

**WEEKLY PROGRESS UPDATE
FOR JANUARY 23 - JANUARY 29, 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 January 23 to January 29, 1998.

1. SUMMARY OF ACTIONS TAKEN

UXO Surveys

No UXO surveys were performed during this period.

Drilling

One drill rig is preparing to drill at MW-19D. The second Barber Rig has drilled to 150 feet bgs at MW-3D.

Samples

Groundwater samples were collected from monitoring wells MW-7M1, MW-13S, MW-13D and CS-1/MW-122A. Soil samples were collected at 10 foot intervals during the advancement of the boring for MW-3D. Soil samples were collected from 0-6" at Areas GP-7, GP-16, and GP-18. Surface water and sediment samples were collected at Areas 23, 25, and 43.

Water Level Measurements

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

Plans and Reports

NGB submitted the final version of the Surface Water/Sediment FSP on January 28, 1998. NGB is preparing the Final Gun and Mortar Positions FSP and the Final Storm Water FSP.

Meetings

A technical meeting with EPA, MADEP, and USGS was not convened this week. An IAGS Review Team meeting was held on January 28 at 6:00 pm at the Bourne Best Western. The next IAGS Review Team meeting is scheduled for Monday, March 2, at the Forestdale School (pending arrangements by school officials).

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, Table 2 for groundwater samples, and Table 3 for sediment samples. Results from soil samples were as follows:

Explosives were detected by the 8330 Method in one soil sample collected from 0-0.5 feet bgs in Area 1.

Explosives were detected by the CRREL Method in three soil samples collected from 0-0.5 feet bgs in Area 5.

Explosives were detected by the CRREL Method in one soil sample collected from 0-0.5 feet bgs in Area 12.

Explosives were detected by the CRREL Method in three soil samples collected from 0-0.5 feet bgs in Area 13.

Explosives were detected by the CRREL Method in seven soil samples collected from 0-0.5 feet bgs at GP-7.

Explosives were detected by the CRREL Method in one soil sample collected from 0-0.5 feet bgs at GP-18.

Explosives were detected by the CRREL Method in twelve soil samples collected from 0-0.5 feet bgs at GP-16.

Results from groundwater samples were as follows:

Nitroglycerin was detected in monitoring well 03MW0604A. Since nitroglycerin was also detected in the laboratory blank accompanying this sample, its presence in the field sample is in doubt, and will be evaluated through data validation.

Results from sediment samples were as follows:

Explosives were detected by the CRREL Method in three sediment samples collected from 0-0.5 feet bgs at Area 23 (J-3 Wetland).

Explosives were detected by the CRREL Method in three sediment samples collected from 0-0.5 feet bgs at Area 25 (Rod & Gun Club).

Explosives were detected by the CRREL Method in one sediment sample collected from 0-0.5 feet bgs at Area 26 (Cranberry Bog).

Explosives were detected by the CRREL Method in two sediment samples collected from 0-0.5 feet bgs at Area 29 (Ox Pond).

Explosives were detected by the CRREL Method in two sediment samples collected from 0-0.5 feet bgs at Area 36 (Opening Pond).

3. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period included the following:

Weekly Progress Update (January 16 - January 22, 1998)	January 23, 1998
Final FSP for Surface Water and Sediment	January 28, 1998

4. SCHEDULED ACTIONS

During the next week, well drilling and installation will continue at monitoring wells MW-19D and MW-3D. Monitoring well development will continue at MW-5M1, MW-5M2, and MW-2S. Groundwater sampling will continue at monitoring well locations. Soil sampling will continue at grid locations in Areas 3, 7, 8, 11, and 15. Sediment and surface water sampling will continue at ponds and swamps. Monitoring well development will continue at completed monitoring well locations.

Table 1. Preliminary (non-validated) Results for Explosives in Soil Samples				
Sample ID	Location	Sample Depth (feet bgs)	Method	Compound
B01IAA	Area 1 Grid I	0-0.5	8330	PETN
B01JAA	Area 1 Grid J	0-0.5	8330	ND
B01KAA	Area 1 Grid K	0-0.5	8330	ND
B05AAA	Area 5 Grid A	0.0-5	CRREL	ND
B05DAA	Area 5 Grid D	0-0.5	CRREL	ND
B05EAA	Area 5 Grid E	0.0-5	CRREL	TNT/DNT
B05HAA	Area 5 Grid H	0.0-5	CRREL	ND
B05IAA	Area 5 Grid I	0.0-5	CRREL	ND
B05JAA	Area 5 Grid J	0-0.5	CRREL	RDX/HMX
B05KAA	Area 5 Grid K	0-0.5	CRREL	ND
B05LAA	Area 5 Grid L	0-0.5	CRREL	ND
B05MAA	Area 5 Grid M	0.0-5	CRREL	ND

Table 1. Preliminary (non-validated) Results for Explosives in Soil Samples				
Sample ID	Location	Sample Depth (feet bgs)	Method	Compound
B05NAA	Area 5 Grid N	0-0.5	CRREL	ND
B05QAA	Area 5 Grid Q	0.0-5	CRREL	TNT/DNT
B06CBA	Area 6 Grid C	1.5-2.0	8330	ND
B06DBA	Area 6 Grid D	1.5-2.0	8330	ND
B06EBA	Area 6 Grid E	1.5-2.0	8330	ND
B12AAA	Area 12 Grid A	0-0.5	CRREL	RDX/HMX
B12FAA	Area 12 Grid F	0-0.5	CRREL	ND
B13FAA	Area 13 Grid F	0-0.5	CRREL	ND
B13GAA	Area 13 Grid G	0-0.5	CRREL	RDX/HMX
B13HAA	Area 13 Grid H	0-0.5	CRREL	ND
B13IAA	Area 13 Grid I	0-0.5	CRREL	TNT/DNT RDX/HMX
B13JAA	Area 13 Grid J	0-0.5	CRREL	TNT/DNT
BM3AAA	MP-3 Grid A	0.0-5	8330	ND
BM3BAA	MP-3 Grid B	0-0.5	8330	ND
BM3CAA	MP-3 Grid C	0.0-5	8330	ND
BM3DAA	MP-3 Grid D	0-0.5	8330	ND
BM3EAA	MP-3 Grid E	0.0-5	8330	ND
BGMAAA	GP-7 Grid A	0-0.5	CRREL	TNT/DNT RDX/HMX
BGMBAA	GP-7 Grid B	0.0-5	CRREL	TNT/DNT
BGMCAA	GP-7 Grid C	0-0.5	CRREL	TNT/DNT
BGMDAA	GP-7 Grid D	0.0-5	CRREL	TNT/DNT
BGMEAA	GP-7 Grid E	0-0.5	CRREL	ND
BGMFAA	GP-7 Grid F	0.0-5	CRREL	ND
BGMFAD	GP-7 Grid F (dup)	0-0.5	CRREL	ND
BGMGAA	GP-7 Grid G	0.0-5	CRREL	TNT/DNT
BGMHAA	GP-7 Grid H	0-0.5	CRREL	ND

Table 1. Preliminary (non-validated) Results for Explosives in Soil Samples				
Sample ID	Location	Sample Depth (feet bgs)	Method	Compound
BGMIAA	GP-7 Grid I	0.0-5	CRREL	ND
BGMJAA	GP-7 Grid J	0-0.5	CRREL	ND
BGMKAA	GP-7 Grid K	0.0-5	CRREL	TNT/DNT
BGMLAA	GP-7 Grid L	0-0.5	CRREL	RDX/HMX
BGLAAA	GP-18 Grid A	0.0-5	CRREL	ND
BGLBAA	GP-18 Grid B	0-0.5	CRREL	ND
BGLCAA	GP-18 Grid C	0.0-5	CRREL	ND
BGLDAA	GP-18 Grid D	0-0.5	CRREL	ND
BGLEAA	GP-18 Grid E	0.0-5	CRREL	ND
BGLFAA	GP-18 Grid F	0-0.5	CRREL	TNT/DNT RDX/HMX
BGLGAA	GP-18 Grid G	0.0-5	CRREL	ND
BGHAAA	GP-16 Grid A	0-0.5	CRREL	TNT/DNT
BGHAAD	GP-16 Grid A (dup)	0.0-5	CRREL	TNT/DNT
BGHBAA	GP-16 Grid B	0-0.5	CRREL	TNT/DNT
BGHDAA	GP-16 Grid D	0.0-5	CRREL	TNT/DNT
BGHEAA	GP-16 Grid E	0-0.5	CRREL	TNT/DNT
BGHFAA	GP-16 Grid F	0.0-5	CRREL	TNT/DNT
BGHGAA	GP-16 Grid G	0-0.5	CRREL	TNT/DNT
BGHHAA	GP-16 Grid H	0.0-5	CRREL	TNT/DNT
BGHIAA	GP-16 Grid I	0-0.5	CRREL	TNT/DNT
BGHJAA	GP-16 Grid J	0.0-5	CRREL	ND
BGHKAA	GP-16 Grid K	0-0.5	CRREL	ND
BGHLAA	GP-16 Grid L	0.0-5	CRREL	TNT/DNT
BGHMAA	GP-16 Grid M	0-0.5	CRREL	TNT/DNT
BGHMAD	GP-16 Grid M (dup)	0.0-5	CRREL	TNT/DNT
S03DCA	MW-3 Boring	10	CRREL	ND
S03DDA	MW-3 Boring	20	CRREL	ND

Table 1. Preliminary (non-validated) Results for Explosives in Soil Samples				
Sample ID	Location	Sample Depth (feet bgs)	Method	Compound
S03DEA	MW-3 Boring	30	CRREL	ND
S03DFA	MW-3 Boring	40	CRREL	ND
S03DGA	MW-3 Boring	50	CRREL	ND
S26DBA	MW-26 Boring	1.5-2.0	8330	ND
S26DFA	MW-26 Boring	60	8330	ND
S26DIA	MW-26 Boring	70	8330	ND
S26DKA	MW-26 Boring	80	8330	ND

Table 1 Acronyms & Abbreviations:

8330 - EPA Method 8330

CRREL - Cold Regions Research Environmental Laboratory colorimetric test

PETN - Pentaerythritol Tetranitrate

ND - No Detected Explosives Compounds

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

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

Table 2. Preliminary (non-validated) Results for Explosives in Groundwater Samples				
Sample ID	Location	Sample Depth (feet bgs)	Method	Compound
WF05XA	FS-12/WT-5	60.8-70.8	8330	ND
WF12XA	90MW00054	NA	8330	ND
WG111A	USGS SD263111	18.32-21.32	8330	ND
WG160A	USGS SD26160	40.35-42.35	8330	ND
WT34AA	03MW0604A	-17.83 to -22.83	8330	Nitroglycerin*
WT360A	03MW0060	NA	8330	ND
WU24XA	USFW241098	2.61 to -0.39	8330	ND

Table 2 Acronyms & Abbreviations

8330 - EPA Method 8330

ND - No Detected Explosives Compounds

NA - Not available

* - Compound was detected in the laboratory blank associated with this sample.

Table 3. Preliminary (non-validated) Results for Explosives in Sediment Samples				
Sample ID	Location	Sample Depth (feet bgs)	Method	Compound
D23AAA	Area 23 (J-3 Wetland) Sample A	0-0.5	CRREL	RDX/HMX
D23BAA	Area 23 (J-3 Wetland) Sample B	0-0.5	CRREL	RDX/HMX
D23BAD	Area 23 (J-3 Wetland) Sample B (dup)	0-0.5	CRREL	RDX/HMX
D23CAA	Area 23 (J-3 Wetland) Sample C	0-0.5	CRREL	ND
D25AAA	Area 25 (Rod & Gun Club) Sample A	0-0.5	CRREL	ND
D25BAA	Area 25 (Rod & Gun Club) Sample B	0-0.5	CRREL	RDX/HMX
D25BAD	Area 25 (Rod & Gun Club) Sample B (dup)	0-0.5	CRREL	RDX/HMX
D25CAA	Area 25 (Rod & Gun Club) Sample C	0-0.5	CRREL	RDX/HMX
D26EAA	Area 26 (Cranberry Bog) Sample E	0-0.5	CRREL	ND
D26FAA	Area 26 (Cranberry Bog) Sample F	0-0.5	CRREL	TNT/DNT
D26GAA	Area 26 (Cranberry Bog) Sample G	0-0.5	CRREL	ND
D26HAA	Area 26 (Deep Bottom Pond) Sample H	0-0.5	CRREL	ND
D28AAA	Area 28 (Grassy Pond) Sample A	0-0.5	CRREL	ND
D28AAD	Area 28 (Grassy Pond) Sample A (dup)	0-0.5	CRREL	ND
D28BAA	Area 28 (Grassy Pond) Sample B	0-0.5	CRREL	ND
D28CAA	Area 28 (Grassy Pond) Sample C	0-0.5	CRREL	ND
D28DAA	Area 28 (Grassy Pond) Sample D	0-0.5	CRREL	ND
D29AAA	Area 29 (Ox Pond) Sample A	0-0.5	CRREL	TNT/DNT RDX/HMX
D29BAA	Area 29 (Ox Pond) Sample B	0-0.5	CRREL	ND
D29CAA	Area 29 (Ox Pond) Sample C	0-0.5	CRREL	TNT/DNT RDX/HMX
D32AAA	Area 32 (Raccoon Swamp) Sample A	0-0.5	CRREL	ND
D32BAA	Area 32 (Raccoon Swamp) Sample B	0-0.5	CRREL	ND
D35AAA	Area 35 (Gibbs Pond) Sample A	0-0.5	CRREL	ND
D35BAA	Area 35 (Gibbs Pond) Sample B	0-0.5	CRREL	ND
D36AAA	Area 36 (Opening Pond) Sample A	0-0.5	CRREL	RDX/HMX

Table 3. Preliminary (non-validated) Results for Explosives in Sediment Samples				
Sample ID	Location	Sample Depth (feet bgs)	Method	Compound
D36BAA	Area 36 (Opening Pond) Sample B	0-0.5	CRREL	ND
D36CAA	Area 36 (Opening Pond) Sample C	0-0.5	CRREL	RDX/HMX

Table 3 Acronyms & Abbreviations:

CRREL - Cold Regions Research Environmental Laboratory colorimetric test

ND - No Detected Explosive Compounds

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

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