	06/04/2003	GROUNDWATER	107	112	77	82
W143M3A-QA	MW-143	06/04/2003	GROUNDWATER	107	112	77	82

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
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SAMPLING PROGRESS
06/01/2003 - 06/07/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W164M2A	MW-164	06/06/2003	GROUNDWATER	157	167	49	59
W168M1A	MW-168	06/06/2003	GROUNDWATER	256	266	174	184
W183M1A	MW-183	06/04/2003	GROUNDWATER	286	296	103.9	113.9
W183M2A	MW-183	06/04/2003	GROUNDWATER	270	280	87.9	97.9
W183M2D	MW-183	06/04/2003	GROUNDWATER	270	280	87.9	97.9
W193M1A	MW-193	06/05/2003	GROUNDWATER	57	62	23.8	28.8
W193M1A-QA	MW-193	06/05/2003	GROUNDWATER	57	62	23.8	28.8
W193SSA	MW-193	06/05/2003	GROUNDWATER	31	36	0	5
W193SSA-QA	MW-193	06/05/2003	GROUNDWATER	31	36	0	5
W194M1A	MW-194	06/05/2003	GROUNDWATER	85	90	39.1	44.1
W198M2A	MW-198	06/04/2003	GROUNDWATER	120	125	98.4	103.4
W198M2A-QA	MW-198	06/04/2003	GROUNDWATER	120	125	98.4	103.4
W198M3A	MW-198	06/04/2003	GROUNDWATER	100	105	78.5	83.5
W198M3A-QA	MW-198	06/04/2003	GROUNDWATER	100	105	78.5	83.5
W198M4A	MW-198	06/04/2003	GROUNDWATER	70	75	48.4	53.4
W198M4A-QA	MW-198	06/04/2003	GROUNDWATER	70	75	48.4	53.4
W200M1A	MW-200	06/03/2003	GROUNDWATER	294	304	89.8	99.8
W201M1A	MW-201	06/03/2003	GROUNDWATER	306	316	106.9	116.9
W201M1A-QA	MW-201	06/03/2003	GROUNDWATER	306	316	106.9	116.9
W201M2A	MW-201	06/03/2003	GROUNDWATER	286	296	86.9	96.9
W201M2A-QA	MW-201	06/03/2003	GROUNDWATER	286	296	86.9	96.9
W201M2D	MW-201	06/03/2003	GROUNDWATER	286	296	86.9	96.9
W201M3A	MW-201	06/03/2003	GROUNDWATER	266	276	66.5	76.5
W201M3A-QA	MW-201	06/03/2003	GROUNDWATER	266	276	66.5	76.5
W207M1A	MW-207	06/05/2003	GROUNDWATER	254	264	100.52	110.52
W207M2A	MW-207	06/05/2003	GROUNDWATER	224	234	79.33	89.33
W207M2D	MW-207	06/05/2003	GROUNDWATER	224	234	79.33	89.33
W219M1A	MW-219	06/05/2003	GROUNDWATER	357	367	178	188
W219M2A	MW-219	06/06/2003	GROUNDWATER	332	342	153.05	163.05
W219M3A	MW-219	06/05/2003	GROUNDWATER	315	325	135.8	145.8
W219M4A	MW-219	06/06/2003	GROUNDWATER	225	235	45.7	55.7
W245M1A	MW-245	06/02/2003	GROUNDWATER	244	254	120.04	130.04
W245SSA	MW-245	06/02/2003	GROUNDWATER	121.9	131.9	0	10
W84DDA	MW-84	06/04/2003	GROUNDWATER	190	200	153	163

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SAMPLING PROGRESS
06/01/2003 - 06/07/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W84M1A	MW-84	06/04/2003	GROUNDWATER	140	150	103	113
W84M1D	MW-84	06/04/2003	GROUNDWATER	140	150	103	113
W84M2A	MW-84	06/04/2003	GROUNDWATER	104	114	67	77
W84M3A	MW-84	06/04/2003	GROUNDWATER	79	89	42	52
W84SSA	MW-84	06/04/2003	GROUNDWATER	54	64	17	27
W90M1A	MW-90	06/02/2003	GROUNDWATER	145	155	27	37
W90M1A-QA	MW-90	06/02/2003	GROUNDWATER	145	155	27	37
W90SSA	MW-90	06/02/2003	GROUNDWATER	118	128	0	10
W90SSA-QA	MW-90	06/02/2003	GROUNDWATER	118	128	0	10
W99M1A	MW-99	06/02/2003	GROUNDWATER	195	205	60	70
W99M1A-QA	MW-99	06/02/2003	GROUNDWATER	195	205	60	70
W99SSA	MW-99	06/02/2003	GROUNDWATER	133	143	0	10
W99SSA-QA	MW-99	06/02/2003	GROUNDWATER	133	143	0	10
WS-4-A	WS-4	06/05/2003	GROUNDWATER	200	220	140	160
WS-4AS-A	WS-4A	06/05/2003	GROUNDWATER	155	165	85.5	95.5
DW060303-NV	GAC WATER	06/03/2003	IDW				
DW060603B-NV	GAC WATER	06/06/2003	IDW				
DW060603-NV	GAC WATER	06/06/2003	IDW				
SC26401	SOIL CUTTING	06/02/2003	IDW				
SC26501	SOIL CUTTING	06/03/2003	IDW				
SC26601	SOIL CUTTING	06/02/2003	IDW				
SC26701	SOIL CUTTING	06/02/2003	IDW				
SC26801	SOIL CUTTING	06/02/2003	IDW				
SC26901	SOIL CUTTING	06/02/2003	IDW				
G272DAA	MW-272	06/02/2003	PROFILE	105	105	10.5	10.5
G272DAA	MW-276	06/02/2003	PROFILE	105	105	10.5	10.5
G276DEA	MW-276	06/02/2003	PROFILE	230	230	46.65	46.65
G276DFA	MW-276	06/02/2003	PROFILE	240	240	56.65	56.65
G276DGA	MW-276	06/02/2003	PROFILE	250	250	66.65	66.65
G276DHA	MW-276	06/02/2003	PROFILE	260	260	76.65	76.65
G276DJA	MW-276	06/03/2003	PROFILE	280	280	96.65	96.65
G276DKA	MW-276	06/03/2003	PROFILE	290	290	106.65	106.65
G276DLA	MW-276	06/04/2003	PROFILE	300	300	116.65	116.65
G276DMA	MW-276	06/04/2003	PROFILE	310	310	126.65	126.65

Profiling methods include: Volatiles and Explosives
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SAMPLING PROGRESS
06/01/2003 - 06/07/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
G276DNA	MW-276	06/05/2003	PROFILE	320	320	136.65	136.65
G276DOA	MW-276	06/05/2003	PROFILE	330	330	146.65	146.65
G276DPA	MW-276	06/05/2003	PROFILE	340	340	156.65	156.65
G276DQA	MW-276	06/05/2003	PROFILE	350	350	166.65	166.65
G276DRA	MW-276	06/06/2003	PROFILE	360	360	176.65	176.65
G277DAA	MW-277	06/06/2003	PROFILE	110	110	3.9	3.9
G277DBA	MW-277	06/06/2003	PROFILE	120	120	13.9	13.9
G277DCA	MW-277	06/06/2003	PROFILE	130	130	23.9	23.9

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**TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 05/09/03 - 06/07/03**

OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
RSNW03-A	RSNW03	05/30/2003	GROUNDWATER					E314.0	PERCHLORATE	
RSNW06-A	RSNW06	05/30/2003	GROUNDWATER	0	0			E314.0	PERCHLORATE	
RSNW06-A	RSNW06	05/30/2003	GROUNDWATER	0	0			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
XXM972-A	97-2	05/27/2003	GROUNDWATER	75	85	53	63	E314.0	PERCHLORATE	
XXM975-A	97-5	05/28/2003	GROUNDWATER	84	94	76	86	E314.0	PERCHLORATE	

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED 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

* = Interference in sample

+ = PDAs are not good matches