

**WEEKLY PROGRESS UPDATE
FOR OCTOBER 1 – OCTOBER 5, 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 October 1 to October 5, 2001.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of October 5 is summarized in Table 1.

Table 1. Drilling progress as of October 5, 2001				
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-177	Central Impact Area Well (CIAP-7) redrill	390	202	375-385
MW-182	Central Impact Area Well (CIAP-9)	370	200	295-305
MW-182M2	Central Impact Area Well (CIAP-9) redrill	290	120	273-283
MW-183	Central Impact Area Well (CIAP-4)	385	204	
MW-184	Central Impact Area Well (P-30) redrill	145	20	
Bgs = below ground surface Bwt = below water table				

Completed well installation of MW-177 (CIAP-7) redrill, MW-182 (CIAP-9), and MW-182M2 (CIAP-9) redrill and completed drilling of MW-183 (CIAP-4) and redrilling of MW-184 (P-30). Well development was continued for newly installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-183 (CIAP-4), and MW-184 (P-30). Groundwater samples were collected as part of the August Long Term Groundwater Monitoring round, including samples collected from the Schooner Pass well. Soil samples were collected from grids on J-3 Range. Post-excavation soil samples were collected at the J-1 and J-2 Ranges. As part of the munitions survey project, soil and wipe samples were collected from UXO on the Gravity Range and samples were collected beneath UXO on the Gravity Range. Pre-detonation samples were collected at the Former K Range. As part of the RRA, post-detonation samples and other soil samples were collected at Mortar Target 9.

The Guard, EPA, and MADEP had a meeting on October 4 to discuss technical issues, including the following:

Attendees

Ben Gregson (IAGWSPO)
Bill Gallagher (IAGWSPO)
Mike Jasinski (EPA)
Gina Tyo (ACE)

CPT Bill Meyer (IAGWSPO)
Dave Hill (IAGWSPO)
Jane Dolan (EPA)
Rob Foti (ACE)

Karen Wilson (IAGWSPO)
Todd Borci (EPA)
Heather Sullivan (ACE)
Ed Wise (ACE)

Marc Grant (AMEC)	Mark Applebee (AMEC)	Jay Clausen(AMEC)
Scott Veenstra (AMEC – phone)	Herb Colby (AMEC-phone)	Kim Harriz (AMEC)
Larry Hudgins (Tetra Tech)	Carla Buriks (Tetra Tech – phone)	Joe Dauchy (Tetra Tech)
Leo Montroy (Tetra Tech–phone)	Susan Stewart (Tetra Tech–phone)	Doug Lam (Tetra Tech)
Adam Balogh (TRC)	Don Walter (USGS)	Dave Williams (MDPH)

Archived Search Report Update

Carla Buriks (Tetra Tech) reviewed the ASR status.

- Interviews. Three additional follow-up interviews have been completed by the private investigator. The interview summaries were distributed to the agencies. One interview has been scheduled and interviews are continuing to be scheduled. Of the existing “to be interviewed list”, one potential interviewee is deceased. Interviewee #19 has retained a private lawyer and has requested that the lawyer be contacted regarding additional information.
- NRC license. A letter has been sent to the NRC requesting information on the Textron license at MMR. A memo summarizing information in files that have been copied will be provided by 10/15. There were some inspection results and these will be highlighted in the memo.
- Advertisement. An advertisement will be placed in the Army Times and Air Force Times requesting information on past activities that may have occurred at MMR.
- Contracts Record Report. Final covers will be distributed shortly.
- Schedule. Draft Revised ASR is on schedule to be submitted 10/31.

Long Term Monitoring for VOCs

Marc Grant (AMEC) distributed a map showing well locations which have screen intervals that have never been sampled for VOCs and a table listing all wells with associated well screens that have never been sampled for VOCs.

- The figure shows that the wells that have not been sampled for VOCs are primarily the Central Impact Area response wells, FS-12 Response wells, and select screens among the Demo 1 wells.
- Todd Borci (EPA) responded that appropriate screens from wells in the Demo 1 Area have been sampled in response to delineating PCE detections in this area. AFCEE will be drilling 58MW0020 in the CS-19 area to evaluate a potential VOC source associated with this area. Mr. Borci proposed that all VOC data be reviewed along with the results from the new well at CS-19 and then re-evaluate the need for additional VOC sampling in the Central Impact Area.
- Discussion on additional monitoring for VOCs to be scheduled pending results from CS-19 drilling.

J-Range Plume Maps

- Ed Wise (ACE) stated that the Guard had received additional comment from MADEP regarding the plume maps and the ACE/AMEC/Guard were in the process of revising the maps with consideration of MADEP’s, JPO’s, and EPA’s comments.
- Mike Jasinski (EPA) noting that the comments were contradictory, suggested that the agencies, JPO, and the Guard go through the comments at the next Tech meeting and resolve conflicts. At that point, the figures could be revised.
- Jane Dolan (EPA) indicated that comments on the J-1, J-3, L Ranges Report would be coming next week (by 10/10) since she was still waiting on internal comments. Ms. Dolan noted that locations of monitoring wells proposed in the Report looked good, and she did not intend to adjust these locations. Therefore, drilling of these locations could proceed.

However, additional monitoring locations would be requested in the EPA's comment on the Report. The EPA would like to see these additional locations added to the current scope of work, as defined in Additional WorkPlan #1.

- Ed Wise (ACE) and Dave Hill (IAGWSPO) suggested that it would be more appropriate to add any additional wells to the Additional Work Plan #2 scope.

Central Impact Area Pump Test

- Todd Borci (EPA) indicated that written comment would be provided by 10/11 on the pump test workplan. However, verbal comment at this Tech meeting would be provided by the EPA's contractor (TRC) so that drilling of the observation wells could start on schedule.
- Adam Balogh (TRC) commented that TRC concurred with the new observation well configuration. And TRC particularly liked the data assessment methodology, noting that it was very professionally done. TRC suggested that a background well be added to monitor the barometric efficiency of the aquifer.
- Jay Clausen (AMEC) and Heather Sullivan (ACE) agreed that a background well would be a useful addition. Mr. Clausen also noted that AMEC intended to monitor the mounding effect in the area of water discharge in order to obtain information on aquifer recharge.
- Todd Borci (EPA) indicated that this verbal approval by the EPA meant that the observation wells could be drilled ASAP.
- Heather Sullivan (EPA) to contact MADEP regarding comments on the pump test.

Documents and Schedule

Marc Grant (AMEC) distributed the Document List Table and reviewed outstanding scheduling issues.

- For several of the Munitions Survey Letter Reports, an extension of 2/3 weeks will be requested. These extensions will effect the Demo 1 and Phase IIb Reports dates. Tetra Tech indicated that the extension requests were primarily the result of the base closure in mid September. For Demo 1, the extension was requested for receipt of validated data; sampling and the resultant analysis and validation time had not been included in the original scope of work for Demo 1. Todd Borci (EPA) indicated that these extensions would be approved.
- Todd Borci (EPA) noted that the Central Impact Area Soil Report dates will be discussed in a breakout meeting and wondered if agreement on all dates could be reached so that the revised combined draft schedule could be submitted next week. Gina Tyo (ACE) indicated that this was the ACE/Guard's intention.
- Jane Dolan (EPA) asked what would be addressed at the J-2 Range scoping meeting. Herb Colby (AMEC) indicated that results of recent sampling would be reviewed. Based on these results, the agencies and the Guard would decide if adequate delineation had been conducted to allow for COC identification or if additional delineation would still be required. If sufficient delineation has been completed, the upcoming J-2 Range Report would be used to identify COCs, otherwise the report would be an additional data summary.
- Heather Sullivan (ACE) indicated that additional J-2 Range data had been forwarded to the Guard on 10/03 and would be made available to EPA later today or tomorrow (10/04 or 10/05).
- Ms. Dolan indicated that EPA comments on the MSP Phase I Report would be sent out by 10/11. And again comments on the J Ranges Report would be submitted by 10/10.
- Gina Tyo (ACE) reported that the Guard/ACE were still working on the 4th round of comments on the RRA Round 1 COW Report and the meeting for comment resolution should be tentatively scheduled for 10/18.

BOMARC Site WorkPlan

- Gina Tyo (ACE) reported that Tetra Tech had developed a scope of work for sampling the disposal area near the BOMARC facility that had been uncovered during the AirMag validation survey. However, the ACE was delaying the submittal of the Plan pending a review by Nick Iaienarro (ACE) of what type of materials might be encountered as a safety precaution.
- Bill Gallagher (IAGWSPO) explained that the scope included excavation of the pit and post excavation sampling; no decisions had been made regarding waste sampling. Larry Hudgins (Tetra Tech) pointed out that a radiological survey and air monitoring would be conducted during excavation.
- Todd Borci (EPA) pointed out that capacitors would be expected to contain PCBs and VOCs.
- Ben Gregson (IAGWSPO) inquired if anyone had been identified who might know what the materials were.
- Ms. Tyo explained that Mr. Iaiennaro would be looking in to what type of wastes would be expected, which may aide in determining how to characterize them. Mr. Iaienarro was waiting on receipt of some materials today. Hopefully, the WorkPlan could be submitted next week.

Miscellaneous

- Jane Dolan (EPA) noted that Heather Sullivan (ACE) had forwarded dye results for groundwater sampling in an 8/1 email and indicated that AMEC was reviewing the toxicity information on these compounds. An update was requested for the 10/11 Tech meeting.
- Ms. Dolan asked Karen Wilson (IAGWSPO) how site restoration at Mortar Target 9 was proceeding. Ms. Wilson indicated that 42 plantings had been completed and that they appeared to be in good shape.
- Ms. Dolan asked about the OE WorkPlan for Former H Range. This workplan was supposed to be submitted by Friday, but more time had been requested. Ms. Dolan thought it would be submitted this week. Gina Tyo (ACE) to check with the Baltimore District Corps.

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 sample HDJ1300038SS5 had a detection of tetryl that was not confirmed by PDA spectra.

- Groundwater samples from 58MW0011D (CS-19), 90MW0054 (FS-12) and MW-86S (Central Impact Area) and MW-86M2 (Central Impact Area) had detections of RDX that were confirmed by PDA spectra. RDX was detected in previous rounds of sampling for these wells.
- Groundwater samples from 90WT0013 (FS-12) had a detection of nitroglycerin that was not confirmed by PDA spectra. Nitroglycerin has never been validated as a detection in this well.
- Groundwater samples from 90WT0019 (FS-12) had detections of 1,3,5-trinitrobenzene, 1,3-dinitrobenzene, and 2,6-DNT. The detection of 2,6-DNT was confirmed by PDA spectra and was similar to the previous sampling round.
- Groundwater samples from MW-66S (Gun & Mortar) had a detection of perchlorate. This detection was similar to the previous detection of perchlorate in this well.
- Groundwater samples from MW-85M1 (Central Impact Area) and MW-87M1 (Central Impact Area) had detections of RDX and HMX that were confirmed by PDA spectra. These detections were similar to previous sampling rounds for these wells.
- Groundwater profile samples from MW-184 (Central Impact area) had detections of nitroglycerin (3 intervals), 2A-DNT (1 interval), and picric acid (2 intervals). The 2A-DNT detection was confirmed by PDA spectra.

3. DELIVERABLES SUBMITTED

Central Impact Area Groundwater PSI Draft Workplan	10/02/01
Draft Feasibility Study Report, Demo 1 Groundwater (Technical Memo 01-07)	10/02/01
Weekly Progress Report for September 24 - September 28, 2001	10/05/01

4. SCHEDULED ACTIONS

Scheduled actions for the week of October 8 include well installations of MW-183 (CIAP-4) and MW-184 (P-30), and commence drilling CIAP-2 and OW-1 for the Central Impact Area pump test. Groundwater sampling will continue for the August LTM round. Soil samples will be collected from J-3 Range grids. 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. The groundwater Feasibility Study was submitted on October 2, 2001. Analytical results from additional soil borings and geophysical anomalies validation efforts were evaluated and revisions to the Demo 1 Soil Report were initiated.

TABLE 2
 SAMPLING PROGRESS
 9/29/2001-10/5/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
P.A.2.00008.3.0	p.2.00008.r	10/05/2001	CRATER	0.66	0.91		
HDJ120034RPE1	J120034RPE	10/02/2001	CRATER GRAB	0.00	0.25		
HDJ120034RPE2	J120034RPE	10/02/2001	CRATER GRAB	0.00	0.25		
HDJ120034RPE3	J120034RPE	10/02/2001	CRATER GRAB	0.00	0.25		
HDJ260MMPE1	J260MMPE	10/02/2001	CRATER GRAB	0.00	0.25		
HDJ260MMPE2	J260MMPE	10/02/2001	CRATER GRAB	0.00	0.25		
HDJ260MMPE3	J260MMPE	10/02/2001	CRATER GRAB	0.00	0.25		
HDJ281MM2PE1	J281MM2PE	10/02/2001	CRATER GRAB	0.00	0.25		
HDJ281MM2PE2	J281MM2PE	10/02/2001	CRATER GRAB	0.00	0.25		
HDJ281MM2PE3	J281MM2PE	10/02/2001	CRATER GRAB	0.00	0.25		
MT.A.4.00001.4.0	mt.4.00001.r	10/01/2001	CRATER GRID	1.00	1.25		
MT.A.4.00003.4.0	mt.4.00003.r	10/01/2001	CRATER GRID	0.75	1.00		
MT.A.4.00004.4.0	mt.4.00004.r	10/01/2001	CRATER GRID	1.00	1.25		
MT.A.4.00006.4.0	mt.4.00006.r	10/01/2001	CRATER GRID	0.50	0.75		
MT.X.00AME1.4.0	mt.4.00002.o	10/01/2001	CRATER GRID	1.00	1.25		
MT.X.00AME1.4.D	mt.4.00002.o	10/01/2001	CRATER GRID	1.00	1.25		
GTR.B.2.00027.1.0	GTR.2.00027.o	10/05/2001	Crater	0.15	0.40		
GTR.B.2.00028.1.0	GTR.2.00028.o	10/05/2001	Crater	0.30	0.70		
O.G.000121.0.T	FIELDQC	10/05/2001	FIELD QC	0.00	0.00		
27MW0017E	FIELDQC	10/01/2001	FIELDQC	0.00	0.00		
G183DNE	FIELDQC	10/01/2001	FIELDQC	0.00	0.00		
G183DPE	FIELDQC	10/02/2001	FIELDQC	0.00	0.00		
G183DQE	FIELDQC	10/03/2001	FIELDQC	0.00	0.00		
G183DRE	FIELDQC	10/04/2001	FIELDQC	0.00	0.00		
G184SBE	FIELDQC	10/03/2001	FIELDQC	0.00	0.00		
HC102UA1AAE	FIELDQC	10/01/2001	FIELDQC	0.00	0.00		
HC102UC1AAE	FIELDQC	10/03/2001	FIELDQC	0.00	0.00		
HC102UC1AAT	FIELDQC	10/03/2001	FIELDQC	0.00	0.00		
HC102UD1AAT	FIELDQC	10/01/2001	FIELDQC	0.00	0.00		
HC102UF1AAE	FIELDQC	10/02/2001	FIELDQC	0.00	0.00		
HC102UF1AAT	FIELDQC	10/02/2001	FIELDQC	0.00	0.00		
W166M2T	FIELDQC	10/04/2001	FIELDQC	0.00	0.00		
W168M1T	FIELDQC	10/05/2001	FIELDQC	0.00	0.00		
GTR.B.2.00027.3.0	GTR.2.00027.o	10/05/2001	GAUZE WIPE	0.15	0.40		
GTR.B.2.00028.3.0	gtr.2.00028.o	10/05/2001	GAUZE WIPE	0.30	0.70		
27MW0017A	27MW0017	10/01/2001	GROUNDWATER	134.00	139.00	49.70	54.70
W135M1A	MW-135	10/04/2001	GROUNDWATER	319.00	329.00	130.80	140.80
W135M2A	MW-135	10/04/2001	GROUNDWATER	280.00	290.00	91.60	101.60
W135M3A	MW-135	10/05/2001	GROUNDWATER	239.00	249.00	50.50	60.50
W166M1A	MW-166	10/04/2001	GROUNDWATER	218.00	223.00	109.30	114.30
W166M2A	MW-166	10/04/2001	GROUNDWATER	150.00	160.00	41.30	51.30
W166M3A	MW-166	10/04/2001	GROUNDWATER	125.00	135.00	16.40	26.40
W168M1A	MW-168	10/05/2001	GROUNDWATER	256.00	266.00	171.30	181.30

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
9/29/2001-10/5/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W168M2A	MW-168	10/05/2001	GROUNDWATER	198.00	208.00	113.30	123.30
W168M3A	MW-166	10/04/2001	GROUNDWATER	103.00	113.00	18.40	28.40
W168M3D	MW-166	10/04/2001	GROUNDWATER	103.00	113.00	18.40	28.40
W89M2A	MW-88	10/03/2001	GROUNDWATER	214.00	224.00	69.10	79.10
W89M2D	MW-88	10/03/2001	GROUNDWATER	214.00	224.00	69.10	79.10
W89M3A	MW-88	10/03/2001	GROUNDWATER	174.00	184.00	29.00	39.00
W91M1A	MW-91	10/03/2001	GROUNDWATER	170.00	180.00	43.60	53.60
W92M1A	MW-92	10/03/2001	GROUNDWATER	165.00	175.00	24.10	34.10
W92M1D	MW-92	10/03/2001	GROUNDWATER	165.00	175.00	24.10	34.10
W92SSA	MW-92	10/03/2001	GROUNDWATER	139.00	149.00	0.00	10.00
W93M1A	MW-93	10/03/2001	GROUNDWATER	185.00	195.00	54.80	64.80
W93M2A	MW-93	10/03/2001	GROUNDWATER	145.00	155.00	14.70	24.70
W94M1A	MW-94	10/02/2001	GROUNDWATER	160.00	170.00	34.10	44.10
W94M2A	MW-94	10/02/2001	GROUNDWATER	140.00	150.00	14.10	24.10
W94SSA	MW-94	10/02/2001	GROUNDWATER	124.00	134.00	98.30	108.30
W95M1A	MW-95	10/01/2001	GROUNDWATER	202.00	212.00	75.10	85.10
W95M2A	MW-95	10/01/2001	GROUNDWATER	167.00	177.00	40.00	50.00
W95SSA	MW-95	10/01/2001	GROUNDWATER	125.50	135.50	0.00	10.00
W96M1A	MW-96	10/02/2001	GROUNDWATER	206.00	216.00	69.50	79.50
W96M2A	MW-96	10/02/2001	GROUNDWATER	160.00	170.00	23.40	33.40
WL101S	MW-101	10/05/2001	GROUNDWATER	131.00	141.00	0.00	10.00
WL102M2	MW-102	10/04/2001	GROUNDWATER	237.00	247.00	91.20	101.20
WSCNRA	Schooner Pass	10/02/2001	GROUNDWATER				
WSCNRD	Schooner Pass	10/02/2001	GROUNDWATER				
DW100301	GAC WATER	10/03/2001	IDW	0.00	0.00		
HCPPS1031A	HCPPS1031A	10/03/2001	OTHER				
HCPPS1031B	HCPPS1031B	10/03/2001	OTHER				
HCPPW10031A	HCPPW10031A	10/03/2001	OTHER				
HCPPW10031B	HCPPW10031B	10/03/2001	OTHER				
HCPPW10031C	HCPPW10031C	10/03/2001	OTHER				
HCPPW10031D	HCPPW10031D	10/03/2001	OTHER				
HCPPW10031E	HCPPW10031E	10/03/2001	OTHER				
HCPPW1031DD	HCPPW10031D	10/03/2001	OTHER				
G183DNA	MW-183	10/01/2001	PROFILE	335.00	335.00	153.90	153.90
G183DOA	MW-183	10/01/2001	PROFILE	345.00	345.00	163.90	163.90
G183DPA	MW-183	10/02/2001	PROFILE	355.00	355.00	173.90	173.90
G183DQA	MW-183	10/03/2001	PROFILE	365.00	365.00	183.90	183.90
G183DRA	MW-183	10/04/2001	PROFILE	375.00	375.00	193.90	193.90
G183DSA	MW-183	10/04/2001	PROFILE	385.00	385.00	203.90	203.90
G184SAA	MW-184	10/03/2001	PROFILE	135.00	135.00	9.50	9.50
G184SBA	MW-184	10/03/2001	PROFILE	145.00	145.00	19.50	19.50
GTR.B.2.00027.2.0	gtr.2.00027.o	10/05/2001	SOIL BRUSHING	0.15	0.40		
GTR.B.2.00028.2.0	GTR.2.00028.o	10/05/2001	SOIL BRUSHING	0.30	0.70		
HC102UA1AAA	SS102UA	10/02/2001	SOIL GRID	0.00	0.25		

Profiling methods include: Volatiles and Explosives

Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry

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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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 9/29/2001-10/5/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
HC102UA1BAA	SS102UA	10/02/2001	SOIL GRID	0.25	0.50		
HC102UA1CAA	SS102UA	10/02/2001	SOIL GRID	0.50	1.00		
HC102UA1CAD	SS102UA	10/02/2001	SOIL GRID	0.50	1.00		
HC102UA1DAA	SS102UA	10/02/2001	SOIL GRID	1.50	2.00		
HC102UB1AAA	SS102UB	10/02/2001	SOIL GRID	0.00	0.25		
HC102UB1BAA	SS102UB	10/02/2001	SOIL GRID	0.25	0.50		
HC102UB1CAA	SS102UB	10/02/2001	SOIL GRID	0.50	1.00		
HC102UB1DAA	SS102UB	10/02/2001	SOIL GRID	1.50	2.00		
HC102UC1AAA	SS102UC	10/03/2001	SOIL GRID	0.00	0.25		
HC102UC1BAA	SS102UC	10/03/2001	SOIL GRID	0.25	0.50		
HC102UC1CAA	SS102UC	10/03/2001	SOIL GRID	0.50	1.00		
HC102UC1DAA	SS102UC	10/03/2001	SOIL GRID	1.50	2.00		
HC102UD1AAA	102UD	10/01/2001	SOIL GRID	0.00	0.25		
HC102UD1BAA	102UD	10/01/2001	SOIL GRID	0.25	0.50		
HC102UD1CAA	102UD	10/01/2001	SOIL GRID	0.50	1.00		
HC102UD1DAA	102UD	10/01/2001	SOIL GRID	1.50	2.00		
HC102UE1AAA	102UE	10/01/2001	SOIL GRID	0.00	0.25		
HC102UE1BAA	102UE	10/01/2001	SOIL GRID	0.25	0.50		
HC102UE1CAA	102UE	10/01/2001	SOIL GRID	0.50	1.00		
HC102UE1DAA	102UE	10/01/2001	SOIL GRID	1.50	2.00		
HC102UF1AAA	102UF	10/02/2001	SOIL GRID	0.00	0.25		
HC102UF1BAA	102UF	10/02/2001	SOIL GRID	0.25	0.50		
HC102UF1CAA	102UF	10/02/2001	SOIL GRID	0.50	1.00		
HC102UF1DAA	102UF	10/02/2001	SOIL GRID	1.50	2.00		
HC102UG1AAA	102UG	10/01/2001	SOIL GRID	0.00	0.25		
HC102UG1BAA	102UG	10/01/2001	SOIL GRID	0.25	0.50		
HC102UG1BAD	102UG	10/01/2001	SOIL GRID	0.25	0.50		
HC102UG1CAA	102UG	10/01/2001	SOIL GRID	0.50	1.00		
HC102UG1DAA	102UG	10/01/2001	SOIL GRID	1.50	2.00		
HC102UH1AAA	102UH	10/01/2001	SOIL GRID	0.00	0.25		
HC102UH1BAA	102UH	10/01/2001	SOIL GRID	0.25	0.50		
HC102UH1CAA	102UH	10/01/2001	SOIL GRID	0.50	1.00		
HC102UH1DAA	102UH	10/01/2001	SOIL GRID	1.50	2.00		
HC102UH1DAD	102UH	10/01/2001	SOIL GRID	1.50	2.00		
HC102UI1AAA	102UI	10/02/2001	SOIL GRID	0.00	0.25		
HC102UI1AAD	102UI	10/02/2001	SOIL GRID	0.00	0.25		
HC102UI1BAA	102UI	10/02/2001	SOIL GRID	0.25	0.50		
HC102UI1CAA	102UI	10/02/2001	SOIL GRID	0.50	1.00		
HC102UI1DAA	102UI	10/02/2001	SOIL GRID	1.50	2.00		
MT.F.4.000R1.4.0	MT.4.000R1	10/01/2001	SOIL GRID	0.00	0.25		
MT.F.4.000R2.4.0	MT.4.000R2	10/01/2001	SOIL GRID	0.00	0.25		
MT.F.4.000R3.4.0	MT.4.000R3	10/01/2001	SOIL GRID	0.00	0.25		
MT.F.4.000R4.4.0	MT.4.000R4	10/01/2001	SOIL GRID	0.00	0.25		
MT.F.4.000R5.4.0	MT.4.000R5	10/01/2001	SOIL GRID	0.00	0.25		

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 9/15/01-10/5/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
HDJ1300038SS5	J1300038S	09/26/2001	CRATER GRID	0.00	0.25			8330N	TETRYL	NO*
58MW0011D	58MW0011	09/26/2001	GROUNDWATER	175.40	180.40	49.50	54.50	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
90MW0054	90MW0054	09/25/2001	GROUNDWATER	107.00	112.00	91.10	96.10	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
90WT0013	90WT0013	09/25/2001	GROUNDWATER	92.00	102.00	0.00	10.00	8330N	NITROGLYCERIN	NO
90WT0019	90WT0019	09/26/2001	GROUNDWATER	96.00	106.00	0.00	10.00	8330N	1,3,5-TRINITROBENZENE	NO
90WT0019	90WT0019	09/26/2001	GROUNDWATER	96.00	106.00	0.00	10.00	8330N	1,3-DINITROBENZENE	NO
90WT0019	90WT0019	09/26/2001	GROUNDWATER	96.00	106.00	0.00	10.00	8330N	2,6-DINITROTOLUENE	YES*
W66SSA	MW-66	09/21/2001	GROUNDWATER	125.70	135.70	7.00	17.00	E314.0	PERCHLORATE	
W85M1A	MW-85	09/26/2001	GROUNDWATER	137.50	147.50	19.00	29.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
W85M1A	MW-85	09/26/2001	GROUNDWATER	137.50	147.50	19.00	29.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
W86M2A	MW-86	09/27/2001	GROUNDWATER	158.00	168.00	12.20	22.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
W86SSA	MW-86	09/27/2001	GROUNDWATER	143.00	153.00	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
W87M1A	MW-87	09/27/2001	GROUNDWATER	194.00	204.00	119.60	129.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
W87M1A	MW-87	09/27/2001	GROUNDWATER	194.00	204.00	119.60	129.60	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7	YES
G184DMA	MW-184	09/27/2001	PROFILE	270.00	270.00	144.50	144.50	8330N	NITROGLYCERIN	NO
G184SAA	MW-184	10/03/2001	PROFILE	135.00	135.00	9.50	9.50	8330N	2-AMINO-4,6-DINITROTOLUENE	YES+
G184SAA	MW-184	10/03/2001	PROFILE	135.00	135.00	9.50	9.50	8330N	NITROGLYCERIN	NO
G184SAA	MW-184	10/03/2001	PROFILE	135.00	135.00	9.50	9.50	8330N	PICRIC ACID	NO
G184SBA	MW-184	10/03/2001	PROFILE	145.00	145.00	19.50	19.50	8330N	NITROGLYCERIN	NO
G184SBA	MW-184	10/03/2001	PROFILE	145.00	145.00	19.50	19.50	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

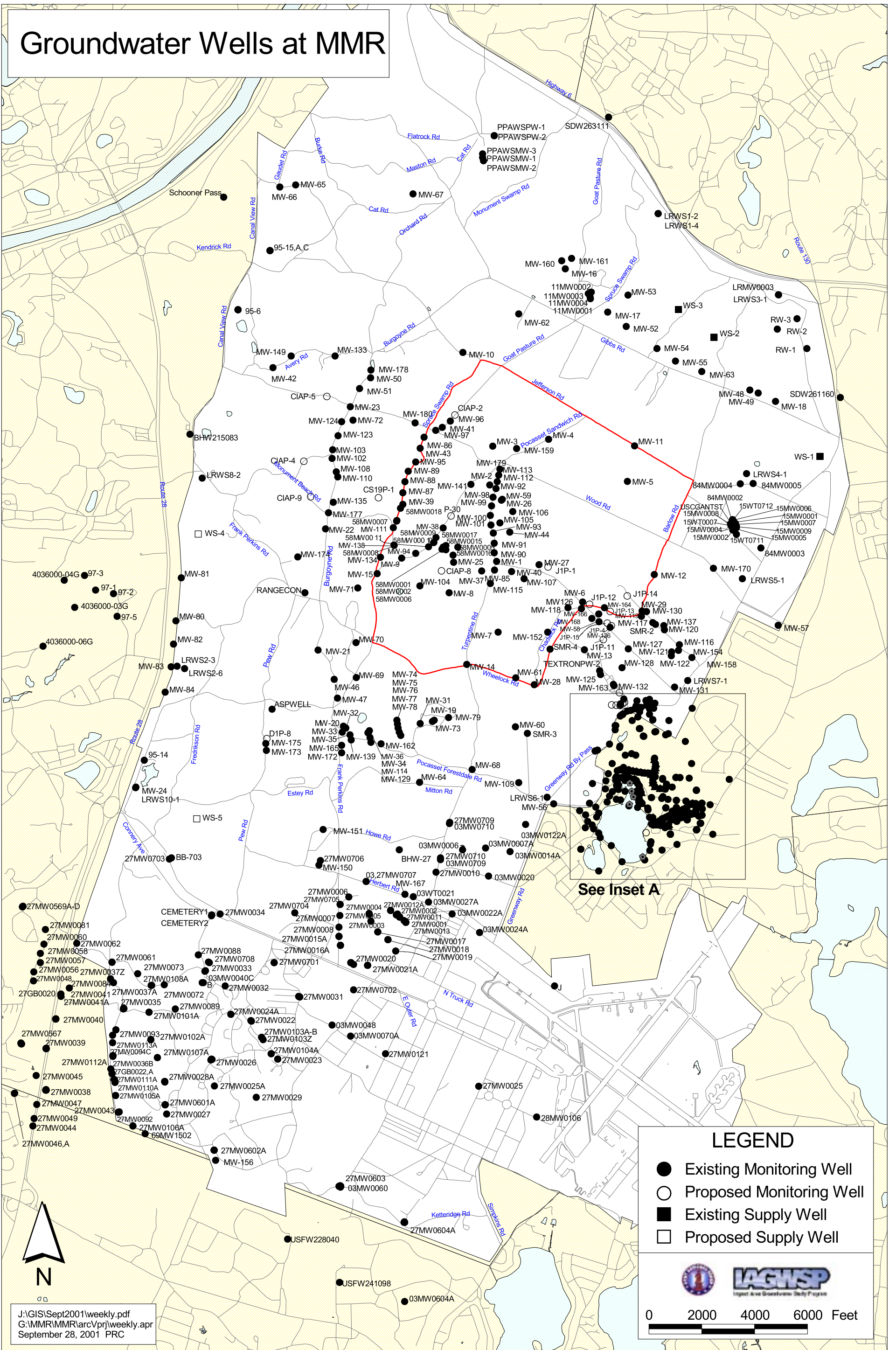
BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET

PDA/YES = Photo Diode Array, Detect Confirmed

PDA/NO = Photo Diode Array, Detect Not Confirmed

* = Interference in sample

Groundwater Wells at MMR



See Inset A

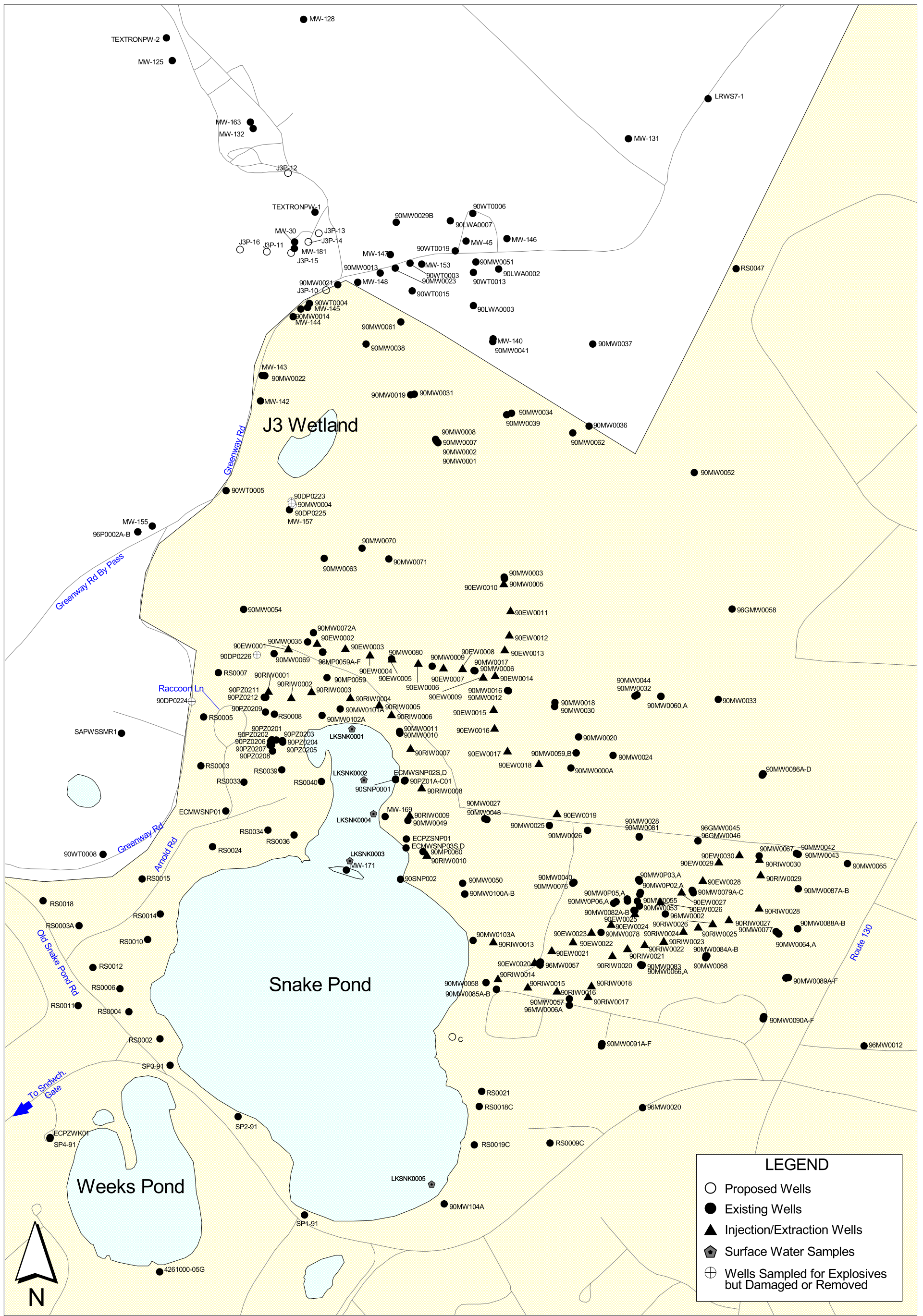
LEGEND

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



0 2000 4000 6000 Feet

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G:\MMR\MMR\arc\prj\weekly.apr
September 28, 2001 PRC



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

