WEEKLY PROGRESS UPDATE
FOR APRIL 14 – APRIL 18, 2003

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019, 1-2000-0014, & BOURNE-BWSC 4-15031

MASSACHUSETTS MILITARY RESERVATION
TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from April 14 through April 18, 2003.

1. SUMMARY OF ACTIONS TAKEN

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

Table 1. Drilling progress as of April 18, 2003

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-100	Central Impact Area (CIAP-30)	369	231	
MW-266	Central Impact Area (CIAP-27)	323	174	239-249; 307-317
MW-267	Bourne Area (BP-5)	250	20	
MW-268	Bourne Area (BP-2)	60	8	

bgs = below ground surface
bwt = below water table

Completed well installation of MW-266 (CIAP-27), completed drilling of MW-100 (CIAP-30), and commenced drilling of MW-267 (BP-5) and MW-268 (BP-2). MW-100 (CIAP-30) was backfilled without installation of new screens. 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-100, MW-267, and MW-268. Groundwater samples were collected from Bourne water supply and monitoring wells, recently installed wells, residential wells, from the Opening Pond Drive Points, and as part of the April Long-Term Groundwater Monitoring Plan. Water samples were collected from the GAC treatment system. Influent and effluent water samples were collected as part of the pilot study being conducted at MW-80. Supplemental soil samples were collected from the K-Range BIP craters. Soil cutting samples were collected from Central Impact Area well pads. Surface water samples were collected near a public beach, private beach, and the spit at Snake Pond.

The following are notes from the April 17, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Tina Dolen (IAGWSPO)	Bill Gallagher (IAGWSPO)	LTC Bill FitzPatrick (E&RC)
Todd Borci (EPA)	Meghan Cassidy (EPA)	Desiree Moyer (EPA)
Jane Dolan (EPA)	Bob Lim (EPA)	Len Pinaud (MADEP)
Mark Panni (MADEP)	Dave Williams (MDPH)	Gina Kaso (ACE)
Ed Wise (ACE)	Heather Sullivan (ACE -phone)	Shelia Holt (ACE)
Katrazyna Chelkowska (ACE)	Marc Grant (AMEC-phone)	John Rice (AMEC)
Kim Harriz (AMEC)	Al Larkins (ECC)	Leo Yuskus (Haley and Ward)
Larry Panell (Jacobs)	Kevin Hood (UConn)	

Punchlist Items

#4 Provide RoE for NWP-1 (Corps). Permit for well installation will be signed today by the Corps and returned to the IAGWSPO for signature. SHPO approval due by 5/12.

#7 Provide list of possible RRA/RAM sites (Corps). List discussed at Remedial Project Managers meeting.

#8 Provide map of existing wells in the Northwest Corner of the base (Corps). Map of Northwest Corner with existing wells was distributed.

#10 Provide prioritized list of ASR witness candidates (Corps). List emailed 4/16.

MSP3 and Southeast Ranges Update

Gina Kaso (ACE) provided an update on the MSP3 task and SE Ranges fieldwork.

Ox Pond – Discussions between the Army/Guard and agencies on 4/11 confirmed that completed fieldwork was sufficient for investigation. Confirmation email to be sent out this week.

Former Demo sites (Inactive Demo sites) – Fieldwork completed. Discussions between the Army/Guard and agencies on 4/11 resulted in the selection of additional anomalies to excavate for site characterization. Email confirming anomalies selected will be sent out this week.

ASP – All fieldwork was completed. Tetra Tech is compiling data that will be included in a letter report. Sampling of soil beneath the 105mm cartridge casings still needs to be completed. Workplan will be revised to reflect MSP3 protocols. The revised workplan and responses to EPA comments will be provided to the agencies.

NBC Area – Geophysical survey figures were provided to the agencies on 3/20. Corps/IAGWSPO and agencies selected anomalies for excavation via conference call on 4/11. Email confirming anomalies selected will be sent out this week.

J-3 Range Hillside/Barrage Rocket Sites – Schonstedt survey was completed at the Hillside site. Data was provided to AMEC. AMEC will review the information to select areas for placement of soil grids and anomalies for excavation. Ms. Kaso to check when map/table will be available for agency review. Crews continue surface clearance and grubbing at Barrage Rocket site; Schonstedt survey to commence shortly.

Controlled Burn Update

Bill Gallagher (IAGWSPO) distributed a 1/24 letter and a 3/14 letter from Mike Ciaranca (MAARNG) to Gerald Monte (MADEP) identifying areas being considered for prescribed burns.

- As indicated in the letters, the A-4 quadrant was the preferred burn area with a window for the burn of April 1 to June 13.
- To date, weather conditions have not been suitable to perform the prescribed burn. In addition, a firebreak still needs to be established around the identified area.
- EPA to review the letters prior to further comment (if any).

CDC Update.
Gina Kaso (ACE) provided an update on the Controlled Detonation Chamber activities.

- Total items discovered since departure of CDC: 33, consisting of Supplementary Charges (12), Small Arms Ammunition (17), 3-inch Stokes Mortars (3), 4.2-inch Mortar Propellant Increment (1), and a practice grenade (1).
- Total items destroyed 12/02-1/03: 10,100. Total Items scheduled for destruction: 19,801. Total Items remaining for destruction: 9,701 (majority are 20MM projectiles).
- The Corps has recommended that the CDC be returned in the immediate future for a 2-week period to destroy the remainder of the CDC capable munitions with the exception of the 20MM projectiles. The Corps has recommended that the 20MM projectiles be drummed and sent to a Clean Harbors' facility in LA for thermal destruction per the UXO Demilitarization "White Paper" being prepared by ECC.

Update on UXO Demilitarization "White Paper"
Al Larkins (ECC) provided a summary of the White Paper prepared for the Corps addressing the demilitarization of energetic small arms ammunition items and military munitions with minor component/residual explosives.

- The objective of the White paper is to identify and evaluate technologies available to treat small arms, pyrotechnics, and fragmentation, as well as soil containing minor concentrations of energetic residue. Up to 5 lbs explosive, TNT equivalent.
- Five Thermal Treatment Options were evaluated:
  - Superheated steam
  - Hot Gas Decontamination (Blanket)
  - Hot Gas Decontamination (Chamber)
  - Flashing Furnace
  - Low Temperature Thermal Desorbtion
- A detailed analysis was performed of each technology based on the following factors:
  - Commercial Availability
  - Army Technical Bulletin 700-4
  - Throughput
  - Siting Requirements
  - Operating and Capital Costs
  - Ability to Treat All Required Materials
  - Utility Requirements
  - Permitting
  - Labor Requirements
  - Waste Disposal
- For treatment of 20mm projectiles (10,000) ECC looked at the RCRA-permitted facility, Clean Harbors of Baton Rouge, LA. A price has been requested to package, transport and dispose of the 20MM rounds. After thermal destruction, the waste residue is collected, sampled and shipped off for disposal as non-hazardous or hazardous waste, as appropriate.
- For treatment of the 40mm projectiles not safe to move (5,000), on-site Flashing Furnace maybe an effective technology. Flashing furnace can process explosive contaminated range material to 5X at a rate of up to 10,000 pounds per hour (lb/hr). Flashing furnace may also be an effective technology for the 20MM rounds.
- Permitting requirements for on-site use of technologies and example sites where the technologies have been used are also discussed in the paper.
- Draft to the agencies anticipated on 5/21. Todd Borci requested he be provided the cost information to be provided by Clean Harbors.

Northwest Corner of Camp Edwards
Bill Gallagher (IAGWSPO) gave an update on the Northwest Corner investigation.

- Jane Dolan (EPA) indicated the Bourne Braves had provided no new information on their irrigation well.
- USGS Bourne Bridge wells were sampled on 4/10 and 4/11. Explosives analysis had a 5-day TAT; perchlorate analysis, 1 week TAT.

- Letters were sent to four Foretop Road residences to identify private water wells (if any). Responses indicated that 2 of the contacted residences have private wells that they use for potable water, 2 do not have wells.
- Ralph Marks (BWD) was contacted to determine which of the Foretop residents are customers. All but three of the residences are customers. Two are the residences identified with private wells; the third residence does not have a listed phone number and the status of a well on that property is not known. Other inquires to area residences indicate one property owner has a disabled well, that is not used, located in a vegetable garden. Another owner is planning on installing a well to serve as an irrigation well and to fill a swimming pool.
- The owners of residences with private wells have agreed to allow the IAGWSPO to sample the wells. The sampling to be arranged as soon as acceptable by the property owners. Wells to be sampled for explosives (1 day TAT) and perchlorate (2 day TAT).
- Although Mr. Marks had been contacted before regarding possible private wells in the Bourne area, he admitted to forgetting about these wells that had been installed when the property developer had not been willing to wait for the BWD to route a water line to Foretop Road.
- Tina Dolen (IAGWSPO) indicated a call was being placed to the developer to identify the well driller not only for construction details of the identified wells, but also to assist in the identification of any additional wells. Information would also be pursued with the Board of Health.
- Len Pinaud (MADEP) to investigate state records for well information on Foretop Road residences.
- Meghan Cassidy (EPA) requested that an email be sent when the sampling day was established and that the quickest TAT for analyses achievable be requested from the laboratory.
- NWP-1 has a confirmed location in the southeast corner of the Corps property parking lot; agreeable to all parties. Schedule for the installation will be provided later. Waiting on SHPO for ROA approval by 5/12.
- ROAs for NWP-2, NWP-3 and NWP-4 were approved by Karen Wilson (IAGWSPO) and Dr. Sue Goodfellow (E&RC). These wells are in an NStar easement. The Corps is working out an agreement with NStar to install wells in the easement.
- As shown on the figure of existing wells in the Northwest corner distributed pursuant to Punchlist Item #8, the IAGWSPO is considering sampling the following wells in this area:

95-15	not known to have been sampled for perchlorate, screen slightly deeper than 95-15B and C in this vicinity.
95-15E	slightly north of current data points between 95-15 and particle track from 4036011, same general screen interval as 95-15
95-16	slightly south and east of 95-15 series, and shallower at 4 to -2 ft MSL than 95-15E screen.
CMW-1	mid level well slightly southeast of 95-15.
95-6ED	south of 95-6B (which had one perchlorate detection), same screen interval as 95-6B.

Bourne Update

Bill Gallagher (IAGWSPO) gave an update on activities related to the Bourne investigation.

- Monthly and weekly groundwater monitoring continues; no new significant findings were noted in this week's results.
- Drilling of BP-2 continued. Drilling of BP-5 commenced.
- The BWD is working with NStar on an easement to install monitoring wells around WS-4. The ROA for WS4P-6 was approved.

- Soil sampling as part of the Bourne Perchlorate Response Plan has not started yet since the MOR has not been finalized. MOR to be discussed in an After-meeting today.
- Next meeting with the Bourne Water District scheduled for 1 pm, April 23.
- Pilot Study at MW-80 continues on schedule. A table of influent and effluent perchlorate concentrations was distributed via email.

Documents and Schedules

Marc Grant (AMEC) reviewed document priorities and scheduling issues. A one-page Scheduling Issues table was distributed.

- Priority documents for the MADEP review were the HUTA1 and HUTA2 Reports. EPA HUTA comments were being addressed; Gina Kaso indicated that Bill Myer (IAGWSPO) wanted to go over some of the comments with EPA.
- Priority for EPA's review was the MSP3 Scar Site Report. EPA indicated comments would be coming today.
- Of second priority for both agencies should be the Gun & Mortar COC Letter Report.
- Regarding the LTGM Plan for 2003, Todd Borci's questions regarding the Central Impact Area and CS-19 were being addressed. Some further response on the plan would be needed in the next few weeks as the field crews were coming to the end of the list of wells that had no changes from last year's plan. Todd Borci suggested that the Corps suggest another group of wells for him to review.
- Regarding the L Range Soil Workplan, Jane Dolan indicated that the EPA was looking for text revisions to accompany the revised table that had been provided. Dave Hill (IAGWSPO) to check with Herb Colby (AMEC). Heather Sullivan (ACE) indicated the Corps was working on contracting the GPR survey for the L Range and completing the ROAs for piezometer installation.
- To EPA's inquiry, Dave Hill indicated the IAGWSP team was expecting to propose a well downgradient of J1P-16 to further delineate the perchlorate detection in the profile samples from this borehole. Mr. Borci suggested that one of the two SE Ranges "wilderness wells", previously scoped and funded be substituted for this new J-1 Range well. Specification of a proposed location for this well added as a Punchlist item.
- Heather Sullivan indicated the list of wells for Southeast Ranges synoptic water level round and schedule for piezometer installations could be provided as early as next week. These requests added as Punchlist items.

2. SUMMARY OF DATA RECEIVED

Rush data are summarized in Table 3. These data are for analyses that are performed on a fast turn around 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 02-03M2 had a detection of perchlorate. The results were similar to the previous sampling rounds.
- Groundwater samples from 02-08M2 and M3 had detections of chloroform.
- Influent samples from a pilot study at MW-80M1 had detections of perchlorate that were similar to the previous sampling rounds at this well.

Central Impact Area

- Profile results from MW-100 (CIAP-30) had detections of perchlorate and 2,4-DANT. Perchlorate was detected in six intervals between 12 feet and 62 feet below the water table. 2,4-DANT was detected and confirmed by PDA spectra in one interval at 82 feet below the water table. The original well screens at MW-100 (P-4) were set at 30 to 40 ft and 45 to 55 ft bwt. It was agreed that no additional screens were required at this location.

DELIVERABLES SUBMITTED

Weekly Progress Update for April 7 – April 11, 2003	04/16/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of April 21 include complete well installation of MW-267 (BP-5), complete drilling at MW-268 (BP-2), and commence drilling at CIAP-29. Groundwater sampling at Bourne water supply and monitoring wells, and as part of the April Long-Term Groundwater Monitoring Plan will continue.

4. SUMMARY OF ACTIVITIES FOR DEMO AREA 1

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 resolution meeting for the Demo Area 1 Groundwater RRA/RAM Plan was continued on April 17, 2003. EPA and MADEP comments on the Soil RRA/RAM Plan were received on April 1, 2003 and responses are being developed.

TABLE 2
SAMPLING PROGRESS
04/12/2003 - 04/19/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
G100DSE	FIELDQC	04/14/2003	FIELDQC	0	0		
G100DUE	FIELDQC	04/15/2003	FIELDQC	0	0		
G100DWE	FIELDQC	04/16/2003	FIELDQC	0	0		
G267DAE	FIELDQC	04/17/2003	FIELDQC	0	0		
G267DBE	FIELDQC	04/18/2003	FIELDQC	0	0		
G267DBT	FIELDQC	04/18/2003	FIELDQC	0	0		
HD040501SS3E	FIELDQC	04/18/2003	FIELDQC	0	0		
SC22402E	FIELDQC	04/14/2003	FIELDQC	0	0		
SC22402T	FIELDQC	04/14/2003	FIELDQC	0	0		
SC26602E	FIELDQC	04/15/2003	FIELDQC	0	0		
SC26602T	FIELDQC	04/15/2003	FIELDQC	0	0		
W02-08M1T	FIELDQC	04/16/2003	FIELDQC	0	0		
XXM971-E	FIELDQC	04/15/2003	FIELDQC	0	0		
XXM972-E	FIELDQC	04/16/2003	FIELDQC	0	0		
4036000-01G-A	4036000-01G	04/15/2003	GROUNDWATER	38	69.8	6	12
4036000-06G-A	4036000-06G	04/15/2003	GROUNDWATER	108	128	6	12
PHOP01-A	DP OP01	04/17/2003	GROUNDWATER	44	46	39.06	41.06
PHOP02-A	DP OP02	04/17/2003	GROUNDWATER	68	70	61.2	63.2
RS0011FRTP-A	RS0011F	04/18/2003	GROUNDWATER				
RS0017FRTP-A	RS0017F	04/18/2003	GROUNDWATER				
W02-01M1A	02-01	04/14/2003	GROUNDWATER	95	105	42.9	52.9
W02-01M2A	02-01	04/14/2003	GROUNDWATER	83	93	30.9	40.9
W02-02M2A	02-02	04/18/2003	GROUNDWATER	94.5	104.5	42.65	52.65
W02-02SSA	02-02	04/18/2003	GROUNDWATER	49.5	59.5	0	10
W02-03M1A	02-03	04/14/2003	GROUNDWATER	130	140	86.1	96.1
W02-03M1D	02-03	04/14/2003	GROUNDWATER	130	140	86.1	96.1
W02-03M2A	02-03	04/14/2003	GROUNDWATER	92	102	48.15	58.15
W02-03M3A	02-03	04/14/2003	GROUNDWATER	75	85	31.05	41.05
W02-04M1A	02-04	04/18/2003	GROUNDWATER	123	133	73.97	83.97
W02-04M2A	02-04	04/17/2003	GROUNDWATER	98	108	48.93	58.93
W02-04M3A	02-04	04/17/2003	GROUNDWATER	83	93	34.01	44.01
W02-08M1A	02-08	04/16/2003	GROUNDWATER	108	113	86.56	91.56
W02-08M2A	02-08	04/16/2003	GROUNDWATER	82	87	60.65	65.65
W02-08M3A	02-08	04/16/2003	GROUNDWATER	62	67	40.58	45.58

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
04/12/2003 - 04/19/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W02-10M1A	02-10	04/18/2003	GROUNDWATER	135	145	94	104
W02-13M1A	02-13	04/15/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M1D	02-13	04/15/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	04/15/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	04/15/2003	GROUNDWATER	68	78	28.3	38.3
W105M1A	MW-105	04/14/2003	GROUNDWATER	205	215	78	88
W105M2A	MW-105	04/15/2003	GROUNDWATER	165	175	38	48
W124M1A	MW-124	04/15/2003	GROUNDWATER	234	244	98	108
W124M2A	MW-124	04/15/2003	GROUNDWATER	219	229	83	93
W124M2D	MW-124	04/15/2003	GROUNDWATER	219	229	83	93
W141M1A	MW-141	04/16/2003	GROUNDWATER	190	200	62	72
W141M2A	MW-141	04/16/2003	GROUNDWATER	162	172	34	44
W141SSA	MW-141	04/17/2003	GROUNDWATER	128	138	0	10
W159M1A	MW-159	04/16/2003	GROUNDWATER	178.5	188.5	53	63
W159SSA	MW-159	04/17/2003	GROUNDWATER	126.3	136.3	1	11
W160SSA	MW-160	04/16/2003	GROUNDWATER	137.5	147.5	5	15
W161SSA	MW-161	04/16/2003	GROUNDWATER	145.5	155.5	6	16
W38DDA	MW-38	04/17/2003	GROUNDWATER	242	252	124	134
W38M1A	MW-38	04/17/2003	GROUNDWATER	217	227	99	109
W38M2A	MW-38	04/16/2003	GROUNDWATER	187	197	69	79
W38M3A	MW-38	04/16/2003	GROUNDWATER	170	180	52	62
W38M3A-QA	MW-38	04/16/2003	GROUNDWATER	170	180	52	62
W38M3A-QD	MW-38	04/16/2003	GROUNDWATER	170	180	52	62
W38M4A	MW-38	04/16/2003	GROUNDWATER	132	142	14	24
W39M1A	MW-39	04/14/2003	GROUNDWATER	220	230	84	94
W39M2A	MW-39	04/14/2003	GROUNDWATER	175	185	39	49
W40M1A	MW-40	04/15/2003	GROUNDWATER	132.5	142.5	13	23
W40M1A-QA	MW-40	04/15/2003	GROUNDWATER	132.5	142.5	13	23
W40M1D	MW-40	04/15/2003	GROUNDWATER	132.5	142.5	13	23
W41M1A	MW-41	04/14/2003	GROUNDWATER	235	245	108	118
W41M2A	MW-41	04/14/2003	GROUNDWATER	194	204	67	77
W43M1A	MW-43	04/14/2003	GROUNDWATER	223	233	90	100
W43M2A	MW-43	04/14/2003	GROUNDWATER	200	210	67	77
W83DDA	MW-83	04/18/2003	GROUNDWATER	142	152	109	119

Profiling methods include: Volatiles and Explosives
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04/12/2003 - 04/19/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W83M1A	MW-83	04/18/2003	GROUNDWATER	110	120	77	87
W83M2A	MW-83	04/18/2003	GROUNDWATER	85	95	52	62
W89M1A	MW-89	04/17/2003	GROUNDWATER	234	244	92	102
W89M1A-QA	MW-89	04/17/2003	GROUNDWATER	234	244	92	102
W89M2A	MW-89	04/17/2003	GROUNDWATER	214	224	72	82
W89M2A-QA	MW-89	04/17/2003	GROUNDWATER	214	224	72	82
W89M3A	MW-89	04/17/2003	GROUNDWATER	174	184	32	42
W89M3A-QA	MW-89	04/17/2003	GROUNDWATER	174	184	32	42
W89M3D	MW-89	04/17/2003	GROUNDWATER	174	184	32	42
W97M1A	MW-97	04/16/2003	GROUNDWATER	235	245	112	122
W97M2A	MW-97	04/16/2003	GROUNDWATER	185	195	62	72
W97M3A	MW-97	04/16/2003	GROUNDWATER	140	150	17	27
XXM971-A	97-1	04/15/2003	GROUNDWATER	83	93	62	72
XXM972-A	97-2	04/16/2003	GROUNDWATER	75	85	53	63
DW041503-NV	GAC WATER	04/15/2003	IDW	0	0		
DW041603-NV	GAC WATER	04/16/2003	IDW	0	0		
DW041703-NV	GAC WATER	04/17/2003	IDW	0	0		
SC15202	SOIL CUTTING	04/15/2003	IDW	0	0.25		
SC16402	SOIL CUTTING	04/15/2003	IDW	0	0.25		
SC22402	SOIL CUTTING	04/14/2003	IDW	0	0.25		
SC22902	SOIL CUTTING	04/14/2003	IDW	0	0.25		
SC23502	SOIL CUTTING	04/14/2003	IDW	0	0.25		
SC24502	SOIL CUTTING	04/14/2003	IDW	0	0.25		
SC26502	SOIL CUTTING	04/15/2003	IDW	0	0.25		
SC26602	SOIL CUTTING	04/15/2003	IDW	0	0.25		
SC3702	SOIL CUTTING	04/15/2003	IDW	0	0.25		
SC3902	SOIL CUTTING	04/15/2003	IDW	0	0.25		
SC4002	SOIL CUTTING	04/14/2003	IDW	0	0.25		
SC4302	SOIL CUTTING	04/15/2003	IDW	0	0.25		
SC4402	SOIL CUTTING	04/14/2003	IDW	0	0.25		
SC5902	SOIL CUTTING	04/15/2003	IDW	0	0.25		
PT80M1INF21A	MW-80	04/14/2003	ITE_MW80_PILOT	130	140	86	96
PT80M1INF27A	MW-80	04/13/2003	ITE_MW80_PILOT	130	140	86	96
PT80M1INF28A	MW-80	04/13/2003	ITE_MW80_PILOT	130	140	86	96

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SAMPLING PROGRESS
04/12/2003 - 04/19/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
PT80M1INF29A	MW-80	04/14/2003	ITE_MW80_PILOT	130	140	86	96
PT80M1INF30A	MW-80	04/14/2003	ITE_MW80_PILOT	130	140	86	96
PT80M1INF31A	MW-80	04/15/2003	ITE_MW80_PILOT	130	140	86	96
PT80M1INF32A	MW-80	04/15/2003	ITE_MW80_PILOT	130	140	86	96
PT80M1INF33A	MW-80	04/16/2003	ITE_MW80_PILOT	130	140	86	96
PT80M1INF34A	MW-80	04/16/2003	ITE_MW80_PILOT				
PT80M1INF35A	MW-80	04/17/2003	ITE_MW80_PILOT				
PT80M1INF36A	MW-80	04/17/2003	ITE_MW80_PILOT				
PT80M1INF41A	MW-80	04/18/2003	ITE_MW80_PILOT				
PTEFFA10A	PTEFFA10	04/14/2003	ITE_MW80_PILOT	0	0		
PTEFFA11A	PTEFFA11	04/16/2003	ITE_MW80_PILOT	0	0		
PTEFFA12A	PTEFFA12	04/18/2003	ITE_MW80_PILOT				
PTEFFA14A	PTEFFA14	04/18/2003	ITE_MW80_PILOT				
PTEFFA9A	PTEFFA9	04/13/2003	ITE_MW80_PILOT	0	0		
PTEFFB4A	PTEFFB4	04/14/2003	ITE_MW80_PILOT	0	0		
PTEFFB4D	PTEFFB4	04/14/2003	ITE_MW80_PILOT	0	0		
PTEFFB6A	PTEFFB6	04/15/2003	ITE_MW80_PILOT	0	0		
PTEFFB6D	PTEFFB6	04/15/2003	ITE_MW80_PILOT	0	0		
PTEFFB7A	PTEFFB7	04/17/2003	ITE_MW80_PILOT	0	0		
PTEFFB8A	PTEFFB8	04/18/2003	ITE_MW80_PILOT				
PTFTA6A	PTFTA6A	04/15/2003	ITE_MW80_PILOT	0	0		
PTFTC8A	PTFTC3A	04/17/2003	ITE_MW80_PILOT	0	0		
PTFTD9A	PTFTC3A	04/18/2003	ITE_MW80_PILOT				
PTFTE10A	PTFTA10A	04/16/2003	ITE_MW80_PILOT	0	0		
G100DSA	MW-100	04/14/2003	PROFILE	320	320	181.8	181.8
G100DTA	MW-100	04/14/2003	PROFILE	330	330	191.8	191.8
G100DUA	MW-100	04/15/2003	PROFILE	340	340	201.8	201.8
G100DWA	MW-100	04/16/2003	PROFILE	360	360	221.8	221.8
G267DAA	MW-267	04/17/2003	PROFILE	235	235	5	5
G267DBA	MW-267	04/18/2003	PROFILE	240	240	10	10
G267DCA	MW-267	04/18/2003	PROFILE	250	250	20	20
G268DAA	MW-268	04/18/2003	PROFILE	60	60	8.35	8.35
HD040501SS1	040501	04/18/2003	SOIL GRID	0	0.16		
HD040501SS2	040501	04/18/2003	SOIL GRID	0	0.16		

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
04/12/2003 - 04/19/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HD040501SS3	040501	04/18/2003	SOIL GRID	0	0.16		
HD040501SS3D	040501	04/18/2003	SOIL GRID	0	0.16		
HD040501SS4	040501	04/18/2003	SOIL GRID	0	0.16		
HD040501SS5	040501	04/18/2003	SOIL GRID	0	0.16		
HD040501SS6	040501	04/18/2003	SOIL GRID	0	0.16		
HD040501SS7	040501	04/18/2003	SOIL GRID	0	0.16		
HD040501SS8	040501	04/18/2003	SOIL GRID	0	0.16		
LKSNK0005AAA	LKSNK0005	04/16/2003	SURFACE WATER	0	0		
LKSNK0006AAA	LKSNK0006	04/16/2003	SURFACE WATER	0	0		
LKSNK0006AAD	LKSNK0006	04/16/2003	SURFACE WATER	0	0		
LKSNK0007AAA	LKSNK0007	04/16/2003	SURFACE WATER	0	0		

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 03/21/03 - 04/19/03

OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W02-03M2A	02-03	04/14/2003	GROUNDWATER	92	102	48.15	58.15	E314.0	PERCHLORATE	
W02-08M2A	02-08	04/16/2003	GROUNDWATER	82	87	60.65	65.65	OC21V	CHLOROFORM	
W02-08M3A	02-08	04/16/2003	GROUNDWATER	62	67	40.58	45.58	OC21V	CHLOROFORM	
PT80M1INF25A	MW-80	04/12/2003	ITE_MW80_PILOT	130	140	86	96	E314.0	PERCHLORATE	
PT80M1INF29A	MW-80	04/14/2003	ITE_MW80_PILOT	130	140	86	96	E314.0	PERCHLORATE	
G100DBA	MW-100	04/01/2003	PROFILE	150	150	11.8	11.8	E314.0	PERCHLORATE	
G100DCA	MW-100	04/02/2003	PROFILE	160	160	21.8	21.8	E314.0	PERCHLORATE	
G100DEA	MW-100	04/02/2003	PROFILE	180	180	41.8	41.8	E314.0	PERCHLORATE	
G100DFA	MW-100	04/02/2003	PROFILE	190	190	51.8	51.8	E314.0	PERCHLORATE	
G100DGA	MW-100	04/03/2003	PROFILE	200	200	61.8	61.8	E314.0	PERCHLORATE	
G100DIA	MW-100	04/03/2003	PROFILE	220	220	81.8	81.8	8330N	PICRIC ACID	NO
G100DIA	MW-100	04/03/2003	PROFILE	220	220	81.8	81.8	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
G100DIA	MW-100	04/03/2003	PROFILE	220	220	81.8	81.8	8330N	2,4-DIAMINO-6-NITROTOLUENE	YES
G100DJA	MW-100	04/03/2003	PROFILE	230	230	91.8	91.8	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
G100DJA	MW-100	04/03/2003	PROFILE	230	230	91.8	91.8	8330N	2,6-DINITROTOLUENE	NO
G100DJA	MW-100	04/03/2003	PROFILE	230	230	91.8	91.8	8330N	PICRIC ACID	NO
G100DJA	MW-100	04/03/2003	PROFILE	230	230	91.8	91.8	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
G100DKA	MW-100	04/04/2003	PROFILE	240	240	101.8	101.8	8330N	PICRIC ACID	NO
G100DLA	MW-100	04/04/2003	PROFILE	250	250	111.8	111.8	8330N	PICRIC ACID	NO
G100DMA	MW-100	04/04/2003	PROFILE	260	260	121.8	121.8	8330N	PICRIC ACID	NO
G100DNA	MW-100	04/07/2003	PROFILE	270	270	131.8	131.8	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G100DNA	MW-100	04/07/2003	PROFILE	270	270	131.8	131.8	8330N	PICRIC ACID	NO

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.
SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BELOW GROUND SURFACE
SED = SAMPLE COLLECTION END DEPTH IN FEET BELOW GROUND SURFACE
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**
+ = PDAs are not good matches

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 03/21/03 - 04/19/03

OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G100DNA	MW-100	04/07/2003	PROFILE	270	270	131.8	131.8	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
G100DRA	MW-100	04/09/2003	PROFILE	310	310	171.8	171.8	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
G100DRA	MW-100	04/09/2003	PROFILE	310	310	171.8	171.8	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G100DRA	MW-100	04/09/2003	PROFILE	310	310	171.8	171.8	8330N	PICRIC ACID	NO
G100DRA	MW-100	04/09/2003	PROFILE	310	310	171.8	171.8	8330N	2-NITROTOLUENE	NO
G100DRA	MW-100	04/09/2003	PROFILE	310	310	171.8	171.8	8330N	4-NITROTOLUENE	NO
G100DRA	MW-100	04/09/2003	PROFILE	310	310	171.8	171.8	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
G100DRA	MW-100	04/09/2003	PROFILE	310	310	171.8	171.8	8330N	NITROGLYCERIN	NO
G100DUA	MW-100	04/15/2003	PROFILE	340	340	201.8	201.8	8330N	NITROGLYCERIN	NO
G100DUA	MW-100	04/15/2003	PROFILE	340	340	201.8	201.8	8330N	PICRIC ACID	NO
G100DUA	MW-100	04/15/2003	PROFILE	340	340	201.8	201.8	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G100DUA	MW-100	04/15/2003	PROFILE	340	340	201.8	201.8	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
G100DUA	MW-100	04/15/2003	PROFILE	340	340	201.8	201.8	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
G100DWA	MW-100	04/16/2003	PROFILE	360	360	221.8	221.8	8330N	PICRIC ACID	NO

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.
SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BELOW GROUND SURFACE
SED = SAMPLE COLLECTION END DEPTH IN FEET BELOW GROUND SURFACE
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**
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