WEEKLY PROGRESS UPDATE
FOR NOVEMBER 26 – NOVEMBER 30, 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 November 26 to November 30, 2001.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of November 30 is summarized in Table 1.

Table 1. Drilling progress as of November 30, 2001

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-190	J-1 Range Well (J1P-11)	301	201	110-120, 145-155
MW-191	J-1 Range Well (J1P-15)	318	209	106-116, 120-130, 137-142
MW-192	J-1 Range Well (J1P-14)	322	212	
MW-193	J-3 Range Well (J3P-12)	20		
MW-194	J-3 Range Well (J3P-13)	60	3	
MW-195	J-3 Range Well (J3P-14)	40		
MW-196	J-3 Range Well (J3P-15)	140	107	
MW-197	J-3 Range Well (J3P-11)	125	105	
MW-199	Central Impact Area Well (CIAP-18)	190	55	

bgs = below ground surface
bwt = below water table

Completed well installation of MW-190 (J1P-11) and MW-191 (J1P-15). Completed drilling of MW-192 (J1P-14), MW-194 (J3P-13), and MW-196 (J3P-15). Commenced drilling of MW-193 (J3P-12), MW-195 (J3P-14), MW-197 (J3P-15) and MW-199 (CIAP-18). Well development continued for newly installed Demo 1 and Central Impact Area wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-192, MW-196, MW-197, and MW-199. Groundwater samples were collected as part of the December Long Term Groundwater Monitoring round. Water samples were collected from the influent and effluent of the PW-1 (Pump Test well) treatment unit and the GAC treatment system. Soil samples were collected from the MW-195 borehole. Soil samples were collected for resampling of various analytes from grids at Gun and Mortar positions, the J-3 Range, the Demo 1 Area, and the Central Impact Area. Soil sampling for dyes was completed at the J-2 Range. As part of the Munitions Survey Project, soil samples were collected from transects in the Central Impact Area. Soil samples were also collected from the anomaly excavation at BA-1.

The Guard, EPA, and MADEP had a meeting on November 29 to discuss technical issues, including the following:

Attendees

Ben Gregson (IAGWSPO - phone)	Bill Gallagher (IAGWSPO)	Karen Wilson (IAGWSPO)
Pam Richardson (IAGWSPO)	Dave Hill (IAGWSPO)	LTC Bill FitzPatrick (MAARNG)
Todd Borci (EPA)	Mike Jasinski (EPA)	Jane Dolan (EPA)
Jim Murphy (EPA)	Desiree Moyer (EPA)	Len Pinaud (MADEP)
Mark Panni (MADEP)	Ed Wise (ACE)	Heather Sullivan (ACE)
Ellen Iorio (ACE – phone)	Gina Tyo (ACE)	Rob Foti (ACE)
John McPherson (ACE)	Marc Grant (AMEC)	John Rice (AMEC)
Scott Veenstra (AMEC – phone)	Mark Applebee (AMEC)	Diane Curry (AMEC - phone)
Kim Harriz (AMEC)	Al Laase (AMEC – phone)	Larry Hudgins (Tetra Tech)
Joe Dauchy (Tetra Tech)	Doug Lam (Tetra Tech)	Ken Valder (Tetra Tech)
Susan Stewart (Tetra Tech–phone)	James Forrelli (Tetra Tech)	Dave Williams (MDPH)
Don Walter (USGS)	Adam Balogh (TRC - phone)	Ken Gaynor (Jacobs)

Punchlist Items

#2 Access 90PZ208 (Corps). Ray Cottengaim (ACE) intends to send property owner an additional certified letter indicating that this will be the Corps final contact attempt and that the Commonwealth will attempt contact, hereafter. When this letter is sent, MADEP to be provided with all documentation regarding contacts.

#3 Provide comments on PCN and MDL sampling approach and sampling plans (EPA). EPA requested 2 more weeks for comment response.

#5 Provide Comments on CDC Air Emissions Review (AMEC). EPA forwarded a Condition Approval Letter. This approval specifies that modifications need to be made to the door seals prior to use. Ellen Iorio (ACE) has requested that the Huntsville Corps provide the response to comment letter by Dec. 11. If there are any issues Todd Borci (EPA) requested that he be contacted directly.

#7 Schedule site visits with interviewee's 9, 24, 25, and 30 (Corps). Summary of Interviewee #25 site visit distributed at meeting. A summary of the site visit with Interviewee #9, conducted last week, is being prepared. Site visits for remaining interviewee's to be scheduled for next week.

#8 Provide recommendation on how to handle HUTA soil with explosive detections (Corps). Ellen Iorio (ACE) indicated that the Corps would like two additional weeks to evaluate their options, given that there was a significant amount of soil (1200 cubic yards) and the soil is under cover.

#9 Provide Table of wells being sampled for Perchlorate (AMEC). AMEC preparing table and recommendation letter for additional wells for perchlorate sampling for distribution next week.

#12 Provide comments on Corps proposal on how to handle lifts with low concentrations of explosives (EPA). Todd Borci (EPA) provided verbal approval to distribute soil in HUTA area as proposed by Corps, will also follow-up with email approval.

#13 Provide comments on Perchlorate MDL and information from Denver Lab (EPA). Provided prior to meeting. Marc Grant (AMEC) commented that AMEC is discussing with Acculabs the sensitivity of their method with actual soil samples – with which they do not have experience. In the interim, Ceimic has achieved a 3 ppb detection limit for soil using actual MMR samples; they are seeing a lot of interferences in the samples. As a result, sampling for Perchlorate (3 samples) at Demo 1 is being held pending resolution of the MDL issues. This may impact the Demo 1 deliverable schedule. Todd Borci (EPA) suggested that

Guard collect Demo 1 soils and have both labs analyze to see the results that are achieved.

#14 Provide information regarding the disposition of CDC waste (AMEC) CDC waste was picked up by Cyn on Wednesday, 11/21. Scott Veenstra (AMEC) discussed and received approval of selected disposal facilities from EPA representatives in Regions 4 and 5 at the direction of the EPA Region 1 representative.

#15 Provide update on Mortar Target 9 post excavation samples (Corps). Results will be available next week.

#16 Provide soil results from ASP (Corps). Results will be available next week.

#17 Provide written approval to use drill cuttings for fill (EPA). EPA approved use of drill cuttings as proposed, indicating that it was acceptable to rely on the Tech meeting notes as written documentation of approval.

#18 Check with Rock Island regarding ASP copies (Corps). Appendix volume was forwarded to MADEP; MADEP to look for at office; Corps to send additional copy if can not be located. Corps to provide additional Appendix copy for EPA at MMR trailer on Wednesday 12/5.

Snake Pond Diffusion Sampling

- Heather Sullivan (ACE) indicated that data had been provided via email. Validation is scheduled to be completed by Monday 12/03.
- Analytical results showed no PDA confirmed detections of RDX, but there were PDA-confirmed detections of various explosive compounds in 5 other samples.
- 22 of 110 samples were not analyzed for various reasons (ruptured membranes, dislodged samplers, samplers out of the water, etc.). Dave Hill (IAGWSPO) to contact Denis LeBlanc (USGS) to confirm reasons analyses were not completed.
- Mr. Hill indicated that in light of these results, the surface water sampling program at Snake Pond should be reevaluated. Marc Grant (AMEC) indicated that an email had been circulated recommending that the surface water sampling be discontinued. Jane Dolan (EPA) was not familiar with this email. Guard/AMEC to follow-up with agencies with recommendation.

Central Impact Area Pump Test Update

John Rice (AMEC) summarized the pump test activities.

- The Mini-test is scheduled for next week, 12/05. Results from the mini-test are expected to be available Tuesday 12/11. Results to be discussed Wednesday 12/12. The Step Test is scheduled to be conducted 12/14. The Pump test is scheduled for 12/15. Pumping well to yield 500 gallons/minute. Transducers will be set on 12/14.
- The mini-test was being conducted to assess the explosives/perchlorate concentrations of the groundwater extracted from the aquifer during the pumping test, prior to and post treatment. Based on the results of these samples, decisions will be made regarding whether the pump test will proceed as planned (to be discussed 12/12).
- Todd Borci (EPA) to call Adam Balogh (TRC) regarding scheduling for oversite during the test.

Munitions Survey Project Update

- HUTA2. Joe Dauchy (Tetra Tech) reviewed HUTA2 activities. Transects 1 & 5 have been cleared, surveyed, and preliminary geophysics performed. Surface soil sampling was initiated at Transect 5. No UXO items were uncovered in Transect 1. Six UXO items were uncovered in Transect 5. A BIP had been completed on a UXO item uncovered in the road leading to Transect 5.
- Ellen Iorio (ACE) reminded Tetra Tech that once maps were completed, hard copies should be forwarded to Jane Dolan (EPA) per her prior request.

- BA-1 Disposal Site. Jim Forrelli (Tetra Tech) reviewed work completed at the BA-1 disposal site. Excavation of the anomaly was planned to be 20 square feet by 6 feet deep. Three feet had been excavated to date. VOC and radiation monitoring conducted during the excavation indicated background conditions. Thirty items had been uncovered so far in the excavation. Four items were magnets and magnet assemblies labeled Raytheon. Most of the items were electronic components consisting of aluminum boxes 6 inches X 4 inches and 2 inches thick, labeled BOMAC. One box encased a liquid that was observable thru a site glass on one end of the box. Some similar boxes had broken windows, but there was no staining of the soil indicative of a release of liquid. The excavation will be completed today, 11/29 – but the majority of items have likely already been uncovered.
- Information on BOMAC company has been obtained from the internet. In addition numbers on some of the boxes had been compared with a commodity list of BOMARC items provided by the Corps. One number that partially matched a number on the list, indicated that the item was an electron tube containing a cobalt isotope with a reference. Tetra Tech is planning to contact BOMAC directly regarding nature of discovered items.
- J Range Polygons. Larry Hudgins (Tetra Tech) summarized the J Range Polygon excavation status. ROAs had been completed for Karen Wilson's approval for all polygons to be investigated. Tetra Tech will perform the surface soil sampling and provide samples to AMEC whom will manage analysis and reporting.
- Ellen Iorio (ACE) indicated that the MSP3 Workplan that was recently submitted includes a general workplan for all MSP3 tasks except for the J Range Polygons for which it provides a detailed scope. More detailed Workplans will be developed for all other areas after completion of a reconnaissance. The MSP3 Workplan supercedes the MSP3 scoping document previously provided. Jane Dolan (EPA) committed to provide comment on the J Range Polygon portion of the plan by Wednesday 12/5.
- Ken Valder (Tetra Tech) indicated that he was preparing the MSP3 Workplan for the 2 sites by the 5 Corners Area, for which catchy monikers had not yet been developed.
- AirMag. Doug Lam (Tetra Tech) indicated that with regard to the AirMag visual inspections, all inspections on the list (111 targets) were completed. Ellen Iorio (ACE) stated that the AirMag Workplan was being finalized. The scope of the plan will be clearly stated. A list will be provided in the plan as to what anomalies have been investigated (visual inspection and/or excavation) and what anomalies are proposed for investigation (visual inspection and/or excavation). Todd Borci (EPA) emphasized that a comprehensive list was imperative.
- Ellen Iorio (ACE) indicated that the MOR for the Section 9 (J Ranges) of the MSP Report will be emailed this afternoon (11/29).

DEM0 1 FS Schedule

Dave Hill (IAGWSPO) indicated that it was not possible for the Guard to submit a revised/redline strike-out version of the Demo 1 FS Report by the EPA-specified date of 12/7. A detailed schedule was distributed that completely outlined the Guard's understanding of what would be required per EPA's comments to revise the Draft Report and the timeframe required to complete each of these tasks.

- A major comment regarding the Draft FS was a comment by MADEP that complete plume delineation (nature&extent) was required prior to finalizing the FS. A minimum of 3 to 4 wells would need to be installed to complete this task (Task 16 on the schedule provided). These wells would need to be installed between Pew and Frank Perkins Rd which had no ready access. Road building was impeded by steep/rugged terrain and dense vegetation, particularly from the Frank Perkins Road side due to a 30 foot deep kettle hole. Access had not been investigated as of yet from the Pew Rd side. Road building for well access and

sequential well installation would cause a 7-8 month delay (166 working days were scoped for completing plume delineation) in finalizing the FS.

- To address this issue, Mark Applebee (AMEC) indicated that there were two options 1)accept plume boundaries as estimated and go forward with schedule. Accept the fact that the FS conclusions may not match the actual plume configuration. Modifications in the plume boundaries probably won't have a huge effect on the relative comparison of the Alternatives 2) delineate plume boundaries and then proceed with the FS evaluation.
- Len Pinaud (MADEP) suggested a site visit be organized for the agencies to view the terrain and potentially come up with an alternative way to access the site.
- Mike Jasinski (EPA) expressed concern that the FS was being delayed. Mark Panni (MADEP) stated that presumed plume boundaries were too indefinite to hazard a guess – the distance between Pew and Frank Perkins Roads was nearly 3000 feet, there are no wells located between these roads. Mr. Applebee clarified that the characterized extent of the plume was 3500 feet and modeling predicted that the plume should extend another 2000 feet (more than 50% of the characterized length). Mr. Pinaud indicated that the Commonwealth didn't want to delay the FS either.
- Discussion ensued on the plausibility of an Alternative 6 which would involve cutting the plume off at Frank Perkins Road with extraction wells and continued monitoring of wells at Pew Road. The Pew Road monitoring well "fence" could be extended to ensure that all migration routes would be monitored). Then an extraction system could be installed once the detached plume migrated to Pew Road. This could be a viable alternative if the trade off optimized the preservation of other natural resources (trees and habitat). The point was made that eventually it probably would still be necessary to place monitoring wells between the two roads. It was agreed that these issues could be discussed further following the site visit to view access. AMEC to bring along ortho-photographic coverage of area.
- Mr. Hill requested an extension to 12/12 to provide responses to EPA comments. Of course there were some major comments that could not be addressed fully until decisions were made, such as how to handle the delineation issue. In addition, MADEP comments could not be completely addressed in that time frame. Mike Jasinski (EPA) requested that the RCL, including at least a partial response to MADEP comments, be submitted by 12/10 and asked that the major comments be flagged in the RCL for further discussion. It was agreed to provide a partial RCL to EPA and MADEP comments via email on 12/10.
- Mr. Hill explained that the schedule which was provided showed the tasks that needed to be completed in order to respond to EPA comments on the FS. The task list and components were the Guard's interpretation of what the EPA wanted based on their comments. The Guard requested input from the EPA on whether this is what the EPA was thinking.
- Mr. Applebee explained that such a task list was deemed necessary, as the Guard had been surprised by the EPA's comments on the FS based on the meetings/decisions that had been made leading up to submittal of the FS. The FS Report focused on the remediation of the RDX plume and did not specifically address concentration reduction over time for other COCs – this decision was based on the MOR for the FSSR. Resolution of EPA specific comment 14 on the FSSR indicated that volume and mass estimates for other COCs would not be provided in the Final FSSR Report. Therefore, for the purpose of the FS, it was also assumed that evaluation of only RDX would provide a reasonable estimate of contaminant reduction over time. It was assumed that EPA would agree with this approach for the FS, since the FSSR MOR was approved. Secondly, at the July meeting to discuss the Demo 1 modeling, AMEC provided an update on the modeling completed for the FS. EPA requested additional evaluation of alternate recovery scenarios at that time. AMEC explained that this effort could not be completed within the remaining time. EPA agreed in that meeting that AMEC could present the modeling effort to date in the Draft FS Report and update the Final FS Report with the additional evaluations. Comments provided on the FS Report seem to

indicate that in spite of their perceived concurrence, EPA in fact did not agree with this approach for the FS.

- Mr. Applebee indicated that there were 3 options on how to proceed with the FS 1) Complete all delineation work, complete a detailed FS. 2) Use assumed/modeled plume boundaries, do some tasks of the FS in more detail. 3) Use assumed/modeled plume boundaries. Consider the FS as complete/acceptable for a relative comparison of the alternatives.
- Mr. Jasinski proposed the following schedule for further Demo 1 FS activities: Site visit, Tuesday 12/4 at 11am; Karen Wilson (IAGWSPO) to accompany. RCL submittal to agencies, Monday 12/10 to include partial responses to EPA and MADEP comments. Discussion of RCL/proposed schedule, Thursday 12/13 at Tech meeting.

MW-181 Gross Alpha Results

- Marc Grant (AMEC) indicated that Uranium (234/235/238) results had been received for the sample collected from MW-181S groundwater samples (one sample + duplicate sample). One sample had been nondetect for all isotopes. Two isotopes had been detected in the duplicate sample. U234 was detected at 0.072 pCi/L with an uncertainty of 0.084 (greater than the detection). U238 was detected at 0.19 pCi/L with an uncertainty of 0.11 (75% of the detected value). If the uncertainty is taken into account for this sample, this is essentially a nondetect for both these isotopes. These results combined with the nondetect gross alpha results indicate that the aquifer itself does not appear to be impacted by radioactive isotopes.
- A proposal has been forwarded to the EPA providing a scope for further evaluation of the remaining profile sample volume for which the elevated gross alpha results were detected. 2+ liters of the profile sample remains, mostly residual sample volume from the explosive and VOC analysis sample bottles that had been sent to Severn Trent's Burlington lab. Severn Trent's St Louis lab had performed the gross alpha analysis on the profile sample. The recommended scope proposes a separate analysis of the liquid portion of the sample, a combined liquid/particulate portion of the sample, and the particulate portion of the sample for gross alpha and beta. This reanalysis could indicate if the sample sent to the St Louis lab was contaminated in that laboratory, since the portion to be sampled will be collected from sample bottles sent to the Burlington lab. Or it could indicate if the solid portion of the sample is the source of the elevated alpha activity.
- EPA requested that further sample analysis be held pending their complete evaluation of the options, particularly because once the profile sample volume was depleted, it could not be duplicated by resampling.
- Jane Dolan (EPA) requested that the Guard take splits of samples collected by Textron when they clean out the J-3 Range septic tanks. Bill Gallagher (IAGWSPO) pointed out that the Guard had already sampled the tanks as part of the J-1/J-3/L Range Investigation scope of work.
- Ms. Dolan also requested that the Guard conduct a radiation survey during the drum excavation on J-3 Range.

MW-84 2,6-DNT detections

Marc Grant (AMEC) distributed a map showing particle backtracks from the 84M1 and 84D well screens.

- 2,6-DNT was detected in 84M1 at 0.27 ppb and in 84D at 1.9 ppb. This well is one of the "far-field" wells, located on Canal View Rd along the western edge of Camp Edwards, close to Rt 28.

- 2,6-DNT had been detected in the 8330N sample analysis, but not the semivolatile analysis. Therefore, AMEC had reanalyzed the sample using the SIM method of semivolatile analysis to confirm the detections.
- Todd Borci (EPA) stated that this was the first time that EPA was aware of the SIM procedure and the times it was used for confirmation of detections. In the future, this information and the intention to do the analysis should be provided ahead of time. Mr. Grant indicated that this was only the second time to date that the method had been used. The other time was to analyze samples from 58MW0018, a CS-19 well. Mike Jasinski (EPA) requested that a procedure be drafted specifying when the SIM analysis would be used.
- Mr. Borci also requested that in absence of MCL's that the 1 $X10^{-6}$ risk screening value (MMR PRG) be used for comparison. The MMR PRG was 0.05 ppb for 2,6-DNT. Both sample results exceeded this concentration.
- The map showed that 84D backtracks to the KD Range, while 84M1 backtracks to E Range. EPA requested that screen depths for the following wells be reviewed relative to the depths along the backtrack and evaluated for potential sampling and analysis: ASP well, MW-47 and MW-61.

Central Impact Area Wells

Todd Borci (EPA) reviewed locations for proposed Central Impact Area wells:

CIAP-10 place 225-250 feet south of MW-110.

CIAP-8 place 225-250 feet north of MW-135.

CIAP-16 place on Wood Road on particle track from MW-164. Mr. Borci cautioned that the MW-164 particle track should be reviewed closely as it seems to be different on different figures. John Rice (AMEC) indicated that well installation here would be limited by HUTA2 activity as the location was in the exclusion zone. AMEC to provide Corps/Mr. Borci map of well locations with exclusion zone superimposed.

CIAP-23 will depend on results of CIAP-16, between 5 Corners Area and CIAP-16.

CIAP-15 place 450 feet north of CIAP-3. Bill Gallagher (IAGWSPO) indicated that was still within the buffer zone of the wetland and Karen Wilson (IAGWSPO) would need to look at that.

CIAP-19 Mr. Borci stated that this well location could not be approved since the Phase IIb report was not completed yet. This would be a combined Phase IIb and Central Impact Area well.

CIAP-11/12 Mr. Borci offered to drop CIAP-13, if CIAP-11 and 12 could both be installed as original proposed. Ms. Wilson to consider. Jane Dolan (EPA) pointed out that CIAP-11 was close to forward particle track from MW-166.

Gun and Mortar Workplans

Todd Borci (EPA) intended to send comments on the Supplemental and Additional Delineation Workplans for the Gun and Mortar Positions next week. As a headsup, Mr. Borci provided the following comments:

- Mr. Borci inquired as to the intent of the separate Workplans and the schedule for the investigations. Kim Harriz (AMEC) explained that the Supplemental Workplan was submitted with the Revised Draft Report to come up with a final COC list for the G&M Positions. As stated in the workplan, there were issues with detections of TCE, nitroglycerin, and cyanide at seven locations that were to be resampled, MCPP/MCPA detections were being resampled/reevaluated, plus perchlorate needed to be analyzed. The intent was to complete the sampling for these parameters before the end of the year, as stated under the schedule heading in the Workplan, pending EPA approval and final decision on a perchlorate MDL. The Draft Additional Delineation Workplan for 2,4-DNT was pursuant to Mr. Borci's request with the intent that this workplan could be finalized once the

COC list was finalized, to be inclusive of all the COCs. Additional delineation sampling, as yet unscheduled, would likely be conducted in the spring.

- Based on the CS-18 Report, Mr. Borci indicated that dioxin/furan analyses should be included in the Supplemental Workplan. Mr. Borci contended that Ben Gregson (IAGWSPO) had agreed to sample for dioxin/furans in these area per a previous discussion. Bill Gallagher (IAGWSPO), to finish review of the AFCEE CS-18 SI Report and follow up with Mr. Gregson.
- Mr. Borci also indicated that the Guard's approach taken in the ADWorkplan focused on the additional delineation of 2,4-DNT detects. The approach should also take into consideration a more comprehensive assessment of the areas of the gun and mortar positions, since the interview information indicated that bag burning was often done at the periphery of a position. Some positions had only a couple of grids which did not provide adequate coverage. Marc Grant (AMEC) indicated that such distribution was already taken in to account when the original FSPs were prepared (and approved by EPA). Some of the positions were small, and therefore based on the number of grids per acreage guideline, only 2 or 3 grids were required.

Central Impact Area Targets Sampling Plan

Todd Borci (EPA) was working on the Central Impact Area Targets Sampling Plan comments and provided the following verbal comments as a precursor to the written comments:

- Page 10 language regarding explosive method is not acceptable. Language similar to language (procedure) stated in the HUTA2 workplan should be substituted. Bill Gallagher(IAGWSPO) indicated that the Guard was currently moving away from use of the field lab for testing of RDX in soil.
- Page 12 regarding the collecting of high RDX residue soil sample with Shelby tubes for leaching tests. Could these samples be verified using a field test kit? since previous attempts to do this sampling resulted in collection of soil that did not have sufficient concentrations of RDX.

Long Term Monitoring Program

Todd Borci (EPA) requested the following additions to the LTM program.

- 102M1 & M2 for VOC
- CIAP-4 (MW-183) and -7 (MW-177) for VOC
- Sixteen LF-1 southwest wells for 8330 and SVOC from map provided by EPA (split with AFCEE if they're already sampling)
- 27MW0707 and any wells along north side of LF-1 for 8330 (split w/ AFCEE if possible)
- 27MW0031B for 8330NX unless already proposed by AFCEE to be sampled for explosives (split w/ AFCEE if possible)
- CS-19 wells for 8330NX and perchlorate (some may already be getting NX): 58MW0001, 0002, 0006E, 0007B, 0007C, 0009E, 0011D, 0011E, 0016B, 0016C, 0018A, 0018B, 0018C
- CS-19 wells for 8330NX: 58MW0015A, 0015B
- CS-19 wells for 8330NX, perchlorate and VOC: 58MW0020A, 0020B (new wells, request coordinates & backward particle tracks for profile detections of solvents detected between 60 and 100 feet bwt at this location).
- 108M1 & M3 & M4, 110M1 & M2, for perchlorate
- following are believed to be primary/secondary plume wells but were not in LTM for Dec sampling (please check logic for these and all other plume wells): 135M1 & 135M2 for 8330 and perchlorate; 135M3 for 8330
- John Rice (AMEC) noted that these additions would likely extend the duration of the December 2001 LTM round.

Documents/Schedule

Marc Grant (AMEC) reviewed the following document/scheduling issues:

- Guard sent a 11/13 letter with change dates for documents - will the EPA have a response? Todd Borci (EPA) indicated that the EPA had been waiting for additional scheduling changes, such as for the Demo 1 FS to respond. The first date to be changed is a January deadline, so the EPA will continue to wait to respond.
- EPA comments on MSP letter reports have been received. When can these be discussed with the agencies? Mr. Borci to talk to Ellen Iorio (ACE) regarding if comment responses should be held until data is available. Gina Tyo (ACE) to talk to Ms. Iorio.
- When will Central Impact Area Soil Report comments be provided? Mr. Borci to forward comments in approximately 3 weeks. However, Target Workplan comments will reflect comments to be provided on the Soil Report.

Miscellaneous

- EPA requested that punchlist item be added to provide copies of analytical data that has been received from the lab but not provided to the agencies to date.
- Jane Dolan (EPA) requested a copy of the J-2 Range data that had not been forwarded already be emailed separately, prior to the Workplan.
- Ms. Dolan requested an email of the Former H Range Update, which had not been received for the week.
- Ms. Dolan commented on the dispersal of the Witness #9 interview in the IART mailing. She requested that in the future that the EPA be afforded a review prior to distribution so that confidential information could be blacked out. In addition, although Richard Hugus (Falmouth Resident) had been particularly interested in the Witness #9 interview, all interview summaries had been requested. These should be included in the mailing before the meeting.
- Ms. Dolan asked if for the dye sampling at Demo 1 area soil was to be conducted at the same locations to be sampled for perchlorate. Mr. Grant indicated that they were, however perchlorate sampling was being held pending resolution of MDL issues.
- Ms. Dolan asked when the Fate and Transport Study would be available. Report to be submitted by the University of Texas, 11/30. Report will need to be reviewed prior to general distribution, probably by mid December.
- Todd Borci (EPA) indicated that the ASR private investigator should ask upcoming interviewees about E Range acitivities, particularly in the late 1960s. Mr. Borci to forward appropriate questions. Mr. Borci also provided the name of a former range control worker who might be a knowledgeable resource, as he was at Camp Edwards during that time.
- Mike Jasinski (EPA) provided a water supply update based on David Rich's (Mashpee Water District) briefing to the Senior Management Board at their 11/28 meeting. The Water Supply Wells were due to be online in the spring or at least by July. NEPA/ERI issues still needed to be addressed. No specific technical issues have been discussed during four meetings to date.

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-105M1 and M2 (Central Impact Area) had detections of RDX that were confirmed by PDA spectra. The detections were similar to previous sampling rounds.

- Groundwater samples from MW-181S (J-3 Range) had detections of U234/238 that were not detected in a duplicate sample. This is the first time this well has been sampled.

- An influent sample from the Pump Test Well GAC treatment system had a detection of perchlorate.

- Groundwater profile samples from MW-192 (J-1 Range) had detections of 1,3,5-trinitrobenzene (2 intervals), 1,3-dinitrobenzene (3 intervals), TNT (1 interval), 2,4-DANT (2 intervals), 2,4-DNT (3 intervals), 2,6-DNT (5 intervals), RDX (7 intervals), nitrobenzene (3 intervals), nitroglycerin (12 intervals), PETN (1 interval), picric acid (4 intervals), 1,2,4-trichlorobenzene (1 interval), 2-chloroethyl vinyl ether (1 interval), 2-hexanone (10 intervals), acetone (21 intervals), benzene (1 interval), bromomethane (1 interval), carbon disulfide (1 interval), chloroethane (6 intervals), chloroform (9 intervals), chloromethane (2 intervals), 2-butanone (20 intervals), methyl isobutyl ketone (5 intervals), toluene (1 interval), and vinyl chloride (3 intervals). Two detections of 2,4-DANT were confirmed by PDA spectra, but not a duplicate detection.

- Groundwater profile samples from MW-196 (J-3 Range) had detections of TNT (2 intervals), 2A-DNT (1 interval), 4A-DNT (1 interval), HMX (2 intervals), acetone (1 interval), carbon disulfide (1 interval), chloroform (6 intervals), toluene (1 interval), and 1,1,1-TCA (6 intervals). All detections of explosives were confirmed by PDA spectra.

- Groundwater profile samples from MW-197 (J-3 Range) had detections of RDX (6 intervals), nitroglycerin (5 intervals), HMX (6 intervals), acetone (1 interval), and chloroform (5 intervals). The detections of RDX and HMX were confirmed by PDA spectra.

3. DELIVERABLES SUBMITTED

Weekly Progress Update, November 12 – November 16, 2001	11/26/01
Weekly Progress Update, November 19 – November 23, 2001	11/30/01
Draft J-2 Range Additional Delineation Workplan #2	11/30/01

4. SCHEDULED ACTIONS

Continue Third Quarter 2001 Long Term Groundwater Monitoring. Complete J-2 Range dye sampling. Complete well installation of MW-192 (J1P-14). Continue drilling of MW-193 (J3P-12), MW-195 (J3P-14), MW-194 (J3P-13), MW-196 (J3P-15), MW-197 (J3P-11), and MW-199 (CIAP-18). Conduct mini-pump test in Central Impact Area.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

The Demo 1 Soil Report is being revised and will be 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
11/24/2001-11/30/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
0.G.0.00127.0.T	TRIP BLANK 127	11/29/2001	FIELDQC	0.00	0.00		
0.G.0.00128.0.T	TRIP BLANK 128	11/30/2001	FIELDQC	0.00	0.00		
0.G.0.00129.0.T	TRIP BLANK 129	11/30/2001	FIELDQC	0.00	0.00		
0.G.0.00130.0.T	TRIP BLANK 130	11/30/2001	FIELDQC	0.00	0.00		
0.G.0.BA01.0.E	RINSATE BA01	11/28/2001	FIELDQC	0.00	0.00		
0.G.0.BA02.0.E	RINSATE BA02	11/29/2001	FIELDQC	0.00	0.00		
0.G.0.BA03.0.E	RINSATE BA03	11/30/2001	FIELDQC	0.00	0.00		
BM6CAE	FIELDQC	11/28/2001	FIELDQC	0.00	0.00		
BM8AAT	FIELDQC	11/30/2001	FIELDQC	0.00	0.00		
BO7BAE	FIELDQC	11/26/2001	FIELDQC	0.00	0.00		
G192DME	FIELDQC	11/27/2001	FIELDQC	0.00	0.00		
G192DMT	FIELDQC	11/27/2001	FIELDQC	0.00	0.00		
G196DBT	FIELDQC	11/26/2001	FIELDQC	0.00	0.00		
G197DET	FIELDQC	11/28/2001	FIELDQC	0.00	0.00		
G197DKE	FIELDQC	11/29/2001	FIELDQC	0.00	0.00		
G199DAE	FIELDQC	11/29/2001	FIELDQC	0.00	0.00		
G199DBE	FIELDQC	11/30/2001	FIELDQC	0.00	0.00		
HC12WW1AAE	FIELDQC	11/28/2001	FIELDQC	0.00	0.00		
HD103BF1AAE	FIELDQC	11/27/2001	FIELDQC	0.00	0.00		
S195DAE	FIELDQC	11/29/2001	FIELDQC	0.00	0.00		
S195DDE	FIELDQC	11/30/2001	FIELDQC	0.00	0.00		
W10DDT	FIELDQC	11/30/2001	FIELDQC	0.00	0.00		
W01M1A	MW-01	11/30/2001	GROUNDWATER	220.00	225.00	104.00	109.00
W01M1D	MW-01	11/30/2001	GROUNDWATER	220.00	225.00	44.00	49.00
W01M2A	MW-01	11/30/2001	GROUNDWATER	160.00	165.00	44.00	49.00
W05DDA	MW-05	11/29/2001	GROUNDWATER	335.00	340.00	223.00	228.00
W100M1A	MW-100	11/27/2001	GROUNDWATER	179.00	189.00	45.00	55.00
W100M2A	MW-100	11/27/2001	GROUNDWATER	164.00	174.00	30.00	40.00
W100M2D	MW-100	11/27/2001	GROUNDWATER	125.00	135.00	5.00	15.00
W100M2D	MW-100	11/28/2001	GROUNDWATER	164.00	174.00	30.00	40.00
W101M1A	MW-101	11/27/2001	GROUNDWATER	158.00	168.00	27.00	37.00
W101M1A	MW-101	11/28/2001	GROUNDWATER	158.00	168.00	27.00	37.00
W101SSA	MW-101	11/28/2001	GROUNDWATER	131.00	141.00	0.00	10.00
W105M1A	MW-105	11/26/2001	GROUNDWATER	205.00	215.00	78.00	88.00
W105M2A	MW-105	11/26/2001	GROUNDWATER	165.00	175.00	38.00	48.00
W106M1A	MW-106	11/26/2001	GROUNDWATER	170.50	180.50	38.00	48.00
W106M2A	MW-106	11/27/2001	GROUNDWATER	140.50	150.50	8.00	18.00
W107M1A	MW-107	11/29/2001	GROUNDWATER	155.00	165.00	35.00	45.00
W107M2A	MW-107	11/29/2001	GROUNDWATER	125.00	135.00	5.00	15.00
W107M2D	MW-107	11/29/2001	GROUNDWATER	125.00	135.00	5.00	15.00
W112M1A	MW-112	11/27/2001	GROUNDWATER	195.00	205.00	56.00	66.00
W112M2A	MW-112	11/27/2001	GROUNDWATER	165.00	175.00	26.00	36.00
W27SSA	MW-27	11/30/2001	GROUNDWATER	117.00	127.00	0.00	10.00

Profiling methods include: Volatiles and Explosives
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11/24/2001-11/30/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W38M2A	MW-38	11/29/2001	GROUNDWATER	187.00	197.00	69.00	79.00
W38M3A	MW-38	11/29/2001	GROUNDWATER	170.00	180.00	52.00	62.00
W38M3D	MW-38	11/29/2001	GROUNDWATER	170.00	180.00	52.00	62.00
W38M4A	MW-38	11/29/2001	GROUNDWATER	132.00	142.00	14.00	24.00
W38SSA	MW-38	11/30/2001	GROUNDWATER	115.00	125.00	0.00	10.00
W40M1A	MW-40	11/29/2001	GROUNDWATER	132.50	142.50	13.00	23.00
W40SSA	MW-40	11/30/2001	GROUNDWATER	115.50	125.50	0.00	10.00
W41M1A	MW-41	11/29/2001	GROUNDWATER	235.00	245.00	108.00	118.00
W44M1A	MW-44	11/27/2001	GROUNDWATER	182.00	192.00	53.00	63.00
W44SSA	MW-44	11/27/2001	GROUNDWATER	123.00	133.00	0.00	10.00
W59M2A	MW-59	11/28/2001	GROUNDWATER	150.00	160.00	18.00	28.00
W86M1A	MW-86	11/30/2001	GROUNDWATER	208.00	218.00	66.00	76.00
W86M2A	MW-86	11/30/2001	GROUNDWATER	158.00	168.00	72.00	82.00
W86SSA	MW-86	11/30/2001	GROUNDWATER	143.00	153.00	1.00	10.00
W91M1A	MW-91	11/29/2001	GROUNDWATER	170.00	180.00	45.00	55.00
W92M1A	MW-92	11/28/2001	GROUNDWATER	165.00	175.00	25.00	35.00
W92M1A	MW-92	11/29/2001	GROUNDWATER	165.00	175.00	25.00	35.00
W92SSA	MW-92	11/28/2001	GROUNDWATER	139.00	149.00	0.00	10.00
W93M1A	MW-93	11/28/2001	GROUNDWATER	185.00	195.00	56.00	66.00
W93M2A	MW-93	11/28/2001	GROUNDWATER	145.00	155.00	16.00	26.00
W96M1A	MW-96	11/29/2001	GROUNDWATER	206.00	216.00	70.00	80.00
W96M2A	MW-96	11/29/2001	GROUNDWATER	160.00	170.00	24.00	34.00
W96SSA	MW-96	11/30/2001	GROUNDWATER	134.00	144.00	0.00	10.00
W98M1A	MW-98	11/28/2001	GROUNDWATER	164.00	174.00	26.00	36.00
W98SSA	MW-98	11/28/2001	GROUNDWATER	137.00	147.00	0.00	10.00
W99M1A	MW-99	11/28/2001	GROUNDWATER	195.00	205.00	60.00	70.00
W99SSA	MW-99	11/29/2001	GROUNDWATER	133.00	143.00	0.00	10.00
DW112901	GAC WATER	11/29/2001	IDW	0.00	0.00		
PW1DEVEFF	GAC WATER	11/29/2001	IDW	0.00	0.00		
PW1DEVINF	GAC WATER	11/29/2001	IDW	0.00	0.00		
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30
G192DDA	MW-192	11/26/2001	PROFILE	150.00	150.00	40.30	40.30
G192DEA	MW-192	11/26/2001	PROFILE	160.00	160.00	50.30	50.30
G192DFA	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30
G192DFD	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30
G192DGA	MW-192	11/26/2001	PROFILE	180.00	180.00	70.30	70.30
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30
G192DJA	MW-192	11/26/2001	PROFILE	210.00	210.00	100.30	100.30
G192DKA	MW-192	11/26/2001	PROFILE	220.00	220.00	110.30	110.30
G192DLA	MW-192	11/26/2001	PROFILE	230.00	230.00	120.30	120.30

Profiling methods include: Volatiles and Explosives
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11/24/2001-11/30/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
G192DMA	MW-192	11/27/2001	PROFILE	240.00	240.00	130.30	130.30
G192DNA	MW-192	11/27/2001	PROFILE	250.00	250.00	140.30	140.30
G192DND	MW-192	11/27/2001	PROFILE	250.00	250.00	140.30	140.30
G192DOA	MW-192	11/27/2001	PROFILE	260.00	260.00	150.30	150.30
G192DPA	MW-192	11/27/2001	PROFILE	270.00	270.00	160.30	160.30
G192DPD	MW-192	11/27/2001	PROFILE	270.00	270.00	160.30	160.30
G192DQA	MW-192	11/27/2001	PROFILE	280.00	280.00	170.30	170.30
G192DRA	MW-192	11/27/2001	PROFILE	290.00	290.00	180.30	180.30
G192DSA	MW-192	11/27/2001	PROFILE	300.00	300.00	190.30	190.30
G192DTA	MW-192	11/27/2001	PROFILE	310.00	310.00	200.30	200.30
G192DTD	MW-192	11/27/2001	PROFILE	310.00	310.00	200.30	200.30
G192DUA	MW-192	11/27/2001	PROFILE	320.00	320.00	210.30	210.30
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20
G196DBA	MW-196	11/26/2001	PROFILE	45.00	50.00	12.20	17.20
G196DCA	MW-196	11/26/2001	PROFILE	55.00	60.00	22.20	27.20
G196DDA	MW-196	11/26/2001	PROFILE	65.00	70.00	32.20	37.20
G196DEA	MW-196	11/26/2001	PROFILE	75.00	80.00	42.20	47.20
G196DFA	MW-196	11/26/2001	PROFILE	85.00	90.00	52.20	57.20
G196DFD	MW-196	11/26/2001	PROFILE	85.00	90.00	62.20	67.20
G196DGA	MW-196	11/26/2001	PROFILE	95.00	100.00	72.20	77.20
G196DHA	MW-196	11/26/2001	PROFILE	105.00	110.00	82.20	87.20
G196DIA	MW-196	11/27/2001	PROFILE	115.00	120.00	92.20	97.20
G196DJA	MW-196	11/27/2001	PROFILE	125.00	130.00	102.20	107.20
G196DKA	MW-196	11/27/2001	PROFILE	135.00	140.00	112.20	117.20
G197DAA	MW-197	11/27/2001	PROFILE	20.00	25.00	0.00	4.60
G197DBA	MW-197	11/27/2001	PROFILE	30.00	35.00	9.60	14.60
G197DCA	MW-197	11/27/2001	PROFILE	40.00	45.00	19.60	24.60
G197DDA	MW-197	11/27/2001	PROFILE	50.00	55.00	29.60	34.60
G197DEA	MW-197	11/28/2001	PROFILE	60.00	65.00	39.60	44.60
G197DED	MW-197	11/28/2001	PROFILE	60.00	65.00	39.60	44.60
G197DFA	MW-197	11/28/2001	PROFILE	70.00	75.00	49.60	54.60
G197DGA	MW-197	11/28/2001	PROFILE	80.00	85.00	59.60	64.60
G197DHA	MW-197	11/28/2001	PROFILE	90.00	95.00	69.60	74.60
G197DIA	MW-197	11/28/2001	PROFILE	100.00	105.00	79.60	84.60
G197DJA	MW-197	11/28/2001	PROFILE	110.00	115.00	89.60	94.60
G197DKA	MW-197	11/29/2001	PROFILE	120.00	125.00	99.60	104.60
G199DAA	MW-199	11/29/2001	PROFILE	150.00	150.00	15.50	15.50
G199DBA	MW-199	11/30/2001	PROFILE	160.00	160.00	25.50	25.50
G199DCA	MW-199	11/30/2001	PROFILE	170.00	170.00	35.50	35.50
G199DCD	MW-199	11/30/2001	PROFILE	170.00	170.00	35.50	35.50
G199DDA	MW-199	11/30/2001	PROFILE	180.00	180.00	45.50	45.50
S195DAA	MW-195	11/29/2001	SOIL BORING	0.00	0.50		
S195DAD	MW-195	11/29/2001	SOIL BORING	0.00	0.50		
S195DBA	MW-195	11/29/2001	SOIL BORING	1.50	2.00		

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
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SAMPLING PROGRESS
11/24/2001-11/30/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
S195DCA	MW-195	11/29/2001	SOIL BORING	10.00	12.00		
S195DDA	MW-195	11/30/2001	SOIL BORING	20.00	22.00		
S195DEA	MW-195	11/30/2001	SOIL BORING	30.00	32.00		
B07BAA	07B	11/27/2001	SOIL GRID	0.00	0.50		
B14BAA	14B	11/26/2001	SOIL GRID	0.00	0.50		
BA.F.0001	BA-1	11/28/2001	SOIL GRID	3.00	3.25		
BA.F.0001.D	BA-1	11/28/2001	SOIL GRID	3.00	3.25		
BA.F.0002	BA-2	11/28/2001	SOIL GRID	3.00	3.25		
BA.F.0003	BA-3	11/28/2001	SOIL GRID	3.50	4.00		
BA.F.0004	BA-4	11/28/2001	SOIL GRID	2.75	3.00		
BA.F.0005	BA-5	11/28/2001	SOIL GRID	2.75	3.00		
BA.F.0006	BA-6	11/29/2001	SOIL GRID	6.00	6.50		
BA.F.0006.D	BA-6	11/29/2001	SOIL GRID	6.00	6.50		
BA.F.0007	BA-7	11/29/2001	SOIL GRID	6.00	6.50		
BA.F.0008	BA-8	11/29/2001	SOIL GRID	6.00	6.50		
BA.F.0009	BA-9	11/29/2001	SOIL GRID	6.00	6.50		
BA.F.0010	BA-10	11/30/2001	SOIL GRID	6.00	6.50		
BM6CAD	M6C	11/28/2001	SOIL GRID	0.00	0.50		
BM8AAA	M8A	11/29/2001	SOIL GRID	0.00	0.50		
BM8BAA	M8B	11/29/2001	SOIL GRID	0.00	0.50		
BM8CAA	M8C	11/29/2001	SOIL GRID	0.00	0.50		
HC102MA1CAA	102M	11/26/2001	SOIL GRID	0.50	1.00		
HC12UU1AAA	12U	11/28/2001	SOIL GRID	0.00	0.50		
HC12UU1AAD	12U	11/28/2001	SOIL GRID	0.00	0.50		
HC12VV1AAA	12V	11/28/2001	SOIL GRID	0.00	0.50		
HC12WW1AAA	12W	11/28/2001	SOIL GRID	0.00	0.50		
HC50C1AAA	50C	11/28/2001	SOIL GRID	0.00	0.50		
HC59E1AAA	59E	11/29/2001	SOIL GRID	0.00	0.50		
HC70B1AAA	70B	11/28/2001	SOIL GRID	0.00	0.50		
HD102PA4CAA	102P	11/26/2001	SOIL GRID	0.50	1.00		
HD103BF1AAA	103B	11/27/2001	SOIL GRID	0.00	0.25		
T1.F.0B.LRZ.1.0	Transect 1 Grid B	11/30/2001	SOIL GRID	0.00	0.25		
T1.F.0C.LRZ.1.0	Transect 1 Grid C	11/30/2001	SOIL GRID	0.00	0.25		
T1.F.0D.LRZ.1.0	Transect 1 Grid D	11/30/2001	SOIL GRID	0.00	0.25		
T1.F.0E.LRZ.1.0	Transect 1 Grid E	11/30/2001	SOIL GRID	0.00	0.25		
T1.F.0F.LRZ.1.0	Transect 1 Grid F	11/30/2001	SOIL GRID	0.00	0.25		
T1.F.0G.LRZ.1.0	Transect 1 Grid G	11/30/2001	SOIL GRID	0.00	0.25		
T1.F.0I.LRZ.1.0	Transect 1 Grid I	11/30/2001	SOIL GRID	0.00	0.25		
T1.F.0J.LRZ.1.0	Transect 1 Grid J	11/30/2001	SOIL GRID	0.00	0.25		
T1.F.0K.LRZ.1.0	Transect 1 Grid K	11/30/2001	SOIL GRID	0.00	0.25		
T1.F.0L.LRZ.1.0	Transect 1 Grid L	11/30/2001	SOIL GRID	0.00	0.25		
T5.F.0A.LRZ.1.0	Transect 5 Grid A	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0B.LRZ.1.0	Transect 5 Grid B	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0C.HRZ.1.0	Transect 5 Grid C-1	11/29/2001	SOIL GRID	0.00	0.25		

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11/24/2001-11/30/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
T5.F.0C.HRZ.2.0	Transect 5 Grid C-2	11/29/2001	SOIL GRID	0.50	1.00		
T5.F.0D.LRZ.1.0	Transect 5 Grid D	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0E.LRZ.1.0	Transect 5 Grid E	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0F.LRZ.1.0	Transect 5 Grid F	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0G.LRZ.1.0	Transect 5 Grid G	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0H.LRZ.1.0	Transect 5 Grid H	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0I.LRZ.1.0	Transect 5 Grid I	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0J.HRZ.1.0	Transect 5 Grid J-1	11/28/2001	SOIL GRID	0.00	0.25		
T5.F.0J.HRZ.2.0	Transect 5 Grid J-2	11/28/2001	SOIL GRID	0.50	1.00		
T5.F.0K.HRZ.1.0	Transect 5 Grid K-1	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0K.HRZ.2.0	Transect 5 Grid K-2	11/29/2001	SOIL GRID	0.50	1.00		
T5.F.0L.LRZ.1.0	Transect 5 Grid L	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0M.LRZ.1.0	Transect 5 Grid M	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0N.LRZ.1.0	Transect 5 Grid N	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0O.LRZ.1.0	Transect 5 Grid O	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0P.LRZ.1.0	Transect 5 Grid P	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0Q.LRZ.1.0	Transect 5 Grid Q	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0R.HRZ.1.0	Transect 5 Grid R-1	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0R.HRZ.1.D	Transect 5 Grid R-1	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0R.HRZ.2.0	Transect 5 Grid R-2	11/29/2001	SOIL GRID	0.50	1.00		
T5.F.0S.HRZ.1.0	Transect 5 Grid S-1	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0S.HRZ.2.0	Transect 5 Grid S-2	11/29/2001	SOIL GRID	0.50	1.00		
T5.F.0T.LRZ.1.0	Transect 5 Grid T	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0U.LRZ.1.0	Transect 5 Grid U	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0V.LRZ.1.0	Transect 5 Grid V	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0W.LRZ.1.0	Transect 5 Grid W	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0X.LRZ.1.0	Transect 5 Grid X	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0Y.LRZ.1.0	Transect 5 Grid Y	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0Y.LRZ.1.D	Transect 5 Grid Y	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0Z.HRZ.1.0	Transect 5 Grid Z-1	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.0Z.HRZ.2.0	Transect 5 Grid Z-2	11/29/2001	SOIL GRID	0.50	1.00		
T5.F.AA.LRZ.1.0	Transect 5 Grid AA	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.BB.LRZ.1.0	Transect 5 Grid BB	11/29/2001	SOIL GRID	0.00	0.25		
T5.F.CC.LRZ.1.0	Transect 5 Grid CC	11/30/2001	SOIL GRID	0.00	0.25		
T5.F.DD.LRZ.1.0	Transect 5 Grid DD	11/30/2001	SOIL GRID	0.00	0.25		
T5.F.EE.LRZ.1.0	Transect 5 Grid EE	11/30/2001	SOIL GRID	0.00	0.25		
T5.F.FF.LRZ.1.0	Transect 5 Grid FF	11/30/2001	SOIL GRID	0.00	0.25		
T5.F.GG.LRZ.1.0	Transect 5 Grid GG	11/30/2001	SOIL GRID	0.00	0.25		
T5.F.HH.LRZ.1.0	Transect 5 Grid HH	11/30/2001	SOIL GRID	0.00	0.25		
T5.F.II.LRZ.1.0	Transect 5 Grid II	11/30/2001	SOIL GRID	0.00	0.25		
T5.F.JJ.LRZ.1.0	Transect 5 Grid JJ	11/30/2001	SOIL GRID	0.00	0.25		
T5.F.LL.LRZ.1.0	Transect 5 Grid LL	11/28/2001	SOIL GRID	0.00	0.25		
T5.F.MM.LRZ.1.0	Transect 5 Grid MM	11/28/2001	SOIL GRID	0.00	0.25		
T5.F.NN.LRZ.1.0	Transect 5 Grid NN	11/28/2001	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 2
SAMPLING PROGRESS
11/24/2001-11/30/2001

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
T5.F.OO.LRZ.1.0	Transect 5 Grid OO	11/28/2001	SOIL GRID	0.00	0.25		
T5.F.PP.LRZ.1.0	Transect 5 Grid PP	11/28/2001	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 11/10/01-11/30/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W105M1A	MW-105	11/26/2001	GROUNDWATER	205.00	215.00	78.00	88.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
W105M2A	MW-105	11/26/2001	GROUNDWATER	165.00	175.00	38.00	48.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
W181SSD	MW-181	11/09/2001	GROUNDWATER	32.00	42.00	0.00	10.00	E908	URANIUM-234	
W181SSD	MW-181	11/09/2001	GROUNDWATER	32.00	42.00	0.00	10.00	E908	URANIUM-238	
PW1DEVINF	GAC WATER	11/29/2001	IDW	0.00	0.00			E314.0	PERCHLORATE	
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	8330N	1,3,5-TRINITROBENZENE	NO
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	8330N	1,3-DINITROBENZENE	NO
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	8330N	2,4-DINITROTOLUENE	NO
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	NO
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	8330N	NITROBENZENE	NO
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	8330N	NITROGLYCERIN	NO
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	OC21V	2-CHLOROETHYL VINYL ETHER	
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	OC21V	2-HEXANONE	
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	OC21V	ACETONE	
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	OC21V	BROMOMETHANE	
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	OC21V	CARBON DISULFIDE	
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	OC21V	CHLOROMETHANE	
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	OC21V	METHYL ISOBUTYL KETONE (4-I	
G192DAA	MW-192	11/26/2001	PROFILE	120.00	120.00	10.30	10.30	OC21V	VINYL CHLORIDE	
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	8330N	1,3,5-TRINITROBENZENE	NO
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	8330N	1,3-DINITROBENZENE	NO
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	8330N	2,4-DINITROTOLUENE	NO
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	8330N	2,6-DINITROTOLUENE	NO
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	NO
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	8330N	NITROBENZENE	NO
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	8330N	NITROGLYCERIN	NO
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	8330N	PICRIC ACID	NO
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	OC21V	2-HEXANONE	
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	OC21V	ACETONE	
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	OC21V	CHLOROETHANE	
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	OC21V	CHLOROFORM	

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* = Interference in sample

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DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 11/10/01-11/30/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	OC21V	CHLOROMETHANE	
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	OC21V	METHYL ISOBUTYL KETONE (4-	
G192DBA	MW-192	11/26/2001	PROFILE	130.00	130.00	20.30	20.30	OC21V	VINYL CHLORIDE	
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	2,4,6-TRINITROTOLUENE	NO
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	2,4-DIAMINO-6-NITROTOLUENE	YES
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	2,4-DINITROTOLUENE	NO
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	NO
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	NITROBENZENE	NO
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	NITROGLYCERIN	NO
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	PICRIC ACID	NO
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	2-HEXANONE	
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	ACETONE	
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	BENZENE	
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	CHLOROETHANE	
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	CHLOROFORM	
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	TOLUENE	
G192DCA	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	VINYL CHLORIDE	
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	2,4,6-TRINITROTOLUENE	NO
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	2,4-DINITROTOLUENE	NO
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	2,6-DINITROTOLUENE	NO
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	NO
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	NITROBENZENE	NO
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	NITROGLYCERIN	NO
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	PENTAERYTHRITOL TETRANITF	NO
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	8330N	PICRIC ACID	NO
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	2-HEXANONE	
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	ACETONE	
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	BENZENE	
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	CHLOROFORM	

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TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 11/10/01-11/30/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	METHYL ISOBUTYL KETONE (4-	
G192DCD	MW-192	11/26/2001	PROFILE	140.00	140.00	30.30	30.30	OC21V	TOLUENE	
G192DDA	MW-192	11/26/2001	PROFILE	150.00	150.00	40.30	40.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	NO
G192DDA	MW-192	11/26/2001	PROFILE	150.00	150.00	40.30	40.30	8330N	NITROGLYCERIN	NO
G192DDA	MW-192	11/26/2001	PROFILE	150.00	150.00	40.30	40.30	OC21V	2-HEXANONE	
G192DDA	MW-192	11/26/2001	PROFILE	150.00	150.00	40.30	40.30	OC21V	ACETONE	
G192DDA	MW-192	11/26/2001	PROFILE	150.00	150.00	40.30	40.30	OC21V	CHLOROFORM	
G192DDA	MW-192	11/26/2001	PROFILE	150.00	150.00	40.30	40.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DEA	MW-192	11/26/2001	PROFILE	160.00	160.00	50.30	50.30	OC21V	ACETONE	
G192DEA	MW-192	11/26/2001	PROFILE	160.00	160.00	50.30	50.30	OC21V	CHLOROFORM	
G192DEA	MW-192	11/26/2001	PROFILE	160.00	160.00	50.30	50.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DFA	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	8330N	2,6-DINITROTOLUENE	NO
G192DFA	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	NO
G192DFA	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	8330N	NITROGLYCERIN	NO
G192DFA	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	OC21V	2-HEXANONE	
G192DFA	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	OC21V	ACETONE	
G192DFA	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	OC21V	CHLOROETHANE	
G192DFA	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	OC21V	CHLOROFORM	
G192DFA	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DFD	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	8330N	2,6-DINITROTOLUENE	NO
G192DFD	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	8330N	NITROGLYCERIN	NO
G192DFD	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	8330N	PICRIC ACID	NO
G192DFD	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	OC21V	2-HEXANONE	
G192DFD	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	OC21V	ACETONE	
G192DFD	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	OC21V	CHLOROFORM	
G192DFD	MW-192	11/26/2001	PROFILE	170.00	170.00	60.30	60.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DGA	MW-192	11/26/2001	PROFILE	180.00	180.00	70.30	70.30	8330N	NITROGLYCERIN	NO
G192DGA	MW-192	11/26/2001	PROFILE	180.00	180.00	70.30	70.30	OC21V	2-HEXANONE	
G192DGA	MW-192	11/26/2001	PROFILE	180.00	180.00	70.30	70.30	OC21V	ACETONE	
G192DGA	MW-192	11/26/2001	PROFILE	180.00	180.00	70.30	70.30	OC21V	CHLOROFORM	
G192DGA	MW-192	11/26/2001	PROFILE	180.00	180.00	70.30	70.30	OC21V	METHYL ETHYL KETONE (2-BUT	

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SAMPLES COLLECTED 11/10/01-11/30/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30	8330N	2,4-DIAMINO-6-NITROTOLUENE	YES
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	NO
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30	8330N	NITROGLYCERIN	NO
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30	OC21V	2-HEXANONE	
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30	OC21V	ACETONE	
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30	OC21V	CHLOROETHANE	
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30	OC21V	CHLOROFORM	
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DHA	MW-192	11/26/2001	PROFILE	190.00	190.00	80.30	80.30	OC21V	METHYL ISOBUTYL KETONE (4-	
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	8330N	1,3-DINITROBENZENE	NO
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	8330N	2,6-DINITROTOLUENE	NO
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	NO
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	8330N	NITROGLYCERIN	NO
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	8330N	PICRIC ACID	NO
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	OC21V	2-HEXANONE	
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	OC21V	ACETONE	
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	OC21V	CHLOROETHANE	
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DIA	MW-192	11/26/2001	PROFILE	200.00	200.00	90.30	90.30	OC21V	METHYL ISOBUTYL KETONE (4-	
G192DJA	MW-192	11/26/2001	PROFILE	210.00	210.00	100.30	100.30	8330N	2,6-DINITROTOLUENE	NO
G192DJA	MW-192	11/26/2001	PROFILE	210.00	210.00	100.30	100.30	8330N	NITROGLYCERIN	NO
G192DJA	MW-192	11/26/2001	PROFILE	210.00	210.00	100.30	100.30	OC21V	2-HEXANONE	
G192DJA	MW-192	11/26/2001	PROFILE	210.00	210.00	100.30	100.30	OC21V	ACETONE	
G192DJA	MW-192	11/26/2001	PROFILE	210.00	210.00	100.30	100.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DKA	MW-192	11/26/2001	PROFILE	220.00	220.00	110.30	110.30	OC21V	ACETONE	
G192DKA	MW-192	11/26/2001	PROFILE	220.00	220.00	110.30	110.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DLA	MW-192	11/26/2001	PROFILE	230.00	230.00	120.30	120.30	OC21V	ACETONE	
G192DLA	MW-192	11/26/2001	PROFILE	230.00	230.00	120.30	120.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DMA	MW-192	11/27/2001	PROFILE	240.00	240.00	130.30	130.30	OC21V	ACETONE	
G192DMA	MW-192	11/27/2001	PROFILE	240.00	240.00	130.30	130.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DNA	MW-192	11/27/2001	PROFILE	250.00	250.00	140.30	140.30	OC21V	ACETONE	
G192DNA	MW-192	11/27/2001	PROFILE	250.00	250.00	140.30	140.30	OC21V	METHYL ETHYL KETONE (2-BUT	

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SAMPLES COLLECTED 11/10/01-11/30/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G192DND	MW-192	11/27/2001	PROFILE	250.00	250.00	140.30	140.30	OC21V	ACETONE	
G192DND	MW-192	11/27/2001	PROFILE	250.00	250.00	140.30	140.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DOA	MW-192	11/27/2001	PROFILE	260.00	260.00	150.30	150.30	OC21V	2-HEXANONE	
G192DOA	MW-192	11/27/2001	PROFILE	260.00	260.00	150.30	150.30	OC21V	ACETONE	
G192DOA	MW-192	11/27/2001	PROFILE	260.00	260.00	150.30	150.30	OC21V	CHLOROETHANE	
G192DOA	MW-192	11/27/2001	PROFILE	260.00	260.00	150.30	150.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DPA	MW-192	11/27/2001	PROFILE	270.00	270.00	160.30	160.30	8330N	NITROGLYCERIN	NO
G192DPA	MW-192	11/27/2001	PROFILE	270.00	270.00	160.30	160.30	OC21V	ACETONE	
G192DPA	MW-192	11/27/2001	PROFILE	270.00	270.00	160.30	160.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DPD	MW-192	11/27/2001	PROFILE	270.00	270.00	160.30	160.30	OC21V	ACETONE	
G192DPD	MW-192	11/27/2001	PROFILE	270.00	270.00	160.30	160.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DQA	MW-192	11/27/2001	PROFILE	280.00	280.00	170.30	170.30	OC21V	ACETONE	
G192DQA	MW-192	11/27/2001	PROFILE	280.00	280.00	170.30	170.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DRA	MW-192	11/27/2001	PROFILE	290.00	290.00	180.30	180.30	8330N	NITROGLYCERIN	NO
G192DRA	MW-192	11/27/2001	PROFILE	290.00	290.00	180.30	180.30	OC21V	1,2,4-TRICHLOROBENZENE	
G192DRA	MW-192	11/27/2001	PROFILE	290.00	290.00	180.30	180.30	OC21V	ACETONE	
G192DRA	MW-192	11/27/2001	PROFILE	290.00	290.00	180.30	180.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DSA	MW-192	11/27/2001	PROFILE	300.00	300.00	190.30	190.30	OC21V	ACETONE	
G192DSA	MW-192	11/27/2001	PROFILE	300.00	300.00	190.30	190.30	OC21V	CHLOROFORM	
G192DSA	MW-192	11/27/2001	PROFILE	300.00	300.00	190.30	190.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DTA	MW-192	11/27/2001	PROFILE	310.00	310.00	200.30	200.30	OC21V	ACETONE	
G192DTA	MW-192	11/27/2001	PROFILE	310.00	310.00	200.30	200.30	OC21V	CHLOROFORM	
G192DTA	MW-192	11/27/2001	PROFILE	310.00	310.00	200.30	200.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DTD	MW-192	11/27/2001	PROFILE	310.00	310.00	200.30	200.30	OC21V	ACETONE	
G192DTD	MW-192	11/27/2001	PROFILE	310.00	310.00	200.30	200.30	OC21V	CHLOROFORM	
G192DTD	MW-192	11/27/2001	PROFILE	310.00	310.00	200.30	200.30	OC21V	METHYL ETHYL KETONE (2-BUT	
G192DUA	MW-192	11/27/2001	PROFILE	320.00	320.00	210.30	210.30	8330N	NITROGLYCERIN	NO
G192DUA	MW-192	11/27/2001	PROFILE	320.00	320.00	210.30	210.30	OC21V	ACETONE	
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20	8330N	2,4,6-TRINITROTOLUENE	YES
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20	8330N	OCTAHYDRO-1,3,5,7-TETRANITI	YES

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SAMPLES COLLECTED 11/10/01-11/30/01

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20	OC21V	1,1,1-TRICHLOROETHANE	
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20	OC21V	ACETONE	
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20	OC21V	CARBON DISULFIDE	
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20	OC21V	CHLOROFORM	
G196DAA	MW-196	11/26/2001	PROFILE	35.00	40.00	2.20	7.20	OC21V	TOLUENE	
G196DBA	MW-196	11/26/2001	PROFILE	45.00	50.00	12.20	17.20	8330N	2,4,6-TRINITROTOLUENE	YES
G196DBA	MW-196	11/26/2001	PROFILE	45.00	50.00	12.20	17.20	8330N	OCTAHYDRO-1,3,5,7-TETRANITI	YES
G196DBA	MW-196	11/26/2001	PROFILE	45.00	50.00	12.20	17.20	OC21V	1,1,1-TRICHLOROETHANE	
G196DBA	MW-196	11/26/2001	PROFILE	45.00	50.00	12.20	17.20	OC21V	CHLOROFORM	
G196DDA	MW-196	11/26/2001	PROFILE	65.00	70.00	32.20	37.20	OC21V	1,1,1-TRICHLOROETHANE	
G196DEA	MW-196	11/26/2001	PROFILE	75.00	80.00	42.20	47.20	OC21V	1,1,1-TRICHLOROETHANE	
G196DGA	MW-196	11/26/2001	PROFILE	95.00	100.00	72.20	77.20	OC21V	1,1,1-TRICHLOROETHANE	
G196DHA	MW-196	11/26/2001	PROFILE	105.00	110.00	82.20	87.20	OC21V	1,1,1-TRICHLOROETHANE	
G196DHA	MW-196	11/26/2001	PROFILE	105.00	110.00	82.20	87.20	OC21V	CHLOROFORM	
G196DIA	MW-196	11/27/2001	PROFILE	115.00	120.00	92.20	97.20	OC21V	CHLOROFORM	
G196DJA	MW-196	11/27/2001	PROFILE	125.00	130.00	102.20	107.20	OC21V	CHLOROFORM	
G196DKA	MW-196	11/27/2001	PROFILE	135.00	140.00	112.20	117.20	OC21V	CHLOROFORM	
G197DAA	MW-197	11/27/2001	PROFILE	20.00	25.00	0.00	4.60	8330N	NITROGLYCERIN	NO
G197DBA	MW-197	11/27/2001	PROFILE	30.00	35.00	9.60	14.60	8330N	NITROGLYCERIN	NO
G197DBA	MW-197	11/27/2001	PROFILE	30.00	35.00	9.60	14.60	OC21V	ACETONE	
G197DBA	MW-197	11/27/2001	PROFILE	30.00	35.00	9.60	14.60	OC21V	CHLOROFORM	
G197DCA	MW-197	11/27/2001	PROFILE	40.00	45.00	19.60	24.60	8330N	NITROGLYCERIN	NO
G197DCA	MW-197	11/27/2001	PROFILE	40.00	45.00	19.60	24.60	OC21V	CHLOROFORM	
G197DDA	MW-197	11/27/2001	PROFILE	50.00	55.00	29.60	34.60	8330N	NITROGLYCERIN	NO
G197DDA	MW-197	11/27/2001	PROFILE	50.00	55.00	29.60	34.60	OC21V	CHLOROFORM	
G197DEA	MW-197	11/28/2001	PROFILE	60.00	65.00	39.60	44.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
G197DEA	MW-197	11/28/2001	PROFILE	60.00	65.00	39.60	44.60	8330N	NITROGLYCERIN	NO
G197DEA	MW-197	11/28/2001	PROFILE	60.00	65.00	39.60	44.60	8330N	OCTAHYDRO-1,3,5,7-TETRANITI	YES
G197DEA	MW-197	11/28/2001	PROFILE	60.00	65.00	39.60	44.60	OC21V	CHLOROFORM	
G197DED	MW-197	11/28/2001	PROFILE	60.00	65.00	39.60	44.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
G197DED	MW-197	11/28/2001	PROFILE	60.00	65.00	39.60	44.60	8330N	OCTAHYDRO-1,3,5,7-TETRANITI	YES
G197DED	MW-197	11/28/2001	PROFILE	60.00	65.00	39.60	44.60	OC21V	CHLOROFORM	

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G197DFA	MW-197	11/28/2001	PROFILE	70.00	75.00	49.60	54.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G197DFA	MW-197	11/28/2001	PROFILE	70.00	75.00	49.60	54.60	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
G197DGA	MW-197	11/28/2001	PROFILE	80.00	85.00	59.60	64.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G197DGA	MW-197	11/28/2001	PROFILE	80.00	85.00	59.60	64.60	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
G197DHA	MW-197	11/28/2001	PROFILE	90.00	95.00	69.60	74.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G197DHA	MW-197	11/28/2001	PROFILE	90.00	95.00	69.60	74.60	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
G197DIA	MW-197	11/28/2001	PROFILE	100.00	105.00	79.60	84.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G197DIA	MW-197	11/28/2001	PROFILE	100.00	105.00	79.60	84.60	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
G197DJA	MW-197	11/28/2001	PROFILE	110.00	115.00	89.60	94.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G197DJA	MW-197	11/28/2001	PROFILE	110.00	115.00	89.60	94.60	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES

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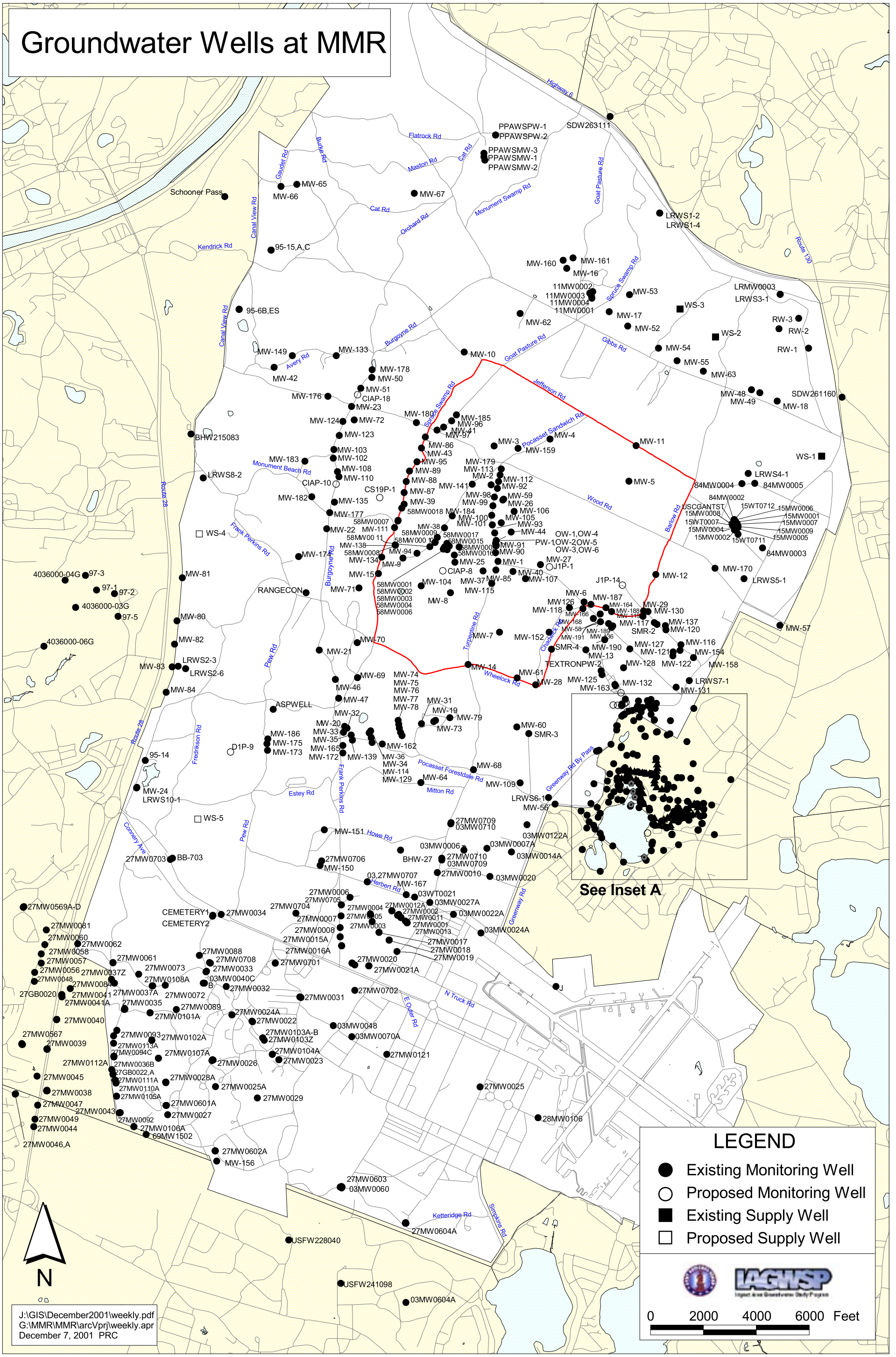
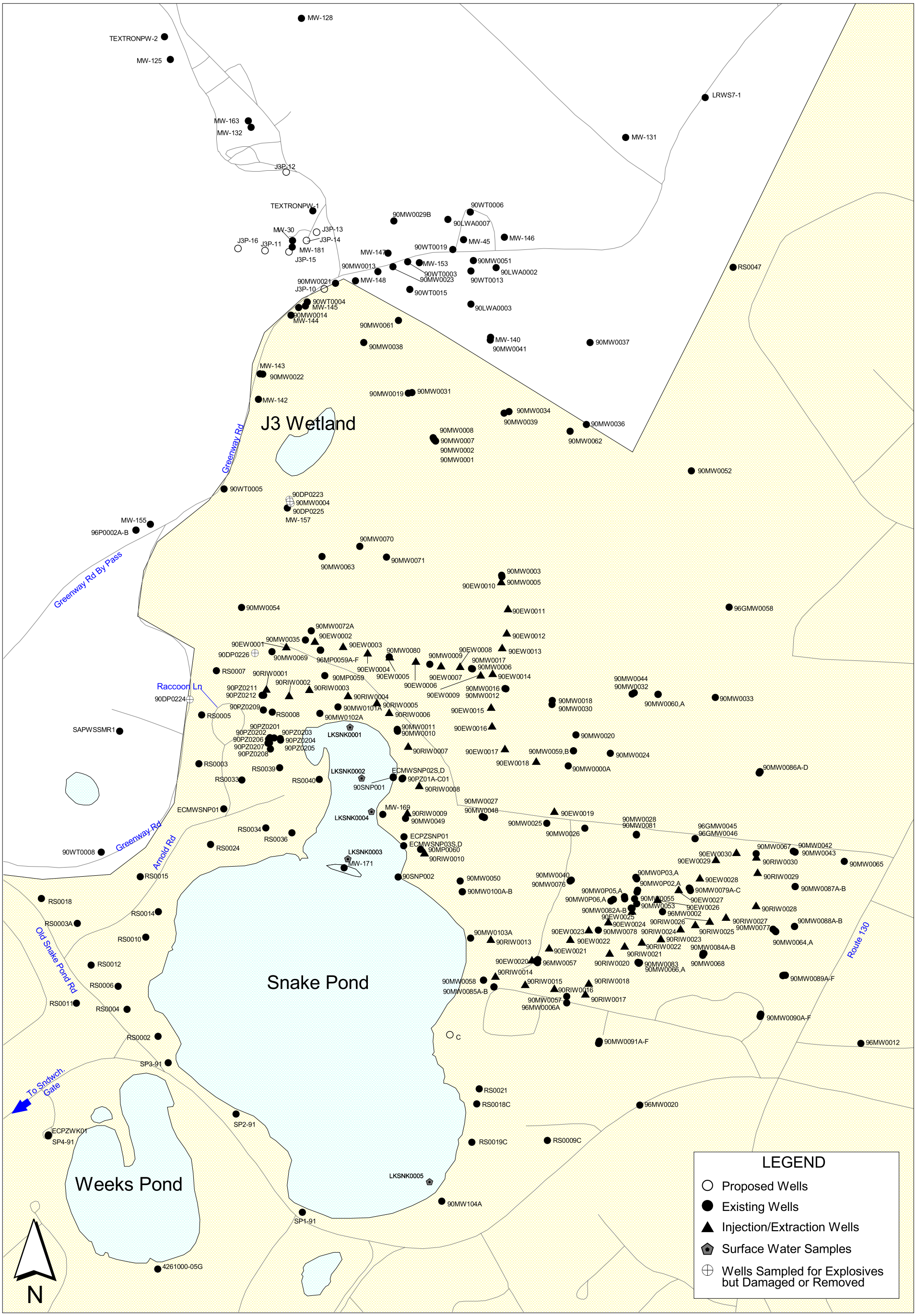
Groundwater Wells at MMR





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