WEEKLY PROGRESS UPDATE
FOR JANUARY 28 – FEBRUARY 1, 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 January 28 to February 1, 2002.

1. SUMMARY OF ACTIONS TAKEN

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

Table 1. Drilling progress as of February 1, 2002

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-188	J-1 Range Well (J1P-13)	120	7	109-119
MW-193	J-3 Range Well (J3P-12)	85	51	31-36, 57-62
MW-194	J-3 Range Well (J3P-13)	90	33	85-90
MW-197	J-3 Range Well (J3P-11)	165	145	60-65, 80-85, 120-125
MW-198	J-3 Range Well (J3P-16)	155	135	70-75, 100-105, 120-125, 150-155
MW-202	Central Impact Area (CIAP-15)	150	6	

bgs = below ground surface
bwt = below water table

Completed well installation of MW-188S (J1P-13), MW-193 (J3P-12), MW-194 (J3P-13), MW-197 (J3P-11), and MW-198 (J3P-16). Commenced drilling of MW-202 (CIAP-15). 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-202. The January quarter Long Term Groundwater Monitoring round was completed for municipal and water supply wells. Groundwater sampling of preliminary rounds for recently installed Central Impact Area, J-1 Range and Demo Area 1 wells continued. Water samples were collected from the GAC treatment system. Soil samples were collected from J-2 Range polygons. Post-detonation soil samples were collected in the Central Impact Area.

As part of the Munitions Survey Project, pre-detonation and post-detonation soil samples were collected from the J-2 Range and Transect 4 in the HUTA2. Wipe, soil and soil brushing samples were collected from UXO in Transect 2. Soil samples were collected from a Transect 4 blowhole. A wipe sample was collected from the inside of an electron tube found in Training Area BA-1.

The Guard, EPA, and MADEP had a meeting on January 31 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)
Todd Borci (EPA-phone)	Jane Dolan (EPA)	Mike Jasinski (EPA)
Desiree Moyer (EPA)	Len Pinaud (MADEP)	Mark Panni (MADEP)
Darrell Deleppo (ACE)	Gina Tyo (ACE)	Ellen Iorio (ACE)
Ed Wise (ACE)	Heather Sullivan (ACE)	Marc Grant (AMEC)
Kim Harriz (AMEC)	John Rice (AMEC)	Jay Clausen (AMEC-phone)
Mark Applebee (AMEC – phone)	Pete Redmond (Tetra Tech)	Susan Stewart (Tetra Tech–phone)
Leo Montroy (Tetra Tech-phone)	Dave Williams (MDPH)	Ken Gaynor (Jacobs)
Adam Balogh (TRC - phone)		

Punchlist Items

#1 Snake Pond area well verification (AFCEE). Mike Jasinski to discuss with AFCEE.
#8 Sign Project Note on HUTA2 Scoping Meeting (EPA/DEP). Project note signed by MADEP. EPA did not sign, discussed further on agenda.
#9 Sign Project Note on Additional Wells in Central Impact Area (EPA/DEP). Note revised at meeting and signed by all parties.
#13 Verify location of 90MW0054 (AMEC) Location of 90MW0054 was verified by GPS. Location is accurate as portrayed on maps.
#14 Provide feedback on recommendation for MW-181 RAD analyses (EPA). AMEC to provide information on remaining sample volume and how many analyses for various alpha emitters using alpha spectroscopy can be conducted based on remaining sample volume. EPA to obtain prioritized list of alpha emitters from Idaho National Engineering Laboratory.

Munitions Survey Project Update

Ellen Iorio (Corps) provided an update on the MSP3 and HUTA tasks.

Last Week's Action Items. 1) HUTA2 Update was completed and emailed with other updates. 2) J Range Polygon scheduling update was emailed. 3) Working on write-up regarding potential additional areas of investigation on the J Ranges. To provide summary, revised grid maps and numbering system next week.

AirMag. AirMag Workplan conditionally approved. Comment resolution scheduled for 2/7. Excavation of anomalies to begin on 2/11. Order of excavation will be discussed with agencies prior to beginning work.

HUTA2. Transects 1&5 -QA magnetometer survey, to be completed with Nick Iaiennaro (ACE), is pending. Transect 2 - Continuing excavation of anomalies - 14 grids completed. BIP of low order 4.2" mortar scheduled for today. Transect 3 - Continuing excavation of anomalies - 3 grids completed. Transect 4 - Continuing excavation of anomalies - 8 grids completed. 66mm Mortar and low impact training round are scheduled to be BIPed.

J Range Polygons. Excavation of J-1 Range Polygons 1-5 that require notification to the town of Sandwich will commence Monday (02/04). J-2 Range Polygons 17-35 investigation will follow. Tetra Tech is building blast shields to utilize during excavations to increase safety. BIPs of 12 items are scheduled today, including 9 - 30MM Projectiles HEI, 1 - 3.5" Rocket HEAT M28, 1 - 66MM HEAT Rocket Motor, 1 - 60MM Mortar HE M49. Known burials at the polygons include J-1 Range Polygons 10, 14, 15; J-2 Polygons 1, 4, 6 (A,B,C,D,E) and 14-15. The "burial" polygons to be investigated further after polygons which required the notification.

- Tina Dolen (IAGWSPO) to talk to Sandwich Town Administrator to clarify if he would prefer to be notified of BIPs in the SE Ranges even when the frag radius from the BIP does not extend into the buffer zone (as a courtesy).

Eastern MSP. ROA approved 1/28. Todd Borci to review Workplan and provide approval to begin grubbing and establishing grids, potentially today. Work tentatively scheduled to begin 2/11, pending receipt of approval.

Scar Site. ROA submitted on 1/21.

U Range. ROA submitted on 1/21. Waiting on ROA and Workplan approval.

BA-1 Disposal Site. No activity. Electron tube formerly observed to have an oily liquid was found empty. A wipe sample (using hexane as a solvent) was collected of the inside of the tube. Wipe sample to be analyzed for PCBs; results expected 02/06.

Contained Detonation Chamber. Gina Tyo (ACE) indicated that repairs had been made to the door of the CDC. Contractors were scheduled to dispense of the stockpiled ordnance in the CDC on 2/11-2/26. Nick Iaiennaro is compiling a list of items that were designated to be too big to put in the chamber, to see if either by splitting or other means some of the items could be detonated in the chamber. List to be provided to Todd Borci.

Summary of Action Items

- Provide List of Items too large to be placed in CDC to Todd Borci.
- EPA to provide approval for clearing and grubbing at Eastern MSP and U Range sites.

Demo 1 Area Additional Delineation

- Karen Wilson (IAGWSPO) indicated that Hanni Dinkeloo (Natural Heritage) had provided written approval for installation of the D1P-9 and two wing wells. The ROA for the other wells has been prepared; it can be submitted pending results of first wells and any adjustments in the well locations.
- UXO clearance for the road is expected to commence by 2/11; currently resources are focused on clearing wells pads in the Central Impact Area.
- A revised schedule for the Demo 1 plume has been sent out. To be discussed in a 2/04 chorus call at 3 pm.
- Mike Nelson to replace Hanni Dinkeloo for approval of 2nd ROA.

Bourne ZOCs and MW-84

Marc Grant led discussion on Bourne ZOCs relative to MW-84.

- AMEC's plan was to develop particle tracks from MW-80 and MW-84 to determine if detections at these wells track into the Bourne wells. Modeling would be done using the AMEC model (a modified version of the USGS model based on site-specific water levels) under pumping scenarios for both YR2000 and YR2020. As a result, the "ZOC" developed by the AMEC model would be slightly different than the approved ZOCs for the wells as modeled by USGS.
- Len Pinaud (MADEP) pointed out that the Zone II is a specific zone (180 days at maximum pumping rate) approved for the wells. The ZOC for the wells is based on a zone of contribution using the approved pumping rate. It would be important to model the backtracks using the official Zone II parameters. Ben Gregson (IAGWSPO) pointed out that there were no officially approved ZOCs just Zone IIs.
- AMEC to develop particle tracks based on USGS model used to develop approved Zone IIs with both the 2000 and 2020 pumping rates. Also to perform modeling with AMEC model for both pumping rates. Plan view and vertical sections to be presented.
- Todd Borci (EPA) pointed out that for the IART presentation, it should be emphasized that analyses to date show no detections of perchlorate or explosives in Bourne supply and sentry wells. The Guard is relying on the analytical data (quarterly sampling for explosives and perchlorate), not the modeling, to determine that there is not impact to the Bourne wells.

- Marc Grant (AMEC) pointed out that quarterly sampling for perchlorate is being performed for the Bourne supply wells but not for the Bourne sentry wells. Mr. Borci recommended that Sentry well 97-5, at least, should be on the quarterly sampling schedule, as this was the well downgradient of MW-84.
- Ben Gregson to talk to Hap Gonser (JPO) to determine if perchlorate is included in parameter list for the water supply wells. Area Water Districts to be included in discussions relative to routine sampling for perchlorate, as requested by Dave Williams (MDPH).

Project Notes

Two Project Notes prepared by the Corps were drafted for approval by the agencies:

- The Central Impact Area Additional Delineation Wells - This note was prepared to document agreed on locations for additional delineation wells being installed beginning 2/11 at locations in and downgradient of the Central Impact Area. EPA requested that only the wells with set locations be documented in the project note. MADEP/Corps requested that the following wells CIAP-11, -12, -13, -14, -18, -20 be included to show the agreed upon logic that would be used to finalize the well location (CIAP-13, -14, -18, -20) and to show the evolution of locations for CIAP-11 and -12. Len Pinaud (MADEP) also requested that a rough schedule be included. Heather Sullivan (ACE) to make revisions in accordance with specific comments provided by EPA/DEP for the agencies/Guard to sign at the meeting conclusion.
- MSP3 SOW for Eastern areas, Scar Site, U Range - This Project Note was prepared to document the scope of the Workplan for the referenced MSP3 sites, as discussed in a recent scoping meeting. The Corps drafted this note so that the agencies and Guard/Corps could "be on the same page" regarding the expected scope for these sites. The Corps envisioned this as a streamlining process such that less draft revisions would be needed if the scope was formerly agreed upon by the agencies and Guard. EPA contended that a project note was not the appropriate vehicle for documenting the scoping meeting, that agreement on the work scope between the Guard and the agencies was achieved with the approval of the Workplan. In addition, the necessary time taken to review these notes was a burden on the agencies and did not make the process more efficient from their viewpoint. The EPA maintained that Project Notes should be limited for use to document agreements between the Guard and the agencies, not to document the process. Emailed meeting minutes were the more appropriate vehicle to address interim steps within the process. Therefore, the EPA would not sign this Project Note. MADEP was in agreement that documentation of the decision making process was a useful exercise and signed the Project Note. Considerable discussion ensued among the Guard, the Corps, MADEP and EPA regarding the function and utility of a Project Note. Agreement was not reached. At the conclusion of the discussion, CPT Meyer (IAGWSPO) reiterated the Guard's position, stating that it is important to document the thought process along the development of the project, because months can be (have been) spent "going in the wrong direction" based on misperceptions of the EPA's requests. The Guard would like to make sure that the project "goes in the right direction" (the EPAs intention and the Guard's direction are aligned) such that funds are utilized cost-effectively. An after meeting was scheduled for the 2/07 Tech meeting to resolve ground rules for the Project Note.

Miscellaneous

- Todd Borci (EPA) informed the Corps that his 12/20/01 email had provided approval to develop detailed Workplans for Barrage Rocket and other MSP3 sites.
- Ellen Iorio (ACE) stressed that comments on MSP3 and Scar Workplans were needed ASAP in order that enforceable milestones for these projects be met. Mr. Borci indicated that appropriately documented extension requests should be provided in writing to EPA and

would be considered. Comments on Workplans expected to be provided 2/06. Approval letter for HUTA2 Workplan and AirMag Report MORs would be emailed.

- EPA to respond to letter from Guard regarding pesticide/PCB results in groundwater; wherein the Guard is proposing to forego further routine analysis of pesticides and PCBs in groundwater. Response from EPA to be added as a punchlist item for 2/14.
- Len Pinaud requested that documents listed on the schedule match the name provided on the cover of the document.
- Tech Memo 99-5 (Background Groundwater). No decision offered by EPA regarding way to proceed in finalizing/addressing.
- TM 01-14 Gun and Mortar Firing Positions Report. Based on after meeting on Gun and Mortar Workplan, DEP to provide comment on Revised Draft Report.
- TM 01-16 J1J3L Additional Delineation Report - MADEP will draft letter stating that comment will be held on this report pending revision or superceding comprehensive report.
- J-2 Range Draft Report - DEP to evaluate whether to provide comment on this combined Report/Workplan.

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:

- Groundwater samples from 90MP0059C (FS-12) had a detection of HMX that was confirmed by PDA spectra. The detection was similar to the previous sampling round.

- Groundwater samples from MW-160S (Demo Area 2) had a detection of RDX that was confirmed by PDA spectra. This is the first time RDX has been detected in this well.

- Groundwater samples from MW-161S (Demo Area 2) and MW-166M2 (J-1 Range) had detections of RDX and HMX that were confirmed by PDA spectra. The detections were similar to previous sampling rounds, except that this is the first time HMX has been detected in MW-161S.

- Groundwater samples from MW-187D (J-1 Range) had detections of RDX, nitroglycerin, and picric acid. The detection of RDX was confirmed by PDA but with interference. This is the first time MW-187D has been sampled.

3. DELIVERABLES SUBMITTED

Weekly Progress Update for January 21 – January 25, 2002 02/01/02

4. SCHEDULED ACTIONS

Scheduled actions for the week of February 4 include continue drilling of MW-202 (CIAP15) and continue J-2 polygon soil sampling.

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, is scheduled to commence the second week of February. Subsequent locations have been proposed and the next location will be selected and approved based on the profile results at D1P-9.

TABLE 2
SAMPLING PROGRESS
01/26/2002 - 02/01/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
J2.A.T14A.001.1.0	J2.T14A.001.R	01/30/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.001.2.0	J2.T14A.001.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.001.3.0	J2.T14A.001.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.002.1.0	J2.T14A.002.R	01/30/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.002.2.0	J2.T14A.002.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.002.3.0	J2.T14A.002.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.003.1.0	J2.T14A.003.R	01/30/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.003.2.0	J2.T14A.003.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.003.3.0	J2.T14A.003.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.004.1.0	J2.T14A.004.R	01/30/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.004.2.0	J2.T14A.004.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T14A.004.3.0	J2.T14A.004.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T16.001.1.0	J2.T16.001.R	01/30/2002	CRATER GRID	0.75	1.00		
J2.A.T16.001.2.0	J2.T16.001.R	01/31/2002	CRATER GRID	0.75	1.00		
J2.A.T16.001.3.0	J2.T16.001.R	01/31/2002	CRATER GRID	0.75	1.00		
J2.A.T16.002.1.0	J2.T16.002.R	01/30/2002	CRATER GRID	1.00	1.25		
J2.A.T16.002.2.0	J2.T16.002.R	01/31/2002	CRATER GRID	1.00	1.25		
J2.A.T16.002.3.0	J2.T16.002.R	01/31/2002	CRATER GRID	1.00	1.25		
J2.A.T16.003.1.0	J2.T16.003.R	01/30/2002	CRATER GRID	0.75	1.00		
J2.A.T16.003.2.0	J2.T16.003.R	01/31/2002	CRATER GRID	0.75	1.00		
J2.A.T16.003.3.0	J2.T16.003.R	01/31/2002	CRATER GRID	0.75	1.00		
J2.A.T16.004.1.0	J2.T16.004.R	01/30/2002	CRATER GRID	0.50	0.75		
J2.A.T16.004.2.0	J2.T16.004.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T16.004.3.0	J2.T16.004.R	01/31/2002	CRATER GRID	0.50	0.75		
J2.A.T16.005.1.0	J2.T16.005.R	01/30/2002	CRATER GRID	1.00	1.25		
J2.A.T16.005.2.0	J2.T16.005.R	01/31/2002	CRATER GRID	1.00	1.25		
J2.A.T16.005.3.0	J2.T16.005.R	01/31/2002	CRATER GRID	1.00	1.25		
J2.A.T16.006.1.0	J2.T16.006.R	01/30/2002	CRATER GRID	1.00	1.25		
J2.A.T16.006.4.0	J2.T16.006.R	01/31/2002	CRATER GRID	1.00	1.25		
J2.A.T16.007.1.0	J2.T16.007.R	01/30/2002	CRATER GRID	4.00	4.25		
J2.A.T16.007.2.0	J2.T16.007.R	01/31/2002	CRATER GRID	4.00	4.25		
J2.A.T16.007.3.0	J2.T16.007.R	01/31/2002	CRATER GRID	4.00	4.25		
T2.B.0H.005.3.0	T2.0H.005.O	01/29/2002	CRATER GRID	1.50	2.00		
T2.B.0H.005.4.0	T2.0H.005.O	01/29/2002	CRATER GRID	1.00	1.25		
T4.A.0E.010.1.0	T4.0E.010.R	01/29/2002	CRATER GRID	1.50	1.75		
T4.A.0E.010.2.0	T4.0E.010.R	01/31/2002	CRATER GRID	1.50	1.75		
T4.A.0E.010.3.0	T4.0E.010.R	01/31/2002	CRATER GRID	1.50	1.75		
T4.A.0E.010.3.D	T4.0E.010.R	01/31/2002	CRATER GRID	1.50	1.75		
T4.A.0F.001.1.0	T4.0F.001.R	01/30/2002	CRATER GRID	0.00	0.25		
T4.A.0F.001.2.0	T4.0F.001.R	01/31/2002	CRATER GRID	0.00	0.25		
T4.A.0F.001.3.0	T4.0F.001.R	01/31/2002	CRATER GRID	0.00	0.25		
G202DCE	FIELDQC	02/01/2002	FIELDQC	0.00	0.00		
HC101EJ1CAE	FIELDQC	01/29/2002	FIELDQC	0.00	0.00		

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
01/26/2002 - 02/01/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
HC101EJ1CAT	FIELDQC	01/29/2002	FIELDQC	0.00	0.00		
HC101GN1CAE	FIELDQC	01/31/2002	FIELDQC	0.00	0.00		
HC101GP1BAE	FIELDQC	01/30/2002	FIELDQC	0.00	0.00		
HC101OU1AAE	FIELDQC	02/01/2002	FIELDQC	0.00	0.00		
HDA01280201AE	FIELDQC	02/01/2002	FIELDQC	0.00	0.00		
W188M1T	FIELDQC	01/30/2002	FIELDQC	0.00	0.00		
W189ST	FIELDQC	02/01/2002	FIELDQC	0.00	0.00		
W190M1T	FIELDQC	01/31/2002	FIELDQC	0.00	0.00		
W191SST	FIELDQC	01/28/2002	FIELDQC	0.00	0.00		
BA.0.0011	BA.0.0011	01/30/2002	GAUZE WIPE	0.00	0.00		
T2.B.0H.005.2.0	T2.0H.005.O	01/29/2002	GAUZE WIPE	1.00	1.00		
4036000-01G	4036000-01G	01/30/2002	GROUNDWATER				
4036000-03G	4036000-03G	01/30/2002	GROUNDWATER				
4036000-04G	4036000-04G	01/30/2002	GROUNDWATER				
4036000-06G	4036000-06G	01/30/2002	GROUNDWATER				
4261000-02G	4261000-02G	01/29/2002	GROUNDWATER				
4261000-04G	4261000-04G	01/29/2002	GROUNDWATER				
4261000-06G	4261000-06G	01/29/2002	GROUNDWATER				
4261000-09G	4261000-09G	01/29/2002	GROUNDWATER				
4261000-10G	4261000-10G	01/29/2002	GROUNDWATER				
4261000-11G	4261000-11G	01/29/2002	GROUNDWATER				
4261000-11GD	4261000-11G	01/29/2002	GROUNDWATER				
PPAWSPW-1	PPAWSPW-1	01/31/2002	GROUNDWATER				
PPAWSPW-2	PPAWSPW-2	01/31/2002	GROUNDWATER				
USCGANTST	USCGANTST	01/29/2002	GROUNDWATER				
W175M1A	MW-175	01/28/2002	GROUNDWATER	264.00	274.00	139.25	149.25
W175M2A	MW-175	01/28/2002	GROUNDWATER	199.00	209.00	74.45	84.45
W175M3A	MW-175	01/28/2002	GROUNDWATER	162.00	167.00	37.40	42.40
W180M1A	MW-180	01/30/2002	GROUNDWATER	300.00	310.00	139.12	149.12
W180M2A	MW-180	01/30/2002	GROUNDWATER	195.00	205.00	34.50	44.50
W188M1A	MW-188	01/30/2002	GROUNDWATER	155.00	165.00	41.10	51.10
W189SSA	MW-189	02/01/2002	GROUNDWATER	94.00	104.00	0.00	7.16
W190M1A	MW-190	01/31/2002	GROUNDWATER	145.00	155.00	44.32	54.32
W190M2A	MW-190	01/31/2002	GROUNDWATER	110.00	120.00	9.30	19.30
W191SSA	MW-191	01/28/2002	GROUNDWATER	106.00	116.00	0.00	10.00
W192M1A	MW-192	01/29/2002	GROUNDWATER	195.00	205.00	84.19	94.19
W192M2A	MW-192	01/29/2002	GROUNDWATER	135.00	145.00	24.20	34.20
W192M3A	MW-192	01/29/2002	GROUNDWATER	115.00	125.00	4.20	14.20
W192M3D	MW-192	01/29/2002	GROUNDWATER	115.00	125.00	4.20	14.20
DW012802	GAC WATER	01/28/2002	IDW	0.00	0.00		
G202DAA	MW-202	02/01/2002	PROFILE	150.00	150.00	6.00	6.00
G202DBA	MW-202	02/01/2002	PROFILE	160.00	160.00	16.00	16.00
G202DCA	MW-202	02/01/2002	PROFILE	170.00	170.00	26.00	26.00
T2.B.0H.005.1.0	T2.0H.005.O	01/29/2002	SOIL BRUSHING	1.00	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 2
SAMPLING PROGRESS
01/26/2002 - 02/01/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
HC101EH1AAA	101EH	01/29/2002	SOIL GRID	0.00	0.25		
HC101EH1BAA	101EH	01/29/2002	SOIL GRID	0.25	0.50		
HC101EH1CAA	101EH	01/29/2002	SOIL GRID	0.50	1.00		
HC101EJ1AAA	101EJ	01/29/2002	SOIL GRID	0.00	0.25		
HC101EJ1BAA	101EJ	01/29/2002	SOIL GRID	0.25	0.50		
HC101EJ1CAA	101EJ	01/29/2002	SOIL GRID	0.50	1.00		
HC101EJ1CAD	101EJ	01/29/2002	SOIL GRID	0.50	1.00		
HC101GF1DAA	101GF	01/30/2002	SOIL GRID	1.00	1.50		
HC101GF1EAA	101GF	01/31/2002	SOIL GRID	1.50	2.00		
HC101GI1DAA	101GI	01/30/2002	SOIL GRID	1.00	1.50		
HC101GI1EAA	101GI	01/30/2002	SOIL GRID	1.50	2.00		
HC101GM1AAA	101GM	01/30/2002	SOIL GRID	0.00	0.25		
HC101GM1BAA	101GM	01/30/2002	SOIL GRID	0.25	0.50		
HC101GM1CAA	101GM	01/30/2002	SOIL GRID	0.50	1.00		
HC101GN1AAA	101GN	01/31/2002	SOIL GRID	0.00	0.25		
HC101GN1BAA	101GN	01/31/2002	SOIL GRID	0.25	0.50		
HC101GN1CAA	101GN	01/31/2002	SOIL GRID	0.50	1.00		
HC101GP1AAA	101GP	01/29/2002	SOIL GRID	0.00	0.25		
HC101GP1BAA	101GP	01/30/2002	SOIL GRID	0.25	0.50		
HC101GP1CAA	101GP	01/30/2002	SOIL GRID	0.50	1.00		
HC101OU1AAA	101OU	02/01/2002	SOIL GRID	0.00	0.25		
HC101OU1BAA	101OU	02/01/2002	SOIL GRID	0.25	0.50		
HC101OU1CAA	101OU	02/01/2002	SOIL GRID	0.50	1.00		
HC101OVA1AAA	101OV	02/01/2002	SOIL GRID	0.00	0.25		
HC101OVA1BAA	101OV	02/01/2002	SOIL GRID	0.25	0.50		
HC101OVA1CAA	101OV	02/01/2002	SOIL GRID	0.50	1.00		
HD101EH3BAA	101EH	01/29/2002	SOIL GRID	0.25	0.50		
HD101EH3CAA	101EH	01/29/2002	SOIL GRID	0.50	1.00		
HDA01280201AA	A01280201	02/01/2002	SOIL GRID	0.00	0.25		
T4.I.0B.008.1.0	T4.0B.008.O	01/29/2002	SOIL GRID	1.00	1.25		

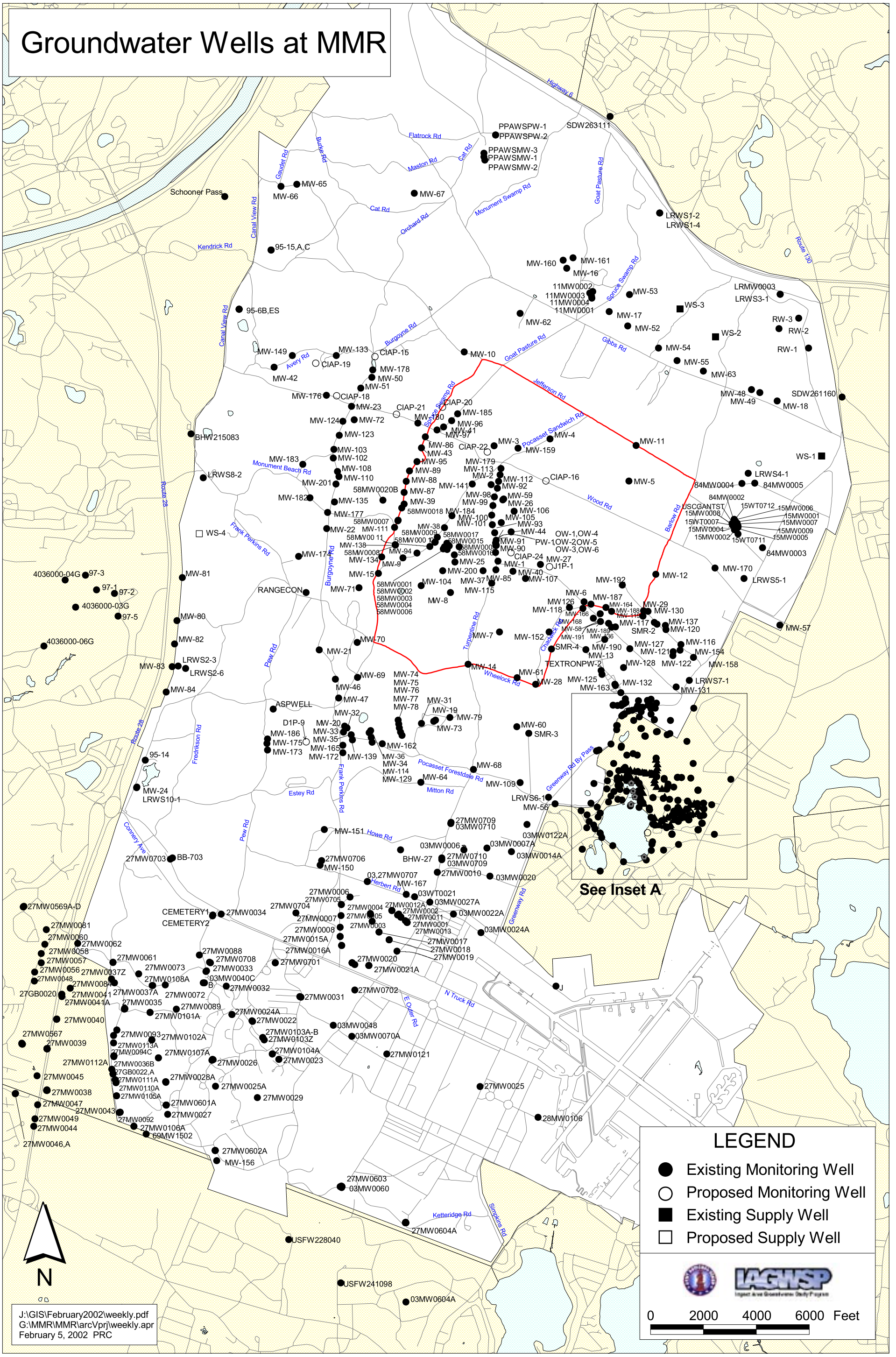
Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
Other Sample Types methods are variable
SBD = Sample Begin Depth, measured in feet bgs
SED = Sample End Depth, measured in feet bgs
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 01/12/02 - 02/01/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
90MP0059C	90MP0059C	01/21/2002	GROUNDWATER	91.00	94.00			8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
W160SSA	MW-160	01/23/2002	GROUNDWATER	137.50	147.50	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
W161SSA	MW-161	01/23/2002	GROUNDWATER	145.00	155.00	6.00	16.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
W161SSA	MW-161	01/23/2002	GROUNDWATER	145.00	155.00	6.00	16.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
W166M2A	MW-166	01/17/2002	GROUNDWATER	150.00	160.00	44.00	54.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
W166M2A	MW-166	01/17/2002	GROUNDWATER	150.00	160.00	44.00	54.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
W187DDA	MW-187	01/23/2002	GROUNDWATER	306.00	316.00	199.50	209.50	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES*
W187DDA	MW-187	01/23/2002	GROUNDWATER	306.00	316.00	199.50	209.50	8330N	NITROGLYCERIN	NO
W187DDA	MW-187	01/23/2002	GROUNDWATER	306.00	316.00	199.50	209.50	8330N	PICRIC ACID	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

- Existing Monitoring Well
- Proposed Monitoring Well
- Existing Supply Well
- Proposed Supply Well

0 2000 4000 6000 Feet

N

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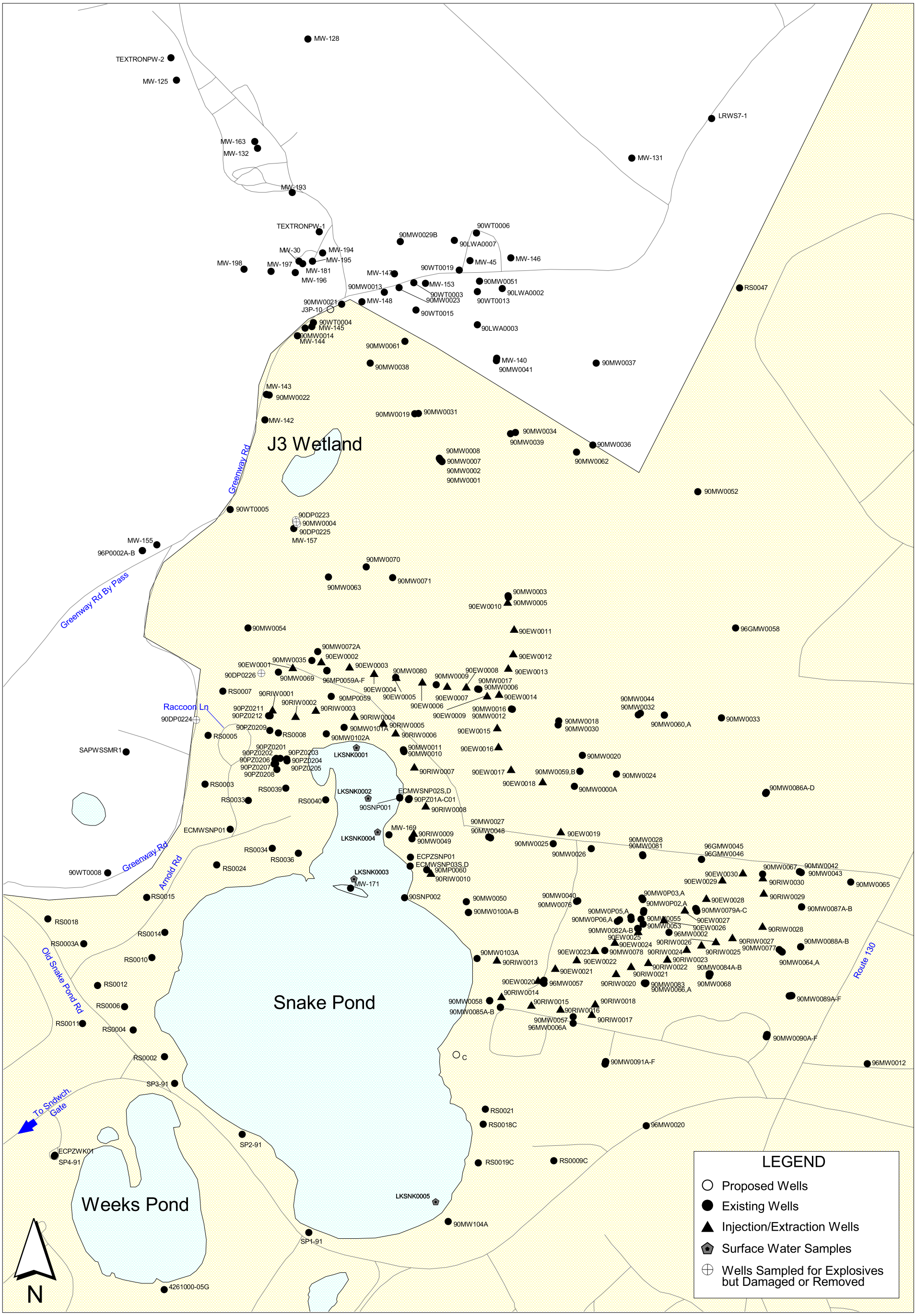
February 5, 2002 PRC



0 600 1200 Feet

Inset A

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February 5, 2002 PRC