WEEKLY PROGRESS UPDATE
FOR JUNE 4 – JUNE 8, 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 June 4 to June 8, 2001.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of June 8 is summarized in Table 1.

Table 1. Drilling progress as of June 8, 2001

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-172	Demo 1 Area well (D1P-5)	232	168	109-119 169-179 199-209

Bgs = below ground surface
Bwt = below water table

Completed installation of MW-172 (D1P-5).

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected for MW-172. Groundwater samples were collected for 2001 Long Term Monitoring and first round of newly installed wells (including the MW-168 at J-1 Range). Split samples were collected of Snake Pond surface water samples and Sandwich-area residential wells. Water samples were collected from the RRA Containment Pad. Pre- and post-detonation samples were collected in the HUTA. As part of the HUTA investigation, soil and wipe samples were collected from UXO and debris in Test Pit 3 and from UXORM and debris in Test Pit 5.

The Guard, EPA, and MADEP had a meeting on June 7 to discuss technical issues, including the following:

MW-172 Screen Selection
John Rice (AMEC) presented data for screen selection at MW-172 (D1P-5). Table of profile data was distributed.

- Similar to profile data for D1P-4 (MW-165), a series of intervals at MW-172 have explosive detections that are PDA-verified but interference with other compounds suggests that the detections are likely not valid. However, unlike MW-165, the explosive detections were all below 2 ppb for RDX.
- It was noted that the deepest of the RDX detections in the MW-139 area was 120 ft bwt.
- Proposed screen intervals in ft bwt were:
  - 45-55 to match screened interval near the expected vertical center of the plume as identified in MW-165.
  - -105-115 to monitor near the expected vertical bottom of the plume.
  - -135-145 monitor intervals of RDX and DANT detections in profile samples.
- Tech team agreed with proposed intervals.

CS-18 and CS-19 Updates

Ken Gaynor (Jacobs) presented an update on CS-18 and CS-19. A one-page handout was distributed.

- No new activity was conducted for CS-18 since last week. Table showing groundwater screening results for new wells was distributed. Analytical results show low level detections of TCE/PCE where screen was set (164-169 bwt) in 16MW0005.
- Trenching activity at CS-19 commenced this week. Magnetic survey of ground surface was completed at all 3 trenches.
- During CS-19 trenching, one 37mm fused round was uncovered and will be BIPed today, 6/7. One crushed drum was encountered at one foot in the 1st trench; samples were collected beneath the drum.
- Conflicts between exclusion zones for intrusive work at CS-19 and Mortar Target 9 were discussed. It was agreed that close coordination was needed between the two projects in terms of work activity, perhaps a joint safety meeting at Range Control between AMEC and Jacobs each morning. Although the safety aspect can be coordinated, the conflicts may result in schedule delays for one or both projects.

ASR Update

Eli Kangas (ACE) presented an update on the ASR. A two-page handout was distributed. Significant items below were discussed.

- Draft Report of Findings of Military History Research was completed and distributed on 5/18.
- Final Report of Interview Findings was completed and distributed on 5/19.
- Draft Report on Contracts Research is undergoing ACE/Guard internal review and will be distributed pending Guard approval by 6/18.
- Aerial photographs (1947, 1958, 1962, 1972) will be ordered 6/8.
- Tetra Tech is attempting to locate technical documents related to Copperhead, SADARM, WAM, and EFP programs as a follow-up to the Picatinny contract search effort. Tetra Tech is also requesting data from the NRC on potential permits issued for DU.
- For GIS Mapping/Integrated ASR input is needed for content and format, new map, attribute layers and ancillary data not specific to the ASR, and software requirements.
- Due to various delays of data (including aerial photographs, ASP data, Final Contracts Report, additional documents from Picatinny Arsenal and NRC), Guard would like to request an extension for Revised ASR Report from 7/31 to 10/31. Information to be provided in ASR may impact Training Areas Investigation. Mike Jasinski (EPA) agreed to review the proposed revised schedule and address the possibility of an extension next week.

Water Supply Study Update

LTC Bleakley (JPO) indicated that the meeting scheduled with Mike Jasinski (EPA), MADEP and Hap Gonser (JPO) on 6/14 needed to be rescheduled to 6/15 or 6/21. Mr. Bleakley also indicated that Dave Hill (IAGWSPO) was coordinating with Mr. Gonser to obtain ZOCs. Pumping rates have already been provided; AMEC still needs water supply well coordinates.

Munitions Survey Update

Larry Hudgins (Tetra Tech) presented the update on the Munitions Survey. A one-page handout was distributed.

- Since last week, additional work was completed at HUTA Test Pit #3 and Test Pit #5. In Test Pit #3 the geophysics was completed on Lift 1C; hand excavation of anomalies is ongoing. Excavation of lift 1C is planned for 6/11. In Test Pit #5, geophysics on Lift 1A was completed and hand excavation of anomalies has started. Three BIPs (two 60mm and a 105mm) were scheduled today 6/7 in Test Pit 3. Awaiting analytical results prior to backfilling Test Pit #4 and #6.

- Presentation of J-1 and J-3 Range ground geophysical data is scheduled for 6/14.
- ACE will provide list of primary AirMag targets/maps for Areas 1-4 today, 6/7. Area 5 map is still being revised. Secondary target list/maps are being prepared, to be provided at the next Tech Meeting.
- No vegetation clearance was conducted as part of the Munitions Survey. Heather Sullivan (ACE) requested that a line item regarding vegetation clearance be continued to be listed on the Munitions Survey Update handout.
- During the punchlist discussion, a detailed schedule of completion dates for the ground geophysical survey and AirMag data as part of the Munitions Survey Project was provided to the agencies. Jane Dolan (EPA) requested a copy of the UXB draft reports on the J Ranges that have been provided to Tetra Tech. To be provided following a review by Guard/ACE in one to two weeks.

Rapid Response Action Update

Scott Veenstra (AMEC) provided an update on the RRA. A one-page handout was distributed.

- Verbal report of runoff results (6/6) from containment pad sump (5/21) indicates the water from the pad is non-detect for explosives. It is the Guard's intention to shutdown and demob water management equipment, remove sump blocks, and allow storm water to flow off pad.
- Jane Dolan (EPA) requested that the remaining soil on the pad that is covered by a tarp and secured with sandbags (perimeter weighting), be containerized prior to allowing storm water to runoff the pad.
- Doors at the top of the filter tank have been closed.
- EPA response to extension request for additional delineation sampling of Mortar Target 9 was received on 5/30. Ben Gregson (IAGWSPO) indicated that the Guard will send a letter if the EPA-extension dates can not be met; will have a better idea in approximately 2 weeks. Concurrent CS-19 activities may impact delineation schedule.
- Addendum to FSP regarding the Additional Delineation Sampling at Mortar Target 9 was sent to the agencies on 6/1. EPA approval to proceed (via e-mail) was received on 6/4.
- Intrusive UXO clearance at Mortar Target 9 commenced 6/4. Small arms training to be conducted Friday-Sunday will delay schedule.
- Delineation sample collection is scheduled to commence following UXO clearance and coordination with CS-19 activities. To help compress schedule, soil samples at 45-55 ft radius will be collected, extracted and put on hold pending results of samples collected from 35-45 ft radius.
- Soil washing process equipment will be demobilized per the Guard's decision to evaluate alternative disposal options (5/30). Ms. Dolan (EPA) requested that documentation be provided on last Thursday (5/31) discussion.

Groundwater Study

John Rice (AMEC) presented an update of the groundwater study. A one-page summary was distributed.

- Installation of MW-172 (D1P-5) will be completed this week. Commence drilling D1P-6 (MW-173) next week, dependent on REC approval. Tech team agreed that D1P-6 location should remain where originally proposed, based on MW-172 profile results.
- Rose Forbes (AFCEE) reported that forward particle tracks from SP-2 (MW-171) with the FS-12 system on are expected by tomorrow. To be emailed to Dave Hill (IAGWSPO) and copied to Ben Gregson (IAGWSPO). USGS was also modeling the particle tracks, although they probably do not have current information on the FS-12 system (Extraction wells, Injection Wells and pumping rates). Herb Colby (AMEC) indicated that particle track cross section presented at 5/31 Tech meeting were inaccurate. Revised particle tracks from MW-171 with the FS-12 system off showed groundwater from 41-96 ft bwt at MW-171

discharging to Snake Pond approximately 300 ft south of the well. Heather Sullivan (ACE) to set up meeting discussion of particle tracks next week.

- Groundwater sampling of J Range wells continued this week including J-1 Range wells: MW-164 and MW-168. Will continue sampling second and third round for J Range wells.
- Rose Forbes (AFCEE) provided a map of Raccoon Lane piezometers. PZ211 and PZ212 are flushmounts located near PW-210. PZ201 and PZ203 have not been found yet. Ray Cottengaim (ACE) has sent a letter requesting access agreements to the property owner on 6/4. Response is expected in one week. Ms. Forbes noted that one of the property owners did request in a letter to AFCEE on 12/1998 that the piezometers be abandoned.
- Rose Forbes (AFCEE) also indicated that Senior Corps has checked Camp GoodNews wells and are continuing to check Greenway Road wells. Senior Corps forms will be provided to Jacobs and a map of useable wells may be available in approximately one month.
- Intrusive clearance commenced at Mortar Target 9 this week and will continue next week. Intrusive clearance of UXO detonation craters will commence next week pending REC approval.
- No soil sampling was conducted this week and is not planned for next week.
- No vegetation removal was completed this week and none is scheduled for next week. RECs have been submitted for D1P-6, SAR-1, CIAP-1, CIAP-2, CIAP-5 and the UXO detonation craters.
- A 1-page table for New Detects - Unvalidated was distributed. The majority of detections were similar to one or more previous rounds with the following exceptions: 2A-DNT was detected for the first time in 58MW0002. 58MW0011D was sampled for the first time and had a detection of RDX. TNT and 2,4-DANT were detected for the first time in MW-31. Mike Jasinski (EPA) requested that the results for CS-19 wells be shared with AFCEE.
- MW-171 will be surveyed before June 24 prior to campers arriving at Camp Good News.
- Jane Dolan (EPA) requested that AMEC look for perchlorate results from MW-152, MW-155, and MW-157 next week.

Document /Schedule Status Update

Marc Grant (AMEC) provided the update on document and schedule status, distributing a one-page table, 3-month Lookahead schedule, and a table outlining the scheduling issues. Highlights of the document/schedule status were reviewed as follows:

- Lavender highlighting was added to show enforceable deadlines for which an extension has been requested.
- Documents Having Comments. J-2 Range Final Report remains on the list pending receipt of a letter from the EPA excusing the enforceable deadline. Jane Dolan (EPA) provided verbal agreement and will send letter by tomorrow to formally delete this enforceable deadline.
- Documents Needing Comments. TM 01-7 UXO Interim Screening Report is still awaiting comment. Mike Jasinski (EPA) indicated that 1 to 2 weeks more was required. Comments on HUTA -1 are due tomorrow, 6/8. Comments on J13L Additional Delineation Workplan and CDC Test Results Report, submitted last week, are due in 3 weeks.
- Documents to be Submitted. Demo 1 Soil Report will be submitted tomorrow, 6/8. Central Impact Area GW FS Screening Report will be submitted 6/12. Guard is waiting on approval for extensions to Phase IIb Report and UXO Other FS Screening Report.

Discussions on IART Action Items and Agenda and J Range Response Planning followed the Tech Meeting.

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 collected from 58MW00001, 58MW0016B, and 58MW0016C (CS-19 area) had detections of RDX and HMX that were verified by PDA spectra. This is the first time these IRP wells have been sampled for the IAGWSP. There have been similar detections in these wells under the AFCEE IRP investigation.

- Groundwater samples collected from 58MW0018A (CS-19 area) had detections of 1,3-dintrobenzene, 2,6-DNT, 3-nitrotoluene, 4-nitrotoluene, nitroglycerin, and tetryl. Only 2,6-DNT was verified by PDA spectra. However, it was noted that there was a large interferent peak from a non-explosive compound and, therefore, the sample will be reanalyzed by GC/MS to confirm the 2,6-DNT detection. This is the first time this IRP well has been sampled for the IAGWSP. There have not been any explosive detections for this well under the AFCEE IRP investigation.

- Groundwater samples collected from 58MW0018B (CS-19 area) had a detection of RDX that was verified by PDA spectra. This is the first time this IRP well has been sampled for the IAGWSP. RDX was detected in this well under the AFCEE IRP investigation.

- The groundwater profile samples from MW-172 had detections of PETN (2 intervals), 2,4-DANT (3 intervals), nitroglycerin (15 intervals) and RDX (8 intervals). Only the RDX and 2,4-DANT detections were verified by PDA spectra.

- Three water samples collected from the sumps on the RRA Containment Pad had detections of alpha endosulfan (1 sample), endosulfan sulfate (1 sample), methoxychlor (1 sample), and 2,4-DANT (2 samples). The 2,4-DANT detections were not verified by PDA spectra.

3. DELIVERABLES SUBMITTED

Weekly Progress Update, May 21 – May 25, 2001	6/04/01
Final Demo Area 1 Groundwater Feasibility Screening Report (Tech Memo 01-5)	6/04/01
May 2001 MMR IAGWSP Monthly Progress Report	6/07/01
Draft Demo Area 1 Soil Report (Tech Memo 01-10)	6/07/01

4. SCHEDULED ACTIONS

Scheduled actions for the week of June 11 include commence drilling of D1P-6 (MW-173), continue development of newly installed wells; continue sampling the 1st through 4th rounds of newly installed wells, and continue sampling Long Term Groundwater Monitoring 2001. Intrusive clearance will continue at Mortar Target 9 to prepare for additional delineation sampling as part of the Rapid Response Action Program.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

The Final Groundwater Feasibility Screening Report (Tech Memo 01-5) was submitted on June 4. The Draft Soil Report (Tech Memo 01-10) was submitted on June 7. Additional downgradient well location, MW-172, was installed and D1P-6 is in the process of being drilled. Monitoring wells at MW-114, -129 and -139 are scheduled for the third round of monitoring in the upcoming weeks. Analysis of second round groundwater samples from newly installed wells is ongoing.

TABLE 2
SAMPLING PROGRESS
6/2/2001-6/8/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
3.A.1.00881.1.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00881.10.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00881.2.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00881.3.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00881.4.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00881.5.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00881.6.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00881.7.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00881.8.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00881.9.0	A.1.00881.R	06/07/2001	CRATER GRID	1.00	1.25		
3.A.1.00924.1.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.A.1.00924.10.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.A.1.00924.2.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.A.1.00924.3.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.A.1.00924.4.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.A.1.00924.5.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.A.1.00924.6.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.A.1.00924.7.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.A.1.00924.8.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.A.1.00924.9.0	A.1.00924.R	06/07/2001	CRATER GRID	1.75	2.00		
3.B.1.00868.4.0	B.1.00868.R	06/05/2001	CRATER GRID	1.75	2.00		
3.B.1.00868.4.D	B.1.00868.R	06/05/2001	CRATER GRID	1.75	2.00		
3.B.1.00868.5.0	B.1.00868.R	06/05/2001	CRATER GRID	1.75	2.00		
5.A.1.00911.1.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
5.A.1.00911.10.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
5.A.1.00911.2.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
5.A.1.00911.3.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
5.A.1.00911.4.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
5.A.1.00911.5.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
5.A.1.00911.6.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
5.A.1.00911.7.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
5.A.1.00911.8.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
5.A.1.00911.9.0	A.1.00911.R	06/07/2001	CRATER GRID	1.00	1.25		
G172DKE	FIELDQC	06/04/2001	FIELDQC	0.00	0.00		
W116SST	FIELDQC	06/04/2001	FIELDQC	0.00	0.00		
W120M1T	FIELDQC	06/06/2001	FIELDQC	0.00	0.00		
W128M2T	FIELDQC	06/07/2001	FIELDQC	0.00	0.00		
W132M1T	FIELDQC	06/08/2001	FIELDQC	0.00	0.00		
W168M3T	FIELDQC	06/05/2001	FIELDQC	0.00	0.00		
0.G.0.00093.0.T	TRIP BLANK 93	06/07/2001	FIELDQC	0.00	0.00		
3.B.1.00868.2.0	B.1.00868.R	06/05/2001	GAUZE WIPE	1.75	2.00		
3.B.1.00868.3.0	B.1.00868.R	06/05/2001	GAUZE WIPE	1.75	2.00		
3.D.1.00872.2.0	D.1.00872.O	06/05/2001	GAUZE WIPE	0.50	0.75		

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
6/2/2001-6/8/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
3.D.1.00872.3.0	D.1.00872.O	06/05/2001	GAUZE WIPE	0.50	0.75		
3.D.1.00874.2.0	D.1.00874.O	06/05/2001	GAUZE WIPE	0.25	0.50		
3.D.1.00874.3.0	D.1.00874.O	06/05/2001	GAUZE WIPE	0.25	0.50		
3.D.1.00877.2.0	D.1.00877.O	06/05/2001	GAUZE WIPE	0.25	0.50		
3.D.1.00877.3.0	D.1.00877.O	06/05/2001	GAUZE WIPE	0.25	0.50		
5.C.1.00834.2.0	C.1.00834.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.C.1.00834.3.0	C.1.00834.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.C.1.00841.2.0	C.1.00841.O	06/04/2001	GAUZE WIPE	0.75	1.00		
5.C.1.00841.3.0	C.1.00841.O	06/04/2001	GAUZE WIPE	0.75	1.00		
5.C.1.00842.2.0	C.1.00842.O	06/04/2001	GAUZE WIPE	1.00	1.25		
5.C.1.00842.3.0	C.1.00842.O	06/04/2001	GAUZE WIPE	1.00	1.25		
5.D.1.00835.2.0	D.1.00835.O	06/04/2001	GAUZE WIPE	0.25	0.50		
5.D.1.00835.3.0	D.1.00835.O	06/04/2001	GAUZE WIPE	0.25	0.50		
5.D.1.00836.2.0	D.1.00836.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00836.3.0	D.1.00836.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00839.2.0	D.1.00839.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00839.2.D	D.1.00839.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00839.3.0	D.1.00839.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00850.2.0	D.1.00850.O	06/04/2001	GAUZE WIPE	1.25	1.50		
5.D.1.00850.3.0	D.1.00850.O	06/04/2001	GAUZE WIPE	1.25	1.50		
5.D.1.00851.2.0	D.1.00851.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00851.3.0	D.1.00851.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00858.2.0	D.1.00858.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00858.3.0	D.1.00858.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00860.2.0	D.1.00860.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00860.3.0	D.1.00860.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00861.2.0	D.1.00861.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00861.3.0	D.1.00861.O	06/04/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00865.2.0	D.1.00865.O	06/04/2001	GAUZE WIPE	0.00	0.25		
5.D.1.00865.3.0	D.1.00865.O	06/04/2001	GAUZE WIPE	0.00	0.25		
5.D.1.00867.2.0	D.1.00867.O	06/04/2001	GAUZE WIPE	0.75	1.00		
5.D.1.00867.3.0	D.1.00867.O	06/04/2001	GAUZE WIPE	0.75	1.00		
5.D.1.00886.2.0	D.1.00886.O	06/07/2001	GAUZE WIPE	0.25	0.50		
5.D.1.00886.3.0	D.1.00886.O	06/07/2001	GAUZE WIPE	0.25	0.50		
5.D.1.00887.2.0	D.1.00887.O	06/07/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00887.3.0	D.1.00887.O	06/07/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00889.2.0	D.1.00889.O	06/07/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00889.3.0	D.1.00889.O	06/07/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00894.2.0	D.1.00894.O	06/07/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00894.3.0	D.1.00894.O	06/07/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00897.2.0	D.1.00897.O	06/07/2001	GAUZE WIPE	0.25	0.50		
5.D.1.00897.3.0	D.1.00897.O	06/07/2001	GAUZE WIPE	0.25	0.50		
5.D.1.00913.2.0	D.1.00913.O	06/07/2001	GAUZE WIPE	0.50	0.75		
5.D.1.00913.3.0	D.1.00913.O	06/07/2001	GAUZE WIPE	0.50	0.75		

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
6/2/2001-6/8/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
5.D.1.00915.2.0	D.1.00915.O	06/07/2001	GAUZE WIPE	1.00	1.25		
5.D.1.00915.3.0	D.1.00915.O	06/07/2001	GAUZE WIPE	1.00	1.25		
5.D.1.00922.2.0	D.1.00922.O	06/07/2001	GAUZE WIPE	0.25	0.50		
5.D.1.00922.3.0	D.1.00922.O	06/07/2001	GAUZE WIPE	0.25	0.50		
RS0009CARR	RS0009	06/06/2001	GROUNDWATER				
RS0018CARR	RS0018C	06/06/2001	GROUNDWATER				
W116SSA	MW-116	06/04/2001	GROUNDWATER	103.00	113.00	0.00	10.00
W116SSD	MW-116	06/04/2001	GROUNDWATER	103.00	113.00	0.00	10.00
W117SSA	MW-117	06/05/2001	GROUNDWATER	103.00	113.00	0.00	10.00
W118M1A	MW-118	06/05/2001	GROUNDWATER	146.00	156.00	34.50	44.50
W118SSA	MW-118	06/05/2001	GROUNDWATER	116.00	126.00	4.40	14.40
W119SSA	MW-119	06/05/2001	GROUNDWATER	103.00	113.00	0.00	10.00
W120M1A	MW-120	06/05/2001	GROUNDWATER	260.00	270.00	154.80	164.80
W120M1A	MW-120	06/05/2001	GROUNDWATER	260.00	270.00	154.80	164.80
W121SSA	MW-121	06/06/2001	GROUNDWATER	88.00	98.00	0.00	10.00
W125M1A	MW-125	06/06/2001	GROUNDWATER	232.00	242.00	180.47	190.47
W125SSA	MW-125	06/06/2001	GROUNDWATER	50.00	60.00	0.00	10.00
W125SSD	MW-125	06/06/2001	GROUNDWATER	50.00	60.00	0.00	10.00
W126M1A	MW-126	06/07/2001	GROUNDWATER	118.00	128.00	16.68	26.68
W126SSA	MW-126	06/07/2001	GROUNDWATER	99.00	109.00	0.00	10.00
W127SSA	MW-127	06/06/2001	GROUNDWATER	99.00	109.00	0.00	10.00
W128M1A	MW-128	06/06/2001	GROUNDWATER	144.00	154.00	55.60	65.60
W128M1D	MW-128	06/06/2001	GROUNDWATER	144.00	154.00	55.60	65.60
W128M2A	MW-128	06/06/2001	GROUNDWATER	104.00	114.00	15.60	25.60
W128SSA	MW-128	06/07/2001	GROUNDWATER	87.00	97.00	0.00	10.00
W131M1A	MW-131	06/07/2001	GROUNDWATER	300.00	310.00	201.80	211.80
W132M1A	MW-132	06/07/2001	GROUNDWATER	224.00	234.00	144.74	154.74
W137SSA	MW-137	06/06/2001	GROUNDWATER	105.00	115.00	0.00	10.00
W160SSA	MW-160	06/08/2001	GROUNDWATER	137.00	147.00	0.00	10.00
W161SSA	MW-161	06/08/2001	GROUNDWATER	145.00	155.00	0.00	10.00
W161SSD	MW-161	06/08/2001	GROUNDWATER	145.00	155.00	0.00	10.00
W167M3A	MW-167	06/08/2001	GROUNDWATER	100.00	110.00	17.90	27.90
W168M1A	MW-168	06/04/2001	GROUNDWATER	256.00	266.00	170.85	180.85
W168M2A	MW-168	06/05/2001	GROUNDWATER	198.00	208.00	112.95	122.95
W168M3A	MW-168	06/04/2001	GROUNDWATER	103.00	113.00	18.05	28.05
W28M1A	MW-28	06/04/2001	GROUNDWATER	270.00	280.00	169.20	179.20
W28M2A	MW-28	06/05/2001	GROUNDWATER	175.00	185.00	73.80	83.80
W2DDA	MW-2	06/02/2001	GROUNDWATER	355.00	360.00	212.00	217.00
W40M1A	MW-40	06/02/2001	GROUNDWATER	132.00	142.00	9.50	19.50
W40SSA	MW-40	06/02/2001	GROUNDWATER	116.00	142.00	0.00	10.00
PWPPC02JN1A	RRA CONTAINMENT	06/02/2001	IDW				
PWPPC02JN1D	RRA CONTAINMENT	06/02/2001	IDW				
G172DKA	MW-172	06/04/2001	PROFILE	172.00	172.00	108.20	108.20
G172DKD	MW-172	06/04/2001	PROFILE	172.00	172.00	108.20	108.20

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TABLE 2
SAMPLING PROGRESS
6/2/2001-6/8/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
G172DLA	MW-172	06/04/2001	PROFILE	182.00	182.00	118.20	118.20
G172DMA	MW-172	06/04/2001	PROFILE	192.00	192.00	128.20	128.20
G172DNA	MW-172	06/04/2001	PROFILE	202.00	202.00	138.20	138.20
G172DOA	MW-172	06/04/2001	PROFILE	212.00	212.00	148.20	148.20
G172DPA	MW-172	06/04/2001	PROFILE	222.00	222.00	158.20	158.20
G172DQA	MW-172	06/04/2001	PROFILE	232.00	232.00	168.20	168.20
3.B.1.00868.1.0	B.1.00868.R	06/05/2001	SOIL BRUSHING	1.75	2.00		
3.D.1.00872.1.0	D.1.00872.O	06/05/2001	SOIL BRUSHING	0.50	0.75		
3.D.1.00874.1.0	D.1.00874.O	06/05/2001	SOIL BRUSHING	0.25	0.50		
3.D.1.00877.1.0	D.1.00877.O	06/05/2001	SOIL BRUSHING	0.25	0.50		
5.C.1.00834.1.0	C.1.00834.O	06/04/2001	SOIL BRUSHING	0.50	0.75		
5.C.1.00841.1.0	C.1.00841.O	06/04/2001	SOIL BRUSHING	0.75	1.00		
5.C.1.00842.1.0	C.1.00842.O	06/04/2001	SOIL BRUSHING	1.00	1.25		
5.D.1.00835.1.0	D.1.00835.O	06/04/2001	SOIL BRUSHING	0.25	0.50		
5.D.1.00836.1.0	D.1.00836.O	06/04/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00839.1.0	D.1.00839.O	06/04/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00850.1.0	D.1.00850.O	06/04/2001	SOIL BRUSHING	1.25	1.50		
5.D.1.00851.1.0	D.1.00851.O	06/04/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00858.1.0	D.1.00858.O	06/04/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00860.1.0	D.1.00860.O	06/04/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00861.1.0	D.1.00861.O	06/04/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00865.1.0	D.1.00865.O	06/04/2001	SOIL BRUSHING	0.00	0.25		
5.D.1.00867.1.0	D.1.00867.O	06/04/2001	SOIL BRUSHING	0.75	1.00		
5.D.1.00886.1.0	D.1.00886.O	06/07/2001	SOIL BRUSHING	0.25	0.50		
5.D.1.00887.1.0	D.1.00887.O	06/07/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00889.1.0	D.1.00889.O	06/07/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00894.1.0	D.1.00894.O	06/07/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00897.1.0	D.1.00897.O	06/07/2001	SOIL BRUSHING	0.25	0.50		
5.D.1.00913.1.0	D.1.00913.O	06/07/2001	SOIL BRUSHING	0.50	0.75		
5.D.1.00915.1.0	D.1.00915.O	06/07/2001	SOIL BRUSHING	1.00	1.25		
5.D.1.00922.1.0	D.1.00922.O	06/07/2001	SOIL BRUSHING	0.25	0.50		
CMPGDNEWS	CMPGDNEWS	06/06/2001	SURFACE WATER	0.00	0.00		
SNKPNDBEACH	SNKPNDBEACH	06/06/2001	SURFACE WATER	0.00	0.00		

Profiling methods include: Volatiles and Explosives
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Other Sample Types methods are variable
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TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 5/19/01-6/8/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
58MW0001	58MW0001	05/29/2001	GROUNDWATER	122.00	127.00	3.60	8.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
58MW0001	58MW0001	05/29/2001	GROUNDWATER	122.00	127.00	3.60	8.60	8330N	OCTAHYDRO-1,3,5,7-TETRANITI	YES
58MW0016B	58MW0016B	05/30/2001	GROUNDWATER	151.00	161.00	28.50	38.50	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
58MW0016B	58MW0016B	05/30/2001	GROUNDWATER	151.00	161.00	28.50	38.50	8330N	OCTAHYDRO-1,3,5,7-TETRANITI	YES
58MW0016C	58MW0016C	05/30/2001	GROUNDWATER	116.00	126.00	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
58MW0016C	58MW0016C	05/30/2001	GROUNDWATER	116.00	126.00	0.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITI	YES
58MW0018A	58MW0018A	05/25/2001	GROUNDWATER	237.00	247.00	93.90	103.90	8330N	1,3-DINITROBENZENE	NO
58MW0018A	58MW0018A	05/25/2001	GROUNDWATER	237.00	247.00	93.90	103.90	8330N	2,6-DINITROTOLUENE	YES
58MW0018A	58MW0018A	05/25/2001	GROUNDWATER	237.00	247.00	93.90	103.90	8330N	3-NITROTOLUENE	NO
58MW0018A	58MW0018A	05/25/2001	GROUNDWATER	237.00	247.00	93.90	103.90	8330N	4-NITROTOLUENE	NO
58MW0018A	58MW0018A	05/25/2001	GROUNDWATER	237.00	247.00	93.90	103.90	8330N	NITROGLYCERIN	NO
58MW0018A	58MW0018A	05/25/2001	GROUNDWATER	237.00	247.00	93.90	103.90	8330N	TETRYL	NO
58MW0018B	58MW0018B	05/25/2001	GROUNDWATER	179.00	189.00	36.50	46.50	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G172DAA	MW-172	05/31/2001	PROFILE	72.00	72.00	8.20	8.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G172DAA	MW-172	05/31/2001	PROFILE	72.00	72.00	8.20	8.20	8330N	NITROGLYCERIN	NO
G172DBA	MW-172	05/31/2001	PROFILE	82.00	82.00	18.20	18.20	8330N	NITROGLYCERIN	NO
G172DCA	MW-172	05/31/2001	PROFILE	92.00	92.00	28.20	28.20	8330N	NITROGLYCERIN	NO
G172DCD	MW-172	05/31/2001	PROFILE	92.00	92.00	28.20	28.20	8330N	NITROGLYCERIN	NO
G172DDA	MW-172	05/31/2001	PROFILE	102.00	102.00	38.20	38.20	8330N	NITROGLYCERIN	NO
G172DEA	MW-172	05/31/2001	PROFILE	112.00	112.00	48.20	48.20	8330N	NITROGLYCERIN	NO
G172DFA	MW-172	06/01/2001	PROFILE	122.00	122.00	58.20	58.20	8330N	NITROGLYCERIN	NO
G172DIA	MW-172	06/01/2001	PROFILE	152.00	152.00	88.20	88.20	8330N	NITROGLYCERIN	NO
G172DJA	MW-172	06/01/2001	PROFILE	162.00	162.00	98.20	98.20	8330N	NITROGLYCERIN	NO
G172DKA	MW-172	06/04/2001	PROFILE	172.00	172.00	108.20	108.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G172DKA	MW-172	06/04/2001	PROFILE	172.00	172.00	108.20	108.20	8330N	NITROGLYCERIN	NO
G172DKA	MW-172	06/04/2001	PROFILE	172.00	172.00	108.20	108.20	8330N	PENTAERYTHRITOL TETRANITR	NO
G172DKD	MW-172	06/04/2001	PROFILE	172.00	172.00	108.20	108.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G172DKD	MW-172	06/04/2001	PROFILE	172.00	172.00	108.20	108.20	8330N	NITROGLYCERIN	NO
G172DLA	MW-172	06/04/2001	PROFILE	182.00	182.00	118.20	118.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G172DLA	MW-172	06/04/2001	PROFILE	182.00	182.00	118.20	118.20	8330N	NITROGLYCERIN	NO
G172DMA	MW-172	06/04/2001	PROFILE	192.00	192.00	128.20	128.20	8330N	2,4-DIAMINO-6-NITROTOLUENE	YES
G172DMA	MW-172	06/04/2001	PROFILE	192.00	192.00	128.20	128.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G172DMA	MW-172	06/04/2001	PROFILE	192.00	192.00	128.20	128.20	8330N	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

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 5/19/01-6/8/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G172DMA	MW-172	06/04/2001	PROFILE	192.00	192.00	128.20	128.20	8330N	PENTAERYTHRITOL TETRANITR	NO
G172DNA	MW-172	06/04/2001	PROFILE	202.00	202.00	138.20	138.20	8330N	2,4-DIAMINO-6-NITROTOLUENE	YES
G172DNA	MW-172	06/04/2001	PROFILE	202.00	202.00	138.20	138.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
G172DNA	MW-172	06/04/2001	PROFILE	202.00	202.00	138.20	138.20	8330N	NITROGLYCERIN	NO
G172DOA	MW-172	06/04/2001	PROFILE	212.00	212.00	148.20	148.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
G172DOA	MW-172	06/04/2001	PROFILE	212.00	212.00	148.20	148.20	8330N	NITROGLYCERIN	NO
G172DPA	MW-172	06/04/2001	PROFILE	222.00	222.00	158.20	158.20	8330N	2,4-DIAMINO-6-NITROTOLUENE	YES
G172DPA	MW-172	06/04/2001	PROFILE	222.00	222.00	158.20	158.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
G172DPA	MW-172	06/04/2001	PROFILE	222.00	222.00	158.20	158.20	8330N	NITROGLYCERIN	NO
G172DQA	MW-172	06/04/2001	PROFILE	232.00	232.00	168.20	168.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
G172DQA	MW-172	06/04/2001	PROFILE	232.00	232.00	168.20	168.20	8330N	NITROGLYCERIN	NO
SWPPSUMP1A	RRA CONTAINMENT	05/24/2001	IDW					OL21P	ALPHA ENDOSULFAN	
SWPPSUMP2A	RRA CONTAINMENT	05/24/2001	IDW					8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
SWPPSUMP3A	RRA CONTAINMENT	05/24/2001	IDW					8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
SWPPSUMP3A	RRA CONTAINMENT	05/24/2001	IDW					OL21P	ENDOSULFAN SULFATE	
SWPPSUMP3A	RRA CONTAINMENT	05/24/2001	IDW					OL21P	METHOXYCHLOR	

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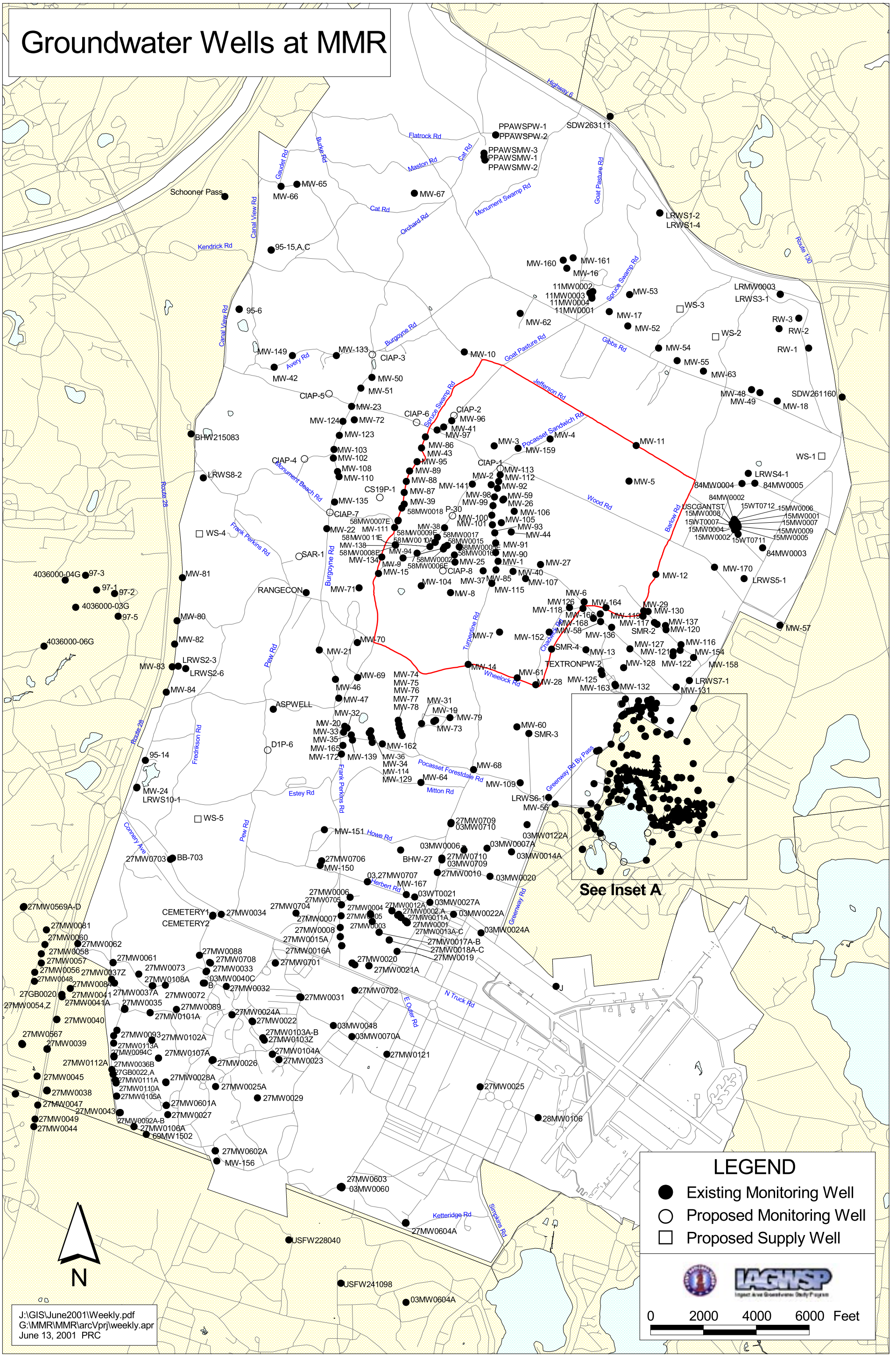
Groundwater Wells at MMR



0 600 1200 Feet

Inset A

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June 13, 2001 PRC