

**WEEKLY PROGRESS UPDATE
FOR AUGUST 18 – AUGUST 22, 2003**

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 August 18 through August 22, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of August 22 is summarized in Table 1.

Table 1. Drilling progress as of August 22, 2003				
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-283	Northwest Corner (NWP-5)	50	40	
MW-284	Northwest Corner (NWP-7)	147	123	
bgs = below ground surface bwt = below water table				

Completed drilling of MW-284 (NWP-7) and continued drilling of MW-283 (NWP-5). Well development continued for recently installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-283 and MW-284. Groundwater samples were collected from Bourne water supply and monitoring wells, well 4036011, recently installed wells, residential wells, and as part of the July Quarterly round of the Draft 2003 Long-Term Groundwater Monitoring Plan. Surface water samples were collected near a public beach, a private beach, and near the spit at Snake Pond.

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. 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 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 97-2C; 02-01M2; 02-02M1; 02-03M2; 02-09 M2 and duplicate; 02-13M1; and MW-213M2, M3 had detections of perchlorate. The results were similar to the previous sampling rounds.

Demo Area 2

- Groundwater samples from MW-259M1 and MW-262M1 and duplicate had detections of RDX and HMX that were confirmed by PDA spectra. The RDX results were similar to the previous sampling rounds. These are the first detections of HMX in these wells.

Northwest Corner

- Profile samples from MW-284 (NWP-7) had detections of perchlorate and RDX. Perchlorate was detected in three intervals, between 16 and 36 feet below the water table (ft bwt). RDX was detected and confirmed by PDA spectra, but with interference, in four intervals, at 76 ft, 96 ft and 116 ft below the water table. Well screens were set at the depth (21 to 31 ft bwt) corresponding to the midpoint (and highest concentration) of the perchlorate detections and at the depth (91 to 101 ft bwt) corresponding to the midpoint (and highest concentration) of the RDX detections.

DELIVERABLES SUBMITTED

Weekly Progress Update for August 11 – August 15, 2003
Revised J-1 Supplemental Soil Workplan

08/20/2003
08/21/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of August 25 include and complete well installation at NWP-7 and complete drilling at NWP-5. Groundwater sampling at Bourne water supply and monitoring wells and recently installed wells will continue.

4. SUMMARY OF ACTIVITIES FOR DEMO AREA 1

The Groundwater Report Addendum for the Demo 1 Groundwater Operable Unit was submitted to EPA and DEP. Modeling activities in support of the Feasibility Study (FS) are currently underway. A Revised Groundwater RRA Plan is under review by EPA and DEP. Geophysical

anomaly excavation and removal continues. The Response to Comments Letter (RCL) was submitted for the Draft Soil RRA Plan and is awaiting a Comment Resolution Meeting (CRM).

**TABLE 2
SAMPLING PROGRESS
08/17/2003 - 08/23/2003**

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
4036000-01G-A	4036000-01G	08/18/2003	GROUNDWATER	38	69.8	6	12
4036000-06G-A	4036000-06G	08/18/2003	GROUNDWATER	108	128	6	12
4036011-A	4036011	08/22/2003	GROUNDWATER	0	0		
97-2C-A	97-2C	08/18/2003	GROUNDWATER	132	132	68	68
97-2D-A	97-2D	08/18/2003	GROUNDWATER	115.4	115.4	82.9	82.9
97-2D-D	97-2D	08/18/2003	GROUNDWATER	115.4	115.4	82.9	82.9
PPAWSPW-1-A	PPAWSPW-1	08/19/2003	GROUNDWATER	430	450	158	178
PPAWSPW-1-A-	PPAWSPW-1	08/19/2003	GROUNDWATER	430	450	158	178
PPAWSPW-2-A	PPAWSPW-2	08/19/2003	GROUNDWATER	336	356	85	105
RSNW03-A	RSNW03	08/22/2003	GROUNDWATER				
RSNW03-D	RSNW03	08/22/2003	GROUNDWATER				
TW00-1-A	00-1	08/21/2003	GROUNDWATER	64	70	52.1	58.1
TW00-2D-A	00-2	08/20/2003	GROUNDWATER	71	77	43.95	49.95
TW00-2S-A	00-2	08/20/2003	GROUNDWATER	29	35	1.17	7.17
TW00-2S-D	00-2	08/20/2003	GROUNDWATER	29	35	1.17	7.17
TW01-1-A	01-1	08/20/2003	GROUNDWATER	62	67	55.21	60.21
TW1-88A-A	1-88	08/21/2003	GROUNDWATER	102.9	102.9	67.4	67.4
TW1-88A-D	1-88	08/21/2003	GROUNDWATER	102.9	102.9	67.4	67.4
W02-05M1A	02-05	08/19/2003	GROUNDWATER	110	120	81.44	91.44
W02-05M2A	02-05	08/19/2003	GROUNDWATER	92	102	63.41	73.41
W02-05M3A	02-05	08/19/2003	GROUNDWATER	70	80	41.37	51.37
W02-10M3A	02-10	08/18/2003	GROUNDWATER	85	95	43.65	53.65
W02-13M1A	02-13	08/18/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	08/18/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M2D	02-13	08/18/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	08/19/2003	GROUNDWATER	68	78	28.3	38.3
W02-15M1A	02-15	08/19/2003	GROUNDWATER	125	135	75.63	85.63
W02-15M1D	02-15	08/19/2003	GROUNDWATER	125	135	75.63	85.63
W02-15M2A	02-15	08/19/2003	GROUNDWATER	101	111	51.5	61.5
W02-15M3A	02-15	08/19/2003	GROUNDWATER	81	91	31.4	41.4
W249M1A	MW-249	08/22/2003	GROUNDWATER	243	253	101.95	111.95
W249M2A	MW-249	08/22/2003	GROUNDWATER	174	184	32.9	42.9
W253DDA	MW-253	08/20/2003	GROUNDWATER	305	315	176.83	186.83
W253M1A	MW-253	08/20/2003	GROUNDWATER	265	275	136.72	146.72
W253SSA	MW-253	08/20/2003	GROUNDWATER	127	137	0	10
W264M1A	MW-264	08/18/2003	GROUNDWATER	192	202	160.94	170.94
W264M2A	MW-264	08/19/2003	GROUNDWATER	136	146	105	115
XXM971-A	97-1	08/21/2003	GROUNDWATER	83	93	62	72
XXM972-A	97-2	08/21/2003	GROUNDWATER	75	85	53	63
XXM973-A	97-3	08/22/2003	GROUNDWATER	75	85	36	46

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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08/17/2003 - 08/23/2003**

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
XXM975-A	97-5	08/22/2003	GROUNDWATER	84	94	76	86
G283DAA	MW-283	08/18/2003	PROFILE	20	20	9.7	9.7
G283DBA	MW-283	08/18/2003	PROFILE	30	30	19.7	19.7
G283DCA	MW-283	08/22/2003	PROFILE	40	40	29.7	29.7
G283DCA	MW-283	08/22/2003	PROFILE	40	40	29.7	29.7
G283DDA	MW-283	08/22/2003	PROFILE	46	46	35.7	35.7
G283DDA	MW-283	08/22/2003	PROFILE	46	46	35.7	35.7
G283DEA	MW-283	08/22/2003	PROFILE	50	50	39.7	39.7
G283DEA	MW-283	08/22/2003	PROFILE	50	50	39.7	39.7
G284DBA	MW-284	08/18/2003	PROFILE	40	40	16.05	16.05
G284DCA	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05
G284DCD	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05
G284DDA	MW-284	08/18/2003	PROFILE	60	60	36.05	36.05
G284DEA	MW-284	08/18/2003	PROFILE	70	70	46.05	46.05
G284DFA	MW-284	08/19/2003	PROFILE	80	80	56.05	56.05
G284DGA	MW-284	08/19/2003	PROFILE	90	90	66.05	66.05
G284DHA	MW-284	08/19/2003	PROFILE	100	100	76.05	76.05
G284DIA	MW-284	08/19/2003	PROFILE	110	110	86.05	86.05
G284DJA	MW-284	08/19/2003	PROFILE	120	120	96.05	96.05
G284DJD	MW-284	08/19/2003	PROFILE	120	120	96.05	96.05
G284DKA	MW-284	08/19/2003	PROFILE	130	130	106.05	106.05
G284DLA	MW-284	08/19/2003	PROFILE	140	140	116.05	116.05
G284DMA	MW-284	08/19/2003	PROFILE	146.5	146.5	126.05	126.05
LKSNK0005AAA	LKSNK0005	08/19/2003	SURFACE WATER				
LKSNK0006AAA	LKSNK0006	08/19/2003	SURFACE WATER				
LKSNK0007AAA	LKSNK0007	08/19/2003	SURFACE WATER				

Profiling methods include: Volatiles and Explosives
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**TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 07/25/03 - 08/23/03**

SAMPLE ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
97-2C-A	97-2C	08/18/2003	GROUNDWATER	132	132	68	68	E314.0	PERCHLORATE	
W02-01M2D	02-01	08/14/2003	GROUNDWATER	83	93	30.9	40.9	E314.0	PERCHLORATE	
W02-02M1A	02-02	08/14/2003	GROUNDWATER	114.5	124.5	63.5	73.5	E314.0	PERCHLORATE	
W02-02M2A	02-02	08/14/2003	GROUNDWATER	94.5	104.5	42.65	52.65	E314.0	PERCHLORATE	
W02-03M2D	02-03	08/13/2003	GROUNDWATER	92	102	48.15	58.15	E314.0	PERCHLORATE	
W02-09M2A	02-09	08/13/2003	GROUNDWATER	59	69	50.3	60.3	E314.0	PERCHLORATE	
W02-09M2D	02-09	08/13/2003	GROUNDWATER	59	69	50.3	60.3	E314.0	PERCHLORATE	
W02-13M1A	02-13	08/18/2003	GROUNDWATER	98	108	58.33	68.33	E314.0	PERCHLORATE	
W213M2A	MW-213	08/15/2003	GROUNDWATER	89	99	41.15	51.15	E314.0	PERCHLORATE	
W213M3A	MW-213	08/15/2003	GROUNDWATER	77	82	29.38	34.38	E314.0	PERCHLORATE	
W259M1A	MW-259	08/13/2003	GROUNDWATER	189	199	7.62	17.62	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W259M1A	MW-259	08/13/2003	GROUNDWATER	189	199	7.62	17.62	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W262M1A	MW-262	08/12/2003	GROUNDWATER	226	236	7.02	17.02	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W262M1A	MW-262	08/12/2003	GROUNDWATER	226	236	7.02	17.02	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W262M1D	MW-262	08/12/2003	GROUNDWATER	226	236	7.02	17.02	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W262M1D	MW-262	08/12/2003	GROUNDWATER	226	236	7.02	17.02	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
G284DAA	MW-284	08/14/2003	PROFILE	30	30	6.05	6.05	8330N	NITROGLYCERIN	NO*
G284DBA	MW-284	08/18/2003	PROFILE	40	40	16.05	16.05	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G284DBA	MW-284	08/18/2003	PROFILE	40	40	16.05	16.05	8330N	PICRIC ACID	NO
G284DBA	MW-284	08/18/2003	PROFILE	40	40	16.05	16.05	8330N	NITROGLYCERIN	NO
G284DBA	MW-284	08/18/2003	PROFILE	40	40	16.05	16.05	8330N	2,6-DINITROTOLUENE	NO
G284DBA	MW-284	08/18/2003	PROFILE	40	40	16.05	16.05	E314.0	PERCHLORATE	
G284DCA	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05	8330N	2,6-DINITROTOLUENE	NO
G284DCA	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G284DCA	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G284DCA	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05	8330N	PICRIC ACID	NO
G284DCA	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05	8330N	NITROGLYCERIN	NO

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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

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SAMPLES COLLECTED 07/25/03 - 08/23/03**

SAMPLE ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
G284DCA	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05	E314.0	PERCHLORATE	
G284DCD	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05	8330N	NITROGLYCERIN	NO
G284DCD	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G284DCD	MW-284	08/18/2003	PROFILE	50	50	26.05	26.05	E314.0	PERCHLORATE	
G284DDA	MW-284	08/18/2003	PROFILE	60	60	36.05	36.05	8330N	NITROGLYCERIN	NO
G284DDA	MW-284	08/18/2003	PROFILE	60	60	36.05	36.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G284DDA	MW-284	08/18/2003	PROFILE	60	60	36.05	36.05	8330N	PICRIC ACID	NO
G284DDA	MW-284	08/18/2003	PROFILE	60	60	36.05	36.05	E314.0	PERCHLORATE	
G284DEA	MW-284	08/18/2003	PROFILE	70	70	46.05	46.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G284DEA	MW-284	08/18/2003	PROFILE	70	70	46.05	46.05	8330N	NITROGLYCERIN	NO
G284DFA	MW-284	08/19/2003	PROFILE	80	80	56.05	56.05	8330N	NITROGLYCERIN	NO
G284DFA	MW-284	08/19/2003	PROFILE	80	80	56.05	56.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G284DFA	MW-284	08/19/2003	PROFILE	80	80	56.05	56.05	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G284DFA	MW-284	08/19/2003	PROFILE	80	80	56.05	56.05	8330N	PENTAERYTHRITOL TETRANITRATE	NO
G284DFA	MW-284	08/19/2003	PROFILE	80	80	56.05	56.05	8330N	PICRIC ACID	NO
G284DGA	MW-284	08/19/2003	PROFILE	90	90	66.05	66.05	8330N	PICRIC ACID	NO
G284DGA	MW-284	08/19/2003	PROFILE	90	90	66.05	66.05	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G284DGA	MW-284	08/19/2003	PROFILE	90	90	66.05	66.05	8330N	NITROBENZENE	NO
G284DGA	MW-284	08/19/2003	PROFILE	90	90	66.05	66.05	8330N	NITROGLYCERIN	NO
G284DGA	MW-284	08/19/2003	PROFILE	90	90	66.05	66.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G284DGA	MW-284	08/19/2003	PROFILE	90	90	66.05	66.05	8330N	PENTAERYTHRITOL TETRANITRATE	NO
G284DHA	MW-284	08/19/2003	PROFILE	100	100	76.05	76.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES*
G284DIA	MW-284	08/19/2003	PROFILE	110	110	86.05	86.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G284DIA	MW-284	08/19/2003	PROFILE	110	110	86.05	86.05	8330N	PICRIC ACID	NO
G284DIA	MW-284	08/19/2003	PROFILE	110	110	86.05	86.05	8330N	NITROGLYCERIN	NO
G284DJA	MW-284	08/19/2003	PROFILE	120	120	96.05	96.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES*
G284DJD	MW-284	08/19/2003	PROFILE	120	120	96.05	96.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES*

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SAMPLE ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
G284DKA	MW-284	08/19/2003	PROFILE	130	130	106.05	106.05	8330N	NITROGLYCERIN	NO
G284DKA	MW-284	08/19/2003	PROFILE	130	130	106.05	106.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G284DLA	MW-284	08/19/2003	PROFILE	140	140	116.05	116.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES*
G284DLA	MW-284	08/19/2003	PROFILE	140	140	116.05	116.05	8330N	NITROGLYCERIN	NO
G284DMA	MW-284	08/19/2003	PROFILE	146.5	146.5	126.05	126.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G284DMA	MW-284	08/19/2003	PROFILE	146.5	146.5	126.05	126.05	8330N	NITROGLYCERIN	NO

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