

**WEEKLY PROGRESS UPDATE
FOR DECEMBER 22 – DECEMBER 26, 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 December 22 through December 26, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of December 26 is summarized in Table 1.

Table 1. Drilling progress as of December 26, 2003				
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
IW-271	Demo Area 1 (IW-D1-1)	330	297	
IW-272	Demo Area 1 (IW-D1-2)	331	236	
MW-301	Northwest Corner (NWP-8ba)	190	92	
MW-302	J-2 Range (J2P-32)	310	201	
MW-303	J-1 Range (J1P-21)	321	218	
bgs = below ground surface bwt = below water table				

Drilling continued at MW-301 (NWP-8ba).

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-301. Groundwater samples were collected from Bourne water supply and monitoring wells, from recently installed wells, and as part of the December round of the Draft 2003 Long-Term Groundwater Monitoring Program. Lysimeters were installed and soil samples were collected from Target 42 in the Central Impact Area.

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

- Groundwater samples from 02-09M2 and duplicate and 97-5 had detections of perchlorate. The results were similar to previous sampling rounds.

Northwest Corner

- A groundwater sample from RSNW06 had a detection of RDX that was confirmed by PDA spectra. The result was similar to previous sampling rounds.
- Groundwater samples from MW-278M1, M2 and duplicate; and MW-283M1 had detections of perchlorate. The results were similar to previous sampling rounds.

Central Impact Area

- A groundwater sample from MW-249M3 had detections of TNT, 2A-DNT and 4A-DNT that were confirmed by PDA spectra. The results were similar to previous sampling rounds.

Southeast Ranges

- A groundwater sample from MW-263M2 had detections of RDX and 4A-DNT that were confirmed by PDA spectra. The results were similar to previous sampling rounds.

3. DELIVERABLES SUBMITTED

No deliverables submitted.

4. SCHEDULED ACTIONS

Scheduled actions for the week of December 29 include continue drilling of MW-301 (NWP-8ba). Groundwater sampling of Bourne water supply and monitoring wells and as part of the December round of the Draft 2003 Long-Term Groundwater Monitoring Plan will also continue. Soil sampling and lysimeter installation will be conducted at Target 42 for the Central Impact Area Focused Investigation.

5. SUMMARY OF ACTIVITIES FOR DEMO AREA 1

The response to comments letter addressing EPA and DEP comments on the Draft Groundwater Report Addendum will be submitted on December 31, 2003.

Installation of extraction and injection wells for the Groundwater RRA is ongoing. Installation of subsurface piping and well vaults for the Frank Perkins Road Extraction, Treatment and Recharge System continues. Hydrostatic testing of the water piping and asphalt paving of Frank Perkins Road were completed this week. Modeling activities in support of the Feasibility Study are ongoing.

Geophysical anomaly and soil excavation within the Demo Area 1 depression continues. Site preparation activities for the Thermal Treatment of excavated soils continues at the H Range just north of Demo Area 1.

**TABLE 2
SAMPLING PROGRESS
12/21/2003 - 12/27/2003**

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
4036000-01G-A	4036000-01G	12/22/2003	GROUNDWATER	38	69.8	6	12
4036000-06G-A	4036000-06G	12/22/2003	GROUNDWATER	108	128	6	12
MW-291M1-	MW-291M1	12/22/2003	GROUNDWATER	185.41	195.4	92	102
MW-291M2-	MW-291M2	12/22/2003	GROUNDWATER	125.29	135.3	32	42
MW-291M2-FD	MW-291M2	12/22/2003	GROUNDWATER	125.29	135.3	32	42
W02-13M1A	02-13	12/22/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	12/22/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	12/22/2003	GROUNDWATER	68	78	28.3	38.3
W154M1A	MW-154	12/23/2003	GROUNDWATER	187.5	192.5	91	96
W154SSA	MW-154	12/24/2003	GROUNDWATER	98	108	0	10
W155M2A	MW-155	12/23/2003	GROUNDWATER	45	55	20	30
W155M2D	MW-155	12/23/2003	GROUNDWATER	45	55	20	30
W178M1A	MW-178	12/24/2003	GROUNDWATER	257	267	117	127
W178M2A	MW-178	12/24/2003	GROUNDWATER	167	177	27	37
W263M1A	MW-263	12/22/2003	GROUNDWATER	190	200	83.63	93.63
W263M2A	MW-263	12/22/2003	GROUNDWATER	115	125	8.66	18.66
W297M1A	MW-297	12/22/2003	GROUNDWATER	92	102	20.28	30.28
W297SSA	MW-297	12/23/2003	GROUNDWATER	72	82	0.32	10.32
W29SSA	MW-29	12/22/2003	GROUNDWATER	98.5	108.5	0	10
G301DGA	MW-301	12/22/2003	PROFILE	160	160	61.8	61.8
G301DHA	MW-301	12/22/2003	PROFILE	170	170	71.8	71.8
G301DHD	MW-301	12/22/2003	PROFILE	170	170	71.8	71.8
G301DIA	MW-301	12/22/2003	PROFILE	180	180	81.8	81.8
G301DJA	MW-301	12/23/2003	PROFILE	190	190	91.8	91.8
HD125LA1AAA	125L	12/22/2003	SOIL GRID	3	3		
HD125LA1BAA	125L	12/23/2003	SOIL GRID	5	5		
HD125LA1CAA	125L	12/23/2003	SOIL GRID	10	10		

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 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 11/28/03 - 12/27/03**

SAMPLE ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
RSNW06-D	RSNW06	12/16/2003	GROUNDWATER					8330N	RDX	YES
W02-09M2A	02-09	12/17/2003	GROUNDWATER	59	69	50.3	60.3	E314.0	PERCHLORATE	
W02-09M2D	02-09	12/17/2003	GROUNDWATER	59	69	50.3	60.3	E314.0	PERCHLORATE	
W249M3A	MW-249	12/12/2003	GROUNDWATER	154	164	12.9	22.9	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
W249M3A	MW-249	12/12/2003	GROUNDWATER	154	164	12.9	22.9	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
W249M3A	MW-249	12/12/2003	GROUNDWATER	154	164	12.9	22.9	8330N	2,4,6-TRINITROTOLUENE	YES
W263M2A	MW-263	12/22/2003	GROUNDWATER	115	125	8.66	18.66	8330N	RDX	YES
W263M2A	MW-263	12/22/2003	GROUNDWATER	115	125	8.66	18.66	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
W278M1A	MW-278	12/03/2003	GROUNDWATER	113	123	25.76	35.76	E314.0	PERCHLORATE	
W278M2A	MW-278	12/03/2003	GROUNDWATER	97	102	9.79	14.79	E314.0	PERCHLORATE	
W278M2D	MW-278	12/03/2003	GROUNDWATER	97	102	9.79	14.79	E314.0	PERCHLORATE	
W283M1A	MW-283	12/02/2003	GROUNDWATER	38	48	29.12	29.12	E314.0	PERCHLORATE	
XXM975-A	97-5	12/18/2003	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