

**WEEKLY PROGRESS UPDATE  
FOR DECEMBER 29, 2003 – JANUARY 2, 2004**

**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 29, 2003 through January 2, 2004.

**1. SUMMARY OF ACTIONS TAKEN**

Drilling progress as of January 2, 2004 is summarized in Table 1.

<b>Table 1. Drilling progress as of January 2, 2004</b>				
<b>Boring Number</b>	<b>Purpose of Boring/Well</b>	<b>Total Depth (ft bgs)</b>	<b>Saturated Depth (ft bwt)</b>	<b>Completed Well Screens (ft bgs)</b>
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				

No drilling activities occurred this week.

Samples collected during the reporting period are summarized in Table 2. Groundwater samples were collected from Bourne water supply and monitoring wells and as part of the December round of the Draft 2003 Long-Term Groundwater Monitoring Program. Lysimeters were installed at Target 42 and soil samples were collected from a transect at Target 42 in the Central Impact Area. Soil samples were also collected from grids along the western boundary.

**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 1-88B had a detection of perchlorate. The result was similar to previous sampling rounds.

#### Northwest Corner

- A groundwater sample from MW-277S had a detection of perchlorate. The result was similar to previous sampling rounds.
- Groundwater samples from MW-297S and M1 had detections of perchlorate. This is the first sampling event at this well. Perchlorate concentrations detected in the M1 screen were consistent with the profile results. A shallow profile sample was not collected at a depth that directly corresponds to the S screen.

### **3. DELIVERABLES SUBMITTED**

Weekly Progress Update for December 15 – December 19, 2003

01/02/2004

### **4. SCHEDULED ACTIONS**

Scheduled actions for the week of January 5 include continue well installation at IW-271 (IW-D1-1) and IW-272 (IW-D1-2), complete drilling of MW-301 (NWP-8ba), and commence drilling of MW-299 (NWP-12). 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.

### **5. SUMMARY OF ACTIVITIES FOR DEMO AREA 1**

The response to comments letter addressing EPA and DEP comments on the Draft Groundwater Report Addendum was submitted on December 31, 2003. A comment resolution meeting is scheduled for January 15, 2004. Modeling activities in support of the Feasibility Study are ongoing. A modeling meeting is tentatively scheduled with the Agencies to discuss the Demo Area 1 Feasibility Study modeling results on January 22, 2004.

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.

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 south of Demo Area 1.

**TABLE 2  
SAMPLING PROGRESS  
12/28/2003 - 1/03/2004**

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
4036000-01G-A	4036000-01G	12/29/2003	GROUNDWATER	38	69.8	6	12
4036000-03G-A	4036000-03G	12/29/2003	GROUNDWATER	50	60	6	12
4036000-04G-A	4036000-04G	12/29/2003	GROUNDWATER	54.6	64.6	6	12
4036000-06G-A	4036000-06G	12/29/2003	GROUNDWATER	108	128	6	12
TW1-88B-A	1-88	12/29/2003	GROUNDWATER	105.5	105.5	69.6	69.6
W02-12M1A	02-12	12/29/2003	GROUNDWATER	109	119	58.35	68.35
W02-12M2A	02-12	12/29/2003	GROUNDWATER	94	104	43.21	53.21
W02-12M3A	02-12	12/29/2003	GROUNDWATER	79	89	28.22	38.22
W02-13M1A	02-13	12/29/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M1D	02-13	12/29/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	12/29/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	12/30/2003	GROUNDWATER	68	78	28.3	38.3
W141M1A	MW-141	12/30/2003	GROUNDWATER	190	200	62	72
W141M2A	MW-141	12/30/2003	GROUNDWATER	162	172	34	44
HC125TA1AAA	125T	12/29/2003	SOIL GRID	0	0.25		
HC125TB1AAA	125T	12/29/2003	SOIL GRID	0	0.25		
HC125TC1AAA	125T	12/29/2003	SOIL GRID	0	0.25		
HC125TD1AAA	125T	12/29/2003	SOIL GRID	0	0.25		
HC125TE1AAA	125T	12/29/2003	SOIL GRID	0	0.25		
HC125TF1AAA	125T	12/29/2003	SOIL GRID	0	0.25		
HC125TG1AAA	125T	12/29/2003	SOIL GRID	0	0.25		
HC125TH1AAA	125T	12/30/2003	SOIL GRID	0	0.25		
HC125TI1AAA	125T	12/30/2003	SOIL GRID	0	0.25		
HC125TJ1AAA	125T	12/30/2003	SOIL GRID	0	0.25		
HC202A1AAA	202A	12/30/2003	SOIL GRID	0	0.5		
HC202A1BAA	202A	12/30/2003	SOIL GRID	1.5	2		
HC202B1AAA	202B	12/30/2003	SOIL GRID	0	0.5		
HC202B1BAA	202B	12/30/2003	SOIL GRID	1.5	2		

**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 12/05/03 - 1/03/04**

<b>SAMPLE ID</b>	<b>LOCID OR WELL</b>	<b>SAMPLED</b>	<b>SAMP_TYPE</b>	<b>SBD</b>	<b>SED</b>	<b>BWTS</b>	<b>BWTE</b>	<b>METHOD</b>	<b>ANALYTE</b>	<b>PDA</b>
TW1-88B-A	1-88	12/29/2003	GROUNDWATER	105.5	105.5	69.6	69.6	E314.0	PERCHLORATE	
W277SSA	MW-277	12/12/2003	GROUNDWATER	102	112	0	10	E314.0	PERCHLORATE	
W297M1A	MW-297	12/22/2003	GROUNDWATER	92	102	20.28	30.28	E314.0	PERCHLORATE	
W297SSA	MW-297	12/23/2003	GROUNDWATER	72	82	0.32	10.32	E314.0	PERCHLORATE	

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**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**