WEEKLY PROGRESS UPDATE
FOR SEPTEMBER 10 – SEPTEMBER 14, 2001

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019 & 1-2000-0014
MASSACHUSETTS MILITARY RESERVATION
TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from September 10 to September 14, 2001.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of September 14 is summarized in Table 1.

Table 1. Drilling progress as of September 14, 2001

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-178	Central Impact Area Well (CIAP-3)	335	195	167-177, 257-267
MW-179	Central Impact Area Well (CIAP-1)	338	198	
MW-182	Central Impact Area Well (CIAP-9)	190	20	
MW-183	Central Impact Area Well (CIAP-4)	71		

Bgs = below ground surface
Bwt = below water table

Completed well installation of MW-178 (CIAP-3). Completed drilling of MW-179 (CIAP-1) and commenced drilling of MW-182 (CIAP-9) and MW-183 (CIAP-4).

Samples collected during the reporting period are summarized in Table 2. Groundwater samples were collected as part of the August Long Term Groundwater Monitoring round.

The Guard, EPA, and MADEP planned a meeting on September 13 to discuss technical issues. This meeting was canceled.

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:

- Soil from supplemental BIP grid samples HDJ1200182RSS3, HDJ200182RSS7, and HDJ1A100043SS4 had detections of PETN that were not confirmed by PDA spectra.

- Soil from supplemental BIP grid sample HDJ1A100043SS2 had detections of 4-nitrotoluene and nitroglycerin that were not confirmed by PDA spectra.

- Soil from supplemental BIP grid sample HDJ1A200108SS4 had a detection of 2,4-DNT that was confirmed by PDA spectra.

- Soil from supplemental BIP grid sample HDJ1A200108SS7 had a detection of 2,4-DNT and HMX that were confirmed by PDA spectra.

- Soil from supplemental BIP grid samples HDJ2A200595SS4, HDJ2A200600SS2, and HDJ2A200600SS6 had detections of nitroglycerin that were not confirmed by PDA spectra.

- Soil from supplemental BIP grid sample HDJ2A200600SS3 had detections of nitroglycerin and RDX. The RDX was confirmed by PDA spectra.

- Groundwater sample 58MW0007C (CS-19) had a detection of RDX that was confirmed by PDA spectra. This was the first time RDX was detected in this well.

- Groundwater samples 58MW0016B (CS-19) and 58MW0016C (CS-19) had detections of RDX and HMX that were confirmed by PDA spectra. The previous rounds of sampling had similar detections.

- Groundwater samples from MW-164M2 (J-1 Range) had detections of RDX, HMX, and tetryl that were confirmed by PDA spectra. The previous round of sampling was similar except that this was the first time tetryl was detected.

- Groundwater samples from MW-45S (L Range) had detections of TNT, 2,6-DNT, 2-nitrotoluene, 3-nitrotoluene, 4-nitrotoluene, RDX, nitroglycerin, and picric acid. 2,6-DNT and RDX were confirmed by PDA spectra. The previous round of sampling was similar except that this is the first time RDX was detected.

- Groundwater samples from MW-58S (J-1 Range) had detections of RDX and HMX that were confirmed by PDA spectra. The previous rounds of sampling had similar detections.

- Groundwater profile samples from MW-181 (J-3 Range) had detections of acetone and chloroform.

- One soil sample from boring B-29 (J-3 Melt/Pour) had a detection of TNT that was confirmed by PDA spectra.

3. DELIVERABLES SUBMITTED

J-1, J-3, L Ranges Final Additional Delineation Work Plan	9/10/01
RRA Final Round 2 Supplemental Delineation Report	9/13/01
Weekly Progress Update for September 3 - September 7	9/13/01

4. SCHEDULED ACTIONS

Scheduled actions for the week of September 10 include well installation of MW-179 (CIAP-1), and continued drilling of MW-182 (CIAP-9) and MW-183 (CIAP-4). Groundwater sampling will continue for the August LTM round. Excavation of UXO detonation craters will continue.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

An additional downgradient well location (D1P-8) on Pew Road will be drilled in the coming weeks. Analysis of first, second, and third round groundwater samples from newly installed wells is ongoing. Analytical results of additional subsurface soil samples were provided. The groundwater Feasibility Study is being prepared.

TABLE 2
SAMPLING PROGRESS
9/8/2001-9/14/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
95-6A-E	FIELDQC	09/10/2001	FIELDQC	0.00	0.00		
95-6A-T	FIELDQC	09/10/2001	FIELDQC	0.00	0.00		
95-6B-T	FIELDQC	09/11/2001	FIELDQC	0.00	0.00		
W164M1T	FIELDQC	09/10/2001	FIELDQC	0.00	0.00		
95-6A	95-6A	09/10/2001	GROUNDWATER		184.00		154.30
95-6B	95-6B	09/10/2001	GROUNDWATER		130.00		104.45
95-6ES	95-6ES	09/11/2001	GROUNDWATER	38.00	48.00	0.00	10.00
BHW215083A	BHW215083A	09/10/2001	GROUNDWATER		215.00		157.50
BHW215083C	BHW215083C	09/10/2001	GROUNDWATER		290.00		232.00
W164M1A	MW-164	09/10/2001	GROUNDWATER	117.00	127.00	9.00	19.00

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 8/21/01-9/14/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
HDJ1200182RSS3	J1200182RS	08/27/2001	CRATER GRID	0.00	0.25			8330N	PENTAERYTHRITOL TETRANITF	NO
HDJ1200182RSS7	J1200182RS	08/27/2001	CRATER GRID	0.00	0.25			8330N	PENTAERYTHRITOL TETRANITF	NO
HDJ1200182RSS8	J1200182RS	08/27/2001	CRATER GRID	0.00	0.25			8330N	PENTAERYTHRITOL TETRANITF	NO
HDJ1A100043SS2	J1A100043S	08/22/2001	CRATER GRID	0.00	0.25			8330N	4-NITROTOLUENE	NO
HDJ1A100043SS2	J1A100043S	08/22/2001	CRATER GRID	0.00	0.25			8330N	NITROGLYCERIN	NO
HDJ1A100043SS4	J1A100043S	08/22/2001	CRATER GRID	0.00	0.25			8330N	PENTAERYTHRITOL TETRANITF	NO
HDJ1A200108SS4	J1A200108A	08/22/2001	CRATER GRID	0.00	0.25			8330N	2,4-DINITROTOLUENE	YES
HDJ1A200108SS7	J1A200108B	08/22/2001	CRATER GRID	0.00	0.25			8330N	2,4-DINITROTOLUENE	YES
HDJ1A200108SS7	J1A200108B	08/22/2001	CRATER GRID	0.00	0.25			8330N	OCTAHYDRO-1,3,5,7-TETRANITF	YES
HDJ2A200595SS4	J2A200595S	08/27/2001	CRATER GRID	0.00	0.25			8330N	NITROGLYCERIN	NO
HDJ2A200600SS2	J2A200600S	08/27/2001	CRATER GRID	0.00	0.25			8330N	NITROGLYCERIN	NO
HDJ2A200600SS3	J2A200600S	08/27/2001	CRATER GRID	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
HDJ2A200600SS3	J2A200600S	08/27/2001	CRATER GRID	0.00	0.25			8330N	NITROGLYCERIN	NO
HDJ2A200600SS6	J2A200600S	08/27/2001	CRATER GRID	0.00	0.25			8330N	NITROGLYCERIN	NO
58MW0007C	58MW0007C	08/31/2001	GROUNDWATER	153.00	158.00	28.16	33.16	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
58MW0016B	58MW0016B	08/30/2001	GROUNDWATER	151.00	161.00	29.50	39.50	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
58MW0016B	58MW0016B	08/30/2001	GROUNDWATER	151.00	161.00	29.50	39.50	8330N	OCTAHYDRO-1,3,5,7-TETRANITF	YES
58MW0016C	58MW0016C	08/30/2001	GROUNDWATER	116.00	126.00	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
58MW0016C	58MW0016C	08/30/2001	GROUNDWATER	116.00	126.00	0.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITF	YES
W164M2A	MW-164	08/21/2001	GROUNDWATER	227.00	237.00	119.00	129.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
W164M2A	MW-164	08/21/2001	GROUNDWATER	227.00	237.00	119.00	129.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITF	YES
W164M2A	MW-164	08/21/2001	GROUNDWATER	227.00	237.00	119.00	129.00	8330N	TETRYL	YES
W45SSA	MW-45	08/23/2001	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	2,4,6-TRINITROTOLUENE	NO
W45SSA	MW-45	08/23/2001	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	2,6-DINITROTOLUENE	YES*
W45SSA	MW-45	08/23/2001	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	2-NITROTOLUENE	NO
W45SSA	MW-45	08/23/2001	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	3-NITROTOLUENE	NO
W45SSA	MW-45	08/23/2001	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	4-NITROTOLUENE	NO
W45SSA	MW-45	08/23/2001	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES*
W45SSA	MW-45	08/23/2001	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	NITROGLYCERIN	NO
W45SSA	MW-45	08/23/2001	GROUNDWATER	89.00	99.00	0.00	10.00	8330N	PICRIC ACID	NO
W58SSA	MW-58	08/22/2001	GROUNDWATER	100.00	110.00	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
W58SSA	MW-58	08/22/2001	GROUNDWATER	100.00	110.00	0.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITF	YES
GAB29A	MW-181	08/22/2001	PROFILE	36.00	36.00	1.70	1.70	OC21V	ACETONE	

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

TABLE 3
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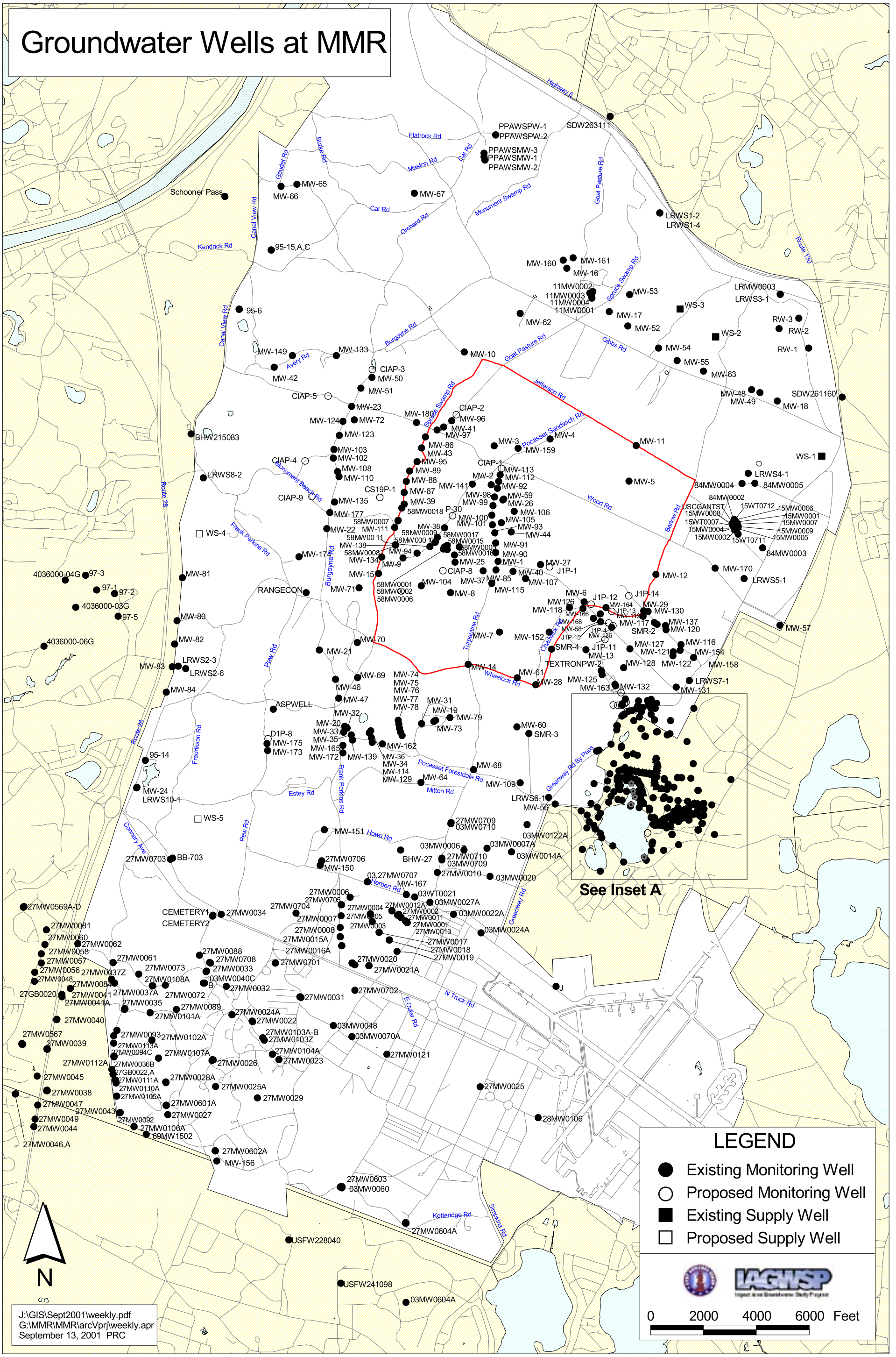
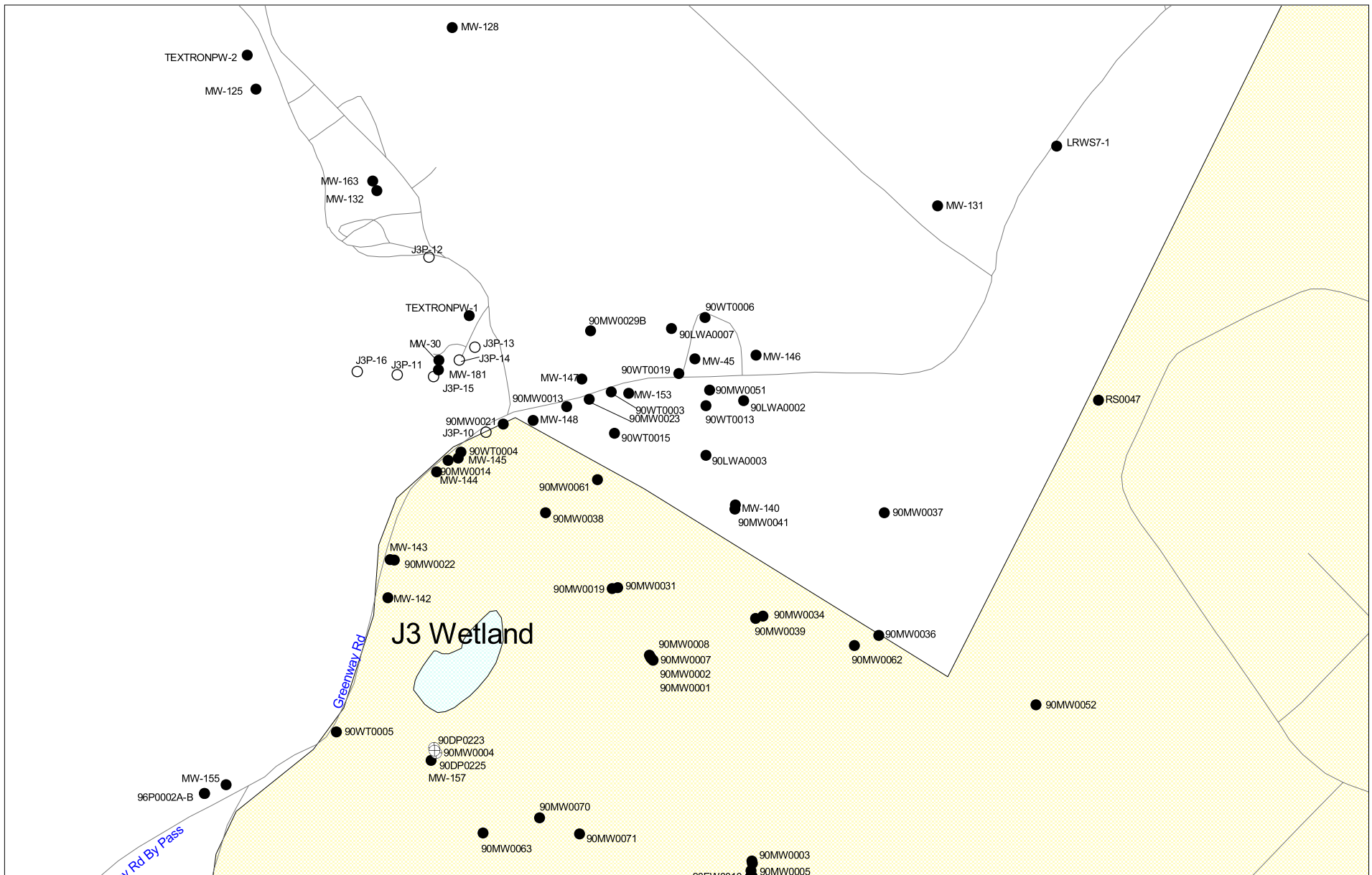
SAMPLES COLLECTED 8/21/01-9/14/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
GAB29A	MW-181	08/22/2001	PROFILE	36.00	36.00	1.70	1.70	OC21V	CHLOROFORM	
ABB0029BAA	B-29	08/22/2001	SOIL BORING	10.00	12.00			8330N	2,4,6-TRINITROTOLUENE	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

Groundwater Wells at MMR





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