WEEKLY PROGRESS UPDATE
FOR SEPTEMBER 16 – SEPTEMBER 20, 2002

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

The following summary of progress is for the period from September 16 through September 20, 2002.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of September 20 is summarized in Table 1.

Table 1. Drilling progress as of September 20, 2002

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-233	Base WS-4 sentry well (WS4P-2)	415	199	356-366; 331-341; 231-241
MW-237	J-3 Range (J3P-21)	210	159	80-90; 49-59
MW-238	L Range (LP-8)	260	163	183-193; 125-135
MW-239	J-3 Range (J3P-27)	211	191	
MW-240	Demo Area 1(D1P-15)	110	12	
MW-241	L Range (LP-5)	50		

bgs = below ground surface
bwt = below water table

Completed well installation of MW-233 (WS4P-2), MW-237 (J3P-21) and MW-238 (LP-8), completed drilling of MW-239 (J3P-27) and commenced drilling of MW-240 (D1P-15) and MW-241 (LP-5). Well development continued for newly installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-239 and MW-240. Groundwater samples were collected from Bourne supply, far field, test, and monitoring wells, as part of the Site-Wide Perchlorate sampling, and as part of the August Long Term Groundwater monitoring round. Water samples were collected from the GAC treatment system. Soil boring samples were collected from boring B-40 through the drywell at the Workshop Building on the J-3 Range.

As part of the Munitions Survey Project, soil samples were collected from the J-2 Range Anomaly 2D excavation. Pre-detonation and post-detonation soil samples were collected from J-2 and N Ranges' anomalies.

The following are the notes from the September 19, 2002 Technical Team meeting at the IAGWSPO:

Participants

Karen Wilson (IAGWSPO)	Bill Gallagher (IAGWSPO)	Dave Hill (IAGWSPO)
Pam Richardson (IAGWSPO)	Todd Borci (EPA)	Meghan Cassidy (EPA)
Desiree Moyer (EPA)	Jane Dolan (EPA)	Millie Garcia-Surette (MADEP)
Ellie Grillo (MADEP)	Len Pinaud (MADEP)	Mark Panni (MADEP)
Dave Williams (MDPH)	Heather Sullivan (ACE-phone)	Ellen Iorio (ACE-phone)
Frank Fedele (ACE)	Rob Foti (ACE)	Don Wood (ACE)
Marc Grant (AMEC)	Kim Harriz (AMEC)	Maria Pologruto (AMEC)
John Rader (AMEC)	Ben Rice (AMEC-phone)	John Rice (AMEC-phone)
Herb Colby (AMEC-phone)	Leo Yuskus (Haley and Ward)	Larry Pannell (Jacobs)
Larry Hudgins (Tetra Tech)	Susan Stewart (Tt-phone)	Leo Montroy (Tt-phone)

Punchlist Items

#2 Provide update for sampling/reporting Perchlorate for Sandwich Water District (EPA/MADEP). EPA would like to arrange a joint meeting between EPA/MADEP/Guard and Sandwich Water District. Todd Borci to contact Dan Mahoney.

#6 Provide Scrap Yard information (Corps). Frank Fedele (ACE) provided copies of manifests and supporting analytical data for sump and pad water and cleaning water that was shipped off-site in two containers on 9/10; one containing 5000 gallons and another containing 2115 gallons. Wastewater was shipped to Environmental Compliance Corporation in Stoughton. Since this disposal, more water has accumulated on the pad and in the sumps. The sumps have been sealed off such that no water can get into or out of them. Water on the pad has been containerized. Samples of the sump water have been collected for explosive analysis. The pad water is to be sampled shortly. Eleven drums are staged at the scrap yard. Eight drums contain soil from target scrap. Two drums contain oily solids with adsorbent material from pad cleanup. One drum contains oily soil from Targets 13, 15, and 44. This drum of soil was sampled earlier this week for the full suite of analyses. Soil in the other drums was previously characterized based on prior sampling of soil from the same area. Some of the drums are the drums that previously contained wastewater from the pads that was contaminated with 1,3,5 -trinitrobenzene and 2,6-dinitrotoluene. A letter requesting information on the cleaning of these drums, among other issues, was sent to the scrap contractor. The Guard will need to decide if the soil placed in the drums that previously contained wastewater is adequately characterized. This issue is to be discussed with Nicole Brooks (MMR environmental office). Scrap yard will be demobilized once the Corps achieves clean samples from the sump and pads. A Corrective Action Plan regarding scrap yard operations is under internal review and will likely be provided to the agencies by the 9/26 Tech meeting. A separate meeting will be set up next week to follow-up with this issue. Information to be provided is a summary of what has happened to date and different procedures to handle scrap.

#7 Provide update list of rockets found at U Range (Corps). Table provided at meeting. Corps still needs to determine which items will need to be BIPed. This information to be provided to the agencies when a determination is made.

#8 Identify location of drum with ash from ASP area. (Corps). Rob Foti (ACE) and Desiree Moyer (EPA) identified this drum in the staging area on 9/18. Drum to be placed in an overpack, probably today. Ellen Iorio (ACE) indicated that Corps was preparing a program to address all investigation-derived waste with FY03 funds. The Corps would to prefer to do the disposal comprehensively. However, this particular drum of waste could be addressed individually, at the agency's request. Desiree Moyer (EPA) suggested the

Guard check with the Base Environmental Office to see if this drum is considered a RCRA waste and whether the 90 day accumulation period applies.

#10 Provide review of post-BIP sampling for Perchlorate in conjunction with LITR rounds (Corps). Table provided at meeting. Corps to add column in table indicating type of round next week. Post-BIP sampling for perchlorate to be completed for all LITR round BIPs in the future.

Bourne Update

Bill Gallagher (IAGWSPO) led a discussion on the Bourne area. A schedule of activities was distributed.

- Installation of WS4P-2 (MW-233) has been completed. Development of this well will be completed by early next week. Delays encountered during installation of this well will cause the overall schedule to shift.
- The Guard provided a table listing all constituents detected in the Bourne well Zone IIs to the Bourne Water District (BWD). Copies to be forwarded to MADEP/EPA. Leo Yuskus (Haley and Ward) to review to see if this table meets the BWD's needs.
- The newly formed Wellhead Treatment Technical Team is scheduled to meet on 10/1 at MADEP's office in Lakeville with Jeff Rose (MADEP Water Supply) hosting. Time to be determined.
- A figure depicting the locations of the two monitoring wells proposed between MW-233 and WS-4 was distributed. Also shown on the figure were two alternative locations located along a power line road that are suggested due to cultural and natural resource issues with the original proposed locations. The Guard is proceeding with submitting ROAs for the original proposed locations with the understanding that the locations are in a moderately sensitive cultural resources area and an archeological survey would need to be completed for any soil disturbance. These original locations are also in an undisturbed, unfragmented scrub oak habitat. Karen Wilson (IAGWSPO) explained that because these locations are located in hilly terrain, a significant winding road would be needed for access from the north. Access to the south off of the adjacent power line road is not an option due to steep terrain associated with a kettle hole. The figure to be revised to show the third proposed well location between MW-219 and WS-4.
- Mr. Yuskus indicated that in a meeting held between the BWD and MADEP, the decision was made to go ahead with developing WS-4 as a water supply source. MADEP Water Supply has indicated that they will require significant control with upgradient wells. AMEC to forward an electronic copy of figure to Mr. Yuskus for review by MADEP Water Supply. MADEP and BWD to consider alternative locations.
- Mr. Yuskus to provide to the Guard a plan view of where BWD would like a cross-section drawn.
- Todd Borci (EPA) requested that the Guard review the Bourne Response Plan schedule to see if agency review time can be shortened given that agencies have seen and commented on the draft plan.

MSP3 and Southeast Ranges Update

Rob Foti (Corps) provided an update on the MSP3 tasks.

AIRMAG. A table of findings is being prepared for the Barlow Road Schonstedt survey and will be submitted by next week.

J-2 Range Polygons. Polygon 2U was completed. Crews will be moving to 2X this afternoon. J-2 Range Polygon 2 sections B, C, E, G, H, K, N, O, P, R, and V remain to be investigated. The items found at J-2 Range Polygon 2 were tabulated and the table was distributed to the agencies. All rounds at 2U were staged on plastic; a snow fence will be placed in the

excavation prior to backfilling. Soil samples from the excavation are being collected today.
SCAR Site. A digital map of the geophysical data and anomaly picks was sent to the agencies via email on 9/17. Six anomaly picks were selected that Tetra Tech identified as potential burial sites. Thirty-one picks were originally budgeted. However, Ellen Iorio (ACE) stressed that additional picks were not selected because Tetra Tech's professional opinion is that the other anomalies are likely individual rockets as opposed to burials. The overall work budget on this site has already been exceeded due to the amount of grubbing required. Todd Borci commented that EPA was not satisfied with the proposed number of picks and would provide comment by 9/26.
N Range. Dr. Sue Goodfellow (E&RC) approved the backfilling of the excavations. BIPs of 59 – 3.5-inch practice rockets are scheduled for today. Post-BIP sampling will be completed like post-BIP sampling for the J-1 Range Polygon 1 trench. The new approved BIP sampling protocols will be followed.
U Range. Grubbing is 55% complete. 25% of the surface clearance has been completed. A table of items discovered was distributed.
Drilling/Sampling. – Drilling is being conducted on proposed locations J3P-27 (J-3 Range) and LP-5 (L Range) and also at D1P-15 (Demo 1). SE Ranges LTGM sampling will be taking place over the next couple weeks. A meeting has been arranged with Camp Good News for 9/24 at 1:00 pm to go over J3P-10, -20, and –22 proposed well locations. The J3P-26 drilling location near Snake Pond needs to be reviewed with Karen Wilson and AMEC. This location will likely require the filing of a Request for Determination of Applicability (RDA) with ConsCom.
BIPs. The following items from N Range and J-2 Range Polygon 2U are scheduled to be BIPed today:

59	3.5-inch Practice Rockets, M29 with M404 BD Fuzes
5	57MM HE Projectiles, M306A1 with M503 Series PD Fuzes

Central Impact Area Update

- Karen Wilson (IAGWSPO) indicated that the Guard worked out a method to stage drilling equipment at the CIAP-14 proposed well location site that will not require any subsurface disturbance. Therefore, the ROA has been sent to Natural Heritage and SHPO for review with Dr. Sue Goodfellow's recommendation for approval.

Snake Pond Sampling

- Dave Hill (IAGWSPO) indicated that the agencies' concurrence is being sought for the Guard's proposal to discontinue the sampling of surface water and well points at Snake Pond, now that the summer beach season has concluded. The last sampling round was completed on 9/11. Data from this sampling event is expected shortly.
- Herb Colby (AMEC) explained that results for sampling of 90SNP0001 were non detect for explosives and perchlorate for all biweekly sampling events. The results for 90SNP0002 showed unvalidated results in June with a RDX detection that was not PDA-confirmed. The results in July included a RDX detection with a PDA confirmation but with interference, also unvalidated. The results for 90SNP0002 have been non detect since the July sampling event. These drive points were installed to monitor groundwater within a few feet of the ground surface and are located on the beach of the north cove, not where the campers swim. Surrounding wells are mostly screened at deeper intervals below the water table including screens for wells MW-218, MW-171, and MW-169. RDX has been detected in the 83-88 ft bwt table screen at MW-171, but not in shallower well screens in any other wells in the area.
- Len Pinaud (MADEP) indicated that MADEP concurs with the Guard's recommendation that the drive point sampling be discontinued with the end of the beach season. Mr. Pinaud

noted that the monitoring well sampling currently performed by the Guard on the eastern edge of Snake Pond is sufficient until the start of the next beach season.

- Todd Borci concluded that the sampling of the drive points was best addressed in the LTGM program outside of the beach season. Provided that the 9/11 sampling event was close enough to the current LTGM round when other Southeast Ranges wells were being sampled, Mr. Borci recommended that the Guard evaluate whether the drive point sampling should be added to the three time per year monitoring as part of the LTGM.
- All parties agreed that Snake Pond surface water sampling could be discontinued with the end of the beach season.

Schooner Pass Well

Bill Gallagher (IAGWSPO) led a discussion on the Schooner Pass well.

- Information on the well, which was provided in an email from AMEC, was distributed.
- AMEC obtained information on the wastewater treatment plant operated by the 102nd CE group as requested by Todd Borci. The WWTP is located approximately 1.25 miles northeast of the Schooner Pass well along Route 6A, and therefore it was unlikely that the leach field effects groundwater flow in the vicinity of Schooner Pass.
- AMEC had recommended in the email that the Guard complete a synoptic water level round at Former A Range and sample a well at the Midway Rest Station on Route 6A. The Guard was committed to following through on these recommendations.
- Frank Fedele (ACE) to investigate the status of Midway Rest Station well, suspected to have been discontinued for use as a source of drinking water. Mr. Yuskus indicated that the rest station had likely hooked up to town water.
- Mr. Borci requested that the Guard notify him when the synoptic water level round was completed.
- The Guard was also pursuing the possibility of sampling an irrigation well at the Technical Regional School on Route 6A. This well, which is used by the school to water their lawns, has not been working recently due to problems with the pump.
- The Guard would also make calls to the Skating Rink to determine if a known well at this property could be sampled. Again, Mr. Yuskus indicated that it was likely that the skating rink had hooked up to town water and no longer used the well for water supply.
- Len Pinaud indicated that MADEP had successfully contacted the Schooner Pass water superintendent. The water superintendent indicated that they were considering the Guard's offer of monthly monitoring of their well for explosives and perchlorate and would discuss the issue further with Jeff Rose (MADEP Water Supply).

Phase IIb Update

Don Wood (ACE) led a discussion on how Phase IIb sites would be handled in the upcoming revised Draft Report. A table was distributed with the sites listed and corresponding details on new data that would be added to the revised Draft Report and whether or not the site would be included in the revised Draft report or segregated out into a separate report.

- Todd Borci expressed concern regarding the Waste Oil Release Sites. Since it was being proposed that these sites be precluded from the Draft Revised Report, how were they to be tracked?
- Bill Gallagher indicated that it was the Guard's intent that these sites would be addressed by a Limited Removal Action (LRA), which would not require reporting to the agencies. Millie Garcia (MADEP) indicated that as part of a LRA, documentation of these sites would be maintained by the LSP of record who would be rendering an opinion on how a release would be addressed. Mr. Borci and Len Pinaud emphasized that even if a LRA was performed, as a matter of record keeping/documentation for the IAGWSP, the sites and actions taken

should be discussed in the Soil Report providing information on the Operable Unit where the LRA took place.

- Ben Rice (AMEC) asked if the redline/strikeout revisions in the previous draft of the Phase IIb Report could be incorporated into the new Revised Draft Report. The agencies had approved of the Phase IIb revised RCL on 5/14. Mr. Borci indicated that these revisions could be accepted for the Revised Draft document.

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 volatile organic compound (VOC) analyses for groundwater profile samples, are conducted in this timeframe, as well as any analyses pursuant to a special request. 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 explosive 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 or perchlorate. Most explosive detections verified by PDA are confirmed to be present upon completion of validation. Table 3 includes the following detections:

Table 3 includes detections from the following areas:

<u>Bourne Wellfield</u>

- Groundwater samples from 02-12M3 and 02-13M1, M2 had detections of perchlorate. The results were similar to the previous sampling rounds.

<u>Central Impact Area and CS-19</u>

- Groundwater samples from 58MW0002, 58MW0018A and MW-100M1 had detections of explosives that were confirmed by PDA spectra. The results were similar to the previous sampling rounds, except that this is the first analysis of MW-100M1 with the 8330NX method.

<u>Southeast of the Ranges</u>

- Groundwater samples from MW-143M3, MW-144S, MW-166M1 and 90WT0004 had detections of explosives that were confirmed by PDA spectra. The results were similar to the previous sampling rounds, except that this is the first analysis of MW-143M3 and MW-166M1 with the method 8330NX.

- Groundwater samples from 90MW0003 and 90WT0003 had detections of explosives that were not confirmed by PDA spectra. The results were similar to the previous sampling rounds.

3. DELIVERABLES SUBMITTED

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4. SCHEDULED ACTIONS

Scheduled actions for the week of September 23 include complete well installation of MW-239 (J3P-27) and MW-240 (D1P-15), complete drilling of MW-241 (LP-5) and commence drilling of LP-6, J3P-31 and J1P-1.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

Additional delineation of the downgradient portion of the groundwater plume is being conducted prior to finalizing the Feasibility Study for the Groundwater Operable Unit and as the Interim Action for groundwater remediation is being designed. Pumping and treating groundwater at the toe of the Demo 1 plume and at Frank Perkins Road has been selected as an Interim Action to address the Demo 1 Area Groundwater Operable Unit. A Rapid Response Action/Release Abatement Measure (RRA/RAM) is also being planned to address soil contamination at Demo 1.

TABLE 2
SAMPLING PROGRESS
09/14/2002 - 09/21/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
J2.A.T2U.001.1.0	J2.T2U.001.R	09/18/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.001.1.D	J2.T2U.001.R	09/18/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.001.2.0	J2.T2U.001.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.001.3.0	J2.T2U.001.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.002.1.0	J2.T2U.002.R	09/18/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.002.2.0	J2.T2U.002.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.002.3.0	J2.T2U.002.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.003.1.0	J2.T2U.003.R	09/18/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.003.2.0	J2.T2U.003.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.003.3.0	J2.T2U.003.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.004.1.0	J2.T2U.004.R	09/18/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.004.2.0	J2.T2U.004.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.004.2.D	J2.T2U.004.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.004.3.0	J2.T2U.004.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.005.1.0	J2.T2U.005.R	09/18/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.005.2.0	J2.T2U.005.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.005.3.0	J2.T2U.005.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.006.1.0	J2.T2U.006.R	09/18/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.006.2.0	J2.T2U.006.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.006.3.0	J2.T2U.006.R	09/19/2002	CRATER GRID	0.00	0.17		
J2.A.T2U.006.3.D	J2.T2U.006.R	09/19/2002	CRATER GRID	0.00	0.17		
NR.A.T12.06C.1.0	NR.T12.006.R/NR.T1	09/18/2002	CRATER GRID	2.50	2.67		
NR.A.T12.06C.2.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.06C.3.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.06N.1.0	NR.T12.006.R/NR.T1	09/18/2002	CRATER GRID	2.50	2.67		
NR.A.T12.06N.2.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.06N.3.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.06S.1.0	NR.T12.006.R/NR.T1	09/18/2002	CRATER GRID	2.50	2.67		
NR.A.T12.06S.2.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.06S.2.D	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.06S.3.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.6NC.2.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.6NC.3.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.6SC.2.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
NR.A.T12.6SC.3.0	NR.T12.006.R/NR.T1	09/19/2002	CRATER GRID	2.50	2.67		
27MW0015B-E	FIELDQC	09/19/2002	FIELDQC	0.00	0.00		
90MW0011-E	FIELDQC	09/16/2002	FIELDQC	0.00	0.00		
90MW0019-E	FIELDQC	09/18/2002	FIELDQC	0.00	0.00		
90MW0101A-E	FIELDQC	09/20/2002	FIELDQC	0.00	0.00		
CEMETERY1-T	FIELDQC	09/17/2002	FIELDQC	0.00	0.00		
G239DAE	FIELDQC	09/18/2002	FIELDQC	0.00	0.00		
G239DAT	FIELDQC	09/18/2002	FIELDQC	0.00	0.00		
G239DLT	FIELDQC	09/19/2002	FIELDQC	0.00	0.00		
G239DNE	FIELDQC	09/19/2002	FIELDQC	0.00	0.00		

Profiling methods include: Volatiles, Explosives and Perchlorate
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
09/14/2002 - 09/21/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
G240DAT	FIELDQC	09/20/2002	FIELDQC	0.00	0.00		
TW1-88AE	FIELDQC	09/17/2002	FIELDQC	0.00	0.00		
W02-13M1F	FIELDQC	09/17/2002	FIELDQC	0.00	0.00		
W05SST	FIELDQC	09/16/2002	FIELDQC	0.00	0.00		
27MW0015B-A	27MW0015B	09/18/2002	GROUNDWATER	68.10	78.10	0.00	10.00
27MW0015B-D	27MW0015B	09/18/2002	GROUNDWATER	68.10	78.10	0.00	10.00
27MW0017A-A	27MW0017A	09/16/2002	GROUNDWATER	134.00	139.00	46.55	51.55
27MW0017B-A	27MW0017B	09/16/2002	GROUNDWATER	104.00	109.00	17.00	22.00
27MW0108A-A	27MW0108A	09/19/2002	GROUNDWATER	222.00	227.00	79.59	84.59
4036000-01G	4036000-01G	09/18/2002	GROUNDWATER				
4036000-03G	4036000-03G	09/18/2002	GROUNDWATER				
4036000-04G	4036000-04G	09/18/2002	GROUNDWATER				
4036000-06G	4036000-06G	09/18/2002	GROUNDWATER				
90MP0059A-A	90MP0059A	09/19/2002	GROUNDWATER				
90MP0059B-A	90MP0059B	09/19/2002	GROUNDWATER				
90MP0059C-A	90MP0059C	09/19/2002	GROUNDWATER				
90MW0011-A	90MW0011	09/16/2002	GROUNDWATER	46.50	51.50	31.75	36.75
90MW0011-D	90MW0011	09/16/2002	GROUNDWATER	46.50	51.50	31.75	36.75
90MW0019-A	90MW0019	09/19/2002	GROUNDWATER	161.00	166.00	68.85	73.85
90MW0031-A	90MW0031	09/18/2002	GROUNDWATER	195.32	200.22	102.54	107.44
90MW0038-A	90MW0038	09/18/2002	GROUNDWATER	94.75	99.62	21.05	25.92
90MW0041-A	90MW0041	09/18/2002	GROUNDWATER	125.37	130.23	28.94	33.80
90MW0101A-A	90MW0101A	09/20/2002	GROUNDWATER	113.00	118.00	105.08	110.08
90MW0102A-A	90MW0102A	09/20/2002	GROUNDWATER	113.00	118.00	105.76	110.76
ASPWELL-A	ASPWELL	09/19/2002	GROUNDWATER				
CEMETERY1-A	CEMETERY1	09/17/2002	GROUNDWATER				
CEMETERY2-A	CEMETERY2	09/17/2002	GROUNDWATER				
RANGECON-A	RANGECON	09/17/2002	GROUNDWATER				
RANGECON-D	RANGECON	09/17/2002	GROUNDWATER				
TW1-88AA	1-88	09/17/2002	GROUNDWATER				
W02-12M1A	02-12	09/17/2002	GROUNDWATER	109.00	119.00	58.35	68.35
W02-12M2A	02-12	09/17/2002	GROUNDWATER	94.00	104.00	43.21	53.21
W02-12M3A	02-12	09/17/2002	GROUNDWATER	79.00	89.00	28.22	38.22
W02-13M1A	02-13	09/17/2002	GROUNDWATER	98.00	108.00	58.33	68.33
W02-13M2A	02-13	09/17/2002	GROUNDWATER	83.00	93.00	44.20	54.20
W02-13M3A	02-13	09/17/2002	GROUNDWATER	68.00	78.00	28.30	38.30
W02-13M3D	02-13	09/17/2002	GROUNDWATER	68.00	78.00	28.30	38.30
W02DDA	MW-02	09/16/2002	GROUNDWATER	355.00	360.00	218.00	223.00
W02M1A	MW-02	09/16/2002	GROUNDWATER	212.00	217.00	75.00	80.00
W02M2A	MW-02	09/16/2002	GROUNDWATER	170.00	175.00	33.00	38.00
W05DDA	MW-05	09/16/2002	GROUNDWATER	335.00	340.00	223.00	228.00
W05M1A	MW-05	09/17/2002	GROUNDWATER	210.00	215.00	98.00	103.00
W05M2A	MW-05	09/16/2002	GROUNDWATER	170.00	175.00	58.00	63.00
W05SSA	MW-05	09/16/2002	GROUNDWATER	119.00	129.00	7.00	17.00

Profiling methods include: Volatiles, Explosives and Perchlorate
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TABLE 2
SAMPLING PROGRESS
09/14/2002 - 09/21/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W101M1A	WL-101	09/19/2002	GROUNDWATER	158.00	168.00	27.00	37.00
W101SSA	WL-101	09/19/2002	GROUNDWATER	131.00	141.00	0.00	10.00
W105M1A	WL-105	09/19/2002	GROUNDWATER	205.00	215.00	78.00	88.00
W105M2A	WL-105	09/19/2002	GROUNDWATER	165.00	175.00	38.00	48.00
W108M1A	MW-108	09/16/2002	GROUNDWATER	297.00	307.00	133.00	143.00
W108M2A	MW-108	09/17/2002	GROUNDWATER	282.00	292.00	118.00	128.00
W109SSA	MW-109	09/19/2002	GROUNDWATER	89.00	99.00	1.00	11.00
W10DDA	MW-10	09/19/2002	GROUNDWATER	351.50	361.50	204.00	212.00
W10MMA	MW-10	09/19/2002	GROUNDWATER	280.00	285.00	133.00	138.00
W10SSA	MW-10	09/19/2002	GROUNDWATER	145.00	155.00	0.00	10.00
W110M1A	MW-110	09/16/2002	GROUNDWATER	315.50	325.50	142.00	152.00
W110M2A	MW-110	09/16/2002	GROUNDWATER	248.50	258.50	75.00	85.00
W110M3A	MW-110	09/17/2002	GROUNDWATER	220.50	230.50	47.00	57.00
W111M1A	MW-111	09/17/2002	GROUNDWATER	224.00	234.00	92.00	102.00
W111M1D	MW-111	09/17/2002	GROUNDWATER	224.00	234.00	92.00	102.00
W111M2A	MW-111	09/18/2002	GROUNDWATER	224.00	234.00	50.00	60.00
W111M3A	MW-111	09/18/2002	GROUNDWATER	165.00	175.00	33.00	43.00
W112M1A	MW-112	09/18/2002	GROUNDWATER	195.00	205.00	56.00	66.00
W112M1D	MW-112	09/18/2002	GROUNDWATER	195.00	205.00	56.00	66.00
W112M2A	MW-112	09/18/2002	GROUNDWATER	165.00	175.00	26.00	36.00
W113M1A	MW-113	09/17/2002	GROUNDWATER	240.00	250.00	98.00	108.00
W113M2A	MW-113	09/17/2002	GROUNDWATER	190.00	200.00	48.00	58.00
W125M1A	MW-125	09/19/2002	GROUNDWATER	232.00	242.00	182.00	192.00
W125SSA	MW-125	09/18/2002	GROUNDWATER	50.00	60.00	0.00	10.00
W128M1A	MW-128	09/20/2002	GROUNDWATER	144.00	154.00	57.00	67.00
W128M2A	MW-128	09/20/2002	GROUNDWATER	104.00	114.00	17.00	27.00
W128SSA	MW-128	09/20/2002	GROUNDWATER	87.00	97.00	0.00	10.00
W132M1A	MW-132	09/20/2002	GROUNDWATER	224.00	234.00	187.00	197.00
W132M1D	MW-132	09/20/2002	GROUNDWATER	224.00	234.00	187.00	197.00
W132SSA	MW-132	09/20/2002	GROUNDWATER	37.00	47.00	0.00	10.00
W134M1A	MW-134	09/20/2002	GROUNDWATER	250.00	260.00	105.00	115.00
W134M2A	MW-134	09/20/2002	GROUNDWATER	170.00	180.00	25.00	35.00
W138M3A	MW-138	09/20/2002	GROUNDWATER	135.00	145.00	14.00	24.00
W13DDA	MW-13	09/17/2002	GROUNDWATER	220.00	225.00	145.00	150.00
W13SSA	MW-13	09/17/2002	GROUNDWATER	73.00	83.00	0.00	10.00
W169M1A	MW-169	09/19/2002	GROUNDWATER	154.00	159.00		
W169M1D	MW-169	09/19/2002	GROUNDWATER	154.00	159.00		
W169M2A	MW-169	09/19/2002	GROUNDWATER	113.50	118.50		
W171M1A	MW-171	09/20/2002	GROUNDWATER	141.00	146.00	143.00	148.00
W171M2A	MW-171	09/20/2002	GROUNDWATER	81.00	86.00	83.00	88.00
W171M3A	MW-171	09/20/2002	GROUNDWATER	29.00	34.00	31.00	36.00
W172M1A	MW-172	09/18/2002	GROUNDWATER	199.00	209.00	134.00	144.00
W172M2A	MW-172	09/18/2002	GROUNDWATER	169.00	179.00	104.00	114.00
W172M3A	MW-172	09/18/2002	GROUNDWATER	109.00	119.00	44.00	54.00

Profiling methods include: Volatiles, Explosives and Perchlorate
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TABLE 2
SAMPLING PROGRESS
09/14/2002 - 09/21/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W184M1A	MW-184	09/18/2002	GROUNDWATER	186.00	196.00	58.20	68.20
W184M1D	MW-184	09/18/2002	GROUNDWATER	186.00	196.00	58.20	68.20
W184M2A	MW-184	09/19/2002	GROUNDWATER	126.00	136.00	0.00	10.00
W212M1A	MW-212	09/18/2002	GROUNDWATER	333.00	343.00	125.60	135.60
W212M2A	MW-212	09/18/2002	GROUNDWATER	308.00	318.00	98.60	108.60
DW091802-NV	GAC WATER	09/18/2002	IDW				
G239DAA	MW-239	09/18/2002	PROFILE	30.00	30.00	9.65	9.65
G239DBA	MW-239	09/18/2002	PROFILE	40.00	40.00	19.65	19.65
G239DCA	MW-239	09/18/2002	PROFILE	50.00	50.00	29.65	29.65
G239DDA	MW-239	09/18/2002	PROFILE	60.00	60.00	39.65	39.65
G239DEA	MW-239	09/18/2002	PROFILE	70.00	70.00	49.65	49.65
G239DFA	MW-239	09/19/2002	PROFILE	80.00	80.00	59.65	59.65
G239DFD	MW-239	09/19/2002	PROFILE	80.00	80.00	59.65	59.65
G239DGA	MW-239	09/19/2002	PROFILE	90.00	90.00	69.65	69.65
G239DHA	MW-239	09/19/2002	PROFILE	100.00	100.00	79.65	79.65
G239DIA	MW-239	09/19/2002	PROFILE	110.00	110.00	89.65	89.65
G239DJA	MW-239	09/19/2002	PROFILE	120.00	120.00	99.65	99.65
G239DKA	MW-239	09/19/2002	PROFILE	130.00	130.00	109.65	109.65
G239DLA	MW-239	09/19/2002	PROFILE	140.00	140.00	119.65	119.65
G239DMA	MW-239	09/19/2002	PROFILE	150.00	150.00	129.65	129.65
G239DNA	MW-239	09/19/2002	PROFILE	160.00	160.00	139.65	139.65
G239DOA	MW-239	09/19/2002	PROFILE	170.00	170.00	149.65	149.65
G239DPA	MW-239	09/19/2002	PROFILE	180.00	180.00	159.65	159.65
G239DQA	MW-239	09/19/2002	PROFILE	190.00	190.00	169.65	169.65
G239DSA	MW-239	09/20/2002	PROFILE	210.00	210.00	179.65	179.65
G240DAA	MW-240	09/20/2002	PROFILE	105.00	105.00	6.70	6.70
ABB0040AAA	B-40	09/18/2002	SOIL BORING	4.00	5.00		
ABB0040BAA	B-40	09/18/2002	SOIL BORING	9.00	10.00		
J2.F.T2U.XC1.1.0	J2 Target 2U Excavati	09/19/2002	SOIL GRID	0.00	3.50		
J2.F.T2U.XC1.2.0	J2 Target 2U Excavati	09/19/2002	SOIL GRID	3.33	3.50		

Profiling methods include: Volatiles, Explosives and Perchlorate
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
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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 08/31/02 - 09/21/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
58MW0002-A	58MW0002	09/11/2002	GROUNDWATEF	121.20	126.20	0.17	5.17	8330NX	2,4-DINITROTOLUENE	YES
58MW0002-A	58MW0002	09/11/2002	GROUNDWATEF	121.20	126.20	0.17	5.17	8330NX	2-AMINO-4,6-DINITROTOLUENE	YES
58MW0002-A	58MW0002	09/11/2002	GROUNDWATEF	121.20	126.20	0.17	5.17	8330NX	4-AMINO-2,6-DINITROTOLUENE	YES
58MW0002-A	58MW0002	09/11/2002	GROUNDWATEF	121.20	126.20	0.17	5.17	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
58MW0002-A	58MW0002	09/11/2002	GROUNDWATEF	121.20	126.20	0.17	5.17	8330NX	HEXAHYDRO-1-MONONITROSO	YES
58MW0002-A	58MW0002	09/11/2002	GROUNDWATEF	121.20	126.20	0.17	5.17	8330NX	OCTAHYDRO-1,3,5,7-TETRANIT	YES
58MW0018A-A	58MW0018A	09/12/2002	GROUNDWATEF	202.70	211.70	57.13	66.13	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
90MW0003-A	90MW0003	09/09/2002	GROUNDWATEF	144.00	149.00	49.10	54.10	8330N	NITROGLYCERIN	NO
90WT0003-A	90WT0003	09/10/2002	GROUNDWATEF	87.50	97.50	0.00	0.00	8330N	PICRIC ACID	NO
90WT0004-A	90WT0004	09/11/2002	GROUNDWATEF	35.00	45.00	0.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
90WT0004-D	90WT0004	09/11/2002	GROUNDWATEF	35.00	45.00	0.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W02-12M3A	02-12	09/11/2002	GROUNDWATEF	79.00	89.00	28.22	38.22	E314.0	PERCHLORATE	
W02-13M1A	02-13	09/11/2002	GROUNDWATEF	98.00	108.00	58.33	68.33	E314.0	PERCHLORATE	
W02-13M2A	02-13	09/11/2002	GROUNDWATEF	83.00	93.00	44.20	54.20	E314.0	PERCHLORATE	
W02-13M2D	02-13	09/11/2002	GROUNDWATEF	83.00	93.00	44.20	54.20	E314.0	PERCHLORATE	
W100M1A	MW-100	09/10/2002	GROUNDWATEF	179.00	189.00	45.00	55.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W100M1A	MW-100	09/10/2002	GROUNDWATEF	179.00	189.00	45.00	55.00	8330NX	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W143M3A	MW-143	09/06/2002	GROUNDWATEF	107.00	112.00	77.00	82.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W144SSA	MW-144	09/06/2002	GROUNDWATEF	26.00	36.00	5.00	15.00	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W166M1A	MW-166	09/10/2002	GROUNDWATEF	218.00	223.00	112.00	117.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES

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