

**WEEKLY PROGRESS UPDATE  
FOR MARCH 13 - MARCH 19, 1998**

**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 March 13 to March 19, 1998.

**1. SUMMARY OF ACTIONS TAKEN**

UXO Surveys

No UXO survey activities occurred during this reporting period.

Drilling

No drilling activities occurred during this reporting period.

Samples

Soil samples were collected from 1.5-2.0 feet below ground surface (bgs) from grids in Areas 5, 12, 16, 17, and 18. Soil samples were collected from 0.0-0.5 feet bgs from grids in Areas 16 and 18.

Water Level Measurements

The next synoptic round of water level measurements is scheduled for March 31, 1998.

Plans and Reports

All Final FSPs are complete at this time. Revision pages for the Groundwater FSP are currently being prepared.

Meetings

A technical meeting was convened with EPA and MADEP on March 19 to discuss progress on the project. The next IAGS Review Team meeting is scheduled for March 31, 1998 at the Bourne Best Western at 6:00 pm.

**2. SUMMARY OF DATA RECEIVED**

*Preliminary non-validated data* that were received during the reporting period for explosives analyses are presented in Table 1 for soil samples and Table 2 for groundwater samples. Explosive compounds were detected by the CRREL method in soil from a depth of 1.5 to 2.0 feet bgs in seven samples from Area 16, three samples from Area 20, one sample from Area 18, one sample in Area 1, and six samples from Area 5. The one sample from Area 1 and five of the samples from Area 5 which had CRREL detections were analyzed for explosives using EPA Method 8330 and had no compounds detected. Other soil samples with CRREL detections were being analyzed by EPA

Method 8330 but results were not yet available. Explosive compounds were detected by EPA Method 8330 in groundwater samples collected from monitoring wells MW-19S and MW-19D.

### 3. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period included the following:

Weekly Progress Update (March 6 to March 12)

March 13, 1998

### 4. SCHEDULED ACTIONS

During the next week, soil sampling will be performed at 1.5-2.0 feet bgs at various locations for which complete data on the upper soil interval are available.

| <b>Table 1. Preliminary (non-validated) Results for Explosives in Soil Samples</b> |  |                                |               |                 |
|--|--|--------------------------------|---------------|-----------------|
| <b>Sample ID</b>   | <b>Location</b>                                      | <b>Sample Depth (feet bgs)</b> | <b>Method</b> | <b>Compound</b> |
| BG5FAA   | Area 5 grab from excavated soil at the munitions pit | 0-0.5                          | 8330          | ND              |
| BG5EAA   | Area 5 grab from bottom of the munitions pit         | 0-0.5                          | 8330          | ND              |
| BGHABA   | Area 16 (GP-16) Grid A                               | 1.5-2                          | CRREL         | RDX/HMX         |
| BGHBBA   | Area 16 (GP-16) Grid B                               | 1.5-2                          | CRREL         | TNT/DNT         |
| BGHDBA   | Area 16 (GP-16) Grid D                               | 1.5-2                          | CRREL         | TNT/DNT         |
| BGHEBA   | Area 16 (GP-16) Grid E                               | 1.5-2                          | CRREL         | TNT/DNT         |
| BGHFBA   | Area 16 (GP-16) Grid F                               | 1.5-2                          | CRREL         | TNT/DNT         |
| BGHGBA   | Area 16 (GP-16) Grid G                               | 1.5-2                          | CRREL         | ND              |
| BGHHBA   | Area 16 (GP-16) Grid H                               | 1.5-2                          | CRREL         | TNT/DNT         |
| BGHIBA   | Area 16 (GP-16) Grid I                               | 1.5-2                          | CRREL         | ND              |
| BGHJBA   | Area 16 (GP-16) Grid J                               | 1.5-2                          | CRREL         | ND              |
| BGHKBA   | Area 16 (GP-16) Grid K                               | 1.5-2                          | CRREL         | ND              |
| BGHLBA   | Area 16 (GP-16) Grid L                               | 1.5-2                          | CRREL         | ND              |
| BGHMBA   | Area 16 (GP-16) Grid M                               | 1.5-2                          | CRREL         | TNT/DNT         |
| BGLABA   | Area 18 (GP-18) Grid A                               | 1.5-2                          | CRREL         | ND              |
| BGLBBA   | Area 18 (GP-18) Grid B                               | 1.5-2                          | CRREL         | RDX/HMX         |
| BGLCBA   | Area 18 (GP-18) Grid C                               | 1.5-2                          | CRREL         | ND              |

| <b>Table 1. Preliminary (non-validated) Results for Explosives in Soil Samples</b> |                             |                                |               |                 |
|--|-----------------------------|--------------------------------|---------------|-----------------|
| <b>Sample ID</b>   | <b>Location</b>             | <b>Sample Depth (feet bgs)</b> | <b>Method</b> | <b>Compound</b> |
| BGLDBA   | Area 18 (GP-18) Grid D      | 1.5-2                          | CRREL         | ND              |
| BM3ABA   | Area 20 (MP-3) Grid A       | 1.5-2                          | CRREL         | TNT/DNT         |
| BM3ABD   | Area 20 (MP-3) Grid A (dup) | 1.5-2                          | CRREL         | TNT/DNT         |
| BM3BBA   | Area 20 (MP-3) Grid B       | 1.5-2                          | CRREL         | TNT/DNT         |
| BM3CBA   | Area 20 (MP-3) Grid C       | 1.5-2                          | CRREL         | ND              |
| BM3DBA   | Area 20 (MP-3) Grid D       | 1.5-2                          | CRREL         | TNT/DNT         |
| BM3EBA   | Area 20 (MP-3) Grid E       | 1.5-2                          | CRREL         | ND              |
| B01IBA   | Area 1 Grid I               | 1.5-2                          | CRREL         | ND              |
| B01JBA   | Area 1 Grid J               | 1.5-2                          | 8330          | ND              |
| B01JBA   | Area 1 Grid J               | 1.5-2                          | CRREL         | TNT/DNT         |
| B01KBA   | Area 1 Grid K               | 1.5-2                          | CRREL         | ND              |
| B04GBA   | Area 4 Grid G               | 1.5-2                          | CRREL         | ND              |
| B05ABA   | Area 5 Grid A               | 1.5-2                          | 8330          | ND              |
| B05ABA   | Area 5 Grid A               | 1.5-2                          | CRREL         | RDX/HMX         |
| B05ABD   | Area 5 Grid A (dup)         | 1.5-2                          | 8330          | ND              |
| B05ABD   | Area 5 Grid A (dup)         | 1.5-2                          | CRREL         | ND              |
| B05BBA   | Area 5 Grid B               | 1.5-2                          | 8330          | ND              |
| B05BBA   | Area 5 Grid B               | 1.5-2                          | CRREL         | RDX/HMX         |
| B05CBA   | Area 5 Grid C               | 1.5-2                          | CRREL         | ND              |
| B05DBA   | Area 5 Grid D               | 1.5-2                          | CRREL         | ND              |
| B05EBA   | Area 5 Grid E               | 1.5-2                          | 8330          | ND              |
| B05EBA   | Area 5 Grid E               | 1.5-2                          | CRREL         | TNT/DNT         |
| B05HBA   | Area 5 Grid H               | 1.5-2                          | 8330          | ND              |
| B05HBA   | Area 5 Grid H               | 1.5-2                          | CRREL         | RDX/HMX         |
| B05IBA   | Area 5 Grid I               | 1.5-2                          | 8330          | ND              |
| B05IBA   | Area 5 Grid I               | 1.5-2                          | CRREL         | TNT/DNT         |
| B05JBA   | Area 5 Grid J               | 1.5-2                          | 8330          | ND              |

| <b>Table 1. Preliminary (non-validated) Results for Explosives in Soil Samples</b> |                 |                                |               |                 |
|--|-----------------|--------------------------------|---------------|-----------------|
| <b>Sample ID</b>   | <b>Location</b> | <b>Sample Depth (feet bgs)</b> | <b>Method</b> | <b>Compound</b> |
| B05JBA   | Area 5 Grid J   | 1.5-2                          | CRREL         | RDX/HMX         |
| B05KBA   | Area 5 Grid K   | 1.5-2                          | CRREL         | TNT/DNT         |
| B05LBA   | Area 5 Grid L   | 1.5-2                          | CRREL         | ND              |
| B05MBA   | Area 5 Grid M   | 1.5-2                          | CRREL         | ND              |
| B05NBA   | Area 5 Grid N   | 1.5-2                          | CRREL         | ND              |
| B05QBA   | Area 5 Grid Q   | 1.5-2                          | CRREL         | ND              |
| B12EBA   | Area 12 Grid E  | 1.5-2                          | CRREL         | ND              |

Table 1 Acronyms &amp; Abbreviations:

CRREL - Cold Regions Research Environmental Laboratory colorimetric test

8330 - EPA Method 8330

ND - No Detected Explosives Compounds

RDX/HMX - Detected Explosive Compounds using the RDX/HMX Screen

TNT/DNT - Detected Explosive Compounds using the TNT/DNT Screen

| <b>Table 2. Preliminary (non-validated) Results for Explosives in Groundwater</b> |                        |                     |               |  |
|---|------------------------|---------------------|---------------|--|
| <b>Sample ID</b>  | <b>Location</b>        | <b>Sample Depth</b> | <b>Method</b> | <b>Compound</b>                                |
| W19SSA  | Monitoring Well MW-19S | 38-48               | 8330          | HMX<HA<br>RDX>HA<br>TNT>HA<br>4AmDNT<br>2AmDNT |
| W19DDA  | Monitoring Well MW-19D | 293-298             | 8330          | RDX<HA   |
| W03DDA  | Monitoring Well MW-03D | 262-267             | 8330          | ND   |
| W03SSA  | Monitoring Well MW-03S | 44-54               | 8330          | ND   |
| WRW3XA  | Monitoring Well RW-3   | -                   | 8330          | ND   |

Table 2 Acronyms &amp; Abbreviations:

8330 - EPA Method 8330

ND - No Detected Explosive Compounds

HA - Health Advisory

TNT - 2,4,6-Trinitrotoluene

4AmDNT - 4-Amino-2,6-dinitrotoluene

2AmDNT - 2-Amino-4,6-dinitrotoluene

RDX - Hexahydro-1,3,5-trinitro-1,3,5-triazine

HMX - Octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine