

**WEEKLY PROGRESS UPDATE
FOR NOVEMBER 10 – NOVEMBER 14, 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 November 10 through November 14, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of November 14 is summarized in Table 1.

Table 1. Drilling progress as of November 14, 2003				
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
EW-275	Demo Area 1 (EW-D1-2)	222	79	175-215
IW-271	Demo Area 1 (IW-D1-1)	330	297	
MW-295	J-3 Range (J3P-33)	190	93	
MW-296	J-2 Range (J2P-30)	210	91	
MW-297	Northwest Corner (NWP-10)	186	114	72-82; 92-102
bgs = below ground surface				
bwt = below water table				

Completed well installation of EW-275 (EW-D1-2) and MW-297 (NWP-10), completed redrilling of IW-271 (IW-D1-1), and commenced drilling of MW-295 (J3P-33) and MW-296 (J2P-30). 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-295 and MW-296. Groundwater samples were collected from Bourne water supply and monitoring wells, residential wells, and as part of the August round of the Draft 2003 Long-Term Groundwater Monitoring Plan. Soil samples were collected from grids in Old Mortar Position 1 and Mortar Position 4. A post-excavation sample was collected from a grid in Demo Area 1. Influent and effluent samples were collected from the FS-12 treatment system. An investigation-derived waste (IDW) sample was collected from the Granular Activated Carbon (GAC) treatment system.

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:

Western Boundary

- A groundwater sample from 02-13M2 had a detection of perchlorate. The result was similar to the previous sampling rounds.

Northwest Corner

- Groundwater samples from RSNW03 and RSNW06 had detections of perchlorate. The results were similar to the previous sampling rounds.

DELIVERABLES SUBMITTED

Draft Soil Treatment Plan	09/10/2003
Draft Thermal Treatability Study Plan	10/01/2003
Materials Disposition Plan —Investigative Derived Materials	11/03/2003
Materials Disposition Plan—OE and Range Residue	11/03/2003
Weekly Progress Update for November 3 – November 7, 2003	11/14/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of November 17 include complete well installation of MW-295 (J3P-33), complete drilling of EW-274 (EW-D1-1) and MW-296 (J2P-30), and commence drilling of MW-298 (NWP-11). Groundwater sampling of Bourne water supply and monitoring wells, recently installed wells, and as part of the August round of the Draft 2003 Long-Term Groundwater Monitoring Plan will continue. Demo Area 1 UXO anomaly removal and anomaly excavation at Gun Position GP-16 will continue.

4. SUMMARY OF ACTIVITIES FOR DEMO AREA 1

The Response to Comments for the Draft Groundwater Report Addendum for the Demo Area 1 Groundwater Operable Unit will be finalized, pending the receipt of DEP comments. The response to comments letter for the Groundwater RRA Plan was submitted on November 6, 2003 and a comment resolution meeting is scheduled for November 20, 2003. Installation of extraction and injection wells for the Groundwater RRA are ongoing. Installation of subsurface piping and well vaults for the Frank Perkins Road Extraction, Treatment and Recharge System will commence November 24, 2003. Modeling activities in support of the Feasibility Study are currently underway.

Geophysical anomaly excavation and removal within the Demo Area 1 depression continues. Responses to EPA and DEP comments on the Soil Treatment Plan are being prepared.

**TABLE 2
SAMPLING PROGRESS
11/09/2003 - 11/16/2003**

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
4036000-01G-A	4036000-01G	11/10/2003	GROUNDWATER	38	69.8	6	12
4036000-06G-A	4036000-06G	11/10/2003	GROUNDWATER	108	128	6	12
58MW0018A-A	58MW0018	11/14/2003	GROUNDWATER	202.7	211.7	60.85	69.85
58MW0018A-QA	58MW0018	11/14/2003	GROUNDWATER	202.7	211.7	60.85	69.85
90WT0003-A	90WT0003	11/12/2003	GROUNDWATER	91.5	101.5	0	10
90WT0006-A	90WT0006	11/12/2003	GROUNDWATER	98	108	95	105
95-14-A	95-14	11/14/2003	GROUNDWATER	102	112	90	100
95-6ED-A	95-6ED	11/14/2003	GROUNDWATER	145.65	145.7	101.48	101.48
OW-1-A	OW-1	11/13/2003	GROUNDWATER	126	136	0	10
OW-2-A	OW-2	11/13/2003	GROUNDWATER	175	185	48.78	58.78
OW-6-A	OW-6	11/13/2003	GROUNDWATER	175	185	46.8	56.8
RSNW01-A	RSNW01	11/12/2003	GROUNDWATER				
RSNW03-A	RSNW03	11/12/2003	GROUNDWATER				
RSNW06-A	RSNW06	11/12/2003	GROUNDWATER				
SMR-3-A	SMR-3	11/12/2003	GROUNDWATER	103	113	7	17
W01SSA	MW-01	11/14/2003	GROUNDWATER	114	124	0	10
W02-13M1A	02-13	11/10/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	11/10/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	11/10/2003	GROUNDWATER	68	78	28.3	38.3
W06SSA	MW-06	11/13/2003	GROUNDWATER	106	116	0	10
W06SSD	MW-06	11/13/2003	GROUNDWATER	106	116	0	10
W07M1A	MW-07	11/13/2003	GROUNDWATER	240	245	135	140
W09SSA	MW-09	11/14/2003	GROUNDWATER	113	123	0	10
W101M1A	MW-101	11/14/2003	GROUNDWATER	158	168	27	37
W101M1A-QA	MW101	11/14/2003	GROUNDWATER	158	168	27	37
W101SSA	MW-101	11/14/2003	GROUNDWATER	131	141	0	10
W101SSA-QA	MW101	11/14/2003	GROUNDWATER	131	141	0	10
W107M1A	MW-107	11/10/2003	GROUNDWATER	155	165	35	45
W107M1A-QA	MW-107	11/10/2003	GROUNDWATER	155	165	35	45
W107M2A	MW-107	11/10/2003	GROUNDWATER	125	135	5	15
W107M2A-QA	MW-107	11/10/2003	GROUNDWATER	125	135	5	15
W119SSA	MW-119	11/12/2003	GROUNDWATER	103	113	0	10
W130DDA	MW-130	11/10/2003	GROUNDWATER	320	330	217	227
W130SSA	MW-130	11/10/2003	GROUNDWATER	103	113	0	10
W147M1A	MW-147	11/12/2003	GROUNDWATER	167	177	94	104
W164M1A	MW-164	11/13/2003	GROUNDWATER	227	237	119	129
W164M1A-QA	MW-164	11/13/2003	GROUNDWATER	227	237	119	129
W164M2A	MW-164	11/13/2003	GROUNDWATER	157	167	49	59
W164M2A-QA	MW-164	11/13/2003	GROUNDWATER	157	167	49	59
W164M3A	MW-164	11/13/2003	GROUNDWATER	117	127	9	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

**TABLE 2
SAMPLING PROGRESS
11/09/2003 - 11/16/2003**

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W164M3A-QA	MW-164	11/13/2003	GROUNDWATER	117	127	9	19
W166M1A	MW-166	11/11/2003	GROUNDWATER	218	223	112	117
W166M2A	MW-166	11/11/2003	GROUNDWATER	150	160	44	54
W166M3A	MW-166	11/11/2003	GROUNDWATER	125	135	19	29
W168M1A	MW-168	11/13/2003	GROUNDWATER	256	266	174	184
W168M1A-QA	MW-168	11/13/2003	GROUNDWATER	256	266	174	184
W168M2A	MW-168	11/13/2003	GROUNDWATER	198	208	116	126
W168M2A-QA	MW-168	11/13/2003	GROUNDWATER	198	208	116	126
W168M3A	MW-168	11/13/2003	GROUNDWATER	103	113	21	31
W169M1A	MW-169	11/12/2003	GROUNDWATER	154	159	154	159
W169M1D	MW-169	11/12/2003	GROUNDWATER	154	159	154	159
W173M2A	MW-173	11/14/2003	GROUNDWATER	208	218	72.2	82.2
W173M3A	MW-173	11/14/2003	GROUNDWATER	188	198	52.2	62.2
W173M3D	MW-173	11/14/2003	GROUNDWATER	188	198	52.2	62.2
W181SSA	MW-181	11/12/2003	GROUNDWATER	32.25	42.25	0	10
W213M1A	MW-213	11/11/2003	GROUNDWATER	133	143	85.01	95.01
W213M2A	MW-213	11/11/2003	GROUNDWATER	89	99	41.15	51.15
W213M3A	MW-213	11/11/2003	GROUNDWATER	77	82	29.38	34.38
W213M3D	MW-213	11/11/2003	GROUNDWATER	77	82	29.38	34.38
W219M4A	MW-219	11/11/2003	GROUNDWATER	225	235	45.7	55.7
W34M1A	MW-34	11/12/2003	GROUNDWATER	151	161	73	83
W34M1A-QA	MW-34	11/12/2003	GROUNDWATER	151	161	73	83
W34M2A	MW-34	11/12/2003	GROUNDWATER	131	141	53	63
W34M2A-QA	MW-34	11/12/2003	GROUNDWATER	131	141	53	63
W34M3A	MW-34	11/12/2003	GROUNDWATER	111	121	33	43
W36M1A	MW-36	11/12/2003	GROUNDWATER	151	161	74	84
W36M2A	MW-36	11/12/2003	GROUNDWATER	131	141	54	64
W36SSA	MW-36	11/12/2003	GROUNDWATER	73	83	0	10
W36SSD	MW-36	11/12/2003	GROUNDWATER	73	83	0	10
W44M1A	MW-44	11/12/2003	GROUNDWATER	182	192	53	63
W44M2A	MW-44	11/12/2003	GROUNDWATER	142	152	13	23
W58SSA	MW-58	11/13/2003	GROUNDWATER	100	110	0	10
W59M1A	MW-59	11/13/2003	GROUNDWATER	165	170	32	38
W59M2A	MW-59	11/13/2003	GROUNDWATER	150	160	18	28
W59M2D	MW-59	11/13/2003	GROUNDWATER	150	160	18	28
W59SSA	MW-59	11/13/2003	GROUNDWATER	128	138	0	10
W68SSA	MW-68	11/11/2003	GROUNDWATER	84	94	0	10
W69SSA	MW-69	11/11/2003	GROUNDWATER	110	120	0	10
W72SSA	MW-72	11/14/2003	GROUNDWATER	106	116	0	10
W72SSD	MW-72	11/14/2003	GROUNDWATER	106	116	0	10

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SAMPLING PROGRESS
11/09/2003 - 11/16/2003**

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W86M1A	MW-86	11/14/2003	GROUNDWATER	208	218	66	76
W86M1A-QA	MW86	11/14/2003	GROUNDWATER	208	218	66	76
W86M2A	MW-86	11/14/2003	GROUNDWATER	158	168	16	26
W86M2A-QA	MW86	11/14/2003	GROUNDWATER	158	168	16	26
W86SSA	MW-86	11/14/2003	GROUNDWATER	143	153	1	11
W86SSA-QA	MW86	11/14/2003	GROUNDWATER	143	153	1	11
W91M1A	MW-91	11/14/2003	GROUNDWATER	170	180	45	55
W91M1A-QA	MW91	11/14/2003	GROUNDWATER	170	180	45	55
W91SSA	MW-91	11/14/2003	GROUNDWATER	124	134	0	10
W91SSA-QA	MW91	11/14/2003	GROUNDWATER	124	134	0	10
W96M1A	MW-96	11/13/2003	GROUNDWATER	206	216	70	80
W96M2A	MW-96	11/13/2003	GROUNDWATER	160	170	24	34
W96M2D	MW-96	11/13/2003	GROUNDWATER	160	170	24	34
W96SSA	MW-96	11/13/2003	GROUNDWATER	134	144	0	10
W98M1A	MW-98	11/12/2003	GROUNDWATER	164	174	26	36
W98SSA	MW-98	11/12/2003	GROUNDWATER	137	147	0	10
DW111303-NV	GACWATER	11/13/2003	IDW	0	0		
FS12TSEF-A	FS12TSEF	11/10/2003	PROCESS WATER	0	0		
FS12TSIN-A	FS12TSIN	11/10/2003	PROCESS WATER	0	0		
G295DAA	MW-295	11/12/2003	PROFILE	100	100	2.9	2.9
G295DAD	MW-295	11/12/2003	PROFILE	100	100	2.9	2.9
G295DBA	MW-295	11/13/2003	PROFILE	110	110	12.9	12.9
G295DCA	MW-295	11/13/2003	PROFILE	120	120	22.9	22.9
G295DDA	MW-295	11/13/2003	PROFILE	130	130	32.9	32.9
G295DEA	MW-295	11/13/2003	PROFILE	140	140	42.9	42.9
G295DFA	MW-295	11/13/2003	PROFILE	150	150	52.9	52.9
G295DFD	MW-295	11/13/2003	PROFILE	150	150	52.9	52.9
G295DGA	MW-295	11/13/2003	PROFILE	160	160	62.9	62.9
G295DHA	MW-295	11/14/2003	PROFILE	170	170	72.9	72.9
G295DIA	MW-295	11/14/2003	PROFILE	180	180	82.9	82.9
MW-296-01	MW-296	11/10/2003	PROFILE	130	130	11	11
MW-296-01	MW-296	11/10/2003	PROFILE	130	130	11	11
MW-296-02	MW-296	11/11/2003	PROFILE	140	140	21	21
MW-296-02	MW-296	11/11/2003	PROFILE	140	140	21	21
MW-296-03	MW-296	11/11/2003	PROFILE	150	150	31	31
MW-296-03	MW-296	11/11/2003	PROFILE	150	150	31	31
MW-296-03FD	MW-296	11/11/2003	PROFILE	150	150	41	41
MW-296-03FD	MW-296	11/11/2003	PROFILE	150	150	41	41
MW-296-04	MW-296	11/11/2003	PROFILE	160	160	51	51
MW-296-04	MW-296	11/11/2003	PROFILE	160	160	51	51

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SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
MW-296-05	MW-296	11/11/2003	PROFILE	170	170	61	61
MW-296-05	MW-296	11/11/2003	PROFILE	170	170	61	61
MW-296-06	MW-296	11/11/2003	PROFILE	180	180	71	71
MW-296-06	MW-296	11/11/2003	PROFILE	180	180	71	71
MW-296-07	MW-296	11/11/2003	PROFILE	190	190	81	81
MW-296-07	MW-296	11/11/2003	PROFILE	190	190	81	81
MW-296-08	MW-296	11/11/2003	PROFILE	200	200	91	91
MW-296-08	MW-296	11/11/2003	PROFILE	200	200	91	91
MW-296-09	MW-296	11/11/2003	PROFILE	210	210	101	101
MW-296-09	MW-296	11/11/2003	PROFILE	210	210	101	101
B5	WP1-A	11/12/2003	SOIL GRAB	0	0.2		
HC71C1AAA	71C	11/11/2003	SOIL GRID	0	0.5		
HC71C1BAA	71C	11/11/2003	SOIL GRID	1.5	2		
HC71E1AAA	71E	11/11/2003	SOIL GRID	0	0.5		
HC71E1BAA	71E	11/11/2003	SOIL GRID	1.5	2		
HC71F1AAA	71F	11/11/2003	SOIL GRID	0	0.5		
HC71F1AAD	71F	11/11/2003	SOIL GRID	0	0.5		
HC71F1BAA	71F	11/11/2003	SOIL GRID	1.5	2		
HC75E1AAA	75E	11/10/2003	SOIL GRID	0	0.5		
HC75E1AAD	75E	11/10/2003	SOIL GRID	0	0.5		
HC75E1BAA	75E	11/10/2003	SOIL GRID	1.5	2		
HC75F1AAA	75F	11/10/2003	SOIL GRID	0	0.5		
HC75F1BAA	75F	11/10/2003	SOIL GRID	1.5	2		
HC75G1AAA	75G	11/10/2003	SOIL GRID	0	0.5		
HC75G1BAA	75G	11/10/2003	SOIL GRID	1.5	2		
HC75H1AAA	75H	11/10/2003	SOIL GRID	0	0.5		
HC75H1BAA	75H	11/10/2003	SOIL GRID	1.5	2		
HC75I1AAA	75I	11/10/2003	SOIL GRID	0	0.5		
HC75I1BAA	75I	11/10/2003	SOIL GRID	1.5	2		
HC75J1AAA	75J	11/11/2003	SOIL GRID	0	0.5		
HC75J1AAD	75J	11/11/2003	SOIL GRID	0	0.5		
HC75J1BAA	75J	11/11/2003	SOIL GRID	1.5	2		
HC75K1AAA	75K	11/11/2003	SOIL GRID	0	0.5		
HC75K1BAA	75K	11/11/2003	SOIL GRID	1.5	2		

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**TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 10/17/03 - 11/15/03**

SAMPLE ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
RSNW03-A	RSNW03	11/12/2003	GROUNDWATER					E314.0	PERCHLORATE	
RSNW06-A	RSNW06	11/12/2003	GROUNDWATER					E314.0	PERCHLORATE	
W02-13M2A	02-13	11/10/2003	GROUNDWATER	83	93	44.2	54.2	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