

**WEEKLY PROGRESS UPDATE
FOR NOVEMBER 29 – DECEMBER 3, 1999**

**EPA REGION I ADMINISTRATIVE ORDER SDWA I-97-1019
MASSACHUSETTS MILITARY RESERVATION
TRAINING RANGE AND IMPACT AREA**

The following summary of progress is for the period from November 29 to December 3, 1999.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of December 3 is summarized in Table 1.

Table 1. Drilling progress as of December 3, 1999				
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-57b	Sandwich far field well	230	142	148-158 188-198 213-223
bgs = below ground surface bwt = below water table				

Samples collected during the reporting period are summarized in Table 2. No field activities occurred in the Impact Area or Training Ranges during this reporting period due to the hunting season. Split samples were collected from the Snake Pond drive points sampled by AFCEE. Installation of the wells at MW-57 indicated in Table 1 was completed November 30.

The Guard, EPA, and MADEP had a meeting on December 2 to discuss technical issues, including the following:

- Jacobs Engineering updated on the activities at CS-19. The revised resolution memo was distributed on 12/1/99. The plan is to return to the field on Monday to finish the UXO avoidance and soil sampling. UXO detected last week were a 105-mm and 2 rocket grenades. Jacobs indicated that the UXO contractor would be collecting the IRP soil samples due to the presence of the UXO.
- Ogden and Tetra Tech gave the field activity updates. Tetra Tech indicated that they were currently working on the calibration site (52 items) and that photographs of this activity have been distributed. They are currently waiting for propellant bags for the calibration area. Bids have been received from the surveyors. Field work will start as soon as the surveyor is contracted. Ogden indicated that they are finishing MW-57b today. Next week, UXO avoidance and clearance, soil sampling, and development are scheduled. EPA indicated that they would like to visit the site next week. A 3-page handout of the APC soil sampling plan was distributed. Demonstration of the Power Probe drilling has been rescheduled to the week of December 20th.
- A 1-page handout of document status was distributed for review. TM 99-5 has been moved back 1 week. TM 99-6 has been moved back to mid January. The PEP report responses have been broken down to show individual components. The Guard will provide a written request to EPA for an extension of the start date for the Training Areas Investigation. Comments on the Training Area

Workplan have not been received, and this investigation is also dependent on resolution of the PEP comments.

- A 2-page handout of the memo of Resolution for Mortar Targets and Trenches was distributed for review by the regulatory agencies. Approvals or changes were requested by Friday 12/3.
- A 6-page handout of the Draft Milestone Schedule was distributed. Changes requested by the EPA have been made. This item will be discussed at next week's Tech Meeting.
- A 1-page handout of the 95-14 monitoring well results was distributed. DEP requested that this table be submitted to the town of Bourne.
- A 15-page handout of the Explosives detection table was distributed for review. This is an update of the latest data, including gun/mortar position wells.
- A 1-page handout of the Demo 1 response well cross section was distributed for review. Ogden indicated that the locations for the remaining two locations (MW-74 and MW-78) need to be selected next week to allow time for road building.

2. SUMMARY OF DATA RECEIVED

Rush data are summarized in Table 3. These data are for analyses that are performed on a fast turnaround time, typically 1-5 days. Explosive analyses for monitoring wells, and explosive and VOC analyses for groundwater profile samples, are conducted in this timeframe. 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 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. Most explosive detections verified by PDA are confirmed to be present upon completion of validation. Table 3 includes the following detections:

- The groundwater sample from well 90LWA0007 had detections of 2-nitrotoluene, 3-nitrotoluene, 4-nitrotoluene, nitroglycerin, and picric acid which were not verified with the PDA spectra.
- The groundwater sample from MW-43 had a detection of RDX that was verified by the PDA spectra. This compound was detected in previous groundwater sampling rounds.
- The groundwater sample from MW-45 had detections of 3-nitrotoluene, 4-nitrotoluene, nitroglycerin, and PETN which were not verified by the PDA spectra.
- The groundwater sample from MW-59 had detections of RDX and HMX that were verified by PDA spectra. These compounds were detected in previous groundwater sampling rounds.
- A groundwater profile duplicate sample from MW-75 had detections of 3-nitrotoluene and RDX. Only the RDX was confirmed with the PDA spectra. The regular sample from this interval had similar compounds detected as reported in the progress report for November 15, 1999.

3. DELIVERABLES SUBMITTED

Weekly Progress Update (Nov 15-19)

12/3/99

4. SCHEDULED ACTIONS

Scheduled actions for the week of December 6 include the development of MW-57b (Sandwich far field well), the continued soil sampling of Gun and Mortar positions, and the start of the soil sampling of the mortar targets and trenches.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

No investigation activities occurred at Demo 1 during this reporting period due to the shutdown for hunting.

TABLE 2
 SAMPLING PROGRESS
 11/29-11/3

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
ECMWSP02D	DP-2	11/30/1999	GROUNDWATER			79.90	84.90
ECMWSP02S	DP-2	11/30/1999	GROUNDWATER			40.00	45.00
ECMWSP03D	DP-3	11/30/1999	GROUNDWATER			79.90	84.90
ECMWSP03S	DP-3	11/29/1999	GROUNDWATER			40.00	45.00

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

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 11/15/99-12/3/99

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
90LWA0007	90LWA0007	11/15/1999	GROUNDWATER	92.00	102.00	0.00	10.00	8330N	2-NITROTOLUENE	NO
90LWA0007	90LWA0007	11/15/1999	GROUNDWATER	92.00	102.00	0.00	10.00	8330N	3-NITROTOLUENE	NO
90LWA0007	90LWA0007	11/15/1999	GROUNDWATER	92.00	102.00	0.00	10.00	8330N	4-NITROTOLUENE	NO
90LWA0007	90LWA0007	11/15/1999	GROUNDWATER	92.00	102.00	0.00	10.00	8330N	NITROGLYCERIN	NO
90LWA0007	90LWA0007	11/15/1999	GROUNDWATER	92.00	102.00	0.00	10.00	8330N	PICRIC ACID	NO
W43M2A	MW-43	11/18/1999	GROUNDWATER	200.00	210.00	70.00	80.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
W45SSA	MW-45	11/16/1999	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	3-NITROTOLUENE	NO
W45SSA	MW-45	11/16/1999	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	4-NITROTOLUENE	NO
W45SSA	MW-45	11/16/1999	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	NITROGLYCERIN	NO
W45SSA	MW-45	11/16/1999	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	PENTAERYTHRITOL TETRANITR	NO
W45SSA	MW-45	11/16/1999	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	PICRIC ACID	NO
W59SSA	MW-59	11/22/1999	GROUNDWATER	128.00	138.00	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
W59SSA	MW-59	11/22/1999	GROUNDWATER	128.00	138.00	0.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
G75MBD	MW-75	11/18/1999	PROFILE	110.00	110.00	27.00	27.00	8330N	3-NITROTOLUENE	NO
G75MBD	MW-75	11/18/1999	PROFILE	110.00	110.00	27.00	27.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.

SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BGS

SED = SAMPLE COLLECTION END DEPTH IN FEET BGS

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