WEEKLY PROGRESS UPDATE
FOR FEBRUARY 3 – FEBRUARY 7, 2003

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019, 1-2000-0014, & BOURNE-BWSC-4-1503-1

MASSACHUSETTS MILITARY RESERVATION
TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from February 3 through February 7, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of February 7 is summarized in Table 1.

Table 1. Drilling progress as of February 7, 2003

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-256	Central Impact Area (CIAP-28)	307	180	198-208; 297-307
MW-257	Base WS-4 sentry well (WS4P-4)	320	175	195-205; 290-300
MW-258	Demo Area 1 (D1P-17)	210	166	

bgs = below ground surface
bwt = below water table

Completed well installation of MW-256 (CIAP-28) and MW-257 (WS4P-4), and completed drilling of MW-258 (D1P-17). 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-258. Groundwater samples were collected from Bourne water supply and monitoring wells, recently installed wells, and as part of the December Long Term Groundwater monitoring round.

The following are the notes from the February 6, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Ben Gregson (IAGWSPO)	Bill Gallagher (IAGWSPO)	LTC Bill FitzPatrick (E&RC)
Todd Borci (EPA)	Jane Dolan (EPA)	Desiree Moyer (EPA)
Len Pinaud (MADEP)	Mark Panni (MADEP)	Dave Williams (MDPH)
Gina Kaso (ACE)	Ed Wise (ACE)	Heather Sullivan (ACE)
Don Wood (ACE)	Sheila Holt (ACE -phone)	Katarzyna Chelkowska (ACE -phone)
Darrin Smith (ACE)	Marc Grant (AMEC)	Kim Harriz (AMEC)
Mark Applebee (AMEC)	John Rice (AMEC-phone)	Herb Colby (AMEC-phone)
Dick Skryness (ECC)	Leo Yuskus (Haley & Ward)	Carla Buriks (Tt-phone)
John Brawley (Tt-phone)	Larry Panell (Jacobs)	Kevin Hood (Univ. of Conn.)

Punchlist Items

#3 Provide ASR inquiry letter for Indian Head NAVSTA (Corps). Letter to Indian Head is ready for signature and may be sent out this week.

#4 Provide update on USGS Tritium/He3 report for GW age/travel information (Corps). Dave Hill (IAGWSPO) forwarded the data in an email last week. Some of the tests are being rerun. A formal report will not be provided by the USGS. Instead the USGS intends to use the information for model calibration.

#5 Provide reconciled list of items found from J-2 Range Polygons 1&2 (Corps). List of items distributed at meeting.

#7 Obtain information on the spill and/or wells located in the vicinity of Well 4036009DC on Corps property northwest of the base (Corps). Bourne Recreation Authority provided a report on a spill of ethylene glycol that occurred in this area. The report stated that the spill did not meet requirements for reporting to MADEP. Three monitoring wells were installed in response to the spill. Copies of the report were distributed to the agencies.

#8 Provide status of "white paper" on alternatives to dispose the numerous 40mm grenades with fuzes (Corps). The paper is due in mid February from ECC and will be available to the agencies at the end of February. The paper will address inert and energetic small arms specific to MMR. Todd Borci (EPA) asked what the report would contain. ECC to provide feedback next week after the internal draft is complete.

#9 Renew access agreements for PZ208 and PZ211 (Corps). Corps mailed letters to the property owners on 1/31.

#10 Provide origination/use of 20mm rounds via Lot Numbers (Corps). UXO crews have been directed to document lot numbers as they transport rounds from the stockpile to the CDC.

#13 Provide Camp Edwards Long-Term Range Use Schedule for agency review (Corps). Schedule to be provided as soon as available.

Archive Search Report Update

Carla Buriks (Tetra Tech) provided a summary of activities in January 2003. A one-page summary was distributed.

- Summary table for Witnesses 53-68 and follow-up interviews were recently emailed to the agencies for review and approval.
- An update to the 104(e) response-tracking table was submitted to EPA and MADEP on 1/10. Since the update was submitted, copies of the Kerr-McGee and ETEX 104(e) information request responses were received. The responses are being reviewed and the tracking table will be updated with this information.
- An Interview Status Memorandum was submitted to the agencies on 1/16. An additional 10 witness interviews have been funded; these interviews to be discussed in an after the meeting today.
- An EOD request letter to Tyndall AFB was sent on 1/28. Another request letter to Indian Head will likely be sent this week.
- The EPA provided comments on J-2 Range interview questions prepared by AMEC; the questions and comments are being reviewed by the ASR team. Questions regarding J-1 and J-3 Ranges are also being prepared. These questions will be asked of witnesses at the same time as the J-2 Range questions.

MSP3 and Southeast Ranges Update

Heather Sullivan (ACE) provided an update on the MSP3 tasks.

Ox Pond – The Schonstedt survey was completed. A draft map of findings should be available the week of February 17th. An ROA for anomaly excavation has been submitted with approval due the first week in March.

Gun&Mortar – Anomaly excavation is scheduled to commence 2/10 even without the final agency approval of the Workplan. Excavation will begin with anomalies that all parties have agreed to.
Former Demo sites (Inactive Demo sites) – The Schonstedt survey was completed 1/31. The EM61 survey was completed yesterday, 2/5.
J Ranges – OE items are being moved to the CDC bunker.
NBC Ranges – The EM61 Survey was completed with a 35% coverage of the area. The goal had been 50%; therefore additional grubbing is being conducted so that goal of 50% can be achieved. A meandering path EM61 Survey will also be utilized to achieve this goal. The Schonstedt survey continued.
J-3 Range Barrage and Hillside Sites in SE Ranges – To Mr. Borci's inquiry about the status of this project, Gina Kaso (ACE) explained that AMEC was developing new requirements for soil sampling to be implemented at the same time as anomaly excavation. Mr. Borci insisted the sampling and anomaly excavation were not related; the EPA had already stated an anomaly map (digital data) was expected prior to the completion of soil sampling or well installation. Funding was also being procured. Mr. Borci requested feedback on this directive by tomorrow, 2/7.
SE Ranges Field Work – UXO clearance at J1P-16 continued and is likely to continue for 2 weeks; this area is saturated with anomalies primarily attributed to OE fragment. The December 2002 LTM round will be completed this week.
CDC – Gina Kaso stated an updated total of 19724 items are scheduled for destruction in the CDC. Through January, 9401 items have been destroyed. 10323 remain, of which 9550 are 20mm rounds. The CDC is scheduled to stay until 2/21. Additional time may be available after the 21st, contingent on funding and prior commitments. Weather conditions have required shutdown for maintenance for several days.

Demo 1 PSI Soil Data
Mark Applebee (AMEC) provided an update on the Demo 1 PSI analytical results for soil. A figure showing the soil grids in the Demo 1 area was distributed.

- A prior email summarized the major detections to delineate the lateral extent of explosives and propellant in soil at Demo 1.
- Of the samples collected for the PSI, only one (soil grid BA, 6-12 inches bgs) had a detection of RDX/HMX. This grid was located within the perimeter road.
- Perchlorate in concentrations less than 10 ppb was detected in 4 grids: 12AY, 12BC, 12AZ and 12BU. Three of the grids are located to the north and one near the former bunker on the west side.
- 2,4-DNT was detected in one sample (soil grid 12BC) with very low concentrations of 1,3 dintrobenzene and TNT also detected.
- Of the dyes, benzanthrone was detected in 3 samples from 2 grids on the south side, maximum concentration of 57 ppb.
- Lead, copper and antimony were detected in soil samples collected around the former Small Arms targets.
- SVOCs (primarily PAHs) were detected in low concentrations (<0.5 ppb); the highest concentrations were observed in samples from soil grid 12L.
- Because of the sporadic nature of detections and low concentrations, it is AMEC's opinion that this new data does not effect the previous conclusions regarding contaminant distribution in soil at Demo 1.

Northwest Corner of Camp Edwards
Bill Gallagher (IAGWSPO) outlined steps the Army was proposing to characterize the groundwater quality at the northwest corner of Camp Edwards. A letter to the agencies outlining the proposed characterization approach was distributed.

1. The first step of the approach was to use existing resources, including:
   - sample upgradient well associated with ethylene glycol spill.
   - obtain screen information and sample 95-15 series well from AFCEE. AMEC may also have screen information.
   - Pursue the identification of USGS wells, if any. Ben Gregson (IAGWSPO) indicated that wells might have been identified on map in the USGS study reviewed to identify wells downgradient of the Monument Beach Well Field.
   - Pursue construction details on water supply wells (active, inactive and decommissioned).
2. The second step was to install NWP-1 at the base boundary and upgradient of 4036009DC (DC referring to the fact the well was decommissioned).
3. The third step was to review all new and existing data to evaluate the need for additional activities.

- Len Pinaud (MADEP), Todd Borci (EPA) and Jane Dolan (EPA) all expressed dissatisfaction that the proposed plan offered nothing beyond what was presented in the January 23 Tech meeting. The agencies felt the proposed plan was inadequate to characterize the Northwest Corner, dealing only with the detection of perchlorate at well 4036009DC. The agencies stated they failed to see how proposed well NWP-1 alone would be adequate to assess potential impacts to cross-gradient active water supply well 4036011 with or without a detection of perchlorate and RDX, given there was no commitment for additional well installation. The agencies had expected contingency wells to be proposed based on a site conceptual model.
- Mr. Gallagher expressed the Army's opinion that there was insufficient data to develop a site conceptual model. The focus of the preliminary investigation outlined in the letter was to obtain more accurate information on a probable source area prior to proposing further characterization. Mr. Gregson pointed out that because the actual depth of the perchlorate detection in 4036009DC and the RDX detection in 4036011 were not known, the source area could exist anywhere from the immediate area of the well to the very center of the Central Impact Area. Mr. Gallagher further pointed out that the Army felt it was being responsive to MADEP's request at the prior Technical meeting to spell out clearly the investigation objectives and approach. There had not been an understanding (or concurrence) by the IAGWSPO that contingency wells were to be offered as part of the approach,
- Mr. Gallagher and Mr. Gregson acknowledged the agencies concern with the characterization approach for the Northwest Corner and requested the agencies provide a formal written response to the letter, being as specific as possible.
- Mr. Borci indicated the EPA did not recognize the Army as respondent under the Administrative Order and requested that future proposals/plans be proffered by the National Guard whom were the named respondents under the Order. The EPA may not recognize future letters from the Army as an official response.
- Dave Williams (MDPH) stated the Guard/Army had requested a health consult from MDPH to assess what potential impacts the presence of perchlorate at 6 ppb in well 4036009DC had to public health during its use, prior to 1990. MDPH would develop exposure scenarios based on the use prior to 1990, when the well was decommissioned, incorporating available data and any new data afforded by further investigation. Mr. Williams expressed MDPH's approval that the DoD was committed to further investigating this area.

Bourne Update

Bill Gallagher (IAGWSPO) summarized issues related to the Bourne area.
Weekly and monthly groundwater sampling continues. There were no significant new detections.

- MW-257 (WS4P-4) profile results were non detect for perchlorate. There was an explosive detection that was thought to be a false positive. The BWD had requested four wells be installed at this location. Only two wells screens could be installed in the borehole. The Army was unwilling to install two additional screens in a separate borehole.
- ROAs for BP-2, BP-4, and BP-5 were submitted on 1/29. Approvals are pending.
- A meeting with BWD and Haley and Ward was held yesterday, 2/5. The main issues discussed were as follows:
    1. Haley and Ward expressed concern regarding EPAs 1/22 memorandum on the Interim Guidance of 4 –18 ppb for perchlorate. The concern centered on how this memo would impact execution of the Final Bourne Response Plan. Meghan Cassidy (EPA) stated the 1.5 ppb Relevant Standard was not an MCL but was for use in evaluation of treatment options in the Feasibility Study. There was a general discussion among the agency representatives regarding the guidance level. Army stated their position was that the 1 ppb MADEP Advice was not an enforceable standard.
    2. Leo Yuskus (Haley & Ward) reviewed the unresolved comments on the Bourne Response Plan. The Army did not concede any previous statements regarding these comments.
    3. The Army has further directed the IAGWSPO not to finalize the MOR as the Army is evaluating options based on the direction from the highest levels within DoD. Hap Gonser (IAGWSPO), based on directives from upper levels of DoD management, was determining how DoD policy was applied to the IAGWSP. The IAGWPO's current direction is to proceed with the installation of proposed wells BP-2, BP-3, BP-4, and BP-5, only.
- Considerable discussion at the Tech meeting followed Mr. Gallagher's statement, focusing on the agencies' position that the 4-18 ppb interim guidance for perchlorate had no bearing on the characterization of perchlorate contamination in the aquifer, only on the FS Study and Remedial Action. Mr. Gallagher further emphasized the Army was uncomfortable with efforts spent delineating sporadic, subpart per billion concentrations of perchlorate, an order of magnitude below the current health-based standard.
- Mr. Gallagher stated the Army would be sending the agencies a modified MOR. Mr. Pinaud indicated MADEP would not accept a modified MOR.
- Leo Yuskus stated that since the memo from the EPA had been received, there had been a distinct change in the attitude, cooperation, and reasonableness of the IAGWSPO. Mr. Yuskus requested that all parties meet to discuss these issues further, since the BWD could not wait weeks for this issue to be resolved because the recreation and high water-use season approached.
- Dave Williams stated his hope that interested parties should be able to come up with some answers based on the 4 million dollars spent on the Bourne investigation to date.

Documents and Schedules

Marc Grant (AMEC) reviewed the following priorities for the agencies review schedule, distributing a one-page table that highlighted scheduling issues:

1. HUTA2 All Transects Report Comments – Desiree Moyer indicated comments would be sent 2/14. MADEP still working on comments.
2. HUTA1 Report Additional Comments. EPA to provide after HUTA2 comments.
3. Gun and Mortar COC Letter Report Comments. No estimate of response time offered by EPA.
4. AIRMAG Report Comments.

5. MSP3 Eastern Test Site MOR.
6. MSPII ASP Letter Report MOR.

- Heather Sullivan indicated the Central Impact Area Pump Test, TM 02-3 approval was received from EPA on 2/11.

Miscellaneous

- Jane Dolan asked what the schedule was to resample the dry wells. Heather Sullivan stated the intent was to sample these wells (as possible) before the April LTGM round.
- Ms. Dolan asked if the Final Site Wide Perchlorate Report would include an update of outstanding data. Kim Harriz (AMEC) indicated, as stated in the Workplan, outstanding data from Priority 4 and 5 wells (that were mostly Central Impact Area Wells) would be reported in the Central Impact Area Groundwater Report. Analytical results reported in the Site Wide Perchlorate Report would not be updated when finalized. The objective of this report was to address Priority 1-3 wells (for which all data was provided in the report), as designated in the Workplan.
- Ms. Moyer requested the submittal of a revised Central Impact Area Plume Map be added to the Punchlist for 2/20.
- Todd Borci requested the Range Control Logs be reviewed for additional sites and a determination made as to whether these sites should be added as a Phase 2b sites or a Training Area, to be addressed in the appropriate Workplan.

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 Area

- Groundwater samples from 00-1; 1-88A; 02-02M1, M2 and duplicate; and 02-13M1, M2 and duplicate had detections of perchlorate. The results were similar to the previous sampling rounds.

- Ten groundwater samples had detections of chloroform.

Central Impact Area and Downgradient

- Groundwater samples from MW-23M1; MW-37M2, M3; MW-50M1; and MW-91M1, S had detections of various explosives that were confirmed by PDA spectra. The results were similar to the previous sampling rounds.

Demo Area 1

- Profile samples from MW-258 (D1P-17) had detections of RDX and perchlorate. RDX was detected and confirmed by PDA spectra with interference in one interval at 36 feet below the water table. Perchlorate was detected in two intervals between 36 feet and 46 feet below the water table. Well screens will be set at the depth (33 to 38 ft bwt and 43 to 48 ft bwt) of the perchlorate detections and at the depth (65 to 75 ft bwt) corresponding to the perchlorate detections in upgradient well MW-231.

Southeast Ranges

- Groundwater samples from 90WT0013 had detections of 2A-DNT; 1,3,5-trinitrobenzene; tetryl; nitrobenzene; 2,6-DNT; picric acid; 2-nitrotoluene; 3-nitrotoluene; 4-nitrotoluene; and nitroglycerin that were not confirmed by PDA spectra. Of these compounds, only 2A-DNT; 1,3,5-trinitrobenze; and 2,6-DNT have been validated in previous sampling rounds.

DELIVERABLES SUBMITTED

January 2003 Monthly Progress Report	02/09/2003
Weekly Progress Update for January 27 – January 31, 2003	02/09/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of February 10 include commence well installation of MW-258 (D1P-17), and commence drilling of MW-255 (D1P-19), and Demo 2 proposed wells D2P-3 and D2P-4. Groundwater sampling of the Bourne water supply and monitoring wells and as part of the December LTGM round will continue.

4. 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. Drilling at D1P-19 (MW-255) and well installation at D1P-17 (MW-258) will commence next week.

Pumping and treating groundwater near the toe of the Demo Area 1 plume and at Frank Perkins Road has been selected as an Interim Action to address the Demo Area 1 Groundwater Operable Unit. The Draft RRA/RAM Plan, describing this action, was submitted to the agencies and the IART on January 21, 2003. The informal public comment period on this document began on January 28, 2003 and continues until February 11, 2003. A Rapid Response Action/Release Abatement Measure (RRA/RAM) is also being prepared to address soil contamination at Demo Area 1. A poster board session and a presentation on the Soil RRA/RAM will be conducted at the Impact Area Review Team meeting on February 25th.

TABLE 2
SAMPLING PROGRESS
02/01/2003 - 02/08/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
58MW0015A-E	FIELDQC	02/05/2003	FIELDQC	0	0		
G258DNE	FIELDQC	02/04/2003	FIELDQC	0	0		
TW1-88A-E	FIELDQC	02/04/2003	FIELDQC	0	0		
W81M2T	FIELDQC	02/06/2003	FIELDQC	0	0		
4036000-01G-A	4036000-01G	02/04/2003	GROUNDWATER	38	69.8	6	12
4036000-06G-A	4036000-06G	02/04/2003	GROUNDWATER	108	128	6	12
58MW0003-A	58MW0003	02/04/2003	GROUNDWATER	118.1	124	0	5
58MW0015A-A	58MW0015A	02/05/2003	GROUNDWATER	160.68	169.94	36	45
58MW0015B-A	58MW0015B	02/05/2003	GROUNDWATER	130.96	140.22	12.7	22.7
90MW0063-A	90MW0063	02/05/2003	GROUNDWATER	50	55	32.5	37.5
90MW0063-D	90MW0063	02/05/2003	GROUNDWATER	50	55	32.5	37.5
90MW0080-A	90MW0080	02/04/2003	GROUNDWATER	139	144	87.2	92.2
PPAWSPW-1	PPAWSPW-1	02/05/2003	GROUNDWATER	430	450	158	178
PPAWSPW-2	PPAWSPW-2	02/05/2003	GROUNDWATER	336	356	85	105
RANGECON-A	RANGECON	02/03/2003	GROUNDWATER	260	270	30	40
TW1-88A-A	1-88	02/04/2003	GROUNDWATER	102.9	102.9	67.4	67.4
TW1-88A-D	1-88	02/04/2003	GROUNDWATER	102.9	102.9	67.4	67.4
W02-12M1A	02-12	02/04/2003	GROUNDWATER	109	119	58.35	68.35
W02-12M2A	02-12	02/04/2003	GROUNDWATER	94	104	43.21	53.21
W02-12M3A	02-12	02/04/2003	GROUNDWATER	79	89	28.22	38.22
W02-13M1A	02-13	02/04/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	02/04/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M2D	02-13	02/04/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	02/04/2003	GROUNDWATER	68	78	28.3	38.3
W156SSA	MW-156	02/03/2003	GROUNDWATER	77	87	7	17
W172M1A	MW-172	02/03/2003	GROUNDWATER	199	209	134	144
W172M3A	MW-172	02/03/2003	GROUNDWATER	109	119	44	54
W206M1A	MW-206	02/05/2003	GROUNDWATER	178.5	188.5	19.57	29.57
W206SSA	MW-206	02/05/2003	GROUNDWATER	156	166	0	7
W214M1A	MW-214	02/05/2003	GROUNDWATER	198	208	111.4	121.4
W214M2A	MW-214	02/05/2003	GROUNDWATER	165	175	78.45	88.45
W214M3A	MW-214	02/06/2003	GROUNDWATER	140	150	53.45	63.45
W231M1A	MW-231	02/06/2003	GROUNDWATER	210.5	220.5	104.15	114.15
W231M2A	MW-231	02/06/2003	GROUNDWATER	165.5	175.5	58.33	68.33

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
Other Sample Types methods are variable
SBD = Sample Begin Depth, measured in feet bgs
SED = Sample End Depth, measured in feet bgs
BWTS = Depth below water table, start depth, measured in feet
BWTE = Depth below water table, end depth, measured in feet

TABLE 2
SAMPLING PROGRESS
02/01/2003 - 02/08/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W231M2D	MW-231	02/06/2003	GROUNDWATER	165.5	175.5	58.33	68.33
W231M3A	MW-231	02/06/2003	GROUNDWATER	115.5	125.5	8.27	18.27
W39M1A	MW-39	02/03/2003	GROUNDWATER	220	230	84	94
W39M2A	MW-39	02/03/2003	GROUNDWATER	175	185	39	49
W39M2D	MW-39	02/03/2003	GROUNDWATER	175	185	39	49
W41M1A	MW-41	02/03/2003	GROUNDWATER	235	245	108	118
W41M2A	MW-41	02/03/2003	GROUNDWATER	194	204	67	77
W41M2D	MW-41	02/03/2003	GROUNDWATER	194	204	67	77
W43M1A	MW-43	02/04/2003	GROUNDWATER	223	233	90	100
W43M2A	MW-43	02/04/2003	GROUNDWATER	200	210	67	77
W47DDA	MW-47	02/05/2003	GROUNDWATER	194	204	100	110
W47M1A	MW-47	02/05/2003	GROUNDWATER	169	179	75	85
W47M2A	MW-47	02/05/2003	GROUNDWATER	131.5	141.5	38	48
W47M2D	MW-47	02/05/2003	GROUNDWATER	131.5	141.5	38	48
W80DDA	MW-80	02/06/2003	GROUNDWATER	156	166	114	124
W80M1A	MW-80	02/06/2003	GROUNDWATER	130	140	86	96
W80M2A	MW-80	02/06/2003	GROUNDWATER	100	110	56	66
W80M3A	MW-80	02/06/2003	GROUNDWATER	70	80	26	36
W80SSA	MW-80	02/06/2003	GROUNDWATER	43	53	0	10
W81DDA	MW-81	02/06/2003	GROUNDWATER	184	194	156	166
W81M1A	MW-81	02/06/2003	GROUNDWATER	128	138	100	110
W81M2A	MW-81	02/05/2003	GROUNDWATER	83	93	55	65
W81M3A	MW-81	02/06/2003	GROUNDWATER	53	58	25	30
W81SSA	MW-81	02/06/2003	GROUNDWATER	25	35	0	10
W82DDA	MW-82	02/06/2003	GROUNDWATER	125	135	97	107
W82M1A	MW-82	02/06/2003	GROUNDWATER	104	114	76	86
W82M2A	MW-82	02/06/2003	GROUNDWATER	78	88	50	60
W82M2D	MW-82	02/06/2003	GROUNDWATER	78	88	50	60
W82M3A	MW-82	02/06/2003	GROUNDWATER	54	64	26	36
W92M1A	MW-92	02/06/2003	GROUNDWATER	165	175	25	35
W93M1A	MW-93	02/03/2003	GROUNDWATER	185	195	56	66
W93M2A	MW-93	02/03/2003	GROUNDWATER	145	155	16	26
W93M2D	MW-93	02/03/2003	GROUNDWATER	145	155	16	26
W94M1A	MW-94	02/04/2003	GROUNDWATER	160	170	36	46

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
Other Sample Types methods are variable
SBD = Sample Begin Depth, measured in feet bgs
SED = Sample End Depth, measured in feet bgs
BWTS = Depth below water table, start depth, measured in feet
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TABLE 2
SAMPLING PROGRESS
02/01/2003 - 02/08/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W94M2A	MW-94	02/04/2003	GROUNDWATER	140	150	16	26
W94M2D	MW-94	02/04/2003	GROUNDWATER	140	150	16	26
W94SSA	MW-94	02/05/2003	GROUNDWATER	124	134	0	10
W95M1A	MW-95	02/04/2003	GROUNDWATER	202	212	78	88
W95M2A	MW-95	02/05/2003	GROUNDWATER	167	177	43	53
W96M1A	MW-96	02/03/2003	GROUNDWATER	206	216	70	80
W96M2A	MW-96	02/03/2003	GROUNDWATER	160	170	24	34
W96SSA	MW-96	02/03/2003	GROUNDWATER	134	144	0	10
W97M2A	MW-97	02/03/2003	GROUNDWATER	185	195	62	72
W97M3A	MW-97	02/03/2003	GROUNDWATER	140	150	17	27
G258DNA	MW-258	02/04/2003	PROFILE	180	180	135.7	135.7
G258DOA	MW-258	02/04/2003	PROFILE	190	190	145.7	145.7
G258DPA	MW-258	02/04/2003	PROFILE	200	200	155.7	155.7
G258DQA	MW-258	02/04/2003	PROFILE	210	210	165.7	165.7

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
Other Sample Types methods are variable
SBD = Sample Begin Depth, measured in feet bgs
SED = Sample End Depth, measured in feet bgs
BWTS = Depth below water table, start depth, measured in feet
BWTE = Depth below water table, end depth, measured in feet

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 01/10/03 - 02/08/03

OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	1,3,5-TRINITROBENZENE	NO
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	TETRYL	NO
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	NITROBENZENE	NO
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	2,6-DINITROTOLUENE	NO
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	PICRIC ACID	NO
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	2-NITROTOLUENE	NO
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	4-NITROTOLUENE	NO
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	3-NITROTOLUENE	NO
90WT0013-A	90WT0013	01/30/2003	GROUNDWATER	92	102	0	10	8330N	NITROGLYCERIN	NO
TW00-1-A	00-1	01/29/2003	GROUNDWATER	64	70	52.1	58.1	E314.0	PERCHLORATE	
TW1-88A-A	1-88	02/04/2003	GROUNDWATER	102.9	102.9	67.4	67.4	E314.0	PERCHLORATE	
W02-02M1A	02-02	01/30/2003	GROUNDWATER	114.5	124.5	63.5	73.5	E314.0	PERCHLORATE	
W02-02M2A	02-02	01/30/2003	GROUNDWATER	94.5	104.5	42.65	52.65	E314.0	PERCHLORATE	
W02-02M2D	02-02	01/30/2003	GROUNDWATER	94.5	104.5	42.65	52.65	E314.0	PERCHLORATE	
W02-13M1A	02-13	02/04/2003	GROUNDWATER	98	108	58.33	68.33	E314.0	PERCHLORATE	
W02-13M2A	02-13	02/04/2003	GROUNDWATER	83	93	44.2	54.2	E314.0	PERCHLORATE	
W02-13M2D	02-13	02/04/2003	GROUNDWATER	83	93	44.2	54.2	E314.0	PERCHLORATE	
W23M1A	MW-23	01/30/2003	GROUNDWATER	225	235	103	113	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W23M1A	MW-23	01/30/2003	GROUNDWATER	225	235	103	113	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W37M2A	MW-37	01/31/2003	GROUNDWATER	145	155	26	36	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W37M3A	MW-37	01/31/2003	GROUNDWATER	130	140	11	21	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.
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BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET
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OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W50M1A	MW-50	01/31/2003	GROUNDWATER	207	217	89	99	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
W50M1A	MW-50	01/31/2003	GROUNDWATER	207	217	89	99	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W91M1A	MW-91	01/31/2003	GROUNDWATER	170	180	45	55	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W91M1A	MW-91	01/31/2003	GROUNDWATER	170	180	45	55	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W91SSA	MW-91	01/31/2003	GROUNDWATER	124	134	0	10	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W91SSA	MW-91	01/31/2003	GROUNDWATER	124	134	0	10	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
TW00-2S-A	00-2	01/31/2003	GROUNDWATER	29	35	1.17	7.17	OC21V	CHLOROFORM	
W80M1A	MW-80	02/06/2003	GROUNDWATER	130	140	86	96	OC21V	CHLOROFORM	
W80M2A	MW-80	02/06/2003	GROUNDWATER	100	110	56	66	OC21V	CHLOROFORM	
W80M3A	MW-80	02/06/2003	GROUNDWATER	70	80	26	36	OC21V	CHLOROFORM	
W80SSA	MW-80	02/06/2003	GROUNDWATER	43	53	0	10	OC21V	CHLOROFORM	
W81DDA	MW-81	02/06/2003	GROUNDWATER	184	194	156	166	OC21V	CHLOROFORM	
W81M1A	MW-81	02/06/2003	GROUNDWATER	128	138	100	110	OC21V	CHLOROFORM	
W81M2A	MW-81	02/05/2003	GROUNDWATER	83	93	55	65	OC21V	CHLOROFORM	
W81M3A	MW-81	02/06/2003	GROUNDWATER	53	58	25	30	OC21V	CHLOROFORM	
W81SSA	MW-81	02/06/2003	GROUNDWATER	25	35	0	10	OC21V	CHLOROFORM	
G258DAA	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G258DAA	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	1,3,5-TRINITROBENZENE	NO
G258DAA	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	1,3-DINITROBENZENE	NO
G258DAA	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	2,6-DINITROTOLUENE	NO
G258DAA	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	NITROGLYCERIN	NO
G258DAD	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	1,3-DINITROBENZENE	NO

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G258DAD	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	1,3,5-TRINITROBENZENE	NO
G258DAD	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	NITROBENZENE	NO
G258DAD	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	2,6-DINITROTOLUENE	NO
G258DAD	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	PICRIC ACID	NO
G258DAD	MW-258	01/29/2003	PROFILE	50	50	5.7	5.7	8330N	NITROGLYCERIN	NO
G258DBA	MW-258	01/29/2003	PROFILE	60	60	15.7	15.7	8330N	NITROGLYCERIN	NO
G258DDA	MW-258	01/30/2003	PROFILE	80	80	35.7	35.7	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES*
G258DDA	MW-258	01/30/2003	PROFILE	80	80	35.7	35.7	8330N	1,3,5-TRINITROBENZENE	NO
G258DDA	MW-258	01/30/2003	PROFILE	80	80	35.7	35.7	8330N	NITROGLYCERIN	NO
G258DDA	MW-258	01/30/2003	PROFILE	80	80	35.7	35.7	E314.0	PERCHLORATE	
G258DEA	MW-258	01/30/2003	PROFILE	90	90	45.7	45.7	8330N	NITROGLYCERIN	NO
G258DEA	MW-258	01/30/2003	PROFILE	90	90	45.7	45.7	E314.0	PERCHLORATE	
G258DJA	MW-258	01/31/2003	PROFILE	140	140	95.7	95.7	8330N	NITROGLYCERIN	NO
G258DNA	MW-258	02/04/2003	PROFILE	180	180	135.7	135.7	8330N	NITROGLYCERIN	NO
G258DPA	MW-258	02/04/2003	PROFILE	200	200	155.7	155.7	8330N	NITROGLYCERIN	NO
G258DQA	MW-258	02/04/2003	PROFILE	210	210	165.7	165.7	8330N	NITROGLYCERIN	NO
G258DQA	MW-258	02/04/2003	PROFILE	210	210	165.7	165.7	8330N	PICRIC ACID	NO

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