

**WEEKLY PROGRESS UPDATE
FOR JANUARY 3 – JANUARY 7, 2000**

**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 January 3 to January 7, 2000.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of January 7 is summarized in Table 1.

| Table 1. Drilling progress as of January 7, 1999 | | | | |
|---|-------------------------------|-----------------------------|---------------------------------|--|
| Boring Number | Purpose of Boring/Well | Total Depth (ft bgs) | Saturated Depth (ft bwt) | Completed Well Screens (ft bgs) |
| MW-78 | Demo 1 Response Well | 195 | 115 | |
| bgs = below ground surface bwt = below water table | | | | |

Development of the MW-75 and MW-77 wells (Demo 1 response wells) commenced. UXO clearance continued at the Gun and Mortar Position grids and UXO clearance commenced at Turpentine Road for the RDX response wells.

Samples collected during the reporting period are summarized in Table 2. A second round of groundwater samples were collected from some RDX response wells (MW-44), KD Range wells (MW-60, -61), U Range well (MW-62), and Group 2 far field wells (MW-63, -80, -81). Ground water profile samples were collected from MW-78 (Demo 1 response well). Soil sampling continued on the following Gun and Mortar positions: GP-6 (Area 58), MP-1 (Area 70), MP-4 (Area 75), and the Former H Range (Area 79). Soil sampling continued on the following Mortar Targets: Target 4 (Area 82) and Target 5 (Area 83). Soil sampling was completed in Demo 1 for the seven locations identified in the 12/22/99 site walk and the three locations identified in the previous site walk (these are shown as LOCID "110" to "19C" in Table 2).

The Guard, EPA, and MADEP had a meeting on January 6 to discuss technical issues, including the following:

- Jacobs provided an update on the CS-19 investigation. They have received approval to perform the subsurface portion of the investigation. They expect to start drilling by 1/24/00. The order of the well installation will be discussed at a future meeting. There was a discussion of the conference call procedure for selecting well screen depths.

Regarding CS-19, EPA advised the Guard that they are discussing the schedule with AFCEE. EPA wants to shorten the schedule, and suggested the Guard also discuss with AFCEE since both parties are involved at this location.

- Tetra Tech provided an update on the Munitions Survey. They have started operations in Demo Area 1 and expect the initial UXO clearance and vegetation removal to require several days. They are setting up a calibration area for the geophysics equipment. A second UXO team will be working on gun and mortar positions. Coordination with Ogden (sampling soil at gun and mortar positions) was

discussed at a 1/5/00 meeting and will be ongoing. There was a discussion of how vegetation removal will be minimized.

- Ogden provided an update on the Groundwater Study. Groundwater sampling continued for the "new Group 2" wells and the Phase II (a) wells installed last due to UXO issues. Soil sampling continued at gun and mortar positions and several other locations. Ogden mentioned the potential to seek an extension on soil sampling deadlines if frozen soil continues to be a problem, as it was last week and the week before. Drilling resumed downgradient from Demo 1, and a conference call to discuss profile results is expected for Monday 1/10.

The Guard discussed plans for a controlled burn to reduce the fire hazard in a portion of the Impact Area. The burn would be conducted between 1/15/00 and 3/31/00, most likely in mid-February or later. EPA asked how the burn would be coordinated with the IAGS. It was agreed to arrange a meeting with the Post Biologist to discuss these issues. This item will also be included for discussion at the 1/20/00 IART meeting.

- The Guard provided a 3-page update of the sampling program for Demo 1, including attached photos from Mr. Zanis. Sampling at the munition debris locations was discussed. Grab samples have been collected by Ogden and are on hold at the lab. EPA would like to determine if it is possible to analyze these samples for SVOCs, dioxin, and by 8321 in addition to the 8330 analysis. Ogden will evaluate sample volume and holding time requirements, and discuss with Guard and agencies on Monday 1/10.
- Discussion of the preliminary results of gun and mortar soil samples will be pushed back to next week, pending receipt of additional data. EPA asked that the data table be provided early in the week to allow time for review prior to the meeting.
- There was a discussion of the agenda for the 1/20/00 IART meeting. It was agreed to include the following topics:
 - Administrative Order #3
 - Resolution of the Notice of Noncompliance
 - Controlled Burn in the Impact Area
 - Propellant Information
 - Controlled Detonation Chamber (potential)
 - Results of APC Investigation
 - Update on the Groundwater StudyThe presentation by Jacobs requested at the 12/15/99 IART meeting will be provided in February due to funding issues.
- There was a discussion of the 12/15/99 IART meeting action items. Items 1-3 and 5-7 are done. EPA has taken item 4 under consideration. Item 8 will be handled by JPO when the minutes are available. Item 9 will be at the 1/20/00 meeting; EPA has not heard any specific questions from the IART concerning this topic. Item 10 will be at the February meeting. EPA will address item 12.
- Tetra Tech asked EPA for specific limits for the High Use Target Area. EPA indicated this remains to be determined from aerial photos.
- There was a discussion of the need to coordinate between Guard and EPA on NEPA issues for the Munitions Survey.

- The Guard provided a 5-page handout summarizing soil sampling results at Demo 2 for the area impacted by the 10/2/99 demolition. The results indicate that the current RDX concentrations are between non-detect and 129 ppb. The Guard recommends that further response actions be suspended pending determination of an action level protective of groundwater. The agencies will review this information.
- The priorities for installation of RDX response wells were discussed. Drilling is expected to begin by 1/18/00, and work started yesterday to clear the section of Turpentine Road between Tank Alley and Five Corners. It was agreed to concentrate initially on the southernmost particle tracks, installing P-4 and P-9 from the workplan.
- EPA gave its approval to the Memorandum of Resolution for the gun/mortar FSP.
- The Guard handed out a Release Notification Form for several 120-day notification requirements.

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 profile samples from well MW-78 (Demo 1 response well) had detections of 2,4,6-trinitrotoluene (1 interval), 2,6-dinitrotoluene (1 interval), 2-amino-4,6-dinitrotoluene (1 interval), 3-nitrotoluene (1 interval), 4-nitrotoluene (1 interval), and nitroglycerin (4 intervals). Only the 2,4,6-trinitrotoluene and the 2,6-dinitrotoluene were verified with the PDA spectra.
- The soil samples from two grids at the APC had detections of 2-amino-4,6-dinitrotoluene (3 samples) and RDX (1 sample), which were verified by the PDA spectra.

3. DELIVERABLES SUBMITTED

| | |
|---|----------|
| Weekly Progress Update (Dec 27-31) | 1/5/2000 |
| Supplemental Analytical Results for TM 99-1 | 1/5/2000 |

4. SCHEDULED ACTIONS

Scheduled actions for the week of January 10 include the continued development of newly installed wells, the continued soil sampling of Gun and Mortar positions and mortar targets, groundwater sampling of the second round of supplemental IRP wells and new priority 2 far field wells, completion of MW-78 and the commencement of the drilling of MW-74.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

Drilling was started and completed on MW-78 (the southernmost response well), with a total of 12 profile samples collected. Results for these samples are provided in Table 3 and indicate shallow detections of TNT and 2,6-DNT. RDX was not detected, and the depth of the TNT and DNT detection suggests that these contaminants are not related to the Demo 1 plume. Therefore it appears that this well has established the southern boundary of the RDX contamination downgradient of Demo 1. Screen depths for MW-78 will be selected on 1/10. The next location to be drilled is MW-74 (the northernmost response well), and drilling will commence during the week of 1/10.

Soil samples were collected from three depths (0"- 3", 3"-6", and 6"-12") at each of the seven locations identified in the December 22 site walk. Analytical parameters for these samples will be discussed on 1/10. Soil samples were collected from two depths (3"-6" and 6"-12") at the three locations identified in the previous site walk. These three locations had previously been sampled at the surface.

Mobilization commenced for the Munitions Survey at Demo 1. Brush cutting and UXO clearance began in preparation for the geophysics survey.

TABLE 2
 SAMPLING PROGRESS
 1/3/00-1/7/00

| OGDEN_ID | LOCID OR WELL ID | DATE SAMPLED | SAMPLE TYPE | SBD | SED | BWTS | BWTE |
|-----------|------------------|--------------|-------------|--------|--------|--------|--------|
| G78MAE | FIELDQC | 1/5/2000 | FIELDQC | 0.00 | 0.00 | | |
| G78MAT | FIELDQC | 1/5/2000 | FIELDQC | 0.00 | 0.00 | | |
| G78MKE | FIELDQC | 1/6/2000 | FIELDQC | 0.00 | 0.00 | | |
| G78MKT | FIELDQC | 1/6/2000 | FIELDQC | 0.00 | 0.00 | | |
| HC75A1AAE | FIELDQC | 1/3/2000 | FIELDQC | 0.00 | 0.00 | | |
| HC75A1AAT | FIELDQC | 1/3/2000 | FIELDQC | 0.00 | 0.00 | | |
| HC75B1AAT | FIELDQC | 1/4/2000 | FIELDQC | 0.00 | 0.00 | | |
| HC79A1AAE | FIELDQC | 1/4/2000 | FIELDQC | 0.00 | 0.00 | | |
| HC79D1AAE | FIELDQC | 1/5/2000 | FIELDQC | 0.00 | 0.00 | | |
| HC79G1AAE | FIELDQC | 1/6/2000 | FIELDQC | 0.00 | 0.00 | | |
| HC83A1AAE | FIELDQC | 1/7/2000 | FIELDQC | 0.00 | 0.00 | | |
| HC83A1AAT | FIELDQC | 1/7/2000 | FIELDQC | 0.00 | 0.00 | | |
| W44SSA | MW-44 | 1/3/2000 | GROUNDWATER | 123.00 | 133.00 | -5.13 | 4.87 |
| W44SSD | MW-44 | 1/3/2000 | GROUNDWATER | 123.00 | 133.00 | -5.13 | 4.87 |
| W60SSA | MW-60 | 1/3/2000 | GROUNDWATER | 91.00 | 101.00 | -3.60 | 6.40 |
| W61SSA | MW-61 | 1/3/2000 | GROUNDWATER | 98.00 | 108.00 | -3.95 | 6.05 |
| W62SSA | MW-62 | 1/4/2000 | GROUNDWATER | 108.00 | 118.00 | -3.39 | 6.61 |
| W63DDA | MW-63 | 1/5/2000 | GROUNDWATER | 375.00 | 380.00 | 220.00 | 225.00 |
| W63M1A | MW-63 | 1/5/2000 | GROUNDWATER | 244.00 | 254.00 | 89.00 | 99.00 |
| W63M1D | MW-63 | 1/5/2000 | GROUNDWATER | 244.00 | 254.00 | 89.00 | 99.00 |
| W63M2A | MW-63 | 1/4/2000 | GROUNDWATER | 214.00 | 224.00 | 58.58 | 68.58 |
| W63M3A | MW-63 | 1/4/2000 | GROUNDWATER | 182.00 | 192.00 | 26.50 | 36.50 |
| W63SSA | MW-63 | 1/4/2000 | GROUNDWATER | 153.00 | 163.00 | -2.40 | 7.60 |
| W80DDA | MW-80 | 1/7/2000 | GROUNDWATER | 158.00 | 168.00 | 111.11 | 121.11 |
| W80M1A | MW-80 | 1/5/2000 | GROUNDWATER | 130.00 | 140.00 | 83.01 | 93.01 |
| W80M2A | MW-80 | 1/6/2000 | GROUNDWATER | 100.00 | 110.00 | 53.02 | 63.02 |
| W80M3A | MW-80 | 1/6/2000 | GROUNDWATER | 70.00 | 80.00 | 22.95 | 32.95 |
| W80SSA | MW-80 | 1/6/2000 | GROUNDWATER | 43.00 | 53.00 | -4.10 | 5.90 |
| W81M1A | MW-81 | 1/7/2000 | GROUNDWATER | 128.00 | 138.00 | 97.90 | 107.90 |
| W81M3A | MW-81 | 1/7/2000 | GROUNDWATER | 53.00 | 58.00 | 23.24 | 28.24 |
| W81M3D | MW-81 | 1/7/2000 | GROUNDWATER | 53.00 | 58.00 | 23.24 | 28.24 |
| GAC7714 | GAC WATER | 1/4/2000 | IDW | 0.00 | 0.00 | | |
| HWB262 | HOLDING BLANK | 1/4/2000 | OTHER | 0.00 | 0.00 | | |
| G78MAA | MW-78 | 1/5/2000 | PROFILE | 90.00 | 90.00 | 10.00 | 10.00 |
| G78MBA | MW-78 | 1/5/2000 | PROFILE | 95.00 | 95.00 | 15.00 | 15.00 |
| G78MCA | MW-78 | 1/5/2000 | PROFILE | 105.00 | 105.00 | 25.00 | 25.00 |
| G78MDA | MW-78 | 1/5/2000 | PROFILE | 115.00 | 115.00 | 35.00 | 35.00 |
| G78MEA | MW-78 | 1/5/2000 | PROFILE | 125.00 | 125.00 | 45.00 | 45.00 |
| G78MED | MW-78 | 1/5/2000 | PROFILE | 125.00 | 125.00 | 45.00 | 45.00 |
| G78MFA | MW-78 | 1/5/2000 | PROFILE | 135.00 | 135.00 | 55.00 | 55.00 |
| G78MGA | MW-78 | 1/5/2000 | PROFILE | 145.00 | 145.00 | 65.00 | 65.00 |
| G78MHA | MW-78 | 1/5/2000 | PROFILE | 155.00 | 155.00 | 75.00 | 75.00 |
| G78MIA | MW-78 | 1/5/2000 | PROFILE | 165.00 | 165.00 | 85.00 | 85.00 |

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
 SAMPLING PROGRESS
 1/3/00-1/7/00

| OGDEN_ID | LOCID OR WELL ID | DATE SAMPLED | SAMPLE TYPE | SBD | SED | BWTS | BWTE |
|-----------|------------------|--------------|-------------|--------|--------|--------|--------|
| G78MJA | MW-78 | 1/5/2000 | PROFILE | 175.00 | 175.00 | 95.00 | 95.00 |
| G78MKA | MW-78 | 1/6/2000 | PROFILE | 185.00 | 185.00 | 105.00 | 105.00 |
| G78MLA | MW-78 | 1/6/2000 | PROFILE | 195.00 | 195.00 | 115.00 | 115.00 |
| HC58A1AAA | 58A | 1/7/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC58A1BAA | 58A | 1/7/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC58B1AAA | 58B | 1/7/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC70B1BAA | 70B | 1/3/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC75A1AAA | 75A | 1/3/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC75A1BAA | 75A | 1/4/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC75B1AAA | 75B | 1/4/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC75B1BAA | 75B | 1/4/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC75C1AAA | 75C | 1/4/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC75C1BAA | 75C | 1/4/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79A1AAA | 79A | 1/4/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79A1AAD | 79A | 1/4/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79A1BAA | 79A | 1/5/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79B1AAA | 79B | 1/5/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79B1BAA | 79B | 1/5/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79C1AAA | 79C | 1/5/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79C1BAA | 79C | 1/5/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79D1AAA | 79D | 1/6/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79D1BAA | 79D | 1/6/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79E1AAA | 79E | 1/5/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79E1BAA | 79E | 1/5/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79F1AAA | 79F | 1/6/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79F1BAA | 79F | 1/6/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79G1AAA | 79G | 1/6/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79G1BAA | 79G | 1/6/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79H1AAA | 79H | 1/7/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79H1BAA | 79H | 1/7/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79I1AAA | 79I | 1/7/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79I1BAA | 79I | 1/7/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79K1AAA | 79K | 1/3/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79K1BAA | 79K | 1/3/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC79L1AAA | 79L | 1/3/2000 | SOIL GRID | 0.00 | 0.50 | | |
| HC79L1BAA | 79L | 1/3/2000 | SOIL GRID | 1.50 | 2.00 | | |
| HC82A1AAA | 82A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HC82A1AAA | 82A | 1/6/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HC82B1AAA | 82B | 1/6/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HC82B1AAD | 82B | 1/6/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HC82B1BAA | 82B | 1/6/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HC82B1CAA | 82B | 1/6/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HC83A1AAA | 83A | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HC83A1BAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |

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

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 1/3/00-1/7/00

| OGDEN_ID | LOCID OR WELL ID | DATE SAMPLED | SAMPLE TYPE | SBD | SED | BWTS | BWTE |
|-----------|------------------|--------------|-------------|------|------|------|------|
| HC83A1CAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HC83B1AAA | 83B | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD82A1AAA | 82A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD82A1BAA | 82A | 1/6/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD82A1CAA | 82A | 1/6/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HD82A3AAA | 82A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD82A3BAA | 82A | 1/6/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD82A3CAA | 82A | 1/6/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HD82A5AAA | 82A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD82A5BAA | 82A | 1/6/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD82A5CAA | 82A | 1/6/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HD82A7AAA | 82A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD82A7BAA | 82A | 1/6/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD82A7CAA | 82A | 1/6/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HD82B1AAA | 82B | 1/6/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD82B1BAA | 82B | 1/6/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD82B1CAA | 82B | 1/6/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HD82B3AAA | 82B | 1/6/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD82B3BAA | 82B | 1/6/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD82B3CAA | 82B | 1/6/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HD82B5AAA | 82B | 1/6/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD82B5BAA | 82B | 1/6/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD82B5CAA | 82B | 1/6/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HD82B7AAA | 82B | 1/6/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD82B7BAA | 82B | 1/6/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD82B7CAA | 82B | 1/6/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HD83A1AAA | 83A | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD83A1BAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD83A1CAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD83A3AAA | 83A | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD83A3BAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD83A3CAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD83A5AAA | 83A | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD83A5BAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD83A5CAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD83A7AAA | 83A | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD83A7BAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD83A7CAA | 83A | 1/7/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HD83B1AAA | 83B | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD83B3AAA | 83B | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD83B5AAA | 83B | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HD83B7AAA | 83B | 1/7/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HDD110AAA | 110 | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HDD110BAA | 110 | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |

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| OGDEN_ID | LOCID OR WELL ID | DATE SAMPLED | SAMPLE TYPE | SBD | SED | BWTS | BWTE |
|-----------|------------------|--------------|-------------|------|------|------|------|
| HDD110CAA | 11O | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HDD11BAA | 11B | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HDD11CAA | 11C | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HDD12BAA | 12B | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HDD12CAA | 12C | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HDD13BAA | 13B | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HDD13CAA | 13C | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HDD14AAA | 14A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HDD14BAA | 14B | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HDD14CAA | 14C | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HDD15AAA | 15A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HDD15AAD | 15A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HDD15BAA | 15B | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HDD15CAA | 15C | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HDD16AAA | 16A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HDD16BAA | 16B | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HDD16CAA | 16C | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HDD17AAA | 17A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HDD17BAA | 17B | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HDD17BAD | 17B | 1/5/2000 | SOIL GRID | 0.25 | 5.00 | | |
| HDD17CAA | 17C | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HDD18AAA | 18A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HDD18BAA | 18B | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HDD18CAA | 18C | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |
| HDD19AAA | 19A | 1/5/2000 | SOIL GRID | 0.00 | 0.25 | | |
| HDD19BAA | 19B | 1/5/2000 | SOIL GRID | 0.25 | 0.50 | | |
| HDD19CAA | 19C | 1/5/2000 | SOIL GRID | 0.50 | 1.00 | | |

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 12/20/99-1/7/00

| OGDEN_ID | LOCID OR WELL ID | SAMPLED | SAMP_TYPE | SBD | SED | BWTS | BWTE | METHOD | OGDEN_ANALYTE | PDA |
|-----------|------------------|------------|-----------|--------|--------|-------|-------|--------|------------------------------|-----|
| G78MAA | MW-78 | 1/5/2000 | PROFILE | 90.00 | 90.00 | 10.00 | 10.00 | 8330N | 2,4,6-TRINITROTOLUENE | YES |
| G78MAA | MW-78 | 1/5/2000 | PROFILE | 90.00 | 90.00 | 10.00 | 10.00 | 8330N | 2,6-DINITROTOLUENE | YES |
| G78MAA | MW-78 | 1/5/2000 | PROFILE | 90.00 | 90.00 | 10.00 | 10.00 | 8330N | 2-AMINO-4,6-DINITROTOLUENE | NO |
| G78MAA | MW-78 | 1/5/2000 | PROFILE | 90.00 | 90.00 | 10.00 | 10.00 | 8330N | 3-NITROTOLUENE | NO |
| G78MAA | MW-78 | 1/5/2000 | PROFILE | 90.00 | 90.00 | 10.00 | 10.00 | 8330N | 4-NITROTOLUENE | NO |
| G78MAA | MW-78 | 1/5/2000 | PROFILE | 90.00 | 90.00 | 10.00 | 10.00 | 8330N | NITROGLYCERIN | NO |
| G78MBA | MW-78 | 1/5/2000 | PROFILE | 95.00 | 95.00 | 15.00 | 15.00 | 8330N | NITROGLYCERIN | NO |
| G78MCA | MW-78 | 1/5/2000 | PROFILE | 105.00 | 105.00 | 25.00 | 25.00 | 8330N | NITROGLYCERIN | NO |
| G78MEA | MW-78 | 1/5/2000 | PROFILE | 125.00 | 125.00 | 45.00 | 45.00 | 8330N | NITROGLYCERIN | NO |
| HCAPC2AAA | APC | 12/23/1999 | SOIL GRID | 0.00 | 0.25 | | | 8330N | 2-AMINO-4,6-DINITROTOLUENE | YES |
| HCAPC2CAA | APC | 12/23/1999 | SOIL GRID | 0.50 | 1.00 | | | 8330N | 2-AMINO-4,6-DINITROTOLUENE | YES |
| HCAPC3BAA | APC | 12/23/1999 | SOIL GRID | 0.25 | 0.50 | | | 8330N | 2-AMINO-4,6-DINITROTOLUENE | YES |
| HCAPC3CAA | APC | 12/23/1999 | SOIL GRID | 0.50 | 1.00 | | | 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

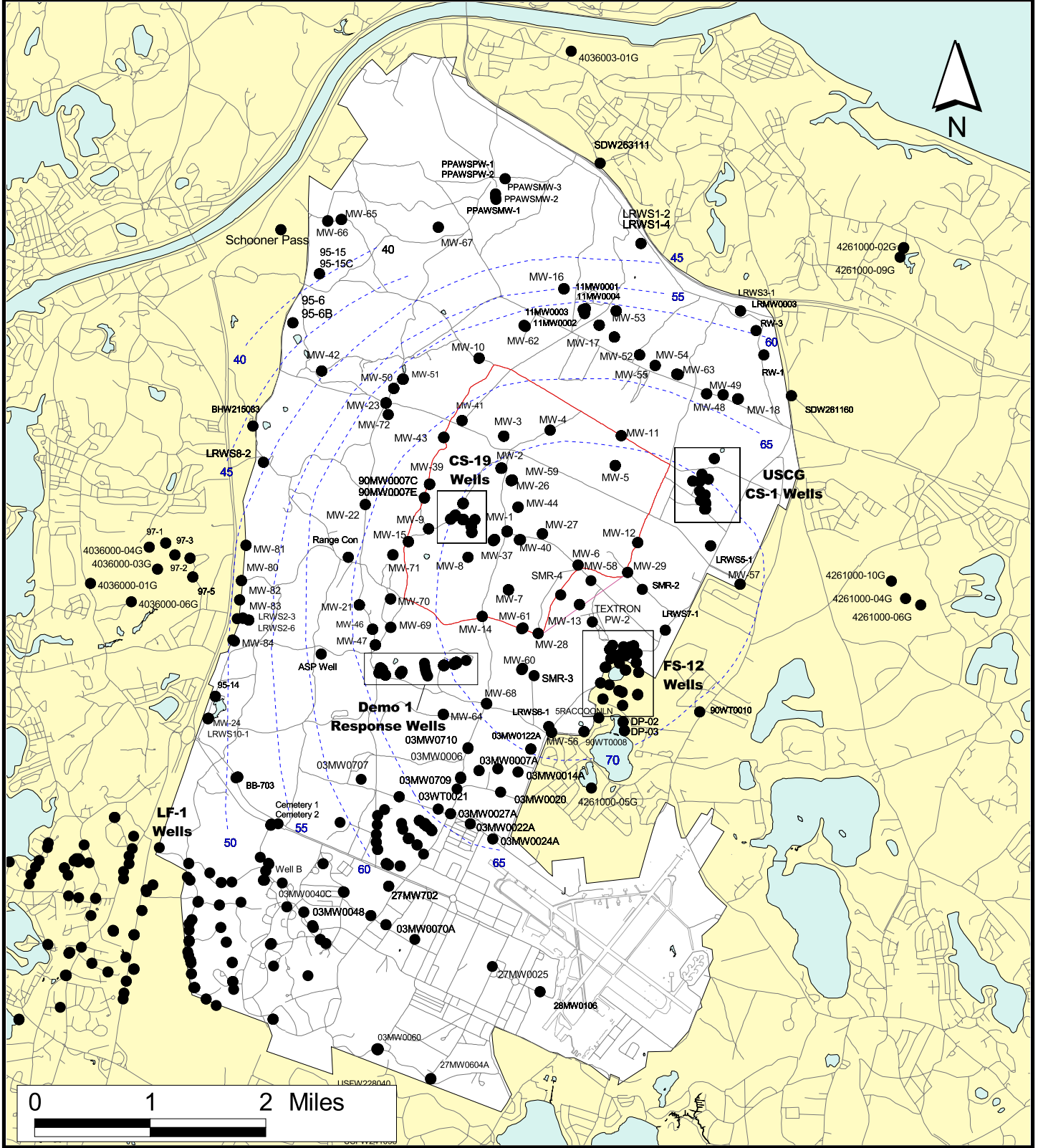
SED = SAMPLE COLLECTION END DEPTH IN FEET BGS

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



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

