

**WEEKLY PROGRESS UPDATE
FOR FEBRUARY 11 – FEBRUARY 15, 2002**

**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 February 11 to February 15, 2002.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of February 15 is summarized in Table 1.

Table 1. Drilling progress as of February 15, 2002				
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-202	Central Impact Area (CIAP-15)	329	185	215-225; 264-274
MW-203	Central Impact Area (CIAP-20)	250	104	
MW-204	Central Impact Area (CIAP-22)	130	74	
MW-205	Central Impact Area (CIAP-16)	276	178	
bgs = below ground surface bwt = below water table				

Completed well installation of MW-202 (CIAP-15) and commenced drilling of MW-203 (CIAP-20), MW-204 (CIAP-22) and MW-205 (CIAP-16). Continued well development for newly installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-203, MW-204, and MW-205. Groundwater sampling of preliminary rounds for recently installed Demo 1, J-1 Range and J-3 Range wells continued. Groundwater water samples were collected from the Bourne water supply wells and the Sandwich Town Hall Spring Well. Water samples were collected from the GAC treatment system. Soil samples were collected from polygons in the J-2 Range, soil cuttings at recently installed monitoring wells and from fill used for well installation.

As part of the Munitions Survey Project, pre-detonation and post-detonation soil samples were collected from the J-1 Range. Soil samples were collected from a burn pit uncovered in the J-1 Range. Wipe and soil samples were collected from UXO and soil samples were collected beneath UXO in Transect 3.

The Guard, EPA, and MADEP had a meeting on February 14 to discuss technical issues, including the following:

Attendees

Ben Gregson (IAGWSPO)	CPT Bill Myer (IAGWSPO)	Dave Hill (IAGWSPO)
Karen Wilson (IAGWSPO)	Bill Gallagher (IAGWSPO)	Tina Dolen (IAGWSPO)
LTC Bill FitzPatrick (MAARNG)	COL Albert Bleakley (JPO)	Jane Dolan (EPA)
Mike Jasinski (EPA)	Desiree Moyer (EPA)	Len Pinaud (MADEP)
Mark Panni (MADEP)	Darrell Deleppo (ACE)	Gina Tyo (ACE)
Ed Wise (ACE)	Heather Sullivan (ACE)	Ellen Iorio (ACE)
Rob Foti (ACE)	Marc Grant (AMEC)	Kim Harriz (AMEC)
John Rice (AMEC)	Larry Hudgins (Tetra Tech)	Leo Montroy (Tetra Tech-phone)
Susan Stewart (Tetra Tech-phone)	Dave Williams (MDPH)	Adam Balogh (TRC-phone)

Punchlist Items

- #1 Verify Wells on Snake Pond Inset Map (AFCEE). AFCEE will not be able to complete this task at this time. AMEC to speak to Rose Forbes and Senior Corps regarding status of existing information. Guard suggested AMEC field crews could document wells in surrounding area as they sample other wells. AMEC could potentially do verification as part of mobilization step in J Range investigations. EPA indicated that well numbers need to be verified.
- #5 Provide Status of UXO too large to be detonated in CDC (Corps). EPA noted that they provided a letter to the Guard, dated February 12th, which clarified two issues that the Guard questioned regarding destruction in the CDC. EPA requested information on disposition of 56, 81mm Mortar rounds recently uncovered in J-1 Range Polygon 1. Status of Mortars (inert or HE) has not been determined. Gina Tyo to follow-up on status and assess the potential that the mortars could be included in upcoming destruction activities at the CDC (2 week duration). Whether the mortars could be included in this round of activity may be limited by the existing backlog and the current contract scope for the CDC.
- #8 Provide summary of MW-181 RAD analyses and schedule to complete (AMEC). Email summary provided on 02/08/02.
- #9 Provide approval of Guard's 01/17/02 letter proposal to discontinue routine Pesticide/PCB groundwater analyses (EPA). EPA to respond shortly.
- #10 Provide cost assessment for discontinuing Pesticide portion of PEST/PCB analysis (Corps). Cost information emailed 02/13/02.
- #12 Provide analyses results from BA-1 electron tube wipe sample (Tetra Tech). It was noted that PCBs were not detected in the wipe sample collected in the tube. In addition, an email sent 02/13/02 indicated that soil analytical results were provided on 1/11/02; 1/18/02. BA-1 Letter Report to be submitted today.
- #13 Provide list of past ASR interviewees w/ BOMARC site knowledge (Corps). Information emailed to Todd Borci. Gina Tyo to forward email to Jane Dolan, and copy Ms. Dolan on any future ASR-related items.
- #15 Provide status and schedule for resampling of MW-187 (Corps/AMEC). MW-187 resampled on 2/11/02; results will be available 2/18/02. Agenda item for next week.
- #16 Email TM 01-7 Report to MADEP (AMEC). Report emailed to Len Pinaud.
- #17 Provide response to Adam Balogh's memo regarding CIA Pump Test (Corps/AMEC). Email responses sent 2/13/02 and 2/14/02; discussions further in After Meeting on CIA Pump Test.

#18 Provide schedule for sampling Sandwich Town Hall Spring Well (Corps/AMEC). Spring sampled for explosives and perchlorate on 02/13/02. Related topics discussed further on agenda.

Sandwich Town Hall Spring Well and other Water Supply Wells

- Official name is Town Hall Spring well located on Main Street in Sandwich. This well was sampled by AMEC on 2/13/02 for explosives, perchlorate analyses.
- Jeff Rose (DEP Water Supply) indicated to Mark Panni (DEP) that this well is only analyzed for nitrate, nitrite and sodium by the Town of Sandwich.
- Five Sandwich Water Supply Wells were sampled for explosives within the last 2 weeks. Residual sample volume from these analysis were sent to Ceimic for analysis of perchlorate.
- Bourne Water Supply Wells were sampled for explosives/perchlorate last on 1/30/02. Bourne Sentry Wells were sampled this week.
- At a meeting with the Town of Bourne Water District and Guard on 2/11/02, Jeff Rose requested that the Guard sample Bourne's 6-inch Test Well, a deep well screened at bedrock, drilled as part of the Bourne well field development. AMEC to obtain information on well, GPS coordinates, and map of well location.

Central Impact Area Wells Update

John Rice (AMEC) described the status of well installations in the Central Impact Area.

- CIAP-20, CIAP-22, and CIAP-16 are currently being drilled. Drilling expected to be completed by mid next week. Screens to be selected at end of next week or at the beginning of the week of February 25th.
- The next wells scheduled for installation are CIAP-18, CIAP-19, and CIAP-21.
- Karen Wilson (IAGWSPO) indicated that ROAs for CIAP-11, CIAP-12 were sent to Mike Nelson (Natural Heritage) for delivery today.
- Mike Jasinski (EPA) suggested that the Guard schedule a site visit with Mr. Nelson since it was his first experience with MMR.

Munitions Survey Project Update

Rob Foti (Corps) provided an update on the MSP3 and HUTA tasks.

AirMag. Excavation of 17 approved anomalies commenced, beginning with Area 4. Excavation of 11 items is complete. 10 anomalies are reported to contain trash. One anomaly is 20 feet off the road and a backhoe is needed for further investigation – effort to be coordinated with Karen Wilson. Findings will be provided in a matrix form next week. Visual investigation of Area 3 items will commence next week.

HUTA2. No activity on HUTA2 due to a non intrusive window (until 3/4/02) to allow other contractors to complete tasks. Polyethylene covering on HUTA1 soil stockpiles was damaged in recent storms and was replaced.

J Range Polygons. Excavation of J-1 Range Polygon 1 revealed 1 burial area, 1 burn pit, and 1 burial area/burn pit. Soil samples were collected in one burn pit. In Burn Pit 2, a 5-gallon bucket with material similar to roofing-tar was uncovered. Photoionization Detector readings on the material were 10 ppm. This material and the surrounding soil have been sampled. BIPs scheduled for 4 items on 02/15/02 including 3, 31mm HE rounds, 2 with partial fuze and one with an intact fuze; and one M524 fuze.

Eastern MSP. Grubbing of area is being conducted this week.

Scar Site. Minor grubbing is being conducted this week to allow access to surveyors.

U Range. Work to begin in the near future. Corps is coordinating with AMEC sampling activities.

BA-1 Disposal Site. Report to be submitted 2/14/02. Tetra tech is maintaining stockpiles and perimeter fencing.

Follow-up Actions.

- Determine status and disposition of J-1 Polygon 1 mortars.
- Coordinate timing of the mortar removals with Tina Dolen for Sandwich notification purposes.

Miscellaneous

- Ellen Iorio (ACE) to provide schedule for submission of remaining MSP3 Workplans by 02/21/02. Add as Punchlist Item.
- Ms. Iorio requested agency comments on the revised Central Impact Area sites and U Range Workplans (redline strikeout versions) by 02/19/02.
- Gina Tyo (ACE) indicated that ASR witness interview #32 will be revised to clarify that observation of munitions in Pond was not a first-hand account. Tetra Tech is compiling a list of remaining interview request to determine what can be completed by the Private Investigator under the existing contract scope.

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, as well as any analyses pursuant to a special request. 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 explosive 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:

- Groundwater samples from MW-163S (J-3 Range) had detections of RDX and HMX that were confirmed by PDA spectra. The detections were similar to previous sampling rounds.
- Groundwater samples from MW-196S (J-3 Range) had detections of 1,3,5-trinitrobenzene, TNT, 2A-DNT, 4A-DNT and HMX that were confirmed by PDA spectra. This is the first time this well has been sampled and these first round results were consistent with the groundwater profile results.
- Groundwater profile samples from MW-205 (CIAP-16) had detections of 2-nitrotoluene (1 interval), nitrobenzene (1 interval), nitroglycerin (5 intervals), RDX (4 intervals), HMX (1 interval) and picric acid (8 intervals). One detection of RDX and the detection of HMX were confirmed by PDA spectra. Three detections of RDX were not confirmed by PDA spectra, but with interference.

- Soil sample HD152AC1CAA (RRA Containment Pad) had a detection of nitroglycerin that was not confirmed by PDA spectra.

3. DELIVERABLES SUBMITTED

Weekly Progress Update for February 4 – February 8, 2002

02/14/02

4. SCHEDULED ACTIONS

Scheduled actions for the week of February 18 include complete well installation of MW-205 (CIAP-16) and complete drilling of MW-203 (CIAP-20) and MW-204 (CIAP-22).

5. SUMMARY OF ACTIVITIES FOR DEMO 1

Additional delineation of the downgradient portion of the groundwater plume will be conducted prior to finalizing the Feasibility Study for the Groundwater Operable Unit. Proposed monitoring well locations have been scoped by the Guard and approved by the agencies for delineation of the groundwater plume. Road building for the first proposed monitoring well, D1P-9 commenced this week. Subsequent locations have been proposed and the next location will be selected and approved based on the profile results at D1P-9. Response to comments letters were submitted for the Draft Final Demo 1 Soil Report and the Post-Screening Investigation Work Plan on February 15, 2002.

TABLE 2
 SAMPLING PROGRESS
 02/09/2002 - 02/15/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
J1.A.T1.001.1.0	J1.T1.001.R	02/14/2002	CRATER GRID	0.25	0.50		
J1.A.T1.001.4.0	J1.T1.001.R	02/15/2002	CRATER GRID	0.25	0.50		
J1.A.T1.002.1.0	J1.T1.002.R	02/14/2002	CRATER GRID	0.25	0.50		
J1.A.T1.002.4.0	J1.T1.002.R	02/15/2002	CRATER GRID	0.25	0.50		
J1.A.T1.003.1.0	J1.T1.003.R	02/14/2002	CRATER GRID	0.25	0.50		
J1.A.T1.003.4.0	J1.T1.003.R	02/15/2002	CRATER GRID	0.25	0.50		
J1.A.T1.004.1.0	J1.T1.004.R	02/14/2002	CRATER GRID	0.00	0.25		
J1.A.T1.004.4.0	J1.T1.004.R	02/15/2002	CRATER GRID	0.00	0.25		
J1.A.T1.004.4.D	J1.T1.004.R	02/15/2002	CRATER GRID	0.00	0.25		
T3.B.0B.011.3.0	T3.0B.011.O	02/12/2002	CRATER GRID	0.00	0.25		
T3.B.0B.011.4.0	T3.0B.011.O	02/12/2002	CRATER GRID	0.50	1.00		
G203DKE	FIELDQC	02/15/2002	FIELDQC	0.00	0.00		
G205DHE	FIELDQC	02/14/2002	FIELDQC	0.00	0.00		
HC101OPA1CAE	FIELDQC	02/14/2002	FIELDQC	0.00	0.00		
HC101OSA1CAE	FIELDQC	02/12/2002	FIELDQC	0.00	0.00		
HC101OYB1CAE	FIELDQC	02/11/2002	FIELDQC	0.00	0.00		
HC101OYF1CAE	FIELDQC	02/13/2002	FIELDQC	0.00	0.00		
SC20001E	FIELDQC	02/15/2002	FIELDQC	0.00	0.00		
W193SSE	FIELDQC	02/13/2002	FIELDQC	0.00	0.00		
W193SST	FIELDQC	02/13/2002	FIELDQC	0.00	0.00		
W197M1E	FIELDQC	02/14/2002	FIELDQC	0.00	0.00		
W197M1T	FIELDQC	02/14/2002	FIELDQC	0.00	0.00		
W197M1T	FIELDQC	02/15/2002	FIELDQC	0.00	0.00		
W197M2E	FIELDQC	02/11/2002	FIELDQC	0.00	0.00		
W197M2T	FIELDQC	02/11/2002	FIELDQC	0.00	0.00		
W197M3E	FIELDQC	02/12/2002	FIELDQC	0.00	0.00		
W197M3T	FIELDQC	02/12/2002	FIELDQC	0.00	0.00		
T3.B.0B.011.2.0	T3.0B.011.O	02/12/2002	GAUZE WIPE	0.00	0.00		
4261020-01G	4261020-01G	02/13/2002	GROUNDWATER				
97-1	97-1	02/11/2002	GROUNDWATER	83.00	93.00	62.00	72.00
97-2	97-2	02/12/2002	GROUNDWATER	75.00	85.00	29.40	39.40
97-3	97-3	02/13/2002	GROUNDWATER	75.00	85.00	36.00	46.00
97-5	97-5	02/12/2002	GROUNDWATER	84.00	94.00	76.00	86.00
97-5D	97-5D	02/12/2002	GROUNDWATER	84.00	94.00	76.00	86.00
W165M3A	MW-165	02/13/2002	GROUNDWATER	94.50	104.50	16.00	26.00
W187DDA	MW-187	02/11/2002	GROUNDWATER	306.00	316.00	199.50	209.50
W193SSA	MW-193	02/13/2002	GROUNDWATER	31.00	36.00	0.00	10.00
W194M1A	MW-194	02/13/2002	GROUNDWATER	85.00	90.00	39.10	44.10
W197M2A	MW-197	02/11/2002	GROUNDWATER	80.00	85.00	59.30	64.30
W197M3A	MW-197	02/12/2002	GROUNDWATER	60.00	65.00	39.40	44.40
DW021202	GAC WATER	02/11/2002	IDW				
DW021502	GAC WATER	02/15/2002	IDW				
G203DAA	MW-203	02/14/2002	PROFILE	150.00	150.00	4.00	4.00

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
 02/09/2002 - 02/15/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
G203DBA	MW-203	02/14/2002	PROFILE	160.00	160.00	14.00	14.00
G203DCA	MW-203	02/14/2002	PROFILE	170.00	170.00	24.00	24.00
G203DDA	MW-203	02/14/2002	PROFILE	180.00	180.00	34.00	34.00
G203DEA	MW-203	02/14/2002	PROFILE	190.00	190.00	44.00	44.00
G203DFA	MW-203	02/14/2002	PROFILE	200.00	200.00	54.00	54.00
G203DGA	MW-203	02/14/2002	PROFILE	210.00	210.00	64.00	64.00
G203DHA	MW-203	02/14/2002	PROFILE	220.00	220.00	74.00	74.00
G203DIA	MW-203	02/15/2002	PROFILE	230.00	230.00	84.00	84.00
G203DJA	MW-203	02/15/2002	PROFILE	240.00	240.00	94.00	94.00
G203DKA	MW-203	02/15/2002	PROFILE	250.00	250.00	104.00	104.00
G204DAA	MW-204	02/14/2002	PROFILE	60.00	60.00	3.70	3.70
G204DBA	MW-204	02/14/2002	PROFILE	70.00	70.00	13.70	13.70
G204DCA	MW-204	02/15/2002	PROFILE	80.00	80.00	23.70	23.70
G204DDA	MW-204	02/15/2002	PROFILE	90.00	90.00	33.70	33.70
G204DEA	MW-204	02/15/2002	PROFILE	100.00	100.00	43.70	43.70
G204DFA	MW-204	02/15/2002	PROFILE	110.00	110.00	53.70	53.70
G204DGA	MW-204	02/15/2002	PROFILE	120.00	120.00	63.70	63.70
G204DHA	MW-204	02/15/2002	PROFILE	130.00	130.00	73.70	73.70
G205DAA	MW-205	02/14/2002	PROFILE	105.00	105.00	7.20	7.20
G205DBA	MW-205	02/14/2002	PROFILE	110.00	110.00	12.20	12.20
G205DCA	MW-205	02/14/2002	PROFILE	120.00	120.00	22.20	22.20
G205DCD	MW-205	02/14/2002	PROFILE	120.00	120.00	22.20	22.20
G205DDA	MW-205	02/14/2002	PROFILE	130.00	130.00	32.20	32.20
G205DEA	MW-205	02/14/2002	PROFILE	140.00	140.00	42.20	42.20
G205DFA	MW-205	02/14/2002	PROFILE	150.00	150.00	52.20	52.20
G205DGA	MW-205	02/14/2002	PROFILE	160.00	160.00	62.20	62.20
G205DHA	MW-205	02/14/2002	PROFILE	170.00	170.00	72.20	72.20
G205DIA	MW-205	02/15/2002	PROFILE	180.00	180.00	82.20	82.20
G205DJA	MW-205	02/15/2002	PROFILE	190.00	190.00	92.20	92.20
G205DKA	MW-205	02/15/2002	PROFILE	200.00	200.00	102.20	102.20
G205DLA	MW-205	02/15/2002	PROFILE	210.00	210.00	112.20	112.20
G205DMA	MW-205	02/15/2002	PROFILE	220.00	220.00	122.20	122.20
G205DNA	MW-205	02/15/2002	PROFILE	230.00	230.00	132.20	132.20
G205DOA	MW-205	02/15/2002	PROFILE	240.00	240.00	142.20	142.20
G205DPA	MW-205	02/15/2002	PROFILE	250.00	250.00	152.20	152.20
G205DQA	MW-205	02/15/2002	PROFILE	260.00	260.00	162.20	162.20
G205DRA	MW-205	02/15/2002	PROFILE	270.00	270.00	172.20	172.20
T3.B.0B.011.1.0	T3.0B.011.O	02/12/2002	SOIL BRUSHING	0.00	0.00		
SC19901	IDW	02/15/2002	SOIL CUTTINGS				
SC20001	IDW	02/15/2002	SOIL CUTTINGS				
SC20101	IDW	02/15/2002	SOIL CUTTINGS				
SC20201	IDW	02/15/2002	SOIL CUTTINGS				
HC101OPA1AAA	101OP	02/14/2002	SOIL GRID	0.00	0.25		
HC101OPA1BAA	101OP	02/14/2002	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

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TABLE 2
 SAMPLING PROGRESS
 02/09/2002 - 02/15/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
HC101OPA1CAA	101OP	02/14/2002	SOIL GRID	0.50	1.00		
HC101OS1BAA	101OS	02/11/2002	SOIL GRID	0.25	0.50		
HC101OS1CAA	101OS	02/11/2002	SOIL GRID	0.50	1.00		
HC101OSA1AAA	101OS	02/12/2002	SOIL GRID	0.00	0.25		
HC101OSA1BAA	101OS	02/12/2002	SOIL GRID	0.25	0.50		
HC101OSA1CAA	101OS	02/12/2002	SOIL GRID	0.50	1.00		
HC101OW1AAA	101OW	02/11/2002	SOIL GRID	0.00	0.25		
HC101OW1BAA	101OW	02/11/2002	SOIL GRID	0.25	0.50		
HC101OW1CAA	101OW	02/11/2002	SOIL GRID	0.50	1.00		
HC101OYA1AAA	101OY	02/12/2002	SOIL GRID	0.00	0.25		
HC101OYA1BAA	101OY	02/12/2002	SOIL GRID	0.25	0.50		
HC101OYA1CAA	101OY	02/12/2002	SOIL GRID	0.50	1.00		
HC101OYB1AAA	101OY	02/11/2002	SOIL GRID	0.00	0.25		
HC101OYB1BAA	101OY	02/11/2002	SOIL GRID	0.25	0.50		
HC101OYB1CAA	101OY	02/11/2002	SOIL GRID	0.50	1.00		
HC101OYB1CAD	101OY	02/11/2002	SOIL GRID	0.50	1.00		
HC101OYC1AAA	101OY	02/12/2002	SOIL GRID	0.00	0.25		
HC101OYC1BAA	101OY	02/12/2002	SOIL GRID	0.25	0.50		
HC101OYC1CAA	101OY	02/12/2002	SOIL GRID	0.50	1.00		
HC101OYD1AAA	101OY	02/12/2002	SOIL GRID	0.00	0.25		
HC101OYD1BAA	101OY	02/12/2002	SOIL GRID	0.25	0.50		
HC101OYD1CAA	101OY	02/12/2002	SOIL GRID	0.50	1.00		
HC101OYE1AAA	101OY	02/13/2002	SOIL GRID	0.00	0.25		
HC101OYE1BAA	101OY	02/13/2002	SOIL GRID	0.25	0.50		
HC101OYE1CAA	101OY	02/13/2002	SOIL GRID	0.50	1.00		
HC101OYF1AAA	101OY	02/13/2002	SOIL GRID	0.00	0.25		
HC101OYF1BAA	101OY	02/13/2002	SOIL GRID	0.25	0.50		
HC101OYF1CAA	101OY	02/13/2002	SOIL GRID	0.50	1.00		
HC101OYG1AAA	101OY	02/13/2002	SOIL GRID	0.00	0.25		
HC101OYG1BAA	101OY	02/13/2002	SOIL GRID	0.25	0.50		
HC101OYG1CAA	101OY	02/13/2002	SOIL GRID	0.50	1.00		
J1.F.T1.001.1.0	J1.T1.001.O	02/13/2002	SOIL GRID	0.00	5.83		
J1.F.T1.001.2.0	J1.T1.001.O	02/13/2002	SOIL GRID	6.75	7.00		
J1.F.T1.001.3.0	J1.T1.001.O	02/13/2002	SOIL GRID	3.00	5.00		
WELLFILL021402	WELLFILL021402	02/14/2002	FILLER				

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

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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 01/26/02 - 02/15/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W163SSA	MW-163	02/05/2002	GROUNDWATER	38.00	48.00	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-	YES
W163SSA	MW-163	02/05/2002	GROUNDWATER	38.00	48.00	0.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-	YES
W196SSA	MW-196	02/07/2002	GROUNDWATER	32.00	37.00	0.00	10.00	8330N	1,3,5-TRINITROBENZENE	YES
W196SSA	MW-196	02/07/2002	GROUNDWATER	32.00	37.00	0.00	10.00	8330N	2,4,6-TRINITROTOLUENE	YES
W196SSA	MW-196	02/07/2002	GROUNDWATER	32.00	37.00	0.00	10.00	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
W196SSA	MW-196	02/07/2002	GROUNDWATER	32.00	37.00	0.00	10.00	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
W196SSA	MW-196	02/07/2002	GROUNDWATER	32.00	37.00	0.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-	YES
G205DAA	MW-205	02/14/2002	PROFILE	105.00	105.00	7.20	7.20	8330N	2-NITROTOLUENE	NO
G205DAA	MW-205	02/14/2002	PROFILE	105.00	105.00	7.20	7.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-	NO*
G205DAA	MW-205	02/14/2002	PROFILE	105.00	105.00	7.20	7.20	8330N	NITROBENZENE	NO
G205DAA	MW-205	02/14/2002	PROFILE	105.00	105.00	7.20	7.20	8330N	NITROGLYCERIN	NO
G205DAA	MW-205	02/14/2002	PROFILE	105.00	105.00	7.20	7.20	8330N	PICRIC ACID	NO
G205DBA	MW-205	02/14/2002	PROFILE	110.00	110.00	12.20	12.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-	NO*
G205DBA	MW-205	02/14/2002	PROFILE	110.00	110.00	12.20	12.20	8330N	NITROGLYCERIN	NO
G205DBA	MW-205	02/14/2002	PROFILE	110.00	110.00	12.20	12.20	8330N	PICRIC ACID	NO
G205DCA	MW-205	02/14/2002	PROFILE	120.00	120.00	22.20	22.20	8330N	NITROGLYCERIN	NO
G205DCA	MW-205	02/14/2002	PROFILE	120.00	120.00	22.20	22.20	8330N	PICRIC ACID	NO
G205DCD	MW-205	02/14/2002	PROFILE	120.00	120.00	22.20	22.20	8330N	NITROGLYCERIN	NO
G205DCD	MW-205	02/14/2002	PROFILE	120.00	120.00	22.20	22.20	8330N	PICRIC ACID	NO
G205DDA	MW-205	02/14/2002	PROFILE	130.00	130.00	32.20	32.20	8330N	NITROGLYCERIN	NO
G205DDA	MW-205	02/14/2002	PROFILE	130.00	130.00	32.20	32.20	8330N	PICRIC ACID	NO
G205DEA	MW-205	02/14/2002	PROFILE	140.00	140.00	42.20	42.20	8330N	PICRIC ACID	NO
G205DHA	MW-205	02/14/2002	PROFILE	170.00	170.00	72.20	72.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-	YES
G205DHA	MW-205	02/14/2002	PROFILE	170.00	170.00	72.20	72.20	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-	YES
G205DIA	MW-205	02/15/2002	PROFILE	180.00	180.00	82.20	82.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-	NO*
G205DIA	MW-205	02/15/2002	PROFILE	180.00	180.00	82.20	82.20	8330N	NITROGLYCERIN	NO
G205DIA	MW-205	02/15/2002	PROFILE	180.00	180.00	82.20	82.20	8330N	PICRIC ACID	NO
G205DNA	MW-205	02/15/2002	PROFILE	230.00	230.00	132.20	132.20	8330N	PICRIC ACID	NO
G205DOA	MW-205	02/15/2002	PROFILE	240.00	240.00	142.20	142.20	8330N	PICRIC ACID	NO
HD152AC1CAA	152AC	02/08/2002	SOIL GRID	0.50	1.00			8330LN	NITROGLYCERIN	NO

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

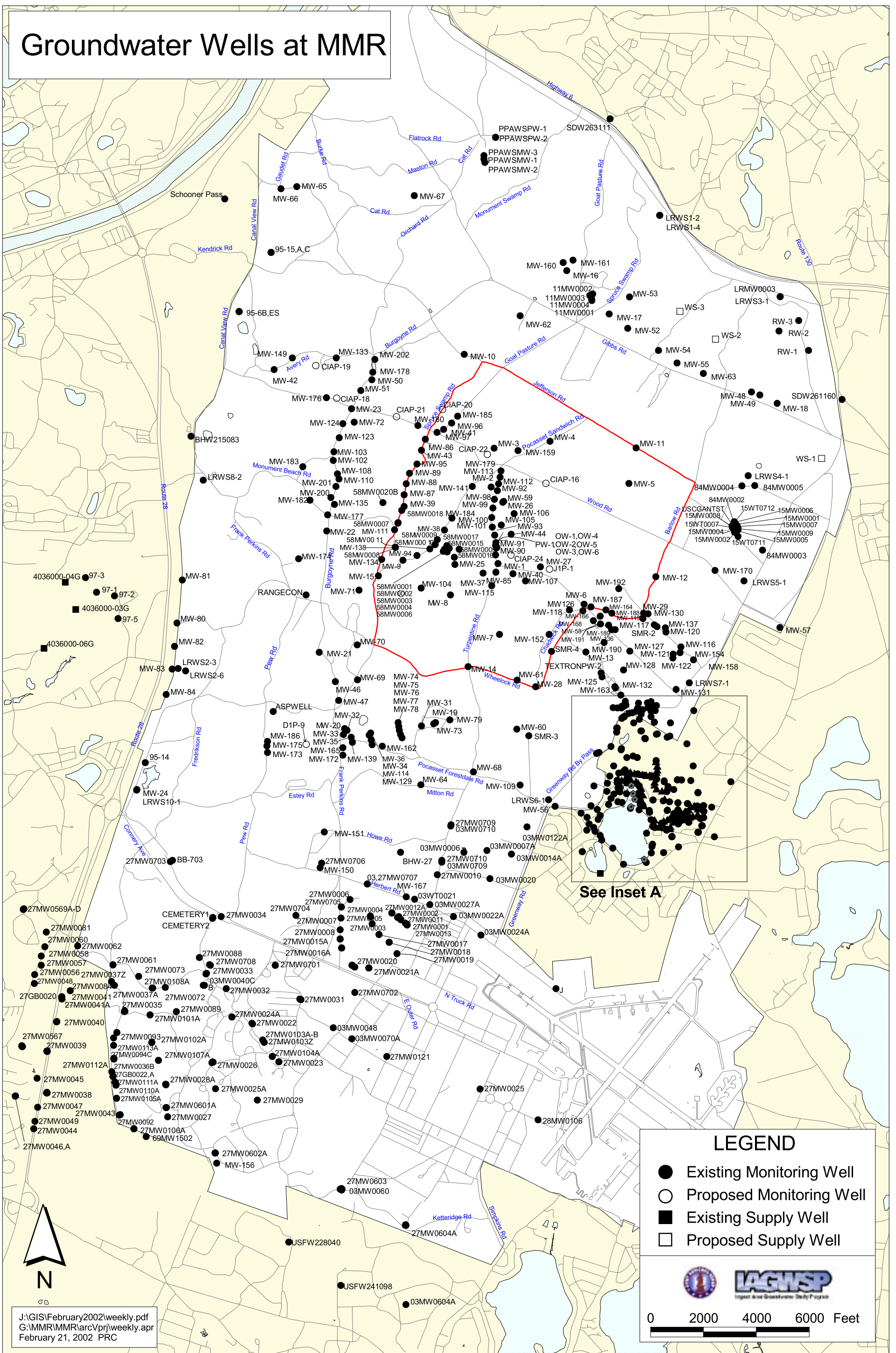
BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET

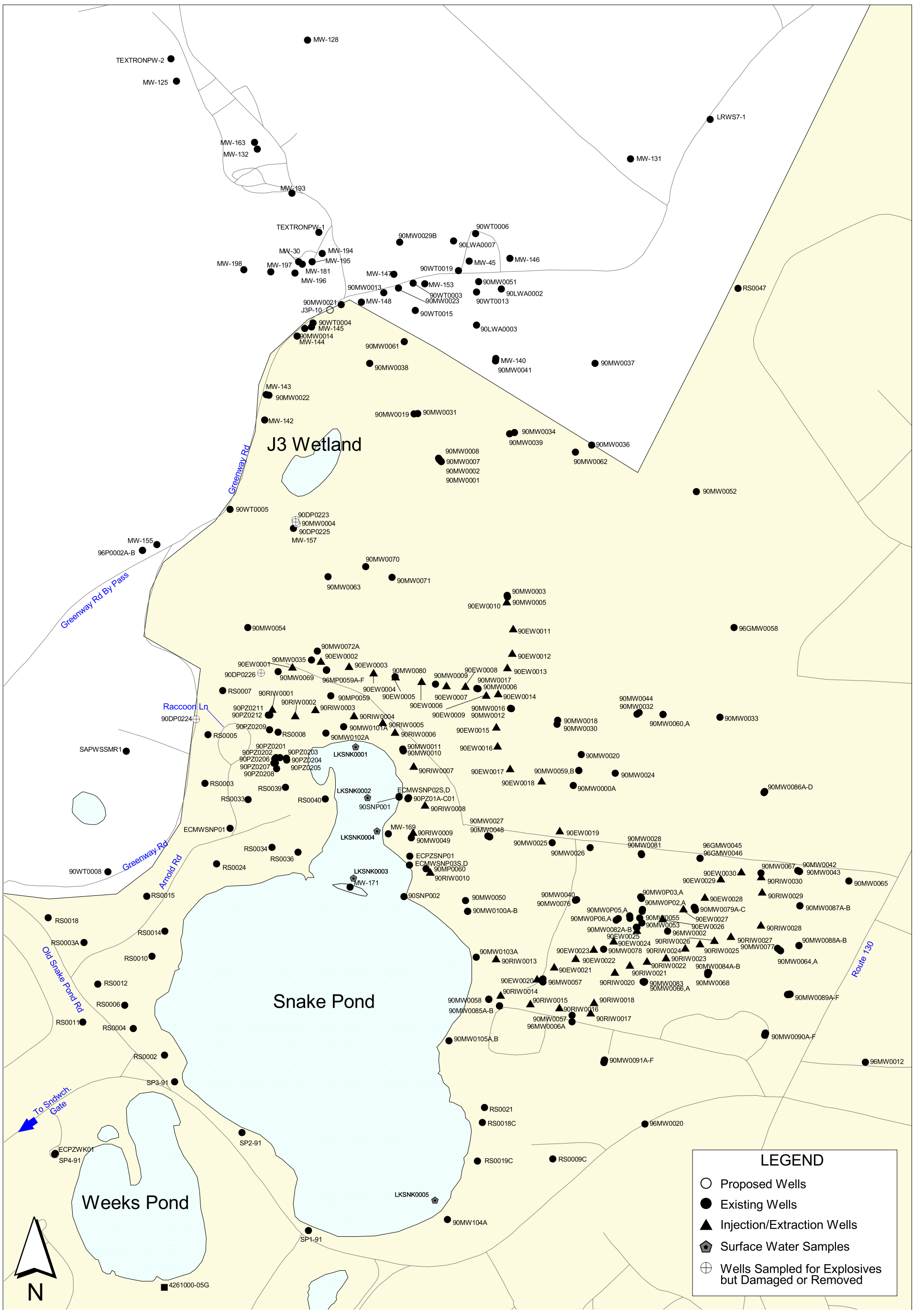
PDA/YES = Photo Diode Array, Detect Confirmed

PDA/NO = Photo Diode Array, Detect Not Confirmed

* = Interference in sample

Groundwater Wells at MMR





LEGEND

- Proposed Wells
- Existing Wells
- ▲ Injection/Extraction Wells
- ⬢ Surface Water Samples
- ⊕ Wells Sampled for Explosives but Damaged or Removed

0 600 1200 Feet

Inset A

