WEEKLY PROGRESS UPDATE
FOR OCTOBER 14 – OCTOBER 18, 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 October 14 through October 18, 2002.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of October 18 is summarized in Table 1.

Table 1. Drilling progress as of October 18, 2002

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-243	J-3 Range (J3P-31)	270	202	
MW-244	J-1 Range (J1P-1)	304	184	

bgs = below ground surface
bwt = below water table

Completed drilling of MW-243 (J3P-31) and MW-244 (J1P-1). 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-243 and MW-244. Groundwater samples were collected from Bourne water supply, far field and monitoring wells, and recently installed wells. Water samples were collected from the GAC treatment system.

As part of the Munitions Survey Project, soil samples were collected from the J-2 Range Polygon excavations.

The following are the notes from the October 17, 2002 Technical Team meeting at the IAGWSPO:

Participants

Ben Gregson (IAGWSPO)
Karen Wilson (IAGWSPO)
Todd Borci (EPA)
Jane Dolan (EPA)
Mark Panni (MADEP)
Gina Kaso (ACE)
John MacPherson (ACE)
Rob Clemens (AMEC)
Maria Pologruto (AMEC)
John Rice (AMEC)
Leo Yuskus (Haley and Ward)
Susan Stewart (Tt-phone)
Tina Dolan (IAGWSPO)
LTC Bill FitzPatrick (E&RC)
Meghan Cassidy (EPA)
Jim Murphy (EPA)
Dave Williams (MDPH)
Heather Sullivan (ACE)
Ed Wise (ACE)
Marc Grant (AMEC-phone)
John Rader (AMEC)
Rich Greiling (ECC)
Larry Pannell (Jacobs)
Kevin Hood (Univ. of Conn)
Dave Hill (IAGWSPO)
Mike Minior (AFCEE)
Desiree Moyer (EPA)
Len Pinaud (MADEP)
Darrell Deleppo (Army Corps)
Rob Foti (ACE)
Don Wood (ACE)
Kim Harriz (AMEC)
Herb Colby (AMEC)
Dick Skryness (ECC)
Larry Hudgins (Tetra Tech)

Punchlist Items

#2 Provide update for sampling/reporting Perchlorate for Sandwich Water District (EPA/MADEP). Todd Borci (EPA) spoke to Dan Mahoney (Sandwich Water Board) on 10/16. Mr. Borci to discuss conversation with Ben Gregson (IAGWSPO) and talk with Mr. Mahoney again next week. It is possible that this issue can be resolved so that samples for explosives analysis (due in October) can be collected concurrently with perchlorate analysis samples.

#3 Determine possibility of sampling the irrigation well at the Regional Tech School (Guard). D.L. Maher inspected the well and determined that the pump and motor are broken and cannot be fixed. Cost to remove the well and ascertain the depth of the well screen is approximately $5,000. Heather Sullivan (ACE) to discuss an intended plan of action with Bill Gallagher (IAGWSPO) and Tech School representatives.

#4 Determine possibility of sampling the Gallo Skating Rink well (Guard). D.L. Maher to inspect the well next week to determine its suitability for sampling.

#8 Determine possibility of sampling old USGS wells located near ocean downgradient of the Monument beach wellfield (Corps). Wells to be sampled next week. Denis LeBlanc (USGS) to provide assistance. AMEC to coordinate with laboratory for getting best results for Perchlorate in sample to be collected from brackish water.

#9 Provide construction forms/map of old USGS wells (Corps). Information provided last week.

#11 Provide a summary of findings from UXO recon of Demo 1 north hillside to agencies (Corps). Summary to be sent out 10/18 or 10/21.

#12 Provide corrected MW-233 well screen data table (Corps). Well screen data was correct in table. Subsequent to the selection of screen depths, the water level in well rose 18 feet. Therefore, the shallow well screen (M3), which was based on profile data, was set at the correct depth. However, the two deeper screens (M2, M1), which were based on particle tracks, were not set at the depths agreed upon in the screen selection process.

MSP3 and Southeast Ranges Update

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

J-2 Range Polygons. Crews finished Polygons 2G, H. Working on Polygon 2J. 16 polygons completed, 2 need to be revisited, 5 additional still need to be investigated. Updated list of findings was distributed.

- J-2 Range Polygon 2 analytical data was distributed last week. The J-1/J-3 Polygon update of anomalies and what was found was distributed via email. Tetra Tech is still working on a summary of J-2 Range Polygon analytical data, other than Polygon 2 data.
- Todd Borci (EPA) requested that the data summary (dump) of J-2 Range data include a map showing locations and hits only table. This summary to be discussed further in the J-2 Range scoping meeting.
- Jane Dolan (EPA) requested a table of contents for the J-2 Range Polygon Report.

SCAR Site. Updated table of findings distributed. Excavation of all 14 locations complete. Anomalies 11 and 13 will need to be revisited. Suspected 155MM HE rounds were uncovered at these locations and need to be BIPed. These excavations then need to be cleared to make sure nothing is below these items.

- Dr. Susan Goodfellow (E&RC) inspected and approved backfilling of the trench. The 14 other excavations remain to be inspected. The analytical data for Anomalies 1-3 (demo sites) has not yet been received.

U Range. Grubbing (84% complete) and surface clearance (29% complete) continuing. Southern berm to be grubbed next week. Geophysical surveys to begin next week. Crews

have been instructed to measure the orientation and declination of all rockets discovered. This will consist of randomly selecting 3-4 grids to discern a pattern/no pattern. EPA would also like a determination of whether the items appear to be randomly scattered or placed for demolition. Tetra Tech to provide list of items to the agencies after the surface clearance is complete. The number of sub cal rounds per grid and locations are being recorded and will be mapped to show their distribution.

Drilling/Sampling. – Three drilling rigs are in operation. Drilling is being conducted on proposed location J1P-1 (MW-244). Rig at J3P-31 is on standby awaiting screen selections. J1P-17 location access road and pad are being built; drill rig may be mobilized to site Friday 10/18. UXO magnetometer and flagging of anomalies is ongoing at Camp Good News. No ROA approval is required for this activity. A walkthrough of the MW-157b location was conducted with AMEC, Karen Wilson (IAGWSPO) and Dr. Goodfellow; this location should be approved since it is adjacent to a previously installed well. Regarding J3P-26, no response has been received from Sandwich Conservation Commission; they will be recontacted today. MW-234, which hadn't been sampled due to exclusion zones and weekend range firing, will be sampled today, with the results placed on quick turn. A waiver the XM53 submunitions has been received for J1P-18 location.

ROA Update

Heather Sullivan (ACE) provided an update on the ROA approval process. An updated chart of the ROA schedule was distributed.

- Additions to the ROA schedule chart include: priorities for wells, date of submittal to base POC, date of submittal to SHPO, and wells proposed but without finalized locations.
- KP-2 ROA has been provided to the Corps and will be submitted to the base POCs shortly.
- No approvals were received from SHPO this week.
- Second set of priorities is for ROA approval for the Demo 1 Area wells.
- Karen Wilson has expressed concern for the WS4P wells; these may require an archeological survey.

Long Term Groundwater Monitoring

- In commenting on the LTGM Plan Assessment for the December 2002 Event (10/16 Letter), Todd Borci questioned why MW-180, MW-182 and MW-185 did not have 3 rounds of data and therefore were not included in the December LTGM round. Marc Grant (AMEC) indicated that these wells were installed between October/November of 2001 and were first sampled in January 2002. The third sampling round was completed last week.
- Mr. Borci asked Larry Pannell (Jacobs) about wells 84MW0004 and 84MW0005 that are upgradient of MW-18 (a well with 3 rounds of RDX detections), whether these wells would be sampled under the IRP program. Mr. Pannell indicated that some wells had been recently added to the ROD for LTGM. Mr. Pannell to check on these specific locations and sampling frequency.
- Mr. Borci indicated that EPA would likely have questions/comments on the December LTGM letter update regarding the Schooner Pass well and some of the other wells.
- Mr. Grant indicated the LTGM was scheduled to start at the end of November.

Bourne Update

Heather Sullivan (ACE) summarized new information on the Bourne investigation.

- Validated data were received for perchlorate in MW-233. Perchlorate was detected at 2.2 ppb in the M3 screen.
- The Draft Bourne Response Plan will be distributed in early November.
- ROA has been submitted for proposed well WSP-4 and other two contingency drilling locations upgradient of WS-4.

- Comments were received from the Bourne Water District (BWD) on the Guard's RCL for the preliminary Response Plan. These comments were discussed in the meeting with BWD Wednesday, 10/16. Ben Gregson indicated that the Draft Response Plan would address BWD comments and the recent data. Any continuing disagreements on the scope of the plan would be addressed in comments on the Draft Response Plan.
- Leo Yuskus (Haley and Ward) indicated the BWD had not been satisfied with the Guard's responses to their comments. There had been no agreement on additional well installations and there had been too much verbiage citing the need for "further evaluation". The BWD was looking forward to the next draft not predicating actions on activities that needed to be done.
- Karen Wilson indicated cultural resource issues had been identified for proposed well WS4P-4 and any additional wells that might be proposed in this area upgradient of WS-4. A broad area upgradient of the well was identified as a moderately culturally sensitive area. Therefore, an archeological survey would be required to determine if it was a historical site. The time needed to complete the actual survey was likely less than a week, however the overall SHPO review/approval and contracting process may result in a 3-6 month delay in implementing well installation. Mike Minior (AFCEE) questioned the necessity of the survey based on his experience with IRP protocols that did not involve a SHPO review process. Len Pinaud (MADEP) indicated that the IAGWSP was committed to following the legal process, as they understood it. Ms. Wilson to discuss the requirements further with Dr. Goodfellow. Gina Tyo (ACE) to investigate contracts/contractors available to complete the archeological survey. Mr. Yuskus suggested the survey be contracted for a broad area to include all proposed well locations that would need to be eventually installed.
- Leo Yuskus indicated that DEP Water Supply had reviewed the four drilling locations proposed by Haley and Ward for upgradient wells and had requested two additional wells, one between WS4P-1 and P-2 and one north of one of these wells. Mr. Yuskus stated the BWD could not wait for the serial installation of all these wells based on sampling results, because the BWD objectives were to have WS-4 permitted for use by the spring, in order for it to be on line for emergency use in the summer. The BWD viewed these wells as investigation wells, since they were to be required to assess the groundwater quality in the area upgradient of the well to determine if there were impacts from perchlorate. After the well was permitted, the determination of which, or if, these wells could be used as chemical monitoring wells or if additional chemical monitoring wells were needed, would be made by DEP Water Supply.
- Len Pinaud surmised that the IAGWSPO and BWD had different objectives. In addition, the BWD wants the investigatory process expedited to meet their water supply needs by next spring.
- Mike Minior (AFCEE) stated that if DEP Water Supply put the requirements for additional monitoring wells as part of the permitting process in writing (document the requirements), prior AFCEE funding could be accessed to install these wells. However, the BWD would be in charge of the installation. Mr. Yuskus responded that it would be much easier for the IAGWSP to install the wells since they had a set process already established.
- Meghan Cassidy and Todd Borci (EPA) expressed the EPA's desire to become involved with the decision making process to assist the BWD with their objectives. It was agreed that the agencies involvement would be most appropriate once the Draft Response Plan was received.
- Ms. Cassidy further explained that the EPA Drinking Water Section was briefed on the status of the BWD perchlorate issue and were available for technical support – specific questions or specific needs. The Drinking Water Section had relayed just this week that a promulgated MCL for perchlorate is several years off. However, a revised reference dose for perchlorate is in internal review and will be published in the IRIS database likely at the

beginning of the calendar year. This dose could be used to set a cleanup level and a health advisory.
- Leo Yuskus also indicated there had been no discussions of wellhead treatment for Water Supply Wells 2 or 5, which are being pumped at approximately 18 hours/day.

Miscellaneous
- Don Wood (ACE) indicated there was one outstanding issue pursuant to finalizing the Demo Area 2 Workplan. The EPA had requested that the downgradient proposed wells be sampled for perchlorate, even though perchlorate had not been detected in upgradient wells in the Demo 2 area. Ben Gregson (IAGWSPO) indicated that although the Guard did not favor sampling for analytes in downgradient wells when upgradient well results were non detect, he agreed to the analysis for perchlorate to expedite finalizing the plan. Mr. Wood to draft MOR summarizing the agreement.

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:

Bourne Wellfield

- Groundwater samples from 97-2, 02-13M2, M3, MW-80M1, M2, MW-213M2, and MW-226M2 had detections of perchlorate. The results were similar to the previous sampling rounds.

- Groundwater samples from MW-226M3 had a detection of perchlorate. This is the first detection of perchlorate in this well.

- Fourteen groundwater samples from Bourne supply wells, monitoring wells, and spring had detections of chloroform.

Central Impact Area

- Groundwater samples from MW-87M1, M2, MW-88M2, MW-89M1 and duplicate, M2 and M3 had detections of explosives that were confirmed by PDA spectra. The results were similar to previous sampling rounds, except that this is first analysis with the method 8330NX at these wells.

- Groundwater samples from MW-235M1 and duplicate had detections of RDX and HMX that were confirmed by PDA spectra. The detections of explosives were consistent with the profile results.

Southeast Ranges

- Groundwater samples from MW-166M3 and duplicate had a detection of RDX that was confirmed by PDA spectra. The results were similar to previous sampling rounds, except that this is the first analysis with the method 8330NX at this well.

- Groundwater samples from MW-234M1 had detections of 2A-DNT, 4A-DNT, RDX and HMX that were confirmed by PDA spectra. The detections of explosives were consistent with the profile results.

- Profile samples from MW-243 (J3P-31) had detections of explosives, VOCs and perchlorate. 2,6 DNT was detected and confirmed by PDA spectra, at 161 feet below the water table. Perchlorate was detected in five intervals between 1 and 41 feet below the water table. Well screens were set at the depths corresponding to the highest perchlorate detections (1 to 11 ft bwt and16 to 26 ft bwt) and at a depth (46 to 56 ft bwt) corresponding to the clean zone below the perchlorate detections.

3. DELIVERABLES SUBMITTED

Draft Method Comparability Study Results for Explosives in Soil	10/18/2002
Weekly Progress Update October 7 - October 11, 2002	10/18/2002

4. SCHEDULED ACTIONS

Scheduled actions for the week of October 14 include complete well installation of MW-243 (J3P-31) and MW-244 (J1P-1), and commence drilling of MW-245 (J1P-17).

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. Soil sampling, to support the ecological risk characterization and to provide additional delineation will be implemented next week. UXO clearance will be initiated next week for proposed drilling locations D1P-16, D1P-17, and D1P-18.

TABLE 2
SAMPLING PROGRESS
10/12/2002 - 10/19/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
G243DUE	FIELDQC	10/16/2002	FIELDQC	0.00	0.00		
G244DHE	FIELDQC	10/15/2002	FIELDQC	0.00	0.00		
M-3D-E	FIELDQC	10/14/2002	FIELDQC	0.00	0.00		
M-6C-E	FIELDQC	10/16/2002	FIELDQC	0.00	0.00		
M-6C-T	FIELDQC	10/16/2002	FIELDQC	0.00	0.00		
M-7C-E	FIELDQC	10/17/2002	FIELDQC	0.00	0.00		
M-7C-T	FIELDQC	10/17/2002	FIELDQC	0.00	0.00		
M-7D-E	FIELDQC	10/14/2002	FIELDQC	0.00	0.00		
TW1-88AE	FIELDQC	10/15/2002	FIELDQC	0.00	0.00		
W166M2T	FIELDQC	10/14/2002	FIELDQC	0.00	0.00		
W217M3T	FIELDQC	10/15/2002	FIELDQC	0.00	0.00		
W234M2T	FIELDQC	10/18/2002	FIELDQC	0.00	0.00		
XXSDW261160E	FIELDQC	10/18/2002	FIELDQC	0.00	0.00		
4036000-01G	4036000-01G	10/15/2002	GROUNDWATER			6.00	12.00
4036000-03G	4036000-03G	10/15/2002	GROUNDWATER	60.00	60.00	6.00	12.00
4036000-04G	4036000-04G	10/15/2002	GROUNDWATER			6.00	12.00
4036000-06G	4036000-06G	10/15/2002	GROUNDWATER			6.00	12.00
4036000-06GD	4036000-06G	10/15/2002	GROUNDWATER			6.00	12.00
97-2E-A	97-2E	10/14/2002	GROUNDWATER	94.50	94.50	0.00	49.80
M-2B-A	M-2B	10/16/2002	GROUNDWATER		65.00	4.25	4.25
M-2C-A	M-2C	10/16/2002	GROUNDWATER		75.00	14.25	14.25
M-2D-A	M-2D	10/16/2002	GROUNDWATER		85.00	24.25	24.25
M-3B-A	M-3B	10/14/2002	GROUNDWATER		65.00		5.43
M-3C-A	M-3C	10/14/2002	GROUNDWATER		75.00		15.43
M-3D-A	M-3D	10/14/2002	GROUNDWATER		85.00		25.43
M-6B-A	M-6B	10/16/2002	GROUNDWATER		59.00		6.92
M-6C-A	M-6C	10/16/2002	GROUNDWATER		69.00		20.54
M-6D-A	M-6D	10/15/2002	GROUNDWATER		79.00		30.73
M-7B-A	M-7B	10/17/2002	GROUNDWATER		55.00	2.16	2.16
M-7C-A	M-7C	10/17/2002	GROUNDWATER		65.00	8.16	8.16
M-7D-A	M-7D	10/14/2002	GROUNDWATER		75.00		18.16
TW1-88AA	1-88	10/15/2002	GROUNDWATER	102.90	102.90	0.00	67.40
W02-01M1A	02-01	10/18/2002	GROUNDWATER	105.00	105.00	42.90	52.90
W02-01M2A	02-01	10/18/2002	GROUNDWATER	93.00	93.00	30.90	40.90
W02-03M1A	02-03	10/18/2002	GROUNDWATER	140.00	140.00	86.10	96.10
W02-03M2A	02-03	10/18/2002	GROUNDWATER	102.00	102.00	48.15	58.15
W02-03M3A	02-03	10/18/2002	GROUNDWATER	85.00	85.00	31.05	41.05
W02-05M1A	02-05	10/18/2002	GROUNDWATER	120.00	120.00	81.44	91.44
W02-12M1A	02-12	10/15/2002	GROUNDWATER	119.00	119.00	58.35	68.35
W02-12M2A	02-12	10/15/2002	GROUNDWATER	104.00	104.00	43.21	53.21
W02-12M3A	02-12	10/15/2002	GROUNDWATER	89.00	89.00	28.22	38.22
W02-13M1A	02-13	10/15/2002	GROUNDWATER	108.00	108.00	58.33	68.33
W02-13M2A	02-13	10/15/2002	GROUNDWATER	93.00	93.00	44.20	54.20
W02-13M3A	02-13	10/15/2002	GROUNDWATER	78.00	78.00	28.30	38.30

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
10/12/2002 - 10/19/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W187DDA	MW-187	10/17/2002	GROUNDWATER	316.00	316.00	199.50	209.50
W187M1A	MW-187	10/16/2002	GROUNDWATER	170.00	170.00	51.30	61.30
W187SSA	MW-187	10/17/2002	GROUNDWATER	113.00	113.00	0.00	10.00
W189SSA	MW-189	10/17/2002	GROUNDWATER	104.00	104.00	0.00	7.00
W190M1A	MW-190	10/15/2002	GROUNDWATER	155.00	155.00	44.32	54.32
W190M2A	MW-190	10/16/2002	GROUNDWATER	120.00	120.00	9.30	19.30
W202M1A	MW-202	10/17/2002	GROUNDWATER	274.00	274.00	117.70	127.70
W202M2A	MW-202	10/17/2002	GROUNDWATER	225.00	225.00	68.00	78.00
W203M1A	MW-203	10/17/2002	GROUNDWATER	176.00	176.00	17.50	27.50
W203M1D	MW-203	10/17/2002	GROUNDWATER	176.00	176.00	17.50	27.50
W206M1A	MW-206	10/15/2002	GROUNDWATER	188.50	188.50	19.57	29.57
W207M1A	MW-207	10/18/2002	GROUNDWATER	264.00	264.00	100.52	110.52
W207M2A	MW-207	10/18/2002	GROUNDWATER	234.00	234.00	79.33	89.33
W208M1A	MW-208	10/18/2002	GROUNDWATER	205.00	205.00	56.18	66.18
W208M2A	MW-208	10/18/2002	GROUNDWATER	168.00	168.00	18.41	28.41
W208M2D	MW-208	10/18/2002	GROUNDWATER	168.00	168.00	18.41	28.41
W209M1A	MW-209	10/17/2002	GROUNDWATER	250.00	250.00	121.00	131.00
W209M2A	MW-209	10/17/2002	GROUNDWATER	230.00	230.00	110.00	120.00
W213M3A	MW-213	10/16/2002	GROUNDWATER	82.00	82.00	29.38	34.38
W216M1A	MW-216	10/17/2002	GROUNDWATER	263.00	263.00	51.19	61.19
W216M2A	MW-216	10/17/2002	GROUNDWATER	246.00	246.00	34.17	44.17
W216SSA	MW-216	10/18/2002	GROUNDWATER	209.00	209.00	0.00	7.13
W217M1A	MW-217	10/17/2002	GROUNDWATER	153.00	153.00	143.00	148.00
W217M2A	MW-217	10/14/2002	GROUNDWATER	143.00	143.00	133.00	138.00
W217M3A	MW-217	10/15/2002	GROUNDWATER	106.00	106.00	96.00	101.00
W217M4A	MW-217	10/14/2002	GROUNDWATER	73.00	73.00	63.00	68.00
W218M1A	MW-218	10/15/2002	GROUNDWATER	133.00	133.00	123.00	128.00
W218M2A	MW-218	10/15/2002	GROUNDWATER	103.00	103.00	93.00	98.00
W218M3A	MW-218	10/15/2002	GROUNDWATER	83.00	83.00	73.00	78.00
W234M1A	MW-234	10/16/2002	GROUNDWATER	130.00	140.00	25.30	35.30
W234M2A	MW-234	10/17/2002	GROUNDWATER	110.00	120.00	1.60	11.60
W236SSA	MW-236	10/16/2002	GROUNDWATER	96.00	106.00	0.00	10.00
W237M1A	MW-237	10/16/2002	GROUNDWATER	80.00	90.00	29.12	39.12
W237SSA	MW-237	10/16/2002	GROUNDWATER	49.00	59.00	0.00	10.00
W238M1A	MW-238	10/16/2002	GROUNDWATER	183.00	193.00	85.46	95.46
W238M2A	MW-238	10/16/2002	GROUNDWATER	125.00	135.00	27.55	37.55
W67SSA	MW-67	10/15/2002	GROUNDWATER	171.00	171.00	1.00	11.00
XXSDW261160	261160	10/18/2002	GROUNDWATER	160.00	160.00	10.00	20.00
XXSDW261160D	261160	10/18/2002	GROUNDWATER	160.00	160.00	10.00	20.00
DW101602-NV	GAC WATER	10/16/2002	IDW				
DW101802-NV	GAC WATER	10/18/2002	IDW				
G243DQA	MW-243	10/15/2002	PROFILE	230.00	230.00	161.50	161.50
G243DRA	MW-243	10/15/2002	PROFILE	240.00	240.00	171.50	171.50
G243DSA	MW-243	10/15/2002	PROFILE	250.00	250.00	181.50	181.50

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TABLE 2
SAMPLING PROGRESS
10/12/2002 - 10/19/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
G243DTA	MW-243	10/15/2002	PROFILE	260.00	260.00	191.50	191.50
G243DUA	MW-243	10/16/2002	PROFILE	270.00	270.00	201.50	201.50
G244DDA	MW-244	10/15/2002	PROFILE	150.00	150.00	30.10	30.10
G244DEA	MW-244	10/15/2002	PROFILE	160.00	160.00	40.10	40.10
G244DFA	MW-244	10/15/2002	PROFILE	170.00	170.00	50.10	50.10
G244DGA	MW-244	10/15/2002	PROFILE	180.00	180.00	60.10	60.10
G244DHA	MW-244	10/15/2002	PROFILE	190.00	190.00	70.10	70.10
G244DHD	MW-244	10/15/2002	PROFILE	190.00	190.00	70.10	70.10
G244DIA	MW-244	10/15/2002	PROFILE	200.00	200.00	80.10	80.10
G244DJA	MW-244	10/15/2002	PROFILE	210.00	210.00	90.10	90.10
G244DKA	MW-244	10/15/2002	PROFILE	220.00	220.00	100.10	100.10
G244DLA	MW-244	10/16/2002	PROFILE	230.00	230.00	110.10	110.10
G244DMA	MW-244	10/16/2002	PROFILE	240.00	240.00	120.10	120.10
G244DNA	MW-244	10/17/2002	PROFILE	250.00	250.00	130.10	130.10
G244DOA	MW-244	10/17/2002	PROFILE	260.00	260.00	140.10	140.10
G244DPA	MW-244	10/17/2002	PROFILE	270.00	270.00	150.10	150.10
G244DQA	MW-244	10/17/2002	PROFILE	280.00	280.00	160.10	160.10
G244DRA	MW-244	10/17/2002	PROFILE	290.00	290.00	170.10	170.10
G244DSA	MW-244	10/17/2002	PROFILE	300.00	300.00	180.10	180.10
J2.F.T2H.XC1.1.0	J2 Target 2H Excavati	10/17/2002	SOIL GRID	0.00	3.50		
J2.F.T2H.XC1.2.0	J2 Target 2H Excavati	10/17/2002	SOIL GRID	3.33	3.50		
J2.F.T2H.XC1.3.0	J2 Target 2H Excavati	10/17/2002	SOIL GRID	0.50	2.00		

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 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 09/28/02 - 10/19/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W02-13M2A	02-13	10/15/2002	GROUNDWATEF	83.00	93.00	44.20	54.20	E314.0	PERCHLORATE	
W02-13M3A	02-13	10/15/2002	GROUNDWATEF	68.00	78.00	28.30	38.30	E314.0	PERCHLORATE	
W166M3A	MW-166	10/04/2002	GROUNDWATEF	125.00	135.00	19.00	29.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W166M3D	MW-166	10/04/2002	GROUNDWATEF	125.00	135.00	19.00	29.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W213M2A	MW-213	10/10/2002	GROUNDWATEF	89.00	99.00	41.15	51.15	E314.0	PERCHLORATE	
W226M2A	MW-226	10/11/2002	GROUNDWATEF	175.00	185.00	61.70	71.70	E314.0	PERCHLORATE	
W226M3A	MW-226	10/10/2002	GROUNDWATEF	135.00	145.00	21.53	31.53	E314.0	PERCHLORATE	
W234M1A	MW-234	10/16/2002	GROUNDWATEF	130.00	140.00	25.30	35.30	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
W234M1A	MW-234	10/16/2002	GROUNDWATEF	130.00	140.00	25.30	35.30	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
W234M1A	MW-234	10/16/2002	GROUNDWATEF	130.00	140.00	25.30	35.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W234M1A	MW-234	10/16/2002	GROUNDWATEF	130.00	140.00	25.30	35.30	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W235M1A	MW-235	10/07/2002	GROUNDWATEF	154.00	164.00	25.30	35.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W235M1A	MW-235	10/07/2002	GROUNDWATEF	154.00	164.00	25.30	35.30	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W235M1D	MW-235	10/07/2002	GROUNDWATEF	154.00	164.00	25.30	35.30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W235M1D	MW-235	10/07/2002	GROUNDWATEF	154.00	164.00	25.30	35.30	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W80M1A	MW-80	10/10/2002	GROUNDWATEF	130.00	140.00	86.00	96.00	E314.0	PERCHLORATE	
W80M2A	MW-80	10/10/2002	GROUNDWATEF	100.00	110.00	56.00	66.00	E314.0	PERCHLORATE	
W87M1A	MW-87	10/04/2002	GROUNDWATEF	194.00	204.00	62.00	72.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W87M1A	MW-87	10/04/2002	GROUNDWATEF	194.00	204.00	62.00	72.00	8330NX	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W87M2A	MW-87	10/04/2002	GROUNDWATEF	169.00	179.00	37.00	47.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W88M2A	MW-88	10/04/2002	GROUNDWATEF	213.00	223.00	72.00	82.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W88M2A	MW-88	10/04/2002	GROUNDWATEF	213.00	223.00	72.00	82.00	8330NX	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W89M1A	MW-89	10/04/2002	GROUNDWATEF	234.00	244.00	92.00	102.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W89M1D	MW-89	10/04/2002	GROUNDWATEF	234.00	244.00	92.00	102.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W89M2A	MW-89	10/04/2002	GROUNDWATEF	214.00	224.00	72.00	82.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W89M2A	MW-89	10/04/2002	GROUNDWATEF	214.00	224.00	72.00	82.00	8330NX	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W89M3A	MW-89	10/04/2002	GROUNDWATEF	174.00	184.00	32.00	42.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
XXM972-A	97-2	10/09/2002	GROUNDWATEF	75.00	85.00	53.00	63.00	E314.0	PERCHLORATE	
M-2B-A	M-2B	10/16/2002	GROUNDWATEF		65.00		4.25	OC21V	CHLOROFORM	
M-2C-A	M-2C	10/16/2002	GROUNDWATEF		75.00		14.25	OC21V	CHLOROFORM	
M-2D-A	M-2D	10/16/2002	GROUNDWATEF		85.00		24.25	OC21V	CHLOROFORM	
M-3B-A	M-3B	10/14/2002	GROUNDWATEF		65.00		5.43	OC21V	CHLOROFORM	

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.
SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BGS
SED = SAMPLE COLLECTION END DEPTH IN FEET BGS
BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET
BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET
PDA/YES = Photo Diode Array, Detect Confirmed
PDA/NO = Photo Diode Array, Detect Not Confirmed
* = Interference in sample

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 09/28/02 - 10/19/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
M-3C-A	M-3C	10/14/2002	GROUNDWATEF		75.00		15.43	OC21V	CHLOROFORM	
M-3D-A	M-3D	10/14/2002	GROUNDWATEF		85.00		25.43	OC21V	CHLOROFORM	
M-6B-A	M-6B	10/16/2002	GROUNDWATEF		59.00		6.92	OC21V	CHLOROFORM	
M-6C-A	M-6C	10/16/2002	GROUNDWATEF		69.00		20.54	OC21V	CHLOROFORM	
M-7D-A	M-7D	10/14/2002	GROUNDWATEF		75.00		18.16	OC21V	CHLOROFORM	
SPRING1-A	SPRING1	10/11/2002	GROUNDWATEF			0.00	0.00	OC21V	CHLOROFORM	
W02-01M1A	02-01	10/18/2002	GROUNDWATEF	95.00	105.00	42.90	52.90	OC21V	CHLOROFORM	
W02-01M2A	02-01	10/18/2002	GROUNDWATEF	83.00	93.00	30.90	40.90	OC21V	CHLOROFORM	
W226M1A	MW-226	10/11/2002	GROUNDWATEF	285.00	295.00	172.00	182.00	OC21V	CHLOROFORM	
W226M2A	MW-226	10/11/2002	GROUNDWATEF	175.00	185.00	61.70	71.70	OC21V	CHLOROFORM	
G243DAA	MW-243	10/07/2002	PROFILE	70.00	70.00	1.50	1.50	8330N	2,6-DINITROTOLUENE	NO*
G243DAA	MW-243	10/07/2002	PROFILE	70.00	70.00	1.50	1.50	8330N	2-NITROTOLUENE	NO
G243DAA	MW-243	10/07/2002	PROFILE	70.00	70.00	1.50	1.50	8330N	NITROGLYCERIN	NO
G243DAA	MW-243	10/07/2002	PROFILE	70.00	70.00	1.50	1.50	8330N	PICRIC ACID	NO
G243DAA	MW-243	10/07/2002	PROFILE	70.00	70.00	1.50	1.50	E314.0	PERCHLORATE	
G243DAA	MW-243	10/07/2002	PROFILE	70.00	70.00	1.50	1.50	OC21V	CHLOROFORM	
G243DBA	MW-243	10/07/2002	PROFILE	80.00	80.00	11.50	11.50	8330N	1,3,5-TRINITROBENZENE	NO
G243DBA	MW-243	10/07/2002	PROFILE	80.00	80.00	11.50	11.50	8330N	2,6-DINITROTOLUENE	NO*
G243DBA	MW-243	10/07/2002	PROFILE	80.00	80.00	11.50	11.50	8330N	2-NITROTOLUENE	NO
G243DBA	MW-243	10/07/2002	PROFILE	80.00	80.00	11.50	11.50	8330N	4-NITROTOLUENE	NO
G243DBA	MW-243	10/07/2002	PROFILE	80.00	80.00	11.50	11.50	8330N	NITROGLYCERIN	NO
G243DBA	MW-243	10/07/2002	PROFILE	80.00	80.00	11.50	11.50	8330N	PICRIC ACID	NO
G243DBA	MW-243	10/07/2002	PROFILE	80.00	80.00	11.50	11.50	E314.0	PERCHLORATE	
G243DBA	MW-243	10/07/2002	PROFILE	80.00	80.00	11.50	11.50	OC21V	CHLOROFORM	
G243DCA	MW-243	10/08/2002	PROFILE	90.00	90.00	21.50	21.50	8330N	1,3,5-TRINITROBENZENE	NO
G243DCA	MW-243	10/08/2002	PROFILE	90.00	90.00	21.50	21.50	8330N	2,6-DINITROTOLUENE	NO*
G243DCA	MW-243	10/08/2002	PROFILE	90.00	90.00	21.50	21.50	8330N	3-NITROTOLUENE	NO*
G243DCA	MW-243	10/08/2002	PROFILE	90.00	90.00	21.50	21.50	8330N	4-NITROTOLUENE	NO
G243DCA	MW-243	10/08/2002	PROFILE	90.00	90.00	21.50	21.50	8330N	NITROGLYCERIN	NO
G243DCA	MW-243	10/08/2002	PROFILE	90.00	90.00	21.50	21.50	8330N	PICRIC ACID	NO
G243DCA	MW-243	10/08/2002	PROFILE	90.00	90.00	21.50	21.50	E314.0	PERCHLORATE	
G243DCA	MW-243	10/08/2002	PROFILE	90.00	90.00	21.50	21.50	OC21V	CHLOROFORM	

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* = Interference in sample

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 09/28/02 - 10/19/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G243DDA	MW-243	10/08/2002	PROFILE	100.00	100.00	31.50	31.50	8330N	1,3,5-TRINITROBENZENE	NO
G243DDA	MW-243	10/08/2002	PROFILE	100.00	100.00	31.50	31.50	E314.0	PERCHLORATE	
G243DDA	MW-243	10/08/2002	PROFILE	100.00	100.00	31.50	31.50	OC21V	CHLOROFORM	
G243DEA	MW-243	10/08/2002	PROFILE	110.00	110.00	41.50	41.50	E314.0	PERCHLORATE	
G243DEA	MW-243	10/08/2002	PROFILE	110.00	110.00	41.50	41.50	OC21V	TETRACHLOROETHYLENE(PCE	
G243DGA	MW-243	10/08/2002	PROFILE	130.00	130.00	61.50	61.50	OC21V	CHLOROFORM	
G243DHA	MW-243	10/08/2002	PROFILE	140.00	140.00	71.50	71.50	OC21V	CHLOROFORM	
G243DJA	MW-243	10/08/2002	PROFILE	160.00	160.00	91.50	91.50	OC21V	METHYL ETHYL KETONE (2-BUT	
G243DKA	MW-243	10/08/2002	PROFILE	170.00	170.00	101.50	101.50	OC21V	CHLOROFORM	
G243DLA	MW-243	10/09/2002	PROFILE	180.00	180.00	111.50	111.50	OC21V	CHLOROFORM	
G243DOA	MW-243	10/10/2002	PROFILE	210.00	210.00	141.50	141.50	8330N	NITROGLYCERIN	NO
G243DPA	MW-243	10/10/2002	PROFILE	220.00	220.00	151.50	151.50	8330N	NITROGLYCERIN	NO
G243DPA	MW-243	10/10/2002	PROFILE	220.00	220.00	151.50	151.50	OC21V	CHLOROFORM	
G243DQA	MW-243	10/15/2002	PROFILE	230.00	230.00	161.50	161.50	8330N	1,3,5-TRINITROBENZENE	NO
G243DQA	MW-243	10/15/2002	PROFILE	230.00	230.00	161.50	161.50	8330N	1,3-DINITROBENZENE	NO
G243DQA	MW-243	10/15/2002	PROFILE	230.00	230.00	161.50	161.50	8330N	2,6-DINITROTOLUENE	YES
G243DQA	MW-243	10/15/2002	PROFILE	230.00	230.00	161.50	161.50	8330N	NITROGLYCERIN	NO
G243DQA	MW-243	10/15/2002	PROFILE	230.00	230.00	161.50	161.50	8330N	PICRIC ACID	NO
G243DRA	MW-243	10/15/2002	PROFILE	240.00	240.00	171.50	171.50	OC21V	METHYL ETHYL KETONE (2-BUT	
G243DTA	MW-243	10/15/2002	PROFILE	260.00	260.00	191.50	191.50	8330N	2,6-DINITROTOLUENE	NO
G243DTA	MW-243	10/15/2002	PROFILE	260.00	260.00	191.50	191.50	8330N	NITROGLYCERIN	NO
G243DUA	MW-243	10/16/2002	PROFILE	270.00	270.00	201.50	201.50	8330N	NITROGLYCERIN	NO
G243DUA	MW-243	10/16/2002	PROFILE	270.00	270.00	201.50	201.50	OC21V	ACETONE	
G243DUA	MW-243	10/16/2002	PROFILE	270.00	270.00	201.50	201.50	OC21V	METHYL ETHYL KETONE (2-BUT	

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