WEEKLY PROGRESS UPDATE
FOR JULY 29 – AUGUST 2, 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 July 29 through August 2, 2002.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of August 2 is summarized in Table 1.

Table 1. Drilling progress as of August 2, 2002

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-229	J-2 Range (J2P-13)	349	236	286-296, 206-216, 141-151, 117-127
MW-231	Demo Area 1 (D1P-14)	300	194	210.5-220.5, 165.5-175.5, 115.5-125.5
MW-232	J-3 Range (J3P-17)	200	158	77.5-82.5, 61-66
MW-233	Base WS-4 sentry well (WS4P-2)	170		

bgs = below ground surface
bwt = below water table

Completed well installation of MW-229 (J2P-13), MW-231 (D1P-14), and MW-232 (J3P-17) and commenced drilling of MW-233 (WS4P-2). Continued well development for newly installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater samples were collected from Bourne supply, sentry, far field and monitoring wells, as part of the Site-Wide Perchlorate sampling, and from newly installed wells. Water samples were collected from the GAC treatment system. Groundwater samples from drivepoints and surface water samples were collected from Snake Pond.

The following are the notes from the August 1, 2002 Technical Team meeting at the IAGWSPO:

Participants

Ben Gregson (IAGWSPO)	MAJ Bill Meyer (IAGWSPO)	Tina Dolen (IAGWSPO)
Karen Wilson (IAGWSPO)	Bill Gallagher (IAGWSPO)	Dave Hill (IAGWSPO)
LTC Bill Fitzpatrick (MAARNG)	Todd Borci (EPA-phone)	Desiree Moyer (EPA)
Mark Panni (MADEP)	Dave Williams (MDPH)	Darrell Deleppo (ACE)
Gina Tyo (ACE)	Heather Sullivan (ACE)	Ellen Iorio (ACE-phone)
Rob Foti (ACE)	John McPherson (ACE)	Don Wood (ACE)
LT Jeffrey Swartzlander (ACE)	Marc Grant (AMEC-phone)	Kim Harriz (AMEC)
Jay Clausen (AMEC-phone)	Herb Colby (AMEC-phone)	Maria Pologruto (AMEC)
Mark Applebee (AMEC-phone)	Larry Pannell (Jacobs)	Larry Hudgins (Tetra Tech)
Bob Scola (Tt-phone)	Susan Stewart (Tt-phone)	

Punchlist Items

#2 Provide recent test results of monitoring wells for WS-1, -2, -3 (E&RC). Draft Report with validated results being prepared. Report to be provided to the Co-op at the 8/14 meeting. Data to be provided to the IAGWSPO after this meeting.

#3 Provide comments on ARA's Perchlorate method test results for select Bourne wells (EPA/DEP). EPA provided comments on 7/31. Mark Panni (MADEP) to follow-up with Len Pinaud (MADEP) regarding status of comments.

#4 Provide update on BOMARC solid rocket fuel (Corps). Information distributed at meeting.

#5 Provide access update on private Snake Pond property (IAGWSPO). Meeting with Property owner and Mike Minior was completed. The property oweners have agreement for consideration. To date, the agreement has not been signed.

#6 Provide draft results from Envirogen Fluidized Bed Reactor (AMEC). Results emailed 7/31. Report expected in mid September.

#7 Discuss reporting of Perchlorate <1ppb with Dan Mahoney (Sandwich) (EPA). Todd Borci (EPA) to contact next week. Agencies approved sampling of explosives only for current sampling round.

#8 Determine POC for Schooner Pass Condo Association to discuss sampling of private supply well (IAGWSPO). Tina Dolen (IAGWSPO) identified 5 potential contacts. Bill Gallagher (IAGWSPO) to follow up with contacts.

MSP3 Update & Schedule

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

AirMag. Excavation of 118 anomalies to commence on 8/12. Tetra tech is coordinating with AMEC and the eco-crew on exclusion zones. Excavations to be left open pending a cultural resources inspection by Dr. Goodfellow (MAARNG).

SCAR Site. Vegetation & grubbing is ongoing, approximately 65% complete. Two crews have been mobilized to complete this task that has progressed more slowly than originally scoped partially due to the exceptionally warm weather conditions.

N Range. Intrusive investigation has been delayed one week in deference to completing SCAR site grubbing. Ten anomalies will be investigated, beginning with the lowest probability items first. Corps/Tetra tech to meet with CI group regarding Sandwich notification protocol prior to proceeding.

BIPs – 8 items from the SCAR Site are scheduled to be BIPed today, 8/1:

4 – 155MM HE Projectile, M107 with M51 Series PD Fuze

2 – 155MM HE Projectile, M107 with Unknown MT Fuze
1 – 105MM HE Projectile, M1 with Unknown MT Fuze
1 – 7" APHE Projectile, MK6MOD1 with Unknown BD Fuzes

MSP3 Schedule

Rob Foti (ACE) addressed questions on the Draft MSP Schedule which was distributed at the July 11 Tech meeting.

- In response to Todd Borci's (EPA) question regarding the number of field crews and how they were to be utilized, Mr. Foti explained that the schedule accounts for the continuous utilization of three field crews to the end of the year. Only 2.5 field crews were available. Two crews are working this week at the SCAR site. The U Range work was postponed. The schedule had called for one crew each to work on AirMag and N Range in addition to one crew at the SCAR site. However, the SCAR site was taking precedence and vacation schedules had cut into staff availability. Therefore, adjustments had been made in the current schedule that were not reflected in the schedule (7/11) distributed 3 weeks ago.
- Desiree Moyer (EPA) noted that there were three months allotted between the ROA submission and approval and one and a half months between the ROA approval and the initiation of fieldwork at the Gun and Mortar Positions. Mr. Foti explained that those were somewhat arbitrary blocks of time, but even though the crews would not be working on this task, three crews would be working on other MSP3 tasks of higher priority. Mr. Borci indicated that it seemed to him also that there were gaps in the schedule. Mr. Foti emphasized that three crews were scheduled to be fully utilized to complete the MSP3 tasks without changes in contracting through the end of the year.
- Ms. Moyer indicated that all necessary information regarding the Gun and Mortar MSP3 Workplan had been received and comments on the Workplan would be forwarded shortly.
- Mr. Borci asked about the status of the investigation of Deep Bottom Pond. This task was not scheduled to be completed before April 03. Mr. Borci had hoped that the Guard could take advantage of the drought to investigate the few anomalies that were located in the pond. Ben Gregson (IAGWSPO) indicated that the pond still had very little water. However, endangered species had been identified in the pond and the Guard would like to have further discussion on the scope of the investigation with EPA/MADEP. Discussion to be added to the 8/8 Tech meeting agenda.

Demo Area 1, D1P-15 Well Installation

Heather Sullivan (ACE) led the discussion regarding relocation of proposed well D1P-15. A plan view map of the plume outline with new proposed location and cross section showing MW-231 profile results and other well results were distributed.

- There has been a low-level detection of perchlorate in profile samples from MW-231 (D1P-14). D1P-15 had been approved north of MW-225, but the Guard would like to relocate the well south of MW-231. Approximately the same amount of road clearance will be needed for the new proposed location.
- Karen Wilson (IAGWSPO) indicated that an attempt would be made to modify the exiting ROA so that approval could be expedited. The cultural resources approval was likely broad enough to incorporate this modification.
- Mark Applebee (AMEC) indicated that the well might need to be moved a little further north than indicated on the map depending on topography. MADEP and EPA concurred that the location as projected or slightly north was approved. AMEC/Corps to conduct site visit with Ms. Wilson to select location.
- Regarding an additional well location further to the west, Ben Gregson (IAGWSPO) indicated that based on the decision criteria of <1.5 ug/L Perchlorate in groundwater, an additional well would likely not be needed. Mark Panni (MADEP) suggested that a

contingency ROA might be good to have ready. Mr. Applebee noted that the area was fairly inaccessible. Ms. Sullivan indicated that a contingency proposed well location was something that the Corps/Guard could discuss.

J Ranges Monitoring Wells

- Karen Wilson indicated that J1P-17 cannot be moved to meet groundwater sampling objectives and conditions for a firebreak. On the other hand, roads to both J1P-16 and J1P-18 can be used for the firebreak. Ms. Wilson to discuss with Mike Ciaranca (MAARNG) in a couple days.
- Todd Borci requested that the previous figure be revised to show the new proposed locations.
- Wells at J3P-17 are currently being installed.
- ROAs for LP-5, LP-6 and J3P27 have been submitted; these wells are not linked to the Camp GoodNews seasonal schedule.

Central Impact Area Update

- John McPherson (ACE) indicated that UXO clearance on CIAP-24 might be completed by next week.
- Regarding the detailed modeling schedule that had been developed by Jay Clausen (AMEC) in July, Todd Borci indicated that in general the schedule was good and showed appropriate detail. Mr. Borci concurred with the objective of updating the model to assist in the remedial design process, such that the pumping wells could be adequately scoped and the treatment system appropriately sized. Mr. Borci to discuss with Mike Jasinski (EPA) what specific concerns he may have had regarding the schedule.
- Mr. Borci did express concern that the Guard considered the Central Impact Area groundwater characterization relatively complete. Mr. Borci specifically identified these areas of data gaps:
    - Area downgradient of MW-206; screens at MW-149 did not appear to be at an appropriate depth to characterize contamination identified at MW-206.
    - Area up and downgradient of MW-205.
- Bill Gallagher (IAGWSPO) indicated that the Corps/Guard would discuss these data gaps internally. Mr. Borci indicated that the modeling should move forward and the additional well installation should be completed before the end of the year.
- Regarding the plume map for the Central Impact Area, Mr. Borci requested that a more accurate representation of the higher RDX concentration contours be made for MW-86 and MW-113.
- Responding to questions regarding specific wells, Marc Grant (AMEC) indicated that MW-223 (CIAP-25) was sampled on July 30. Historical detections of MW-92 have not been above 2 ppb. The May 2000 detection in MW-98 was the only detection above 2 ppb.

Bourne Area Update

Bill Gallagher (IAGWSPO) provided a brief update on the Bourne area investigation.

- Drilling of WS4P-2 has commenced; the well will be profiled for VOCs in addition to explosives and perchlorate.
- Monthly sampling is continuing.
- The Bourne area regional model update will be completed next week. Modeling results from back tracking of detections in and near the Monument Beach well field will be available later in August.
- AMEC is working on a Bourne-area Workplan. Existing data will be presented in context. Monitoring wells and soil sampling will be proposed to determine the origin of the Monument Beach well field perchlorate detections.

- Mr. Borci requested that a scoping meeting be scheduled prior to submission of the Workplan.

Central Impact Area Soil OU Feasibility Schedule

Heather Sullivan (ACE) provided an overview of the Central Impact Area Soil OU FS Schedule. A handout proposing and explaining the schedule was distributed to the agencies (8/1/02 email).

- The email regarding the soil OU schedule outlines two approaches thru the feasibility study. The characterization schedule includes seven tasks. These tasks include additional target sampling, perchlorate sampling, HUTA investigations, MSP investigations, AirMag investigation, Ecological Risk Assessment and the UXO/OE Additional Characterization Work. One schedule proposes conducting the OE characterization and soil data related tasks sequentially; this would significantly delay the submission of the Phase 2 Report, as the UXO/OE work is not scheduled to begin until April 03. The other approach segregates these efforts such that the UXO/OE work would be performed concurrent with the Phase 2 Report and subsequent FS Screening Report, but still addresses them concurrently in the FS. With this schedule, the Phase 2 Report would be completed by August 03.
- Todd Borci indicated that his biggest concern with the schedule was that the UXO/OE characterization was scheduled to take an additional 2 years. Mr. Borci further stated that the soil characterization tasks should include the UXO/OE task.
- Mr. Borci further commented that the manner in which the data was presented made it difficult to evaluate the HUTAI/II data to define the edge of UXO/OE impacts. Of interest was not only the density of items but the chemical data showing the concentration changes in the soil. It may be necessary to have a separate Soil OU and UXO boundary for the Central Impact Area.
- Further EPA comment to be provided as part of the UXO Screening CRM next week.

Documents and Schedules

Marc Grant (AMEC) led the discussion regarding documents and schedules.

- All parties agreed that the document schedule should be updated with a "to be determined" and decision date to select a submittal date for the Central Impact Area Soil Report. In addition, the Demo Area 1 Draft Groundwater Report Addendum submittal would be updated based on a date reflecting the status of the modified ROA schedule for D1P-15. The Guard to send a letter to the agencies requesting these modifications to the enforceable milestones.
- The Guard's priorities for documents are as follows.
  - 1st Priority Remaining HUTA2 Site Reports. Comments on Transects 2&5 were sent by EPA the week of July15th. Comments on Transects 3&4 to be forwarded by the end of this week. MADEP to provide comment by the 8/9.
  - 2nd Priority Addendum to the G&M Additional Characterization Workplan. EPA to forward comment today. MADEP comment provided in email on July 29th.
  - 3rd Priority BA-1 Letter Report MOR.
  - 4th Priority Supplemental Demo Area 1 PSI Soil Workplan, comments due on 8/2.

Miscellaneous

Demo Area 1 Soil RRA/RAM. MADEP concerns regarding the appropriateness of the size of the RAM to be discussed next week when Len Pinaud (MADEP) is available. Todd Borci reiterated that EPA did not favor the Guard's proposal to deal with UXO and anomalies only within the foot print of the soil chemical contamination.

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 wells 02-03M2, M3; 02-04M1; 02-05M2, M3; 02-09M2; and 02-13M1, M2 had detections of perchlorate. The results were similar to previous sampling rounds.

- Groundwater samples from Bourne monitoring wells 02-01M1, M2; 02-03M1; 02-07M3; and 02-12M3 had detections of perchlorate. This is the first time perchlorate has been detected in these wells.

- Groundwater samples from 02-10M2 (Bourne) had a detection of acetone. This is the first detection of acetone in this well.

- Groundwater samples from wells MW-176M1 and duplicate; MW-178M1; MW-204M1 and duplicate, M2; MW-205M1; MW-207M1 and duplicate, M2; and MW-209M1 (all Central Impact Area) had detections of RDX that were confirmed by PDA spectra. The results were similar to previous sampling rounds.

- Groundwater samples from MW-181S (J-3 Range) had a detection of HMX that was confirmed by PDA spectra. The results were similar to the previous sampling round.

- Groundwater samples from wells MW-191M1 (J-1 Range) and MW-198M3, M4 (J-3 Range) had detections of RDX and HMX that were confirmed by PDA spectra. The results were similar to previous sampling rounds.

- Groundwater samples from MW-216M2 (Containment Pad) had detections of carbon disulfide and toluene. This is the first sampling event for this well. The detection of toluene was consistent with the profile results.

- Groundwater samples from MW-215M1 (J-2 Range) and MW-223M2 (Central Impact Area) had detections of RDX that were confirmed by PDA spectra. This is the first sampling event for these wells and the results were consistent with the profile results.

- Thirteen groundwater samples and duplicate samples from Bourne monitoring wells had detections of chloroform.

3. DELIVERABLES SUBMITTED

Draft IAGWSP Technical Team Memorandum 02-2 Small Arms Ranges Report 08/02/02

4. SCHEDULED ACTIONS

Scheduled actions for the week of August 5 include continue drilling of MW-233 (WS4P-2) and commence drilling of MW-234 (J2P-12). Commence August Long Term Groundwater Monitoring round.

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-14 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
07/27/2002 - 08/02/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
97-2E	FIELDQC	08/01/2002	FIELDQC	0.00	0.00		
TW1-88BE	FIELDQC	07/31/2002	FIELDQC	0.00	0.00		
W02-07M1T	FIELDQC	07/30/2002	FIELDQC	0.00	0.00		
W186M2T	FIELDQC	07/29/2002	FIELDQC	0.00	0.00		
W190M2T	FIELDQC	08/02/2002	FIELDQC	0.00	0.00		
W215M2T	FIELDQC	08/01/2002	FIELDQC	0.00	0.00		
W215SSF	FIELDQC	08/01/2002	FIELDQC	0.00	0.00		
W216M2T	FIELDQC	07/31/2002	FIELDQC	0.00	0.00		
4036000-01G	4036000-01G	07/31/2002	GROUNDWATER				
4036000-03G	4036000-03G	07/31/2002	GROUNDWATER				
4036000-04G	4036000-04G	07/31/2002	GROUNDWATER				
4036000-06G	4036000-06G	07/31/2002	GROUNDWATER				
4036000-06GD	4036000-06G	07/31/2002	GROUNDWATER				
90SNP0001	90SNP001	07/30/2002	GROUNDWATER				
90SNP0002	90SNP002	07/30/2002	GROUNDWATER				
97-3	97-3	08/01/2002	GROUNDWATER	75.00	85.00	36.00	46.00
SDW261160	SDW261160	08/01/2002	GROUNDWATER				
SDW263111	SDW263111	08/01/2002	GROUNDWATER				
TW1-88AA	1-88	07/31/2002	GROUNDWATER				67.40
TW1-88BA	1-88	07/31/2002	GROUNDWATER				69.60
USCGANTST	USCGANTST	07/29/2002	GROUNDWATER				
W02-07M1A	02-07	07/30/2002	GROUNDWATER	135.00	145.00	101.14	111.14
W02-07M2A	02-07	07/29/2002	GROUNDWATER	107.00	117.00	72.86	82.86
W02-07M3A	02-07	07/30/2002	GROUNDWATER	47.00	57.00	13.00	23.00
W02-07M3D	02-07	07/30/2002	GROUNDWATER	47.00	57.00	13.00	23.00
W02-09M1A	02-09	07/30/2002	GROUNDWATER	74.00	84.00	65.26	75.26
W02-09M2A	02-09	07/30/2002	GROUNDWATER	59.00	69.00	50.30	60.30
W02-09SSA	02-09	07/29/2002	GROUNDWATER	7.00	17.00	0.00	10.00
W02-10M1A	02-10	07/30/2002	GROUNDWATER	135.00	145.00	94.00	104.00
W02-10M2A	02-10	07/29/2002	GROUNDWATER	110.00	120.00	68.61	78.61
W02-10M3A	02-10	07/29/2002	GROUNDWATER	85.00	95.00	43.65	53.65
W02-12M1A	02-12	08/01/2002	GROUNDWATER	109.00	119.00	58.35	68.35
W02-12M1D	02-12	08/01/2002	GROUNDWATER	109.00	119.00	58.35	68.35
W02-12M2A	02-12	07/31/2002	GROUNDWATER	94.00	104.00	42.71	52.71
W02-12M3A	02-12	07/31/2002	GROUNDWATER	79.00	89.00	28.22	38.22
W02-13M1A	02-13	07/31/2002	GROUNDWATER	98.00	108.00	57.05	67.05
W02-13M2A	02-13	07/31/2002	GROUNDWATER	83.00	93.00	42.02	52.02
W02-13M3A	02-13	07/31/2002	GROUNDWATER	68.00	78.00	27.10	37.10
W156SSA	MW-156	08/01/2002	GROUNDWATER	77.00	87.00	7.00	17.00
W186M1A	MW-186	07/30/2002	GROUNDWATER	202.00	212.00	79.50	89.50
W186M2A	MW-186	07/29/2002	GROUNDWATER	182.00	192.00	59.60	69.60
W191M2A	MW-191	08/02/2002	GROUNDWATER	120.00	130.00	8.40	18.40
W191SSA	MW-191	08/02/2002	GROUNDWATER	106.00	116.00	0.00	10.00
W192M2A	MW-192	08/02/2002	GROUNDWATER	135.00	145.00	34.19	44.19

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
07/27/2002 - 08/02/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W202M1A	MW-202	07/29/2002	GROUNDWATER	264.00	274.00	0.00	0.00
W202M2A	MW-202	07/29/2002	GROUNDWATER	215.00	225.00	0.00	0.00
W203M1A	MW-203	07/29/2002	GROUNDWATER	166.00	176.00	17.50	27.50
W204M1A	MW-204	07/29/2002	GROUNDWATER	141.00	151.00	0.00	10.00
W204M1D	MW-204	07/29/2002	GROUNDWATER	141.00	151.00	0.00	10.00
W204M2A	MW-204	07/29/2002	GROUNDWATER	76.00	86.00	17.20	27.20
W205DDA	MW-205	07/29/2002	GROUNDWATER	266.00	276.00	167.60	177.60
W205M1A	MW-205	07/29/2002	GROUNDWATER	167.00	177.00	67.60	77.60
W215M1A	MW-215	07/30/2002	GROUNDWATER	240.00	250.00	133.85	143.85
W215M2A	MW-215	08/01/2002	GROUNDWATER	205.00	215.00	98.90	108.90
W215SSA	MW-215	08/01/2002	GROUNDWATER	104.00	114.00		7.80
W216M1A	MW-216	07/30/2002	GROUNDWATER	253.00	263.00	51.19	61.19
W216M2A	MW-216	07/31/2002	GROUNDWATER	236.00	246.00	34.17	44.17
W216SSA	MW-216	08/01/2002	GROUNDWATER	199.00	209.00		7.13
W221M1A	MW-221	07/30/2002	GROUNDWATER	216.00	226.00	70.79	80.79
W221M2A	MW-221	07/30/2002	GROUNDWATER	178.00	188.00	32.85	42.85
W221M2D	MW-221	07/30/2002	GROUNDWATER	178.00	188.00	32.85	42.85
W221M3A	MW-221	07/30/2002	GROUNDWATER	156.00	166.00	10.86	20.86
W222M1A	MW-222	07/31/2002	GROUNDWATER	240.00	250.00	123.76	133.76
W222M2A	MW-222	08/02/2002	GROUNDWATER	185.00	195.00	68.58	78.58
W223DDA	MW-223	07/31/2002	GROUNDWATER	260.00	270.00	167.86	177.86
W223M1A	MW-223	07/30/2002	GROUNDWATER	211.00	221.00	118.79	128.79
W223M2A	MW-223	07/30/2002	GROUNDWATER	185.00	195.00	93.31	103.31
W226M1A	MW-226	08/02/2002	GROUNDWATER	77.00	87.00	0.00	7.73
W226M2A	MW-226	08/01/2002	GROUNDWATER	175.00	185.00	61.70	71.70
W226M3A	MW-226	08/01/2002	GROUNDWATER	135.00	145.00	21.53	31.53
DW072502-NV	GAC WATER	07/29/2002	IDW	0.00	0.00		
DW072902-NV	GAC WATER	07/29/2002	IDW	0.00	0.00		
DW073002-NV	GAC WATER	07/30/2002	IDW	0.00	0.00		
DW080202-NV	GAC WATER	08/02/2002	IDW	0.00	0.00		
LKSNK0005AAA	LKSNK0005	07/31/2002	SURFACE WATER				
LKSNK0006AAA	LKSNK0006	07/31/2002	SURFACE WATER				
LKSNK0007AAA	LKSNK0007	07/31/2002	SURFACE WATER				

Profiling methods include: Volatiles, Explosives and Perchlorate
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
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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 07/12/02 - 08/02/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W02-01M1A	02-01	07/27/2002	GROUNDWATEF	95.00	105.00	42.90	52.90	E314.0	PERCHLORATE	
W02-01M2D	02-01	07/27/2002	GROUNDWATEF	83.00	93.00	30.90	40.90	E314.0	PERCHLORATE	
W02-03M1A	02-03	07/27/2002	GROUNDWATEF	130.00	140.00	86.10	96.10	E314.0	PERCHLORATE	
W02-03M2A	02-03	07/27/2002	GROUNDWATEF	92.00	102.00	48.15	58.15	E314.0	PERCHLORATE	
W02-03M3A	02-03	07/27/2002	GROUNDWATEF	75.00	85.00	31.05	41.05	E314.0	PERCHLORATE	
W02-04M1A	02-04	07/27/2002	GROUNDWATEF	123.00	133.00	73.97	83.97	E314.0	PERCHLORATE	
W02-05M2A	02-05	07/24/2002	GROUNDWATEF	92.00	102.00	63.41	73.41	E314.0	PERCHLORATE	
W02-05M3A	02-05	07/25/2002	GROUNDWATEF	70.00	80.00	41.37	51.37	E314.0	PERCHLORATE	
W02-07M1A	02-07	07/30/2002	GROUNDWATEF	135.00	145.00	101.14	111.14	OC21V	CHLOROFORM	
W02-07M2A	02-07	07/29/2002	GROUNDWATEF	107.00	117.00	72.86	82.86	OC21V	CHLOROFORM	
W02-07M3A	02-07	07/30/2002	GROUNDWATEF	47.00	57.00	13.00	23.00	OC21V	CHLOROFORM	
W02-07M3D	02-07	07/30/2002	GROUNDWATEF	47.00	57.00	13.00	23.00	E314.0	PERCHLORATE	
W02-07M3D	02-07	07/30/2002	GROUNDWATEF	47.00	57.00	13.00	23.00	OC21V	CHLOROFORM	
W02-08M1A	02-08	07/27/2002	GROUNDWATEF	108.00	113.00	86.56	91.56	OC21V	CHLOROFORM	
W02-08M2A	02-08	07/27/2002	GROUNDWATEF	82.00	87.00	60.65	65.65	OC21V	CHLOROFORM	
W02-08M3A	02-08	07/27/2002	GROUNDWATEF	62.00	67.00	40.58	45.58	OC21V	CHLOROFORM	
W02-09M1A	02-09	07/30/2002	GROUNDWATEF	74.00	84.00	65.26	75.26	OC21V	CHLOROFORM	
W02-09M2A	02-09	07/30/2002	GROUNDWATEF	59.00	69.00	50.30	60.30	E314.0	PERCHLORATE	
W02-09M2A	02-09	07/30/2002	GROUNDWATEF	59.00	69.00	50.30	60.30	OC21V	CHLOROFORM	
W02-09SSA	02-09	07/29/2002	GROUNDWATEF	7.00	17.00	0.00	10.00	OC21V	CHLOROFORM	
W02-10M1A	02-10	07/30/2002	GROUNDWATEF	135.00	145.00	94.00	104.00	OC21V	CHLOROFORM	
W02-10M2A	02-10	07/29/2002	GROUNDWATEF	110.00	120.00	68.61	78.61	OC21V	ACETONE	
W02-10M2A	02-10	07/29/2002	GROUNDWATEF	110.00	120.00	68.61	78.61	OC21V	CHLOROFORM	
W02-10M3A	02-10	07/29/2002	GROUNDWATEF	85.00	95.00	43.65	53.65	OC21V	CHLOROFORM	
W02-12M3A	02-12	07/31/2002	GROUNDWATEF	79.00	89.00	28.22	38.22	E314.0	PERCHLORATE	
W02-13M1A	02-13	07/24/2002	GROUNDWATEF	98.00	108.00	58.33	68.33	E314.0	PERCHLORATE	
W02-13M2A	02-13	07/31/2002	GROUNDWATEF	83.00	93.00	42.02	52.02	E314.0	PERCHLORATE	
W02-13M3A	02-13	07/31/2002	GROUNDWATEF	68.00	78.00	27.10	37.10	E314.0	PERCHLORATE	
W176M1A	MW-176	07/18/2002	GROUNDWATEF	270.00	280.00	158.55	168.55	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W176M1D	MW-176	07/18/2002	GROUNDWATEF	270.00	280.00	158.55	168.55	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W178M1A	MW-178	07/26/2002	GROUNDWATEF	257.00	267.00	117.00	127.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W181SSA	MW-181	07/26/2002	GROUNDWATEF	32.00	42.00	0.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	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

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 07/12/02 - 08/02/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W191M1A	MW-191	07/25/2002	GROUNDWATEF	137.00	142.00	25.20	30.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W191M1A	MW-191	07/25/2002	GROUNDWATEF	137.00	142.00	25.20	30.20	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W198M3A	MW-198	07/22/2002	GROUNDWATEF	100.00	105.00	78.50	83.50	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W198M3A	MW-198	07/22/2002	GROUNDWATEF	100.00	105.00	78.50	83.50	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W198M4A	MW-198	07/19/2002	GROUNDWATEF	70.00	75.00	48.40	53.40	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W198M4A	MW-198	07/19/2002	GROUNDWATEF	70.00	75.00	48.40	53.40	8330N	OCTAHYDRO-1,3,5,7-TETRANIT	YES
W204M1A	MW-204	07/29/2002	GROUNDWATEF	141.00	151.00	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W204M1D	MW-204	07/29/2002	GROUNDWATEF	141.00	151.00	0.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W204M2A	MW-204	07/29/2002	GROUNDWATEF	76.00	86.00	17.20	27.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W205M1A	MW-205	07/29/2002	GROUNDWATEF	167.00	177.00	67.60	77.60	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W207M1A	MW-207	07/26/2002	GROUNDWATEF	254.00	264.00	100.52	119.52	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W207M1D	MW-207	07/26/2002	GROUNDWATEF	254.00	264.00	100.52	119.52	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W207M2A	MW-207	07/26/2002	GROUNDWATEF	224.00	234.00	79.33	89.33	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W209M1A	MW-209	07/26/2002	GROUNDWATEF	240.00	250.00	121.00	131.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W215M1A	MW-215	07/30/2002	GROUNDWATEF	240.00	250.00	133.85	143.85	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES
W216M2A	MW-216	07/31/2002	GROUNDWATEF	236.00	246.00	34.17	44.17	OC21V	CARBON DISULFIDE	
W216M2A	MW-216	07/31/2002	GROUNDWATEF	236.00	246.00	34.17	44.17	OC21V	TOLUENE	
W223M2A	MW-223	07/30/2002	GROUNDWATEF	185.00	195.00	93.31	103.31	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,	YES

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