

**WEEKLY PROGRESS UPDATE
FOR DECEMBER 13 – DECEMBER 17, 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 December 13 to December 17, 1999.

1. SUMMARY OF ACTIONS TAKEN

No drilling activity occurred during this reporting period due to the shutdown for hunting. Samples collected during the reporting period are summarized in Table 1. Groundwater samples were collected from three wells at MW-57 and 1 well at MW-56.

The EPA convened a meeting of the Impact Area Review Team on December 15, 1999. Topics discussed during the meeting included: the EPA Cleanup Order; Draft KD and U Range Results Technical Memo; Draft J-3 Wetland Results Technical Memo; IAGS Investigations Update; and DOD development of future water supplies. The next IART meeting is scheduled for January 20, 2000.

The Guard, EPA, and MADEP had a meeting on December 16 to discuss technical issues, including the following:

- An update of the field activities at CS-19 was given by Jacobs Engineering. The UXO avoidance has been completed at the soil sampling and drilling locations. A 2-page handout was distributed showing the plan view of the proposed soil sampling and proposed monitoring well locations. Jacobs indicated that the work has stopped due to the existence of UXO. The Guard stated that they had received the report from their EOD unit which stated that the 155 HE and the 105 HE are blow in place (BIP) rounds, the M9A1 Grenades are safe to transport, and the 155 smoke is safe to transport if properly prepared but they suggest a blow in place due to the deteriorated state of the fuze. The Guard stated that they will have Ogden and USA dispose of the BIP rounds on December 28th which will include the air monitoring and post excavation samples. Jacobs asked if a soil sample could be collected prior to the detonation. The Guard suggested that sampling be done like the Demo 2 detonation with additional samples collected if the post-excavation sample has a detection. The EPA agreed.
- Ogden updated the ongoing field activities that included the continued sampling of MW-57 and MW-56. All other work is on hold due to hunting. Next week has soil and groundwater sampling scheduled. Verbal results of MW-57M3 were discussed. PCE was detected at 0.8 ppb, confirming the profile detection. Ogden will forward a summary of the VOC results for the first 3 wells (M3, M1, and D) when available.
- A 1-page handout of the document status was distributed for review. Ogden indicated that the dates for responses for Tech Memo 99-2 (Demo 1) and the Technology Evaluation were moved to 12/23/99.
- The changes to Tech Memo 99-3 (Brick Lined Pit) were distributed on 12/9/99. EPA and DEP approved the changes.
- A letter on the complications with the Method 5035 was distributed on 12/14/99. The letter stated that acetone was being produced by the sodium bisulfate preservation method. Ogden stated that they

have been looking for an alternative method but none appear any better. The lab does not believe the acetone detections will raise the detection limits for the other VOCs, but the detections will mask any low-level acetone in the sample. Ogden proposed split samples with sodium bisulfate vs. DI water preservation to evaluate the impact of the preservative. The EPA is currently looking into this issue and agreed to continue with the sodium bisulfate preservation for now, with the DI preservation as a comparison.

- A 3-page handout of the steel lined pit soil analytical results was distributed. No explosives were detected and all other compounds detected were below reportable concentrations. The groundwater result was not available but will be distributed as soon as it is available (emailed 12/16).
- A 9-page handout of the Gun and Mortar groundwater results was distributed. No explosives were detected and thallium was the only compound detected above the MCL or health advisories. Ogden indicated that the thallium concentrations might be consistent with background groundwater concentrations. The recent report on background (TM 99-5) indicates that molybdenum appears to be the only metal that is site related. After the background report was issued Ogden performed additional data evaluation that suggests that molybdenum could be related to the drilling process. Ogden is still investigating this affect and will provide additional evaluation of the molybdenum occurrences ASAP.
- A 2-page letter from Textron was provided on their agreement to perform a Phase I investigation. EPA asked the Guard to check on the status of the 104e request for Textron. The Guard will contact Textron to determine why the proposed schedule for the Phase I investigation is longer than what the Guard suggested.
- A 5-page letter from ISOTEC was provided showing the results of their treatment of a sample of groundwater from MW-31. The EPA requested that this letter be attached to the Remedial Technologies report.
- The Action Items from the December 15 IART meeting were discussed and are as follows:
 - A map will be added to the weekly progress report to show well locations.
 - The review team asked to have an additional well down gradient of the KD Range added to the program. EPA stated that they would keep this under consideration in their comments on TM 99-1. EPA asked if the USGS has been collecting isotope data on these wells. Ogden indicated that USGS has collected some isotope data, and Ogden will ask for an update on the status.
 - The review team asked to have the Interim Results Report (11/99) include all detects. Ogden indicated that all detects are provided at the IART meetings, and the report works better as a summary if it focuses on the significant detects.
 - The new proposed water supply well areas will be added to Ogden's maps.
 - The results from MW-78 will be highlighted in the progress reports when available.
 - A 7-page handout of the photographs of Demo 1 taken by Mr. Zanis was distributed. There was a discussion of the visual survey of Demo 1 that was proposed to occur after the munition survey. EPA requested that the sampling of the grids in Demo 1 start next week and that another site walk around Demo 1 should be scheduled for next Wednesday.
 - It was agreed to consider placement of a well at the toe of the Demo 1 plume.
- The EPA indicated that Foothills Engineering sent a letter to the SMB recommending an explosives work group.

2. SUMMARY OF DATA RECEIVED

Rush data are summarized in Table 2. 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 typically conducted in this timeframe. This week's rush data included VOC results for the groundwater samples from MW-57, which is the Sandwich far field monitoring well cluster. These analyses were rushed due to profile detections of chlorinated solvents at this boring. The rush data are not validated, but are provided as an indication of the most recent preliminary results. Table 2 summarizes only detects, and does not show samples with non-detects.

As indicated in Table 2, all three screens sampled at MW-57 had detections of chloroform. This analyte is typically detected in groundwater and is not believed to be site-related. In addition, chloromethane was detected in MW-57D and MW-57M3, and PCE was detected in MW-57M3. The detection of the chlorinated solvent PCE in the groundwater sample was consistent with its detection in profile samples at this location. The other two wells at MW-57 have been prioritized for sampling.

3. DELIVERABLES SUBMITTED

No deliverables were submitted during the reporting period.

4. SCHEDULED ACTIONS

Scheduled actions for the week of December 20 include sampling of the remaining wells at MW-57 (Sandwich far field) and MW-56 (J Well far field well), the soil sampling of the Demo 1 soil grids, and the continued soil sampling of the trenches.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

No field activities occurred at Demo 1 during this reporting period. Several issues pertaining to Demo 1 were discussed at the 12/15 IART meeting and the 12/16 technical meeting. At the IART meeting Mr. Zanis provided photographs of munition debris at Demo 1, and requested an explanation of why samples were not collected at these locations. At the technical meeting the Guard and agencies discussed the status of sampling and the proposed munition survey. EPA requested that the sampling of the grids in Demo 1 start next week and that another site walk around Demo 1 should be scheduled for next Wednesday. It was agreed to consider placement of a well at the toe of the Demo 1 plume.

TABLE 1
 SAMPLING PROGRESS
 12/13-12/17

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W56M1T	FIELDQC	12/14/1999	FIELDQC	0.00	0.00		
W57DDT	FIELDQC	12/13/1999	FIELDQC	0.00	0.00		
W56M1A	MW-56	12/14/1999	GROUNDWATER				
W57DDA	MW-57	12/13/1999	GROUNDWATER			125.00	135.00
W57M1A	MW-57	12/14/1999	GROUNDWATER			100.00	110.00
W57M3A	MW-57	12/13/1999	GROUNDWATER			30.00	40.00

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 2
 DETECTED COMPOUNDS-UNVALIDATED
 SAMPLES COLLECTED 11/29/99-12/17/99

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W57DDA	MW-57	12/13/1999	GROUNDWATER			125.00	135.00	OC21V	CHLOROFORM	
W57DDA	MW-57	12/13/1999	GROUNDWATER			125.00	135.00	OC21V	CHLOROMETHANE	
W57M1A	MW-57	12/14/1999	GROUNDWATER			100.00	110.00	OC21V	CHLOROFORM	
W57M3A	MW-57	12/13/1999	GROUNDWATER			30.00	40.00	OC21V	CHLOROFORM	
W57M3A	MW-57	12/13/1999	GROUNDWATER			30.00	40.00	OC21V	CHLOROMETHANE	
W57M3A	MW-57	12/13/1999	GROUNDWATER			30.00	40.00	OC21V	TETRACHLOROETHYLENE(PCE)	

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

SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BGS

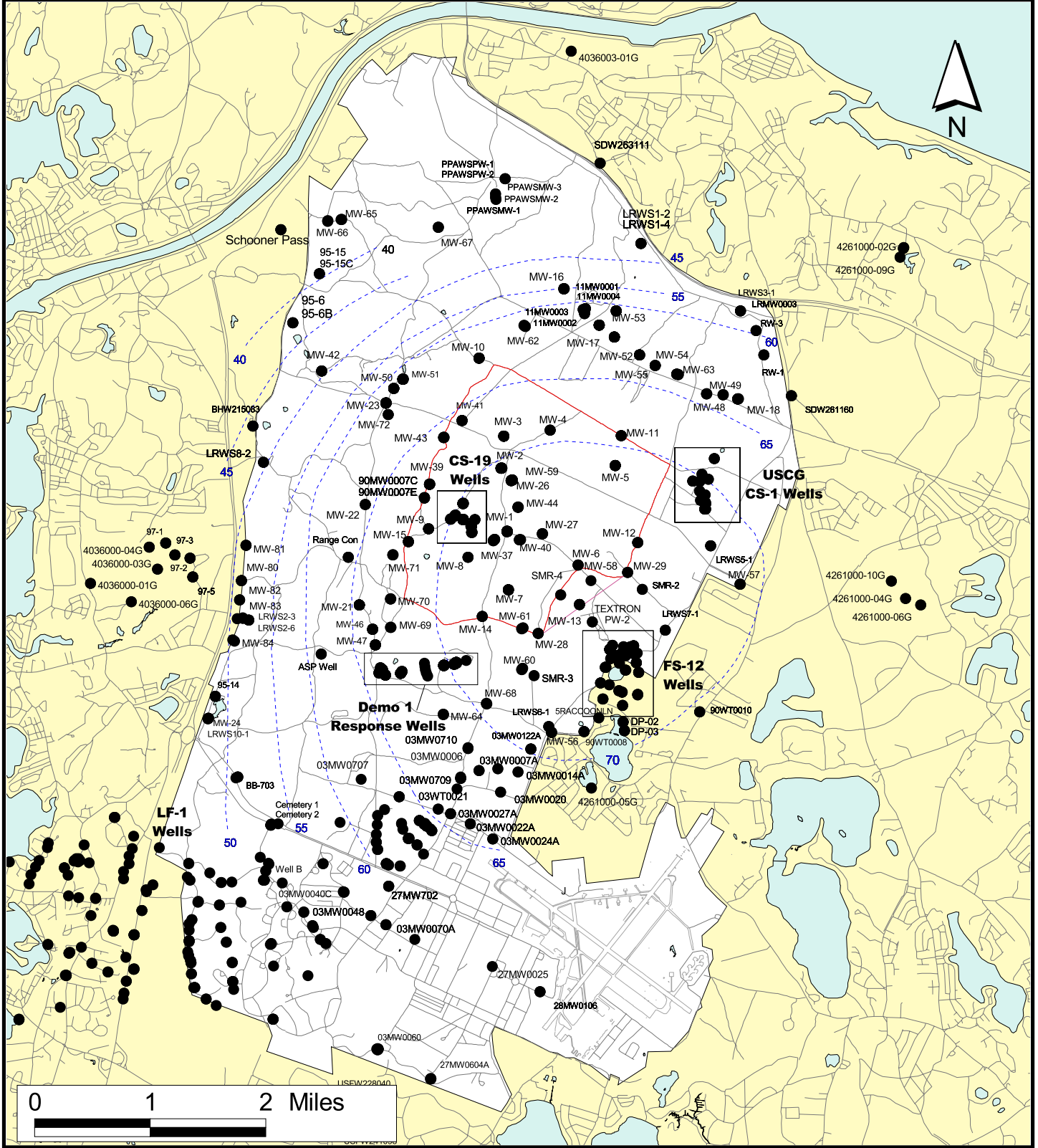
SED = SAMPLE COLLECTION END DEPTH IN FEET BGS

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



Sources & Notes

Map Coordinates: Stateplane,
 NAD83, Zone 4151, Meters
 Source: MASSGIS

Location of Existing and Proposed Groundwater Monitoring Wells As Of 12/16/99



December 16, 1999 DRAFT

Demo1 Response Wells Inset

