WEEKLY PROGRESS UPDATE
FOR AUGUST 5 – AUGUST 9, 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 August 5 through August 9, 2002.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of August 9 is summarized in Table 1.

Table 1. Drilling progress as of August 9, 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)	330	113.6	
MW-234	J-2 Range (J2P-12)	130	22.1	

bgs = below ground surface
bwt = below water table

Continued drilling of MW-233 (WS4P-2) and commenced drilling of MW-234 (J2P-12). Continued well development for newly installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-233 and MW-234. Groundwater samples were collected from Bourne supply, sentry, far field and monitoring wells, as part of the Site-Wide Perchlorate sampling, as part of the August Long Term Groundwater monitoring round, and from newly installed wells. Water samples were collected from the GAC treatment system.

As part of the Munitions Survey Project, pre-detonation and post-detonation soil samples were collected from the Scar Rocket site.

The following are the notes from the August 8, 2002 Technical Team meeting at the IAGWSPO:

Participants

MAJ Bill Meyer (IAGWSPO)	Tina Dolen (IAGWSPO)	Karen Wilson (IAGWSPO)
Bill Gallagher (IAGWSPO)	Dave Hill (IAGWSPO)	Will Tyminski (MAARNG)
Todd Borci (EPA-phone)	Meghan Cassidy (EPA)	Desiree Moyer (EPA)
Jim Murphy (EPA)	Mark Panni (MADEP)	Len Pinaud (MADEP)
Dave Williams (MDPH)	Gina Tyo (ACE)	Ed Wise (ACE)
Ellen Iorio (ACE-phone)	Rob Foti (ACE)	LT Jeffrey Swartzlander (ACE)
Rob Clemens (AMEC)	Kim Harriz (AMEC)	Maria Pologruto (AMEC)
John Rice (AMEC)	Jay Clausen (AMEC)	Mark Applebee (AMEC)
Dick Skryness (ECC)	Larry Pannell (Jacobs)	Larry Hudgins (Tetra Tech)
Leo Montroy (Tt-phone)	Susan Stewart (Tt-phone)	

Punchlist Items

#3 Provide comments on ARA's Perchlorate method test results for select Bourne wells (DEP). Len Pinaud (MADEP) indicated that MADEP had no comment at this time.

#5 Provide access update on private Snake Pond property (IAGWSPO). Property owners have indicated that they will delay signing the agreement and do not wish work to proceed, prior to early September after the school year begins.

#7 Discuss reporting of Perchlorate <1ppb with Dan Mahoney (Sandwich) (EPA). Todd Borci (EPA) spoke with Mr. Mahoney and provided him with information regarding the perchlorate MDL studies. The Sandwich Water Board meeting was this week and Mr. Borci was waiting to hear further from Mr. Mahoney. Len Pinaud (MADEP) also discussed the issue with Jeff Rose (MADEP Water Supply) who may also contact Mr. Mahoney.

#8 Determine POC for Schooner Pass Condo Association to discuss sampling of private supply well (IAGWSPO). Bill Gallagher (IAGWSPO) indicated that the property manager had talked to MADEP, verbally agreeing to have the well sampled but at the same time explaining that the association had not received results from the two previous sampling events. AMEC to check to make sure results are forwarded to the correct address. Mr. Gallagher has called the property manager to arrange sampling, but has not received a response.

MSP3 Update

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

AirMag. Excavation of 22 anomalies to commence on 8/12 and proceed for a couple days. AirMag work will then be placed on hiatus while work is conducted at N Range and will then resume when the work at N Range is completed.

SCAR Site. Vegetation & grubbing is ongoing, approximately 75% complete. Surface clearance of UXO begins today. The geophysical survey was conducted for one day after the clearance of the CIAP-24 well pad was completed and will continue today as grubbing proceeds.

N Range. Intrusive investigation to commence 8/14. Sandwich notification protocols to be discussed with Tina Dolen (IAGWSPO) prior to starting investigation.

MSP Deep Bottom Pond Ecological Issues

Karen Wilson (IAGWSPO) explained issues regarding the possible presence of an endangered plant species (Ovate Spike Rush) at Deep Bottom Pond.

- Although difficult to definitively identify, it is suspected that the Ovate Spike Rush is prevalent in the pond, covering several of the anomalous areas selected for excavation. There are a few anomalous areas where the plant is not present. The concern is not only that the plant would be disturbed during excavation of these areas but also that it could be impacted in the pond area in general as the investigation proceeds. The plant will be dormant in October/November after the growing season; disturbance at this time will cause less impact to the plant. It is also anticipated that water levels in the pond will still be low enough in the fall to allow access to the areas of interest. The plant has also been tentatively identified in Succonsette Pond.
- Todd Borci (EPA) requested that the Guard evaluate two options to investigate the pond anomalies: (1) Look at investigating accessible anomalies where the plant would not be disturbed in the near future, returning later to address the remaining anomalies. (2) Mobilize in the fall to investigate all Deep Bottom Pond anomalies.
- Ellen Iorio (ACE) indicated that MSP3 Tasks related to the ponds had not been prioritized to be completed before the end of 2002, and therefore these tasks were not currently funded. However, the Corps now understood that EPA wants these areas to be a higher priority and

the Corps is working on procuring funding. Workplans will not be provided for these sites; the work will proceed in accordance with the MSP1 and 2 Report recommendations. EPA agreed that this would be an acceptable way to proceed.

- Len Pinaud (MADEP) inquired about coordination with the Conservation Commission. Ms. Iorio and Ms. Wilson indicated that ConsCom could be approached when the work was actually scoped.

Demo Area 1, Soil RRA/RAM

- Len Pinaud (MADEP) related that the Demo 1 Area RAM was discussed in an internal MADEP meeting on 8/5. MADEP agreed that it was a workable action and that the Guard should proceed in submitting the RAM Plan.
- Mr. Pinaud recommended that the RAM Plan be as complete as possible with emphasis on the following key points: multiple disposal options; feasibility studies for soil treatment; plans for soil restoration including identifying a source of backfill; thorough plans for post-excavation sampling; and plans for off-post disposal with specific engineering controls, including controls for dust suppression.

Central Impact Area Update

Bill Gallagher (IAGWSPO) led the discussion regarding Central Impact Area issues.

- UXO clearance was completed at CIAP-24. Clearance took 42 days for this well pad.
- UXO clearance for J1P-18 will be similarly difficult.
- In response to EPA's request for scoping additional RDX delineation wells, Jay Clausen (AMEC) concurred with EPA that additional monitoring wells were needed downgradient of MW-206 and MW-205. Additional wells would be scoped using particle tracks. Mr. Clausen preferred to wait to see the results of J1P-16 and J1P-18 before scoping another well east of MW-205.
- At Todd Borci's request, the Guard agreed to provide an updated Central Impact Area plume map (incorporating EPA's comments last week) with the new proposed well locations. Karen Wilson (IAGWSPO) to preview locations prior to submission to agencies for possible natural and cultural resource issues. An updated map will be provided to agencies as early as Monday, 8/12. MADEP to review map to assess whether the extent of characterization for RDX would be adequate under the MCP.
- At Mr. Borci's request, the Guard agreed to provide an updated map showing new perchlorate data from site-wide perchlorate characterization efforts at the 8/15 Tech meeting.

Bourne Update

Bill Gallagher (IAGWSPO) led the discussion regarding investigations in the Bourne area.

- New low-level detections of perchlorate were reported for 02-15 and 02-12M3. Weekly and monthly sampling continues.
- Drilling of WS4P-2 is progressing slowly due to loose sands. Drilling will probably be completed by mid next week.
- At the meeting with Bourne Water District yesterday, the BWD inquired about the status of presentations of various treatment technologies for perchlorate and the identification of other vendors.
- Tina Dolen (IAGWSPO) indicated that presentations regarding treatment technologies had been arranged with SAIC (Ion Exchange) and Envirogen (Fludized Bed Reactor) for 8/13 and were to be taped. Ms. Dolen also suggested that Erica Beckvar (AFCEE), who was on the DOD Perchlorate Working Group, be invited to speak on various technologies that the working group has been evaluating over the last few years. Dr. Fred Cannon (Penn State)

was also willing to come, although none of his data from the Bourne study had been provided.

- Todd Borci and Dave Hill (IAGWSPO) agreed that presentations should be arranged with Ms. Beckvar and Dr. Cannon (if he would provide his data). Otherwise invitations to vendors to provide presentations should be limited to those who have operable treatment systems in place. Mr. Borci to forward Ms. Dolen information on another company using Ion Exchange for perchlorate treatment.
- The Bourne model update is complete, model is being calibrated, and particle tracks should be generated by the end of next week.
- The Bourne Perchlorate Workplan is being drafted. Len Pinaud (MADEP) requested that some plan for source characterization be presented at the IART meeting. Guard to discuss a potential scope internally and attempt to provide a draft scope or plan for the agencies to review prior to the IART Dry Run on August 22.

Demo Area 1, D1P-15 Well Installation

Karen Wilson (IAGWSPO) led the discussion regarding ROA issues for the relocation of proposed well D1P-15.

- Ms. Wilson indicated that the SHPO office had not reviewed the ROA for the original proposed location for D1P-15, as the procedures were not yet in place when this ROA was submitted. Therefore, Dr. Susan Goodfellow (MAARNG) felt it was important that the submission of the ROA for the new location follow the newly established procedures. The ROA for D1P-15 was submitted to SHPO on Tuesday, 8/6. Dr. Goodfellow has requested that SHPO expedite the process for this location. There is a legal requirement for the Guard to provide SHPO 30 days to review any activities that will result in surface disturbance. If SHPO does not respond in 30 days, the Guard may proceed with the work, but SHPO still can provide comment. Natural Heritage has been providing review and approvals within 2 weeks.
- Todd Borci requested that a prioritized list of ROAs be forwarded to SHPO. Gina Tyo (ACE) agreed that some sort of process needed to be instituted to work with SHPO so that work would not be delayed. This should include not only a prioritized list of ROAs, but also an explanation of the activities being performed under the IAGWSP.
- Karen Wilson (IAGWSPO) explained that Dr. Goodfellow was attempting to establish a relationship with SHPO in order to obtain a programmatic agreement that would allow Dr. Goodfellow to approve ROAs on site. A key part of such an agreement would be approval of MMR's Integrated Resource Management Plan that will be submitted pending internal review in the coming weeks. Once this Plan is approved, Dr. Goodfellow's efforts to obtain a programmatic agreement may take 3-4 months.
- Update on the ROA process to be provided next week.

J-1 Ranges Proposed Monitoring Wells

Karen Wilson (IAGWSPO) led the discussion on relocations of proposed J-1 Range wells. A figure was distributed showing the location of the proposed monitor wells in relationship to the proposed firebreak.

- J1P-17 was left as originally scoped on an old road scar and in the middle of the ZOC from the Base Water Supply wells. J1P-16 was moved 400 northwest and J1P-18 was moved 100 feet northwest so that the roads to these wells could be incorporated into a proposed firebreak. All three wells are located downgradient of the J-1 Range Interberm Area.
- EPA and MADEP approved the well location for J1P-16/18 as proposed by the Guard.
- Todd Borci requested that J1P-17 location be moved 300 feet west to the edge of the ZOC as shown. Mr. Borci noted that the Zone II will increase in width once it is remodeled using 1.5 million gallons per day. Therefore, J1P-17 will still be located in the ZOC if it is moved

west. Dave Hill (IAGWSP) agreed to relocation of the well as proposed by Mr. Borci. MADEP concurred.

Miscellaneous

- During the site visit yesterday, Todd Borci noted multiple breaches of the fence along the western MMR boundary and evidence of dirt bike use. Mr. Borci requested that the Guard photograph and document all fence breaks and forward these pictures to the agencies. Mr. Borci requested that the Guard keep track of access issues particularly along the western site boundary and how Range Control deals with these issues. Len Pinaud concurred that it was important to start maintaining a record of how well access to MMR is controlled. Bill Gallagher indicated that the Guard would take pictures for the agencies and would discuss documentation/tracking issues internally.
- Todd Borci asked for an update on the status of the SERDUP test bed for UXO characterization that had been stopped because of the number of anomalies found and the discovery of horseshoes and inert rifle grenades. Was this site closed or referred to AFCEE? Dave Hill to check on status with Ben Gregson; added to the punchlist.
- In response to Mr. Borci's request, Gina Tyo (ACE) to ask Bill Holtham (ACE) to update Todd Borci on the status of the investigation of munitions disposal at Osbourne Pond, a site that was being considered under the FUDs program.
- At Desiree Moyer's (EPA) request, MAJ Bill Myer (IAGWSPO) to talk to Shaun Cody (MAARNG) about her request to David Cray for GIS data layers for the base.

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:

- Groundwater samples from Bourne monitoring and sentry wells 97-2; 97-5; 1-88; 02-13M1, M2; and Bourne Far Field wells MW-80M1, M2 and MW-81M2 had detections of perchlorate. The results were similar to the previous sampling rounds.

- Groundwater samples from Bourne monitoring wells 02-02M1, M2 and 02-15M2 had detections of perchlorate. This is the first time perchlorate has been detected in these wells.

- Groundwater samples from Bourne monitoring well 02-13M3 and duplicate had detections of perchlorate. This is the first time since April that perchlorate has been detected in this well.

- Groundwater samples from MW-191M2 (J-1 Range) had detections of RDX and HMX that were confirmed by PDA spectra. The results were similar to the previous sampling rounds.

- Groundwater samples from MW-215M2 (J-2 Range) had detections of RDX and HMX that were confirmed by PDA spectra. This is the first sampling event for this well and the results were consistent with the profile results.

- Groundwater samples from MW-216S (RRA Containment Pad) had a detection of nitroglycerin that was not confirmed by PDA spectra. This is the first sampling event for this well and the results were consistent with the profile results.

- Groundwater samples from three Bourne monitoring wells had detections of chloroform.

3. DELIVERABLES SUBMITTED

Weekly Progress Update for July 22 – July 26, 2002	08/05/02
July 2002 Monthly Progress Report	08/09/02
Weekly Progress Update for July 29 – August 2, 2002	08/09/02
Draft Summary Report January – March 2002 UXO Detonations	08/09/02

4. SCHEDULED ACTIONS

Scheduled actions for the week of August 12 include complete drilling of MW-233 (WS4P-2) and MW-234 (J2P-12).

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. Proposed monitoring well D1P-15 is being rescoped to be located south of MW-231 as part of delineation of the toe of the plume. 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
08/3/2002 - 08/09/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
SR.A.A11.001.1.0	SR.A11.001.R	07/31/2002	CRATER GRAB	3.00	3.17		
SR.A.A11.001.1.D	SR.A11.001.R	07/31/2002	CRATER GRAB	3.00	3.17		
SR.A.A11.001.3.0	SR.A11.001.R	08/01/2002	CRATER GRAB	3.00	3.17		
SR.A.D10.001.3.0	SR.D10.001.R	08/01/2002	CRATER GRAB	3.67	3.83		
SR.A.E12.008.3.0	SR.E12.008.R	08/01/2002	CRATER GRAB	3.33	3.50		
SR.A.E12.008.3.D	SR.E12.008.R	08/01/2002	CRATER GRAB	3.33	3.50		
SR.A.F11.005.2.0	SR.F11.005.R	08/01/2002	CRATER GRAB	1.00	1.17		
SR.A.F11.005.3.0	SR.F11.005.R	08/01/2002	CRATER GRAB	1.00	1.17		
SR.A.F12.005.3.0	SR.F12.005.R	08/01/2002	CRATER GRAB	2.00	2.17		
SR.A.G12.005.3.0	SR.G12.005.R	08/01/2002	CRATER GRAB	2.00	2.17		
SR.A.G12.007.3.0	SR.G12.007.R	08/01/2002	CRATER GRAB	2.50	2.67		
SR.A.H8.013.3.0	SR.H8.013.R	08/01/2002	CRATER GRAB	0.50	0.67		
SR.A.A11.001.2.0	SR.A11.001.R	08/01/2002	CRATER GRID	3.00	3.17		
SR.A.D10.001.1.0	SR.D10.001.R	07/31/2002	CRATER GRID	0.00	0.17		
SR.A.D10.001.2.0	SR.D10.001.R	08/01/2002	CRATER GRID	3.67	3.83		
SR.A.E12.008.1.0	SR.E12.008.R	07/31/2002	CRATER GRID	0.00	0.17		
SR.A.E12.008.2.0	SR.E12.008.R	08/01/2002	CRATER GRID	3.33	3.50		
SR.A.F11.005.1.0	SR.F11.005.R	07/31/2002	CRATER GRID	0.00	0.17		
SR.A.F12.005.1.0	SR.F12.005.R	07/31/2002	CRATER GRID	0.00	0.17		
SR.A.F12.005.2.0	SR.F12.005.R	08/01/2002	CRATER GRID	2.00	2.17		
SR.A.F12.005.2.D	SR.F12.005.R	08/01/2002	CRATER GRID	2.00	2.17		
SR.A.G12.005.1.0	SR.G12.005.R	07/31/2002	CRATER GRID	0.00	0.17		
SR.A.G12.005.2.0	SR.G12.005.R	08/01/2002	CRATER GRID	2.00	2.17		
SR.A.G12.007.1.0	SR.G12.007.R	07/31/2002	CRATER GRID	0.00	0.17		
SR.A.G12.007.2.0	SR.G12.007.R	08/01/2002	CRATER GRID	2.50	2.67		
SR.A.H8.013.1.0	SR.H8.013.R	07/31/2002	CRATER GRID	0.00	0.17		
SR.A.H8.013.2.0	SR.H8.013.R	08/01/2002	CRATER GRID	0.50	0.67		
90PZ0204-E	FIELDQC	08/05/2002	FIELDQC	0.00	0.00		
G233DAE	FIELDQC	08/06/2002	FIELDQC	0.00	0.00		
G233DBE	FIELDQC	08/07/2002	FIELDQC	0.00	0.00		
G233DGE	FIELDQC	08/08/2002	FIELDQC	0.00	0.00		
G233DHT	FIELDQC	08/08/2002	FIELDQC	0.00	0.00		
TW1-88AE	FIELDQC	08/06/2002	FIELDQC	0.00	0.00		
W225M2T	FIELDQC	08/05/2002	FIELDQC	0.00	0.00		
W227M2T	FIELDQC	08/06/2002	FIELDQC	0.00	0.00		
W82M2T	FIELDQC	08/07/2002	FIELDQC	0.00	0.00		
4036000-01G	4036000-01G	08/07/2002	GROUNDWATER				
4036000-03G	4036000-03G	08/07/2002	GROUNDWATER				
4036000-04G	4036000-04G	08/07/2002	GROUNDWATER				
4036000-06G	4036000-06G	08/07/2002	GROUNDWATER				
90PZ0204-A	90PZ0204	08/05/2002	GROUNDWATER	80.00	85.00	70.16	80.16
95-15-A	95-15	08/05/2002	GROUNDWATER				
PPAWSPW-1	PPAWSPW-1	08/06/2002	GROUNDWATER				
PPAWSPW-2	PPAWSPW-2	08/06/2002	GROUNDWATER				

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
08/3/2002 - 08/09/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
RS0001CUSH-A	RS0001CUSH	08/05/2002	GROUNDWATER				
RS0001CUSH-D	RS0001CUSH	08/05/2002	GROUNDWATER				
RS0006GRAC-A	RS0006GRAC	08/05/2002	GROUNDWATER				
RS0009CARR-A	RS0009CARR	08/05/2002	GROUNDWATER				
RS0019CARR-A	RS0019CARR	08/05/2002	GROUNDWATER				
RS0029PNCR-A	RS0029PNCR	08/05/2002	GROUNDWATER				
RS0043FASA-A	RS0043FASA	08/05/2002	GROUNDWATER				
TW1-88AA	1-88	08/06/2002	GROUNDWATER				67.40
W02-12M1A	02-12	08/06/2002	GROUNDWATER	109.00	119.00	58.35	68.35
W02-12M1D	02-12	08/06/2002	GROUNDWATER	109.00	119.00	58.35	68.35
W02-12M2A	02-12	08/06/2002	GROUNDWATER	94.00	104.00	43.21	53.21
W02-12M3A	02-12	08/06/2002	GROUNDWATER	79.00	89.00	28.22	38.22
W02-13M1A	02-13	08/06/2002	GROUNDWATER	98.00	108.00	58.33	68.33
W02-13M2A	02-13	08/06/2002	GROUNDWATER	83.00	93.00	44.20	54.20
W02-13M3A	02-13	08/06/2002	GROUNDWATER	68.00	78.00	28.30	38.30
W02-13M3D	02-13	08/06/2002	GROUNDWATER	68.00	78.00	28.30	38.30
W02-15M2A	02-15	08/05/2002	GROUNDWATER	101.00	111.00	51.50	61.50
W02-15M3A	02-15	08/05/2002	GROUNDWATER	81.00	91.00	31.40	41.40
W07DDA	MW-07	08/08/2002	GROUNDWATER	332.00	342.00	227.00	237.00
W07M1A	MW-07	08/08/2002	GROUNDWATER	240.00	245.00	135.00	140.00
W07M2A	MW-07	08/08/2002	GROUNDWATER	170.00	175.00	65.00	70.00
W162M1A	MW-162	08/08/2002	GROUNDWATER	190.50	200.50	114.28	124.28
W162M2A	MW-162	08/08/2002	GROUNDWATER	125.50	135.50	49.28	49.28
W162M2D	MW-162	08/08/2002	GROUNDWATER	125.50	135.50	49.28	49.28
W162M3A	MW-162	08/08/2002	GROUNDWATER	85.50	95.50	9.28	19.28
W192M3A	MW-192	08/05/2002	GROUNDWATER	115.00	125.00	14.19	24.19
W19SSA	MW-19	08/07/2002	GROUNDWATER	38.00	48.00	0.00	10.00
W225M1A	MW-225	08/05/2002	GROUNDWATER	175.00	185.00	77.10	87.10
W225M2A	MW-225	08/05/2002	GROUNDWATER	145.00	155.00	46.48	56.48
W225M3A	MW-225	08/06/2002	GROUNDWATER	125.00	135.00	26.48	36.48
W227M1A	MW-227	08/05/2002	GROUNDWATER	130.00	140.00	76.38	86.38
W227M2A	MW-227	08/06/2002	GROUNDWATER	110.00	120.00	56.38	66.38
W227M3A	MW-227	08/06/2002	GROUNDWATER	65.00	75.00	11.39	21.39
W31DDA	MW-31	08/07/2002	GROUNDWATER	133.00	138.00	48.00	53.00
W31MMA	MW-31	08/07/2002	GROUNDWATER	113.00	123.00	28.00	38.00
W31SSA	MW-31	08/07/2002	GROUNDWATER	98.00	103.00	13.00	18.00
W33DDA	MW-33	08/08/2002	GROUNDWATER	181.50	186.50	85.00	90.00
W33MMA	MW-33	08/08/2002	GROUNDWATER	161.50	171.50	65.00	75.00
W33SSA	MW-33	08/08/2002	GROUNDWATER	146.50	151.50	50.00	55.00
W36M1A	MW-36	08/08/2002	GROUNDWATER	151.00	161.00	74.00	84.00
W36M2A	MW-36	08/08/2002	GROUNDWATER	131.00	141.00	54.00	64.00
W74M1A	MW-74	08/08/2002	GROUNDWATER	170.00	180.00	76.00	86.00
W74M2A	MW-74	08/08/2002	GROUNDWATER	125.00	135.00	31.00	41.00
W74M3A	MW-74	08/08/2002	GROUNDWATER	100.00	110.00	6.00	16.00

Profiling methods include: Volatiles, Explosives and Perchlorate
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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
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TABLE 2
SAMPLING PROGRESS
08/3/2002 - 08/09/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W77M1A	MW-77	08/07/2002	GROUNDWATER	180.00	190.00	98.00	108.00
W77M2A	MW-77	08/07/2002	GROUNDWATER	120.00	130.00	38.00	48.00
W77SSA	MW-77	08/07/2002	GROUNDWATER	83.00	93.00	1.00	11.00
W80DDA	MW-80	08/07/2002	GROUNDWATER	158.00	168.00	114.00	124.00
W80M1A	MW-80	08/07/2002	GROUNDWATER	130.00	140.00	86.00	96.00
W80M2A	MW-80	08/06/2002	GROUNDWATER	100.00	110.00	56.00	66.00
W80M3A	MW-80	08/07/2002	GROUNDWATER	70.00	80.00	26.00	36.00
W81DDA	MW-81	08/07/2002	GROUNDWATER	184.00	194.00	156.00	166.00
W81M1A	MW-81	08/06/2002	GROUNDWATER	128.00	138.00	100.00	110.00
W81M2A	MW-81	08/07/2002	GROUNDWATER	83.00	93.00	55.00	65.00
W81M3A	MW-81	08/07/2002	GROUNDWATER	53.00	58.00	25.00	30.00
W81M3D	MW-81	08/07/2002	GROUNDWATER	53.00	58.00	25.00	30.00
W81SSA	MW-81	08/07/2002	GROUNDWATER	25.00	35.00	0.00	10.00
W82DDA	MW-82	08/08/2002	GROUNDWATER	125.00	135.00	97.00	107.00
W82M1A	MW-82	08/07/2002	GROUNDWATER	104.00	114.00	76.00	86.00
W82M2A	MW-82	08/07/2002	GROUNDWATER	78.00	88.00	50.00	60.00
W82M3A	MW-82	08/07/2002	GROUNDWATER	54.00	64.00	26.00	36.00
W82SSA	MW-82	08/07/2002	GROUNDWATER	25.00	35.00	0.00	10.00
XXRW1-A	RW1	08/06/2002	GROUNDWATER				
XXRW3-A	RW3	08/06/2002	GROUNDWATER				
DW080602-NV	GAC WATER	08/06/2002	IDW				
DW080702-NV	GAC WATER	08/07/2002	IDW				
DW080802-NV	GAC WATER	08/08/2002	IDW				
G233DAA	MW-233	08/06/2002	PROFILE	220.00	220.00	3.55	3.55
G233DBA	MW-233	08/07/2002	PROFILE	230.00	230.00	13.55	13.55
G233DCA	MW-233	08/07/2002	PROFILE	240.00	240.00	23.55	23.55
G233DDA	MW-233	08/07/2002	PROFILE	250.00	250.00	33.55	33.55
G233DEA	MW-233	08/07/2002	PROFILE	260.00	260.00	43.55	43.55
G233DFA	MW-233	08/07/2002	PROFILE	270.00	270.00	53.55	53.55
G233DGA	MW-233	08/08/2002	PROFILE	280.00	280.00	63.55	63.55
G233DGD	MW-233	08/08/2002	PROFILE	280.00	280.00	63.55	63.55
G233DHA	MW-233	08/08/2002	PROFILE	290.00	290.00	73.55	73.55
G233DIA	MW-233	08/08/2002	PROFILE	300.00	300.00	83.55	83.55
G234DAA	MW-234	08/08/2002	PROFILE	110.00	110.00	2.05	2.05

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 07/19/02 - 08/09/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
97-2	97-2	08/03/2002	GROUNDWATEF	75.00	85.00	53.00	63.00	E314.0	PERCHLORATE	
97-5	97-5	08/03/2002	GROUNDWATEF	84.00	94.00	76.00	86.00	E314.0	PERCHLORATE	
TW1-88AA	1-88	08/06/2002	GROUNDWATEF				67.40	E314.0	PERCHLORATE	
W02-02M1A	02-02	08/03/2002	GROUNDWATEF	114.50	124.50	63.50	73.50	E314.0	PERCHLORATE	
W02-02M2A	02-02	08/03/2002	GROUNDWATEF	94.50	104.50	42.65	52.65	E314.0	PERCHLORATE	
W02-02M2D	02-02	08/03/2002	GROUNDWATEF	94.50	104.50	42.65	52.65	E314.0	PERCHLORATE	
W02-13M1A	02-13	08/06/2002	GROUNDWATEF	98.00	108.00	58.33	68.33	E314.0	PERCHLORATE	
W02-13M2A	02-13	08/06/2002	GROUNDWATEF	83.00	93.00	44.20	54.20	E314.0	PERCHLORATE	
W02-13M3A	02-13	08/06/2002	GROUNDWATEF	68.00	78.00	28.30	38.30	E314.0	PERCHLORATE	
W02-13M3D	02-13	08/06/2002	GROUNDWATEF	68.00	78.00	28.30	38.30	E314.0	PERCHLORATE	
W02-15M2A	02-15	08/05/2002	GROUNDWATEF	101.00	111.00	51.50	61.50	E314.0	PERCHLORATE	
W191M2A	MW-191	08/02/2002	GROUNDWATEF	120.00	130.00	8.40	18.40	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W191M2A	MW-191	08/02/2002	GROUNDWATEF	120.00	130.00	8.40	18.40	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W215M2A	MW-215	08/01/2002	GROUNDWATEF	205.00	215.00	98.90	108.90	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W215M2A	MW-215	08/01/2002	GROUNDWATEF	205.00	215.00	98.90	108.90	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W216SSA	MW-216	08/01/2002	GROUNDWATEF	199.00	209.00		7.13	8330N	NITROGLYCERIN	NO
W80M1A	MW-80	08/07/2002	GROUNDWATEF	130.00	140.00	86.00	96.00	E314.0	PERCHLORATE	
W80M2A	MW-80	08/06/2002	GROUNDWATEF	100.00	110.00	56.00	66.00	E314.0	PERCHLORATE	
W81M2A	MW-81	08/07/2002	GROUNDWATEF	83.00	93.00	55.00	65.00	E314.0	PERCHLORATE	
W02-15M1A	02-15	08/03/2002	GROUNDWATEF	125.00	135.00	75.63	85.63	OC21V	CHLOROFORM	
W02-15M2A	02-15	08/05/2002	GROUNDWATEF	101.00	111.00	51.50	61.50	OC21V	CHLOROFORM	
W02-15M3A	02-15	08/05/2002	GROUNDWATEF	81.00	91.00	31.40	41.40	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