

**WEEKLY PROGRESS UPDATE
FOR DECEMBER 10 – DECEMBER 14, 2001**

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

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

1. SUMMARY OF ACTIONS TAKEN

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

| Table 1. Drilling progress as of December 14, 2001 | | | | |
|---|------------------------------------|-----------------------------|---------------------------------|--|
| Boring Number | Purpose of Boring/Well | Total Depth (ft bgs) | Saturated Depth (ft bwt) | Completed Well Screens (ft bgs) |
| MW-193 | J-3 Range Well (J3P-12) | 85 | 53 | |
| MW-194 | J-3 Range Well (J3P-13) | 60 | 3 | |
| MW-195 | J-3 Range Well (J3P-14) | 100 | 65 | |
| MW-196 | J-3 Range Well (J3P-15) | 140 | 107 | |
| MW-197 | J-3 Range Well (J3P-11) | 165 | 145 | |
| MW-198 | J-3 Range Well (J3P-16) | 155 | 135 | |
| MW-199 | Central Impact Area Well (CIAP-18) | 324 | 190 | |
| MW-200 | Central Impact Area Well (CIAP-8) | 75 | | |
| bgs = below ground surface | | | | |
| bwt = below water table | | | | |

Completed drilling of MW-193 (J3P-12), MW-196 (J3P-15), MW-197 (J3P-15), MW-198 (J3P-16) and MW-199 (CIAP-18). Continued drilling of MW-194 (J3P-13), and MW-195 (J3P-14). Commenced drilling of MW-200 (CIAP-8).

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-195, MW-197 and MW-198. Groundwater samples were collected as part of the December Long Term Groundwater Monitoring round. Water samples were collected from drive points in Snake Pond. Background soil samples were collected for herbicides at the Shawme Crowell Forest. Soil samples were collected from polygons in the J-1 Range and J-2 Range. Soil samples were collected from soil cuttings at recently installed monitoring wells.

As part of the Munitions Survey Project, soil samples were collected from J-1 Range. Post-detonation soil samples were collected from Transects 1, 3, and 5 in the Central Impact Area. Wipe and soil samples were collected from UXO in Transect 1 and 3.

The Guard, EPA, and MADEP had a meeting on December 13 to discuss technical issues, including the following:

Attendees

| | | |
|----------------------------|-------------------------------|-----------------------------|
| Ben Gregson (IAGWSPO) | CPT Bill Myer (IAGWSPO) | Tina Dolen (IAGWSPO) |
| Karen Wilson (IAGWSPO) | Bill Gallagher (IAGWSPO) | Dave Hill (IAGWSPO) |
| Mike Ciaranca (MAARNG) | LTC Bill FitzPatrick (MAARNG) | MAJ Brian Rogers (MAARNG) |
| COL Albert Bleakley (JPO) | Todd Borci (EPA) | Jane Dolan (EPA) |
| Mike Jasinski (EPA) | Len Pinaud (MADEP) | Mark Panni (MADEP) |
| Darrell Deleppo (ACE) | Ed Wise (ACE) | Heather Sullivan (ACE) |
| Ellen Iorio (ACE) | Gina Tyo (ACE) | Frank Fedele (ACE) |
| Rob Foti (ACE) | John MacPherson (ACE) | Rob Clemens (AMEC) |
| Marc Grant (AMEC) | John Rice (AMEC - phone) | Kim Harriz (AMEC) |
| Jay Clausen (AMEC - phone) | Karilyn Saunders (AMEC) | Leo Montroy (Tetra Tech) |
| Larry Hudgins (Tetra Tech) | Doug Lam (Tetra Tech) | James Forrelli (Tetra Tech) |
| Susan Stewart (Tetra Tech) | Dave Williams (MDPH) | Adam Balogh (TRC - phone) |

Punchlist Items

- #2 Access 90PZ208 (Corps). Ray Cottengaim (ACE) forwarded copies of contact letters to the Commonwealth on 12/6; MADEP has not received.
- #3 Provide comments on PCN and MDL sampling approach (EPA). Will provide comment week of 1/03/02.
- #6 Provide recommendation on how to handle remaining lifts for 1200 cy soil (Corps). Corps is still evaluating options. Three piles (lined and covered) are staged at the screening pad and at HUTA1. Tetra Tech is routinely inspecting and maintaining the piles/covers. Tetra Tech to check on origin of soil pile at decon pad.
- #7 Provide table of wells for Perchlorate sampling (AMEC). Letter with recommendations for additional perchlorate sampling emailed on 12/11. EPA to provide comment by 1/03/2002.
- #8 Provide soil results from Mortar Target 9 post-excavation sampling (Corps). Results emailed on 12/07.
- #9 Provide soil results from ASP (Corps). Results emailed 12/11 except for dioxin (not received yet). Will email dioxin results upon receipt, likely next week.
- #12 Provide comments/questions on Demo 1 FS task list (EPA). Some questions were received. Further discussion in today's after meeting.
- #17 Provide 8270-SIM protocol (AMEC). Information was faxed on 12/12.
- #18 Provide revised LTM Plan (AMEC). Revised plan to be emailed 12/17.
- #19 Provide interview schedule for Witness #19 (IAGWSPO). Private investigator has been instructed by the NGB to contact #19's attorney. EPA requested that instead, Ben Gregson request that the Guard's attorney talk to Textron's attorney; contact EPA's attorney with any questions/issues regarding this procedure.
- #20 Provide AirMag Workplan (Corps). Workplan has been provided.

Prescribed Burn

Mike Ciaranca (MAARNG) presented an overview on the use of the prescribed burn as a natural resource management tool at MMR.

- Prescribed burning has been used as a resource management tool at MMR, since 1982, to maintain habitat and minimize wildfires. The average prescribed burn is 700 acres, whereas the average wildfire is 1700 acres. Prescribed burning is used for protecting public safety (minimize wildfires), environmental management and stewardship (such as eliminate

introduced invasive, exotic weeds like the spotted knap weed or maintaining scrub oak habitat), and enhancing military training

- The last burn was 2 years ago and involved only 100 acres in the 5 corners area of the Central Impact Area.
- MAARNG recently submitted a permit to the state for year round burning anywhere on post. In the past, the permit has only been requested/issued for the Central Impact Area. The state is currently reviewing the permit. 600 acres per year is targeted for the prescribed burn.
- Approximately 4,000 acres of scrub oak has been requested to be maintained by MADFW. Habitat that needs to be maintained is divided into 6 areas - Zones 1-3 and Training areas A (Alpha), B (Bravo), and C (Charlie); Zone 1 is the Central Impact Area. A separate Fire Management Plan for each of the six areas has been prepared. Copies of the FMPs were provided to Todd Borci (EPA).
- The prescribed burns are managed very precisely by the MAARNG and the base Fire Chief and staff, based on the burn index and current and predicted weather conditions. Fires are not ignited or are extinguished immediately if, based on weather changes, changes in the burn index, or advancement of fire outside the targeted areas, the conditions for the burn are not within the pre-prescribed specifications.
- Mr. Ciaranca stressed that, as in the past, the MAARNG will coordinate its activities with the IAGWSPO and all interested regulatory agencies, including the EPA.
- The DEP and the NGB are still resolving permit issues and prior to issuing the final burn permit, the DEP will ensure that a coordination meeting takes place with the EPA and the IAGWS program.

Central Impact Area Pump Test

Bill Gallagher (IAGWSPO), citing information from the manufacturer, indicated that the Guard does not know the ability of GAC system to remove perchlorate from the groundwater. Therefore, the Guard assumes that perchlorate will be discharged with groundwater extracted during the pump test.

- Marc Grant (AMEC) indicated that a professor at the Pennsylvania State University has been doing a study on the use of GAC for perchlorate treatment and feels that it should be effective for treating groundwater with the concentrations detected at MMR. However, no published data is yet available.
- Mike Jasinski (EPA) indicated that EPA had discussed these issues internally since the 12/12 conference call and have decided not to approve going ahead with the currently planned pump test since EPA does not want to take the risk of discharging perchlorate-containing water in an area with no documented perchlorate contamination. Mr. Jasinski acknowledged that the EPA had requested the expedited schedule for the pump test. But now that the Guard had been able to accomplish scheduling the pump test prior to winter conditions, EPA feels that it is premature to complete the pump test in light of the uncertainties surrounding perchlorate treatment. EPA also understood that the Central Impact Area Feasibility schedule would be impacted in light of the probable delay of the pump test until Spring.
- Todd Borci indicated that it might not have a significant impact on the schedule since additional delineation of the plume would probably be needed beyond the current well installation program.
- Len Pinaud (MADEP) indicated that it was DEP's position that the groundwater should be treated to nondetect, prior to discharge. If it could not be treated to nondetect, then the water could be discharged to an area of existing contamination. If the situation was an emergency (imminent threat to human health or the environment) DEP would make allowances. However, this situation was not deemed an imminent threat.

- Mr. Jasinski requested that the Corps and AMEC evaluate options over the next couple weeks including: 1) screening methods for perchlorate, 2) having Calgon perform a column study to evaluate perchlorate treatment, 3) follow-up with PSU professor regarding test results, and 4) investigating alternative discharge areas. Mr. Jasinski also asked that EPA be presented with proposed schedule impacts.
- Mr. Jasinski to provide email approval to Guard to discharge mini-test discharge water from Frac tank. DEP will also provide email approval.

ASR Interview Priority List

- Jane Dolan (EPA) provided a list with interview names checked. These are the interviews that are the highest priority. The private investigator can complete interviews with these individuals in any order.
- Todd Borci provided a set of maps and questions for the use of the private investigator in his interviews.

Munitions Survey Project Update

Ellen Iorio (ACE) provided an update on the HUTA2 and Rob Foti (ACE) provided an update on the other MSP tasks.

- **HUTA2**. Per EPA's request, work has been stopped on Transects 2,3,4 until five conditions are met. A site walk was performed with Mr. Borci on Wednesday, 12/12/01, and it was agreed that work could continue at Transects 1 and 5. Mr. Borci approved BIPs on Friday if pre-BIP samples were collected. Four BIPs are scheduled, one in Transect 1, two in access road to Transect 3, and 1 in Transect 5. Shipping of cut brush from Transects 2,3,4 was also approved. Mr. Borci indicated that approval/comment on continuing work at Transects 2,3,4 will be provided Monday, 12/17 or sooner.
- **AirMag**. Workplan submitted 12/11. Expecting comments from EPA on 1/02/2002.
- **J Range Polygons**. The investigation is continuing on J-1 Range where no surface soil sampling is required. AMEC has completed surface soil sampling at J-1 Range polygons and has moved on to J-2 Range. The Corps is reviewing exclusion zones on J-1 and J-2 Ranges so that excavations and sampling can be coordinated to proceed at the same time. Polygons 7-9 have been completed. An update was forwarded regarding Polygon 9, which appears to have been a burial site for inert munitions. Three items were sent to the Safe Holding Area because it could not be verified that they were inert. Engineering controls are being considered for the Polygon 1 excavation because of the proximity to the Town of Sandwich. A write-up is being prepared for the site walk through that was conducted with Jane Dolan at J-2/J-3 Ranges.
- **Eastern MSP sites**. Sites have been surveyed. Preparing ROAs for Karen Wilson's (IAGWSPO) approval.
- **Scar Site**. Site has been surveyed. Awaiting ROA approval.
- **U Range**. Site will be discussed in after meeting. ROAs to be submitted later.
- **BA-1 Disposal Site**. Investigation completed. Waiting on analytical results to backfill.
- Jim Forrelli (Tetra Tech) reviewed ongoing efforts to complete identification of items and hazard classification. 56 items have been uncovered. 12 items are magnetrons related to a radar system. 36 items are tubes. Other items are miscellaneous electronic components. Tetra Tech is cataloging all component markings and potential hazards. A radar technician (never worked at MMR) was interviewed who was familiar with the system that utilized these components. The radar technician identified the system as a FPS-6 system manufactured in the 1950s and 1960s by GE. GE was contacted and they indicated that the radar group has since been sold possibly to Textron. PCB-containing oils (probably as a non-contact coolant system) have been identified as being associated with the magnetrons. Tetra Tech is considering wipe samples of the magnetrons if it is determined to be a contact cooling

system. Tetra Tech is seeking more information on the two tubes found with liquid. Soil analytical results from samples collected from the excavation are scheduled to be received in early January.

Scrap Contract Briefing

John McPherson (ACE) distributed a summary of the status of the Scrap Contract and provided a briefing.

- USA Environmental has been retained as the scrap contractor. The scrap collection will be coordinated with other contractors so as not to interfere with other work schedules.
- The scrap-staging yard will be at the soil-washing pad near Range Control. Scrap will be classified/segregated as OE, non-OE, and nonmilitary scrap.
- Processing activities, on-site and off-site are being negotiated.
- Procedures for target removal are still being discussed with two potential subcontractors. Cranes will be used to place targets on lowboys and these will be hauled away for scrap. Details will be provided in writing prior to target removal.
- 50 targets will require removal by crane. ROAs for their removal are being coordinated with Karen Wilson (IAGWSPO). Ms. Wilson indicated that future actions (well installation – possible remediation) will dictate how roads are built to access some targets and site restoration issues. Ms. Wilson to provide specific target list to EPA, so that EPA can provide feedback on current thinking of potential follow-up activity for these areas. Heather Sullivan (IAGWSPO) also indicated that this could be discussed relative to well installation in the Central Impact Area at the Wednesday 12/19 conference call regarding proposed well location approval.

Snake Pond Sampling

Dave Hill (IAGWSPO) summarized activities regarding the Snake Pond investigation.

- Drive point sampling through the pond bottom was performed at seven previous diffusion sampling locations (2, 28, 38, 57, 64, 70, 76) by the USGS on 12/11. Samples at 70 and 38 were slightly offset from the original locations. Four of these locations corresponded to the locations where explosive detections in the diffusion samplers were validated and one location where a non-confirmed detection of RDX was reported. A sample could not be collected from location #81 (the other location with a validated explosive detection) because the organic layer was particularly thick and flow could not be achieved to sample. The USGS was able to get below the organic layer at all the other locations.
- Conductivity data was collected at the beginning and end of sampling. The USGS noted that the conductivity changed at the 76 location, indicating that pond water may have infiltrated into the drive point. USGS requested permission to analyze each of the 3 liter bottles, collected at this location, as 3 separate samples.
- AMEC is proceeding with standard turn around time analysis for explosives and perchlorate; results are expected in approximately 30 days.

MW-181 Profile Sample

Heather Sullivan (ACE) reviewed status of information on the MW-181 sample.

- Gamma Spectrometry results of original profile sample from MW-181 were emailed Monday. Jay Clausen (AMEC) memo indicated that results were consistent with background.
- Two+ liters remain and the Corps would like feedback from the EPA regarding proceeding in accordance with AMEC's proposal.
- Todd Borci indicated that Idaho Labs are taking a closer look at the results, particularly the lead results.
- Mike Jasinski indicated that the EPA will evaluate further and provide comment by Monday 12/17.

- COL Bleakley (JPO) to be emailed results.

Schedule/Documents

Marc Grant (AMEC) reviewed schedule/document issues.

- RRA COWR – Resolution meeting scheduled for 1/03/02.
- June BIP Report – July BIP is ready for submittal, but if there will be significant comment from EPA on June Report MOR, AMEC would like to hold off on submittal of July Report. EPA to look at MOR and provide feedback on any significant comments. AMEC to incorporate into July Report prior to submittal.
- Tech Memo 01-15 (Phase II(b) Report)– Letter to be sent by Heather Sullivan regarding how to proceed with investigation reporting. MADEP to send comments on red line/strike-out report, which will be worked into final reports.
- Gun and Mortar Workplans – Guard/ACE to provide feedback/letter on how they envision additional investigations to proceed. 01/9/02 Workplan deadline to be amended in letter.
- Supplemental Phase IIb Workplan – Added to schedule, submittal date is 1/17/02.
- Demo 1 PSI – 11/13 extension request asked that 1/03/02 deadline be changed to 1/10/02. Mike Jasinski to address.
- MSP Finalization – Ellen Iorio asked if more comments were coming from EPA on the MSP Report. Jane Dolan indicated that the red line/strikeout report should be revised in accordance with the MOR. Although more comments were expected to be received, the date those comments would be received had not been determined.

IART Agenda/Action Items

Tina Dolen (IAGWSPO) reviewed agenda for January IART.

- Former H Range Update – DEP and EPA explained that this should be an update and notification. The update should introduce the Fact Sheet (to be prepared and provided) and what to expect at the upcoming public hearing regarding the Former H Range.
- IART Map discussion – to be added after the Decision Criteria Matrix discussion. 1/07/02 should discuss IART maps internally and have recommendations, based on past team requests, prepared for the IART meeting.
- Decision Criteria Matrix – Make discussion 1 hour.
- Late Breaking News – Make discussion 1 hour.
- Tina Dolan is preparing a letter on the IART team's behalf requesting an IART meeting briefing be conducted by NRTC per Dick Judge's (Sandwich Selectman) request.
- TNA/CDC questions to be included under Late Breaking News.
- Len Pinaud (MADEP) indicated that a follow-up should be considered/prepared for PLM and gross alpha results.
- Comments on Action Items due on 01/03/02.

Miscellaneous

- Jane Dolan requested that the following items be added to the Punchlist.
 - Provide proposal for discontinuing surface water sampling at Snake Pond (AMEC).
 - Review of Interview Summaries (EPA).
 - Provide Fate and Transport Study (AMEC).

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 MW-87M1 (Central Impact Area), MW-88M2 (Central Impact Area), MW-89M2 (Central Impact Area), and MW-108M4 (Central Impact Area) had detections of RDX and HMX that were confirmed by PDA spectra. The detections were similar to previous sampling rounds.
- Groundwater samples from MW-23M1 (Central Impact Area), MW-25S (Central Impact Area), MW-37M2, M3 (Central Impact Area), MW-89M1 (Central Impact Area), MW-98M1 (Central Impact Area), MW-99M1 (Central Impact Area), and MW-111M3 (Central Impact Area) had detections of RDX that confirmed by PDA spectra. The detections were similar to previous sampling rounds
- Groundwater samples from MW-50M1 (Central Impact Area) had detections of 4A-DNT and RDX that were confirmed by PDA spectra. The detections were similar to previous sampling rounds
- Groundwater samples from 90MW0034 (FS-12) had detections of 1,3,5-trinitrobenzene, 1,3-dinitrobenzene, nitroglycerin, and RDX. The detection of RDX was confirmed by PDA spectra, but with interference. No detections of these analytes have been confirmed in previous sampling rounds.
- Influent samples from the Mini Pump Test GAC treatment system had detections of RDX and HMX that were confirmed by PDA spectra.
- Groundwater profile samples from MW-195 (J3P-14) had a detection of chloroform.
- Groundwater profile samples from MW-197 (J3P-11) had detections chloroform (4 intervals), and TNT (1 interval). The detection of TNT was confirmed by PDA spectra, but with interference.
- Groundwater profile samples from MW-198 (J3P-16) had detections of 1,3-dinitrobenzene (1 interval), 2,6-DNT (1 interval), 3-nitrotoluene (1 interval), 4-nitrotoluene (1 interval), RDX (4 intervals), nitrobenzene (1 interval), nitroglycerin (4 intervals), HMX (4 intervals), chloroform (5 intervals), acetone (4 intervals), and benzene (2 intervals). All detections of HMX and RDX were confirmed by PDA spectra, with interference in one positive result for RDX. The detection of 2,6-DNT was not confirmed by PDA spectra, but with interference. Detections of nitroglycerin, 1,3-dinitrobenzene, 3-nitrotoluene, 4-nitrotoluene, and nitrobenzene were not confirmed by PDA spectra.

3. DELIVERABLES SUBMITTED

| | |
|---|----------|
| Draft Final Demo 1 Soil Report (TM 01-10) | 12/10/01 |
| Weekly Progress Update, December 3 - December 7, 2001 | 12/14/01 |

4. SCHEDULED ACTIONS

Continue Third Quarter 2001 Long Term Groundwater Monitoring. Continue sampling of polygons in J-1 and J-2 Ranges. Continued drilling of MW-194 (J3P-13), MW-195 (J3P-14) and MW-200 (CIAP-8).

5. SUMMARY OF ACTIVITIES FOR DEMO 1

The Demo 1 Soil Report was revised and submitted December 10. The next monitoring well (D1P-9) will be located approximately 600 feet west of Frank Perkins Road at the projected centerline of the plume. Additional monitoring well locations will be identified based on results of the first location. Responses to EPA comments on the Draft Feasibility Study for the Groundwater Operable Unit are being prepared.

TABLE 2
 SAMPLING PROGRESS
 12/8/2001-12/14/2001

| OGDEN_ID | LOCID OR WELL ID | DATE SAMPLED | SAMPLE TYPE | SBD | SED | BWTS | BWTE |
|-----------------|------------------|--------------|-------------|--------|--------|-------|-------|
| T1.A.OP.007.1.0 | T1.OP.007.R | 12/14/2001 | CRATER GRID | 0.50 | 0.75 | | |
| T1.A.OP.007.2.0 | T1.OP.007.R | 12/14/2001 | CRATER GRID | 0.50 | 0.75 | | |
| T1.A.OP.007.3.0 | T1.OP.007.R | 12/14/2001 | CRATER GRID | 0.50 | 0.75 | | |
| T1.B.OQ.014.3.0 | T1.OQ.014.O | 12/14/2001 | CRATER GRID | 0.00 | 0.25 | | |
| T1.B.OQ.014.4.0 | T1.OQ.014.O | 12/14/2001 | CRATER GRID | 0.50 | 1.00 | | |
| T3.A.AR.004.1.0 | T3.AR.004.R | 12/14/2001 | CRATER GRID | 0.00 | 0.25 | | |
| T3.A.AR.004.2.0 | T3.AR.004.R | 12/14/2001 | CRATER GRID | 0.00 | 0.25 | | |
| T3.A.AR.004.3.0 | T3.AR.004.R | 12/14/2001 | CRATER GRID | 0.00 | 0.25 | | |
| T3.A.AR.006.1.0 | T3.AR.006.R | 12/14/2001 | CRATER GRID | 0.17 | 0.42 | | |
| T3.A.AR.006.2.0 | T3.AR.006.R | 12/14/2001 | CRATER GRID | 0.17 | 0.42 | | |
| T3.A.AR.006.3.0 | T3.AR.006.R | 12/14/2001 | CRATER GRID | 0.17 | 0.42 | | |
| T3.B.AR.005.3.0 | T3.AR.005.O | 12/14/2001 | CRATER GRID | 0.00 | 0.25 | | |
| T3.B.AR.005.4.0 | T3.AR.005.O | 12/14/2001 | CRATER GRID | 0.50 | 1.00 | | |
| T5.A.AA.005.1.0 | T5.AA.005.R | 12/14/2001 | CRATER GRID | 0.50 | 0.75 | | |
| T5.A.AA.005.2.0 | T5.AA.005.R | 12/14/2001 | CRATER GRID | 0.50 | 0.75 | | |
| T5.A.AA.005.3.0 | T5.AA.005.R | 12/14/2001 | CRATER GRID | 0.50 | 0.75 | | |
| 58MW0015AE | FIELDQC | 12/12/2001 | FIELDQC | 0.00 | 0.00 | | |
| 58MW0018CE | FIELDQC | 12/13/2001 | FIELDQC | 0.00 | 0.00 | | |
| 90LWA0007E | FIELDQC | 12/14/2001 | FIELDQC | 0.00 | 0.00 | | |
| 90MW0054E | FIELDQC | 12/08/2001 | FIELDQC | 0.00 | 0.00 | | |
| 90WT0005E | FIELDQC | 12/11/2001 | FIELDQC | 0.00 | 0.00 | | |
| 90WT0006E | FIELDQC | 12/10/2001 | FIELDQC | 0.00 | 0.00 | | |
| B41JBE | FIELDQC | 12/10/2001 | FIELDQC | 0.00 | 0.00 | | |
| G195DBE | FIELDQC | 12/14/2001 | FIELDQC | 0.00 | 0.00 | | |
| HC05AC1BAE | FIELDQC | 12/10/2001 | FIELDQC | 0.00 | 0.00 | | |
| HC05AF1CAE | FIELDQC | 12/11/2001 | FIELDQC | 0.00 | 0.00 | | |
| HC05NA1AAE | FIELDQC | 12/12/2001 | FIELDQC | 0.00 | 0.00 | | |
| HC05NA1AAT | FIELDQC | 12/12/2001 | FIELDQC | 0.00 | 0.00 | | |
| HC05OB1AAT | FIELDQC | 12/11/2001 | FIELDQC | 0.00 | 0.00 | | |
| HC101KE1AAT | FIELDQC | 12/13/2001 | FIELDQC | 0.00 | 0.00 | | |
| HC101KE1HAE | FIELDQC | 12/13/2001 | FIELDQC | 0.00 | 0.00 | | |
| HC101KF1AAE | FIELDQC | 12/14/2001 | FIELDQC | 0.00 | 0.00 | | |
| PHUSGSDP0001E | FIELDQC | 12/11/2001 | FIELDQC | 0.00 | 0.00 | | |
| SDW261160T | FIELDQC | 12/10/2001 | FIELDQC | 0.00 | 0.00 | | |
| W45SST | FIELDQC | 12/14/2001 | FIELDQC | 0.00 | 0.00 | | |
| T1.B.OQ.014.2.0 | T1.OQ.014.O | 12/14/2001 | GAUZE WIPE | 0.00 | 0.00 | | |
| T3.B.AR.005.2.0 | T3.AR.005.O | 12/14/2001 | GAUZE WIPE | 0.00 | 0.00 | | |
| 58MW0002 | 58MW0002 | 12/14/2001 | GROUNDWATER | 121.80 | 126.80 | 4.00 | 9.00 |
| 58MW0006E | 58MW0006E | 12/13/2001 | GROUNDWATER | 109.00 | 119.00 | 0.00 | 10.00 |
| 58MW0007C | 58MW0007C | 12/12/2001 | GROUNDWATER | 152.80 | 157.80 | 56.00 | 66.00 |
| 58MW0007CD | 58MW0007C | 12/12/2001 | GROUNDWATER | 152.80 | 157.80 | 56.00 | 66.00 |
| 58MW0007CD | 58MW0007CD | 12/12/2001 | GROUNDWATER | 152.80 | 157.80 | 56.00 | 66.00 |
| 58MW0007E | 58MW0007E | 12/12/2001 | GROUNDWATER | 134.00 | 139.00 | 0.00 | 5.00 |

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
12/8/2001-12/14/2001

| OGDEN_ID | LOCID OR WELL ID | DATE SAMPLED | SAMPLE TYPE | SBD | SED | BWTS | BWTE |
|---------------|------------------|--------------|-------------|--------|--------|-------|-------|
| 58MW0009C | 58MW0009C | 12/11/2001 | GROUNDWATER | 168.00 | 173.20 | 41.57 | 47.57 |
| 58MW0009CD | 58MW0009C | 12/11/2001 | GROUNDWATER | 168.00 | 173.20 | 41.57 | 47.57 |
| 58MW0009E | 58MW0009E | 12/11/2001 | GROUNDWATER | 133.40 | 138.40 | 6.50 | 11.50 |
| 58MW0011D | 58MW0011D | 12/11/2001 | GROUNDWATER | 175.40 | 180.40 | 49.50 | 54.50 |
| 58MW0011E | 58MW0011E | 12/11/2001 | GROUNDWATER | 145.00 | 150.00 | 15.70 | 20.70 |
| 58MW0011E | 58MW0011E | 12/13/2001 | GROUNDWATER | 145.00 | 150.00 | 15.70 | 20.70 |
| 58MW0015A | 58MW0015A | 12/12/2001 | GROUNDWATER | 160.00 | 170.00 | 39.00 | 51.20 |
| 58MW0015B | 58MW0015B | 12/12/2001 | GROUNDWATER | 130.00 | 140.00 | 12.70 | 22.70 |
| 58MW0016A | 58MW0016A | 12/11/2001 | GROUNDWATER | 175.00 | 185.00 | 54.22 | 63.22 |
| 58MW0016B | 58MW0016B | 12/11/2001 | GROUNDWATER | 150.00 | 160.00 | 28.50 | 38.50 |
| 58MW0016B | 58MW0016B | 12/13/2001 | GROUNDWATER | 150.00 | 160.00 | 28.50 | 38.50 |
| 58MW0016C | 58MW0016C | 12/11/2001 | GROUNDWATER | 116.00 | 126.00 | 0.00 | 10.00 |
| 58MW0018A | 58MW0018A | 12/14/2001 | GROUNDWATER | 202.70 | 211.70 | 60.85 | 69.85 |
| 58MW0018B | 58MW0018B | 12/13/2001 | GROUNDWATER | 176.00 | 186.00 | 34.55 | 44.55 |
| 58MW0018C | 58MW0018C | 12/13/2001 | GROUNDWATER | 150.00 | 160.00 | 8.56 | 18.56 |
| 90LWA0007 | 90LWA0007 | 12/14/2001 | GROUNDWATER | 92.00 | 102.00 | 0.00 | 10.00 |
| 90MW0003 | 90MW0003 | 12/08/2001 | GROUNDWATER | 144.00 | 149.00 | 52.11 | 57.11 |
| 90MW0022 | 90MW0022 | 12/10/2001 | GROUNDWATER | 112.00 | 117.00 | 72.79 | 77.79 |
| 90MW0034 | 90MW0034 | 12/08/2001 | GROUNDWATER | 94.00 | 99.00 | 28.57 | 33.57 |
| 90MW0034D | 90MW0034 | 12/08/2001 | GROUNDWATER | 94.00 | 99.00 | 28.57 | 33.57 |
| 90MW0054 | 90MW0054 | 12/08/2001 | GROUNDWATER | 107.00 | 112.00 | 91.83 | 96.83 |
| 90MW0063 | 90MW0063 | 12/10/2001 | GROUNDWATER | 50.00 | 55.00 | 32.50 | 37.50 |
| 90MW0070 | 90MW0070 | 12/08/2001 | GROUNDWATER | 132.50 | 137.50 | 78.00 | 83.00 |
| 90MW0071 | 90MW0071 | 12/08/2001 | GROUNDWATER | 150.00 | 155.00 | 82.00 | 87.00 |
| 90MW0080 | 90MW0080 | 12/08/2001 | GROUNDWATER | 139.00 | 144.00 | 0.00 | 10.00 |
| 90WT0003 | 90WT0003 | 12/10/2001 | GROUNDWATER | 87.50 | 97.50 | 0.00 | 10.00 |
| 90WT0004 | 90WT0004 | 12/10/2001 | GROUNDWATER | 35.00 | 45.00 | 3.00 | 13.00 |
| 90WT0005 | 90WT0005 | 12/11/2001 | GROUNDWATER | 47.00 | 57.00 | 0.00 | 10.00 |
| 90WT0006 | 90WT0006 | 12/10/2001 | GROUNDWATER | 95.00 | 105.00 | 0.00 | 10.00 |
| 90WT0019 | 90WT0019 | 12/11/2001 | GROUNDWATER | 96.00 | 106.00 | 0.00 | 10.00 |
| 97-1 | 97-1 | 12/08/2001 | GROUNDWATER | 83.00 | 90.00 | 62.00 | 72.00 |
| 97-3 | 97-3 | 12/08/2001 | GROUNDWATER | 75.00 | 85.00 | 36.00 | 46.00 |
| ECMWSNP02D | ECMWSNP02D | 12/11/2001 | GROUNDWATER | | | 79.90 | 84.90 |
| ECMWSNP02S | ECMWSNP02S | 12/11/2001 | GROUNDWATER | | | 79.90 | 84.90 |
| PHUSGSDP0001A | PHUSGSDP0001A | 12/11/2001 | GROUNDWATER | | | | |
| PHUSGSDP0002A | PHUSGSDP0002A | 12/11/2001 | GROUNDWATER | | | | |
| PHUSGSDP0002D | PHUSGSDP0002A | 12/11/2001 | GROUNDWATER | | | | |
| PHUSGSDP0002D | PHUSGSDP0002D | 12/11/2001 | GROUNDWATER | | | | |
| PHUSGSDP0003A | PHUSGSDP0003A | 12/11/2001 | GROUNDWATER | | | | |
| PHUSGSDP0004A | PHUSGSDP0004A | 12/11/2001 | GROUNDWATER | | | | |
| PHUSGSDP0005A | PHUSGSDP0005A | 12/11/2001 | GROUNDWATER | | | | |
| PHUSGSDP0006A | PHUSGSDP0006A | 12/11/2001 | GROUNDWATER | | | | |
| PHUSGSDP0007A | PHUSGSDP0007A | 12/11/2001 | GROUNDWATER | | | | |
| SDW261160 | SDW261160 | 12/08/2001 | GROUNDWATER | 152.00 | 162.00 | 10.00 | 20.00 |

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
 12/8/2001-12/14/2001

| OGDEN_ID | LOCID OR WELL ID | DATE SAMPLED | SAMPLE TYPE | SBD | SED | BWTS | BWTE |
|-----------------|------------------|--------------|---------------|--------|--------|--------|--------|
| SDW263111 | SDW263111 | 12/08/2001 | GROUNDWATER | 99.00 | 109.00 | 0.00 | 10.00 |
| W130M1A | MW-130 | 12/13/2001 | GROUNDWATER | 160.00 | 170.00 | 57.00 | 67.00 |
| W130SSA | MW-130 | 12/13/2001 | GROUNDWATER | 103.00 | 113.00 | 0.00 | 10.00 |
| W130SSD | MW-130 | 12/13/2001 | GROUNDWATER | 103.00 | 113.00 | 0.00 | 10.00 |
| W131M1A | MW-131 | 12/13/2001 | GROUNDWATER | 300.00 | 310.00 | 204.00 | 214.00 |
| W131M2A | MW-131 | 12/14/2001 | GROUNDWATER | 195.00 | 205.00 | 99.00 | 109.00 |
| W131SSA | MW-131 | 12/13/2001 | GROUNDWATER | 96.00 | 106.00 | 0.00 | 10.00 |
| W131SSD | MW-131 | 12/13/2001 | GROUNDWATER | 96.00 | 106.00 | 0.00 | 10.00 |
| W132M1A | MW-132 | 12/12/2001 | GROUNDWATER | 224.00 | 234.00 | 187.00 | 197.00 |
| W132SSA | MW-132 | 12/12/2001 | GROUNDWATER | 37.00 | 47.00 | 0.00 | 10.00 |
| W136M1A | MW-136 | 12/12/2001 | GROUNDWATER | 124.00 | 134.00 | 17.00 | 27.00 |
| W136SSA | MW-136 | 12/12/2001 | GROUNDWATER | 107.00 | 117.00 | 0.00 | 10.00 |
| W13DDA | MW-13 | 12/12/2001 | GROUNDWATER | 220.00 | 225.00 | 145.00 | 150.00 |
| W18M1A | MW-18 | 12/10/2001 | GROUNDWATER | 171.00 | 176.00 | 128.00 | 133.00 |
| W18M2A | MW-18 | 12/10/2001 | GROUNDWATER | 107.00 | 112.00 | 64.00 | 69.00 |
| W45SSA | MW-45 | 12/14/2001 | GROUNDWATER | 89.00 | 99.00 | 0.00 | 10.00 |
| W49M1A | MW-49 | 12/14/2001 | GROUNDWATER | 160.00 | 170.00 | 90.00 | 100.00 |
| W52DDA | MW-52 | 12/10/2001 | GROUNDWATER | 369.00 | 379.00 | 218.00 | 228.00 |
| W55M1A | MW-55 | 12/14/2001 | GROUNDWATER | 225.00 | 235.00 | 89.00 | 99.00 |
| W55M2A | MW-55 | 12/14/2001 | GROUNDWATER | 195.00 | 205.00 | 59.00 | 69.00 |
| W58SSA | MW-58 | 12/12/2001 | GROUNDWATER | 100.00 | 110.00 | 0.00 | 10.00 |
| W65SSA | MW-65 | 12/10/2001 | GROUNDWATER | 116.00 | 126.00 | 1.00 | 11.00 |
| W66SSA | MW-66 | 12/10/2001 | GROUNDWATER | 126.00 | 136.00 | 7.00 | 17.00 |
| W66SSD | MW-66 | 12/10/2001 | GROUNDWATER | 126.00 | 136.00 | 7.00 | 17.00 |
| W67M1A | MW-67 | 12/10/2001 | GROUNDWATER | 243.00 | 253.00 | 83.00 | 93.00 |
| W67SSA | MW-67 | 12/10/2001 | GROUNDWATER | 161.00 | 171.00 | 1.00 | 11.00 |
| G195DAA | MW-195 | 12/13/2001 | PROFILE | 35.00 | 40.00 | 0.10 | 5.10 |
| G195DBA | MW-195 | 12/14/2001 | PROFILE | 45.00 | 50.00 | 10.10 | 15.10 |
| G195DCA | MW-195 | 12/14/2001 | PROFILE | 55.00 | 60.00 | 20.10 | 25.10 |
| G195DDA | MW-195 | 12/14/2001 | PROFILE | 65.00 | 70.00 | 30.10 | 35.10 |
| G195DEA | MW-195 | 12/14/2001 | PROFILE | 75.00 | 80.00 | 40.10 | 45.10 |
| G195DFA | MW-195 | 12/14/2001 | PROFILE | 85.00 | 90.00 | 50.10 | 55.10 |
| G195DGA | MW-195 | 12/14/2001 | PROFILE | 95.00 | 100.00 | 60.10 | 65.10 |
| G197DLA | MW-197 | 12/12/2001 | PROFILE | 130.00 | 135.00 | 109.60 | 114.60 |
| G197DMA | MW-197 | 12/12/2001 | PROFILE | 140.00 | 145.00 | 119.60 | 124.60 |
| G197DNA | MW-197 | 12/12/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 |
| G197DOA | MW-197 | 12/13/2001 | PROFILE | 160.00 | 165.00 | 139.60 | 144.60 |
| G198DJA | MW-198 | 12/11/2001 | PROFILE | 110.00 | 115.00 | 89.60 | 94.60 |
| G198DKA | MW-198 | 12/11/2001 | PROFILE | 120.00 | 125.00 | 99.60 | 104.60 |
| G198DLA | MW-198 | 12/11/2001 | PROFILE | 130.00 | 135.00 | 109.60 | 114.60 |
| G198DMA | MW-198 | 12/11/2001 | PROFILE | 140.00 | 145.00 | 119.60 | 124.60 |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 |
| T1.B.0Q.014.1.0 | T1.0Q.014.O | 12/14/2001 | SOIL BRUSHING | 0.00 | 0.00 | | |
| T3.B.AR.005.1.0 | T3.AR.005.O | 12/14/2001 | SOIL BRUSHING | 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
 12/8/2001-12/14/2001

| OGDEN_ID | LOCID OR WELL ID | DATE SAMPLED | SAMPLE TYPE | SBD | SED | BWTS | BWTE |
|-------------|------------------|--------------|---------------|------|------|------|------|
| SC18001 | IDW | 12/14/2001 | SOIL CUTTINGS | 0.00 | 0.00 | | |
| SC18502 | IDW | 12/14/2001 | SOIL CUTTINGS | 0.00 | 0.00 | | |
| SC19901 | IDW | 12/14/2001 | SOIL CUTTINGS | 0.00 | 0.00 | | |
| B41HAA | 41H | 12/10/2001 | SOIL GRID | 0.00 | 0.50 | | |
| B41HAD | 41H | 12/10/2001 | SOIL GRID | 0.00 | 0.50 | | |
| B41HBA | 41H | 12/10/2001 | SOIL GRID | 1.50 | 2.00 | | |
| B41JAA | 41J | 12/10/2001 | SOIL GRID | 0.00 | 0.50 | | |
| B41JBA | 41J | 12/10/2001 | SOIL GRID | 1.50 | 2.00 | | |
| HC05AB1AAA | 05AB | 12/10/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05AB1BAA | 05AB | 12/10/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC05AB1CAA | 05AB | 12/10/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC05AC1AAA | 05AC | 12/10/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05AC1BAA | 05AC | 12/10/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC05AC1CAA | 05AC | 12/10/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC05AD1AAA | 05AD | 12/10/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05AD1BAA | 05AD | 12/10/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC05AD1CAA | 05AD | 12/10/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC05AE1AAA | 05AE | 12/10/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05AE1AAD | 05AE | 12/10/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05AE1BAA | 05AE | 12/10/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC05AE1CAA | 05AE | 12/11/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC05AF1AAA | 05AF | 12/11/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05AF1BAA | 05AF | 12/11/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC05AF1CAA | 05AF | 12/11/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC05NA1AAA | 05NA | 12/12/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05NA1BAA | 05NA | 12/12/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC05NA1CAA | 05NA | 12/12/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC05NB1AAA | 05NB | 12/12/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05NB1AAD | 05NB | 12/12/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05NB1BAA | 05NB | 12/12/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC05NB1CAA | 05NB | 12/12/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC05OA1AAA | 05OA | 12/11/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05OA1BAA | 05OA | 12/11/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC05OA1CAA | 05OA | 12/11/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC05OB1AAA | 05OB | 12/11/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05OB1AAD | 05OB | 12/11/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC05OB1BAA | 05OB | 12/11/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC05OB1CAA | 05OB | 12/11/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC101KE1AAA | 101KE | 12/13/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC101KE1BAA | 101KE | 12/13/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC101KE1CAA | 101KE | 12/13/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC101KF1AAA | 101KF | 12/14/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC101KF1AAD | 101KF | 12/14/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC101KF1BAA | 101KF | 12/14/2001 | 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

BWTE = Depth below water table, end depth, measured in feet

TABLE 2
 SAMPLING PROGRESS
 12/8/2001-12/14/2001

| OGDEN_ID | LOCID OR WELL ID | DATE SAMPLED | SAMPLE TYPE | SBD | SED | BWTS | BWTE |
|-----------------|------------------|--------------|-------------|------|------|------|------|
| HC101KF1CAA | 101KF | 12/14/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC101KG1AAA | 101KG | 12/13/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC101KG1AAA | 101KG | 12/13/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC101KG1AAA | 101KG | 12/13/2001 | SOIL GRID | 0.50 | 1.00 | | |
| HC101KH1AAA | 101KH | 12/14/2001 | SOIL GRID | 0.00 | 0.25 | | |
| HC101KH1BAA | 101KH | 12/14/2001 | SOIL GRID | 0.25 | 0.50 | | |
| HC101KH1CAA | 101KH | 12/14/2001 | SOIL GRID | 0.50 | 1.00 | | |
| J1.F.T9.001.1.0 | J1.T9.001.O | 12/11/2001 | SOIL GRID | 0.25 | 4.00 | | |
| J1.F.T9.001.2.0 | J1.T9.001.O | 12/11/2001 | SOIL GRID | 1.00 | 1.25 | | |
| J1.F.T9.001.3.0 | J1.T9.001.O | 12/11/2001 | SOIL GRID | 3.75 | 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 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 11/24/01-12/14/01

| OGDEN_ID | LOCID OR WELL ID | SAMPLED | SAMP_TYPE | SBD | SED | BWTS | BWTE | METHOD | OGDEN_ANALYTE | PDA |
|-----------|------------------|------------|-------------|--------|--------|--------|--------|--------|-----------------------------|------|
| 90MW0034 | 90MW0034 | 12/07/2001 | GROUNDWATER | 94.00 | 99.00 | 28.57 | 33.57 | 8330N | 1,3,5-TRINITROBENZENE | NO |
| 90MW0034 | 90MW0034 | 12/07/2001 | GROUNDWATER | 94.00 | 99.00 | 28.57 | 33.57 | 8330N | 1,3-DINITROBENZENE | NO |
| 90MW0034 | 90MW0034 | 12/07/2001 | GROUNDWATER | 94.00 | 99.00 | 28.57 | 33.57 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES* |
| 90MW0034 | 90MW0034 | 12/07/2001 | GROUNDWATER | 94.00 | 99.00 | 28.57 | 33.57 | 8330N | NITROGLYCERIN | NO |
| W108M4A | MW-108 | 12/05/2001 | GROUNDWATER | 240.00 | 250.00 | 76.00 | 86.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W108M4A | MW-108 | 12/05/2001 | GROUNDWATER | 240.00 | 250.00 | 76.00 | 86.00 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| W111M3A | MW-111 | 12/04/2001 | GROUNDWATER | 182.00 | 192.00 | 50.00 | 60.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W23M1A | MW-23 | 12/06/2001 | GROUNDWATER | 225.00 | 235.00 | 103.00 | 113.00 | 8330NX | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W25SSA | MW-25 | 12/01/2001 | GROUNDWATER | 108.00 | 118.00 | 0.00 | 10.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W37M2A | MW-37 | 12/01/2001 | GROUNDWATER | 145.00 | 155.00 | 26.00 | 36.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W37M3A | MW-37 | 12/01/2001 | GROUNDWATER | 130.00 | 140.00 | 11.00 | 21.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W50M1A | MW-50 | 12/04/2001 | GROUNDWATER | 207.00 | 217.00 | 89.00 | 99.00 | 8330N | 4-AMINO-2,6-DINITROTOLUENE | YES |
| W50M1A | MW-50 | 12/04/2001 | GROUNDWATER | 207.00 | 217.00 | 89.00 | 99.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W87M1A | MW-87 | 12/03/2001 | GROUNDWATER | 194.00 | 204.00 | 62.00 | 72.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W87M1A | MW-87 | 12/03/2001 | GROUNDWATER | 194.00 | 204.00 | 62.00 | 72.00 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| W88M2A | MW-88 | 12/04/2001 | GROUNDWATER | 213.00 | 223.00 | 72.00 | 82.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W88M2A | MW-88 | 12/04/2001 | GROUNDWATER | 213.00 | 223.00 | 72.00 | 82.00 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| W89M1A | MW-89 | 12/04/2001 | GROUNDWATER | 234.00 | 244.00 | 92.00 | 102.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W89M2A | MW-89 | 12/03/2001 | GROUNDWATER | 214.00 | 224.00 | 72.00 | 82.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W89M2A | MW-89 | 12/03/2001 | GROUNDWATER | 214.00 | 224.00 | 72.00 | 82.00 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| W98M1A | MW-98 | 11/28/2001 | GROUNDWATER | 164.00 | 174.00 | 26.00 | 36.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| W99M1A | MW-99 | 11/28/2001 | GROUNDWATER | 195.00 | 205.00 | 60.00 | 70.00 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| PW1MTINF1 | GAC WATER | 12/05/2001 | IDW | 0.00 | 0.00 | | | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| PW1MTINF1 | GAC WATER | 12/05/2001 | IDW | 0.00 | 0.00 | | | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| PW1MTINF2 | GAC WATER | 12/05/2001 | IDW | 0.00 | 0.00 | | | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| PW1MTINF2 | GAC WATER | 12/05/2001 | IDW | 0.00 | 0.00 | | | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| G195DAA | MW-195 | 12/13/2001 | PROFILE | 35.00 | 40.00 | 0.10 | 5.10 | OC21V | CHLOROFORM | |
| G197DLA | MW-197 | 12/12/2001 | PROFILE | 130.00 | 135.00 | 109.60 | 114.60 | OC21V | CHLOROFORM | |
| G197DMA | MW-197 | 12/12/2001 | PROFILE | 140.00 | 145.00 | 119.60 | 124.60 | OC21V | CHLOROFORM | |
| G197DNA | MW-197 | 12/12/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | OC21V | CHLOROFORM | |
| G197DOA | MW-197 | 12/13/2001 | PROFILE | 160.00 | 165.00 | 139.60 | 144.60 | 8330N | 1,3,5-TRINITROBENZENE | YES- |
| G197DOA | MW-197 | 12/13/2001 | PROFILE | 160.00 | 165.00 | 139.60 | 144.60 | OC21V | CHLOROFORM | |

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

TABLE 3
 DETECTED COMPOUNDS-UNVALIDATED
 SAMPLES COLLECTED 11/24/01-12/14/01

| OGDEN_ID | LOCID OR WELL ID | SAMPLED | SAMP_TYPE | SBD | SED | BWTS | BWTE | METHOD | OGDEN_ANALYTE | PDA |
|----------|------------------|------------|-----------|--------|--------|--------|--------|--------|-----------------------------|------|
| G198DFA | MW-198 | 12/05/2001 | PROFILE | 70.00 | 75.00 | 49.60 | 54.60 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| G198DGA | MW-198 | 12/05/2001 | PROFILE | 80.00 | 85.00 | 59.60 | 64.60 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| G198DGA | MW-198 | 12/05/2001 | PROFILE | 80.00 | 85.00 | 59.60 | 64.60 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| G198DGD | MW-198 | 12/05/2001 | PROFILE | 80.00 | 85.00 | 59.60 | 64.60 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| G198DGD | MW-198 | 12/05/2001 | PROFILE | 80.00 | 85.00 | 59.60 | 64.60 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| G198DHA | MW-198 | 12/05/2001 | PROFILE | 90.00 | 95.00 | 69.60 | 74.60 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| G198DHA | MW-198 | 12/05/2001 | PROFILE | 90.00 | 95.00 | 69.60 | 74.60 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| G198DIA | MW-198 | 12/05/2001 | PROFILE | 100.00 | 105.00 | 79.60 | 84.60 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES |
| G198DIA | MW-198 | 12/05/2001 | PROFILE | 100.00 | 105.00 | 79.60 | 84.60 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITR | YES |
| G198DJA | MW-198 | 12/11/2001 | PROFILE | 110.00 | 115.00 | 89.60 | 94.60 | 8330N | NITROGLYCERIN | NO |
| G198DJA | MW-198 | 12/11/2001 | PROFILE | 110.00 | 115.00 | 89.60 | 94.60 | OC21V | ACETONE | |
| G198DJA | MW-198 | 12/11/2001 | PROFILE | 110.00 | 115.00 | 89.60 | 94.60 | OC21V | CHLOROFORM | |
| G198DKA | MW-198 | 12/11/2001 | PROFILE | 120.00 | 125.00 | 99.60 | 104.60 | 8330N | NITROGLYCERIN | NO |
| G198DKA | MW-198 | 12/11/2001 | PROFILE | 120.00 | 125.00 | 99.60 | 104.60 | OC21V | ACETONE | |
| G198DKA | MW-198 | 12/11/2001 | PROFILE | 120.00 | 125.00 | 99.60 | 104.60 | OC21V | CHLOROFORM | |
| G198DLA | MW-198 | 12/11/2001 | PROFILE | 130.00 | 135.00 | 109.60 | 114.60 | 8330N | NITROGLYCERIN | NO |
| G198DLA | MW-198 | 12/11/2001 | PROFILE | 130.00 | 135.00 | 109.60 | 114.60 | OC21V | ACETONE | |
| G198DLA | MW-198 | 12/11/2001 | PROFILE | 130.00 | 135.00 | 109.60 | 114.60 | OC21V | BENZENE | |
| G198DLA | MW-198 | 12/11/2001 | PROFILE | 130.00 | 135.00 | 109.60 | 114.60 | OC21V | CHLOROFORM | |
| G198DMA | MW-198 | 12/11/2001 | PROFILE | 140.00 | 145.00 | 119.60 | 124.60 | OC21V | CHLOROFORM | |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | 8330N | 1,3-DINITROBENZENE | NO |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | 8330N | 2,6-DINITROTOLUENE | NO+ |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | 8330N | 3-NITROTOLUENE | NO |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | 8330N | 4-NITROTOLUENE | NO |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1, | YES- |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | 8330N | NITROBENZENE | NO |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | 8330N | NITROGLYCERIN | NO |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | OC21V | ACETONE | |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | OC21V | BENZENE | |
| G198DNA | MW-198 | 12/11/2001 | PROFILE | 150.00 | 155.00 | 129.60 | 134.60 | OC21V | CHLOROFORM | |

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

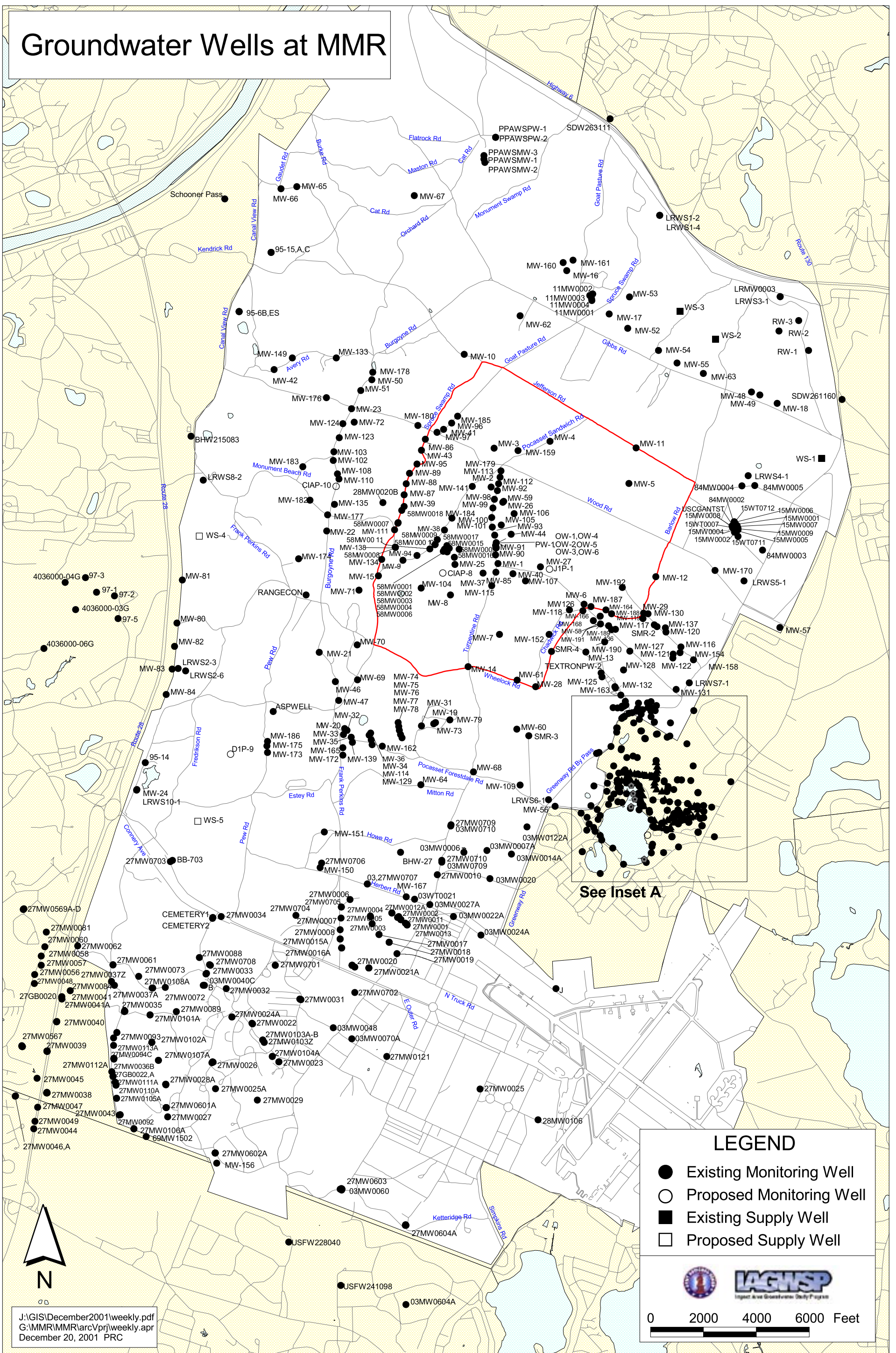
BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET

PDA/YES = Photo Diode Array, Detect Confirmed

PDA/NO = Photo Diode Array, Detect Not Confirmed

* = Interference in sample

Groundwater Wells at MMR

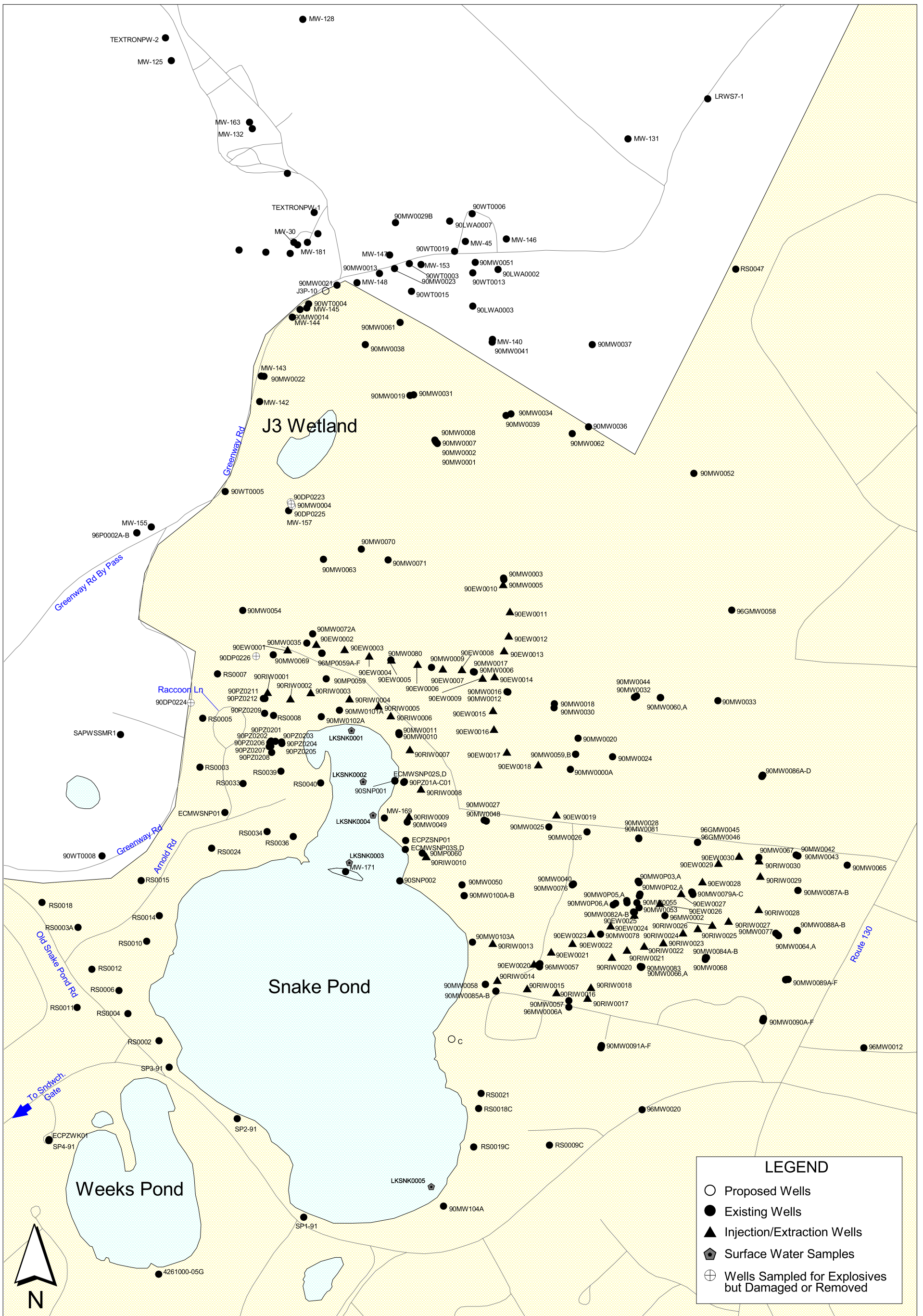


LEGEND

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

0 2000 4000 6000 Feet

J:\GIS\December2001\weekly.pdf
 G:\MMR\MMR\arc\prj\weekly.apr
 December 20, 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

