WEEKLY PROGRESS UPDATE
FOR APRIL 28 – MAY 2, 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 28 through May 2, 2003.

1. SUMMARY OF ACTIONS TAKEN

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

Table 1. Drilling progress as of May 2, 2003

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-93	Central Impact Area (CIAP-29)	270	136	
MW-267	Bourne Area (BP-5)	417	187	97-107
MW-268	Bourne Area (BP-2)	207	155	248-258

bgs = below ground surface
bwt = below water table

Completed well installation of MW-267 (BP-5) and MW-268 (BP-2) and continued drilling of MW-93 (CIAP-29). 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-93. Groundwater samples were collected from Bourne water supply, monitoring wells and spring, recently installed wells, residential wells, and as part of the April Long-Term Groundwater Monitoring Plan. Soil samples were collected from the spoils piles of Demo Area 2 trenches. Supplemental soil sampling was conducted at BIP craters.

The following are notes from the May 1, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Hap Gonser (IAGWSPO)
Bill Gallagher (IAGWSPO)
Todd Borci (EPA - phone)
Meghan Cassidy (EPA)
Millie Garcia-Surette (MADEP)
Ed Wise (ACE)
Shelia Holt (ACE-phone)
Herb Colby (AMEC)
Pam Foti (ECC)
Mike Goydas (Jacobs)
Ben Gregson (IAGWSPO)
Dave Hill (IAGWSPO)
Jane Dolan (EPA)
Desiree Moyer (EPA)
Dave Williams (MDPH)
Heather Sullivan (ACE)
Katrazyna Chelkowska (ACE-phone)
Joanne Muzzin (AMEC)
Darrin Smith (ECC)
Carla Buriks (Tt – phone)
Tina Dolen (IAGWSPO)
LTC Bill Fitzpatrick (E&RC)
Bob Lim (EPA)
Mark Panni (MADEP)
Gina Kaso (ACE)
Raimo Liias (ACE)
Rob Foti (ACE)
Marc Grant (AMEC – phone)
Dick Skryness (ECC - phone)

Punchlist Items

#2 Provide PZ211 Sampling Update (Corps). Property owners have moved debris. AMEC is scheduled to sample piezometer on 5/5.

#3 Provide Use Permit for NWP-1 (Corps). Use Permit for well installation has been forwarded to the AEC for review.

#4 Provide Waldorf School baseball field irrigation well construction details (EPA). Jane Dolan (EPA) tried to contact representatives of the baseball league. EPA following up for additional information this week.

#5 Consider sampling Waldorf School baseball field irrigation well (IAGWSPO). No additional information available.

#6 Provide schedule for piezometer installations at SE Ranges (Corps). Schedules not available yet.

#8 Provide Corrective Action Report for J-2 Range (Corps). No update on gravel.

#9 Evaluate EPA's request to sample piezometers in SE Ranges (IAGWSPO). Piezometers were installed for water level measurements only. IAGWSPO see's no reason to sample these drivepoints or drill deeper. EPA stated that additional wells would be necessary in this area.

#10 Provide earliest start date for start of drilling at J1P-19, located downgradient of J1P-16 (Corps). ROA has been revised and is awaiting approval by Karen Wilson (IAGWSPO). Once approval is received, a drilling date will be working into drilling schedule.

MSP3 and Southeast Ranges Update

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

Ox Pond. Fieldwork completed.

Former Demo sites. Final anomalies were investigated. No significant finds, scrap only. Table of significant findings distributed.

NBC Area. Continuing with intrusive investigation. Completed majority of anomaly excavations with no significant finds. Completion of all anomaly excavations is anticipated early next week.

J-3 Range Hillside/Barrage Rocket Sites. Results of Schonstedt survey for Hillside site were provided to agencies on 4/29. Grubbing and surface clearance completed. Barrage Rocket site transects are continuing with Schonstedt survey.

Deep Bottom Pond. Crew established survey control points and grids. Schonstedt and geophysical surveys started. Five (5) surface water samples and 5 sediment samples (2 in northern lagoon, 2 in middle lagoon, and 1 in southern lagoon) were collected. Analyzed for VOCs, SVOCs, explosives, metals, and pesticides/PCBs.

Northwest Corner of Camp Edwards

Bill Gallagher (IAGWSPO) provided an update on the Northwest Corner investigation.

- Residential wells on Foretop Road were non-detect for perchlorate and explosives. Another Foretop Road residential well was sampled 4/30. Data expected 5/2. To date, all wells have been sampled except for one well buried under resident's vegetable garden.
- The IAGWSPO evaluated one property on Foretop Rd, which is not listed as a BWD customer and has no local phone. The phone for the off-Cape property owner has been disconnected. A certified letter was sent to the property owner's address. It was determined that this property is a lot only with no building and no well on-site.
- Heather Sullivan (Army Corps) provided redline/strikeout version of the Northwest Corner Characterization Approach Letter, revised in accordance with EPA comments, to EPA week of 4/28. Meghan Cassidy (EPA) to review.
- Waiting for SHPO approval on 40360009DC well, expected 5/12. Access agreement worked out.

Bourne Update

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

- BP-2 (MW-268) and BP-5 (MW-267) installed by end of week 5/2. Perchlorate was detected in profile samples collected from BP-5.
- MOR for well installation between the far-field and sentinel wells is being discussed by Leo Yuskus (Haley & Ward) and the Guard. Trying to achieve agreement on wording.
- MW-257 (WS4P-4) had a rush profile RDX result for the P interval (155' bwt) of 0.43 J ug/l, PDA "no". After validation, result changed to PDA "yes". Both the O interval (145' bwt) and the Q interval (165' bwt) had detections of RDX with PDA "yes". A screen (M1) was set at this location at a depth of 145' to 155' bwt, covering the depth of the P interval. First round of sampling from MW-257M1 was ND for explosives. Assumed that this and other detections of RDX in the rush profile data were due to drill rig interference. Jane Dolan (EPA) asked that a report on lab reversals be completed and the item be added to the punchlist for 5/8.
- Bourne Water District is waiting for NStar to agree to access along their easement for additional well installation. All documentation has been submitted, waiting for NStar to process.
- Todd Borci (EPA) asked about NWP-1 ROA approval, expected by SHPO by 5/12, and schedule for drill rig mobilization to well site. Heather Sullivan (Army Corps) will try to direct drill rig to NW Corner well instead of scheduled Bourne well 5/13, if early approval is granted.

Document Status

Marc Grant (AMEC) discussed a handout listing documents that required Agency actions/comments.

- Highest priority remains to be HUTA1, HUTA2, Gun and Mortar COC letter.
- Extension requests - The Guard submitted a notice of Adequate Delineation for Demo 1 on 4/18/03, including a revised schedule for the Groundwater Report Addendum based on a requested Agency approval date of 4/23/03. Demo 1 FS/RD/RA Schedule will need to be shifted when approval is received from the Agencies.
- MSP Phase I Report MOR has been approval. Approval Letter sent last week, week of 4/21.
- L Range Groundwater RCL is expected to go out early next week, week of 5/5. Soil RCL expected to go out week of 5/14.
- J-2 Range Groundwater RCL expected to go out end of next week, week of 5/5. Soil RCL expected to go out 5/16.
- SCAR Site RCL extension until next Thursday 5/5 per Desiree Moyer (EPA).
- Revised QAPP submittal – AMEC revised the QAPP to incorporate agency addendums to produce cohesive operations document, consistent with Region 1.
- Todd Borci sent out comments on BIP reports, 4/24.
- Todd Borci to send out comments on J-1, J-3 Ranges soil reports in next 3 days, 5/5.

J-3 Range Hillside Site

Herb Colby (AMEC) provided a brief overview of the rationale for the proposed investigation of the J-3 Range Hillside site.

- A detailed reconnaissance anomaly map and table of anomalies was submitted earlier in the week.
- Todd Borci (EPA) requested that anomaly map be formatted to match previous geophysical work completed. Dave Hill (IAGWSPO) to re-issue the map week of 5/5.
- An EM61 survey was proposed for the area to validate data collected in the Schonstedt survey on the hillside and at top of the hill.

- Todd Borci expressed concern that the order of execution for geophysical work was modified from the workplan. Gina Kaso (ACE) stated the Guard/Corps were trying to expedite the process by completing 3 excavations now and completing the remainder after the surveys and maps are complete.

Miscellaneous Items

- Jane Dolan (EPA) asked if contractors were able to start SE Ranges work without final workplan and MOR approval. Corps indicated that most likely, work will proceed. Todd Borci to send an email describing the process to follow for soil. Heather Sullivan (ACE) to set up meeting in a couple of weeks to discuss the scope items that were agreed upon.
- UT Fate and Transport discussion debated. Gina Kaso to send out table summarizing additions to Fate and Transport Report for Agency approval. This task will be added to punchlist for next week.
- Guard/Corps will provide an expected date for Snake Pond results next week (punchlist addition).

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 02-05M1, M2 and duplicate, M3; 02-13M1, M2; 97-5 and duplicate; and MW-213M2, M3 had detections of perchlorate. The results were similar to the previous sampling rounds.

Central Impact Area

- Groundwater samples from MW-112M1 had a detection of perchlorate. This is the first detection of perchlorate in this well.

Other Areas

- Groundwater samples from RS0005 (Northwest Corner) had a detection of perchlorate. This is the first sampling event for this well.

DELIVERABLES SUBMITTED

MSP3 Former K Range Draft Supplemental Investigation Workplan	04/28/2003
MSP3 ASP Revised Draft Workplan	04/28/2003
MSP3 J-2 Range Polygon Investigation Draft Report	04/29/2003
Weekly Progress Update for April 21 – April 25, 2003	04/30/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of May 5 include complete drilling at MW-93 (CIAP-29) and commence drilling at MW-269 (BP-4). Groundwater sampling at Bourne water supply and monitoring wells, recently installed 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 28, 2003. Responses to EPA and MADEP comments on the Soil RRA/RAM Plan are being developed.

TABLE 2
SAMPLING PROGRESS
04/27/2003 - 05/03/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HD06200101SS	A06200101	04/28/2003	CRATER GRID	0	0.16		
HD06200101SS	A06200101	04/28/2003	CRATER GRID	0	0.16		
HD06200101SS	A06200101	04/28/2003	CRATER GRID	0	0.16		
HD06200101SS	A06200101	04/28/2003	CRATER GRID	0	0.16		
HD06200101SS	A06200101	04/28/2003	CRATER GRID	0	0.16		
HD06200101SS	A06200101	04/28/2003	CRATER GRID	0	0.16		
HD06200101SS	A06200101	04/28/2003	CRATER GRID	0	0.16		
HD06200101SS	A06200101	04/28/2003	CRATER GRID	0	0.16		
HD08070101SS	A08070101	04/28/2003	CRATER GRID	0	0.16		
HD08070101SS	A08070101	04/28/2003	CRATER GRID	0	0.16		
HD08070101SS	A08070101	04/28/2003	CRATER GRID	0	0.16		
HD08070101SS	A08070101	04/28/2003	CRATER GRID	0	0.16		
HD08070101SS	A08070101	04/28/2003	CRATER GRID	0	0.16		
HD08070101SS	A08070101	04/28/2003	CRATER GRID	0	0.16		
HD08070101SS	A08070101	04/28/2003	CRATER GRID	0	0.16		
HD08070101SS	A08070101	04/28/2003	CRATER GRID	0	0.16		
HD08070101SS	A08070101	04/28/2003	CRATER GRID	0	0.16		
HDGTRB300022	TT1022107	05/01/2003	CRATER GRID	0	0.16		
HDGTRB300022	TT1022107	05/01/2003	CRATER GRID	0	0.16		
HDGTRB300022	TT1022107	05/01/2003	CRATER GRID	0	0.16		
HDGTRB300022	TT1022107	05/01/2003	CRATER GRID	0	0.16		
HDGTRB300022	TT1022107	05/01/2003	CRATER GRID	0	0.16		
HDGTRB300022	TT1022107	05/01/2003	CRATER GRID	0	0.16		
HDGTRB300022	TT1022107	05/01/2003	CRATER GRID	0	0.16		
HDGTRB300022	TT1022107	05/01/2003	CRATER GRID	0	0.16		
HDGTRB300022	TT1022107	05/01/2003	CRATER GRID	0	0.16		
HDJ23.5IN1SS1	J23.5IN1	04/29/2003	CRATER GRID	0	0.16		
HDJ23.5IN1SS2	J23.5IN1	04/29/2003	CRATER GRID	0	0.16		
HDJ23.5IN1SS3	J23.5IN1	04/29/2003	CRATER GRID	0	0.16		
HDJ23.5IN1SS4	J23.5IN1	04/29/2003	CRATER GRID	0	0.16		
HDJ23.5IN1SS5	J23.5IN1	04/29/2003	CRATER GRID	0	0.16		
HDJ23.5IN1SS6	J23.5IN1	04/29/2003	CRATER GRID	0	0.16		
HDJ23.5IN1SS7	J23.5IN1	04/29/2003	CRATER GRID	0	0.16		
HDJ23.5IN1SS8	J23.5IN1	04/29/2003	CRATER 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
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OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HDJ260MM03SS	J260MM3	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM03SS	J260MM3	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM03SS	J260MM3	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM03SS	J260MM3	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM03SS	J260MM3	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM03SS	J260MM3	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM03SS	J260MM3	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM03SS	J260MM3	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM03SS	J260MM3	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM1SS1	J260MM1	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM1SS2	J260MM1	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM1SS3	J260MM1	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM1SS4	J260MM1	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM1SS5	J260MM1	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM1SS6	J260MM1	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM1SS7	J260MM1	04/30/2003	CRATER GRID	0	0.16		
HDJ260MM1SS8	J260MM1	04/30/2003	CRATER GRID	0	0.16		
HDJ281MM14SS	J281MM14	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM14SS	J281MM14	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM14SS	J281MM14	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM14SS	J281MM14	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM14SS	J281MM14	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM14SS	J281MM14	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM14SS	J281MM14	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM14SS	J281MM14	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM19SS	J281MM19	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM19SS	J281MM19	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM19SS	J281MM19	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM19SS	J281MM19	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM19SS	J281MM19	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM19SS	J281MM19	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM19SS	J281MM19	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM19SS	J281MM19	04/29/2003	CRATER GRID	0	0.16		
HDJ281MM19SS	J281MM19	04/29/2003	CRATER 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
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OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HDJ2LAW8SS1	J2LAW8	04/30/2003	CRATER GRID	0	0.16		
HDJ2LAW8SS2	J2LAW8	04/30/2003	CRATER GRID	0	0.16		
HDJ2LAW8SS3	J2LAW8	04/30/2003	CRATER GRID	0	0.16		
HDJ2LAW8SS3	J2LAW8	04/30/2003	CRATER GRID	0	0.16		
HDJ2LAW8SS4	J2LAW8	04/30/2003	CRATER GRID	0	0.16		
HDJ2LAW8SS5	J2LAW8	04/30/2003	CRATER GRID	0	0.16		
HDJ2LAW8SS6	J2LAW8	04/30/2003	CRATER GRID	0	0.16		
HDJ2LAW8SS7	J2LAW8	04/30/2003	CRATER GRID	0	0.16		
HDJ2LAW8SS8	J2LAW8	04/30/2003	CRATER GRID	0	0.16		
HDP19105MM2S	P19105MM2	04/29/2003	CRATER GRID	0	0.16		
HDP19105MM2S	P19105MM2	04/29/2003	CRATER GRID	0	0.16		
HDP19105MM2S	P19105MM2	04/29/2003	CRATER GRID	0	0.16		
HDP19105MM2S	P19105MM2	04/29/2003	CRATER GRID	0	0.16		
HDP19105MM2S	P19105MM2	04/29/2003	CRATER GRID	0	0.16		
HDP19105MM2S	P19105MM2	04/29/2003	CRATER GRID	0	0.16		
HDP19105MM2S	P19105MM2	04/29/2003	CRATER GRID	0	0.16		
HDP19105MM2S	P19105MM2	04/29/2003	CRATER GRID	0	0.16		
HDP19105MM2S	P19105MM2	04/29/2003	CRATER GRID	0	0.16		
HDTT0905101S	TT0905101	05/01/2003	CRATER GRID	0	0.16		
HDTT0905101S	TT0905101	05/01/2003	CRATER GRID	0	0.16		
HDTT0905101S	TT0905101	05/01/2003	CRATER GRID	0	0.16		
HDTT0905101S	TT0905101	05/01/2003	CRATER GRID	0	0.16		
HDTT0905101S	TT0905101	05/01/2003	CRATER GRID	0	0.16		
HDTT0905101S	TT0905101	05/01/2003	CRATER GRID	0	0.16		
HDTT0905101S	TT0905101	05/01/2003	CRATER GRID	0	0.16		
HDTT0905101S	TT0905101	05/01/2003	CRATER GRID	0	0.16		
HDTT0905101S	TT0905101	05/01/2003	CRATER GRID	0	0.16		
HDTT0910101S	TT0910101	05/01/2003	CRATER GRID	0	0.16		
HDTT0910101S	TT0910101	05/01/2003	CRATER GRID	0	0.16		
HDTT0910101S	TT0910101	05/01/2003	CRATER GRID	0	0.16		
HDTT0910101S	TT0910101	05/01/2003	CRATER GRID	0	0.16		
HDTT0910101S	TT0910101	05/01/2003	CRATER GRID	0	0.16		
HDTT0910101S	TT0910101	05/01/2003	CRATER GRID	0	0.16		
HDTT0910101S	TT0910101	05/01/2003	CRATER GRID	0	0.16		

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04/27/2003 - 05/03/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HDTT0910101S	TT0910101	05/01/2003	CRATER GRID	0	0.16		
90MW0021E	FIELDQC	05/02/2003	FIELDQC	0	0		
95-6ED-E	FIELDQC	05/01/2003	FIELDQC	0	0		
G93DBE	FIELDQC	04/28/2003	FIELDQC	0	0		
G93DDE	FIELDQC	04/29/2003	FIELDQC	0	0		
G93DFE	FIELDQC	04/30/2003	FIELDQC	0	0		
G93DNE	FIELDQC	05/02/2003	FIELDQC	0	0		
HCDEMO2T3E	FIELDQC	05/02/2003	FIELDQC	0	0		
HD08070101SS	FIELDQC	04/28/2003	FIELDQC	0	0		
HDJ281MM19SS	FIELDQC	04/29/2003	FIELDQC	0	0		
HDJ2LAW8SS1	FIELDQC	04/30/2003	FIELDQC	0	0		
HDTT0910101S	FIELDQC	05/01/2003	FIELDQC	0	0		
W02-15M3T	FIELDQC	04/29/2003	FIELDQC	0	0		
W244M1T	FIELDQC	05/01/2003	FIELDQC	0	0		
W262M1F	FIELDQC	04/28/2003	FIELDQC	0	0		
4036000-01G-A	4036000-01G	04/29/2003	GROUNDWATER	38	69.8	6	12
4036000-06G-A	4036000-06G	04/29/2003	GROUNDWATER	108	128	6	12
90MW0021-A	90MW0021	05/02/2003	GROUNDWATER	127	132	78	83
90MW0034-A	90MW0034	05/02/2003	GROUNDWATER	93.71	98.59	27.34	32.22
90MW0041-A	90MW0041	05/01/2003	GROUNDWATER	125.37	130.23	31.5	36.5
90MW0041-D	90MW0041	05/01/2003	GROUNDWATER	125.37	130.23	31.5	36.5
90MW0054-A	90MW0054	05/01/2003	GROUNDWATER	107	112	91.83	96.83
90MW0061-A	90MW0061	05/01/2003	GROUNDWATER	150	155	58.65	63.65
90WT0013-A	90WT0013	05/01/2003	GROUNDWATER	92	102	0	10
90WT0019-A	90WT0019	05/02/2003	GROUNDWATER	96	106	0	10
95-15E-A	95-15	05/01/2003	GROUNDWATER	155	165	74.71	84.71
95-6ED-A	95-6	05/01/2003	GROUNDWATER		145.65		
95-6ED-D	95-6	05/01/2003	GROUNDWATER		145.65		
RANGECON-A	RANGECON	05/01/2003	GROUNDWATER				
RS0005FRTP-A	RS0005	04/30/2003	GROUNDWATER				
USCGANTST-A	USCGANTST	04/30/2003	GROUNDWATER				
USCGANTST-A	USCGANTST	05/01/2003	GROUNDWATER				
W02-05M2A	02-05	04/28/2003	GROUNDWATER	92	102	63.41	73.41
W02-05M2D	02-05	04/28/2003	GROUNDWATER	92	102	63.41	73.41

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
04/27/2003 - 05/03/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W02-05M3A	02-05	04/29/2003	GROUNDWATER	70	80	41.37	51.37
W02-13M1A	02-13	04/29/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	04/29/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M2D	02-13	04/29/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	04/29/2003	GROUNDWATER	68	78	28.3	38.3
W02-15M3A	02-15	04/29/2003	GROUNDWATER	81	91	31.4	41.4
W102M1A	MW-102	04/29/2003	GROUNDWATER	267	277	123	133
W102M2A	MW-102	04/29/2003	GROUNDWATER	237	247	93	103
W104M1A	MW104	04/28/2003	GROUNDWATER	155	165	37	47
W104M1A	MW-104	04/28/2003	GROUNDWATER	155	165	37	47
W104M1D	MW104	04/28/2003	GROUNDWATER	155	165	37	47
W104M1D	MW-104	04/28/2003	GROUNDWATER	155	165	37	47
W104M2A	MW104	04/28/2003	GROUNDWATER	135	145	17	27
W104M2A	MW-104	04/28/2003	GROUNDWATER	135	145	17	27
W106M1A	MW-106	04/29/2003	GROUNDWATER	170.5	180.5	38	48
W106M2A	MW-106	04/30/2003	GROUNDWATER	140.5	150.5	8	18
W106M2D	MW-106	04/30/2003	GROUNDWATER	140.5	150.5	8	18
W110M1A	MW-110	04/30/2003	GROUNDWATER	315.5	325.5	142	152
W110M2A	MW-110	04/30/2003	GROUNDWATER	248.5	258.5	75	85
W113M1A	MW-113	04/30/2003	GROUNDWATER	240	250	98	108
W113M2A	MW-113	04/30/2003	GROUNDWATER	190	200	48	58
W113M2A	MW-113	04/30/2003	GROUNDWATER	190	200	48	58
W113M2D	MW-113	04/30/2003	GROUNDWATER	190	200	48	58
W113M2D	MW-113	04/30/2003	GROUNDWATER	190	200	48	58
W177M1A	MW-177	05/01/2003	GROUNDWATER	375	385	186.2	196.2
W177M2A	MW-177	05/01/2003	GROUNDWATER	278	288	87.3	97.3
W226M1A	MW-226	05/01/2003	GROUNDWATER	285	295	172	182
W226M2A	MW-226	05/01/2003	GROUNDWATER	175	185	61.7	71.7
W226M3A	MW-226	05/01/2003	GROUNDWATER	135	145	21.53	31.53
W233M1A	MW-233	05/02/2003	GROUNDWATER	356	366	157.8	167.8
W233M1D	MW-233	05/02/2003	GROUNDWATER	356	366	157.8	167.8
W233M2A	MW-233	05/02/2003	GROUNDWATER	331	341	132.8	142.8
W244M1A	MW-244	04/30/2003	GROUNDWATER	270	280	150.73	160.73
W244SSA	MW-244	04/30/2003	GROUNDWATER	118	128	0	10

Profiling methods include: Volatiles and Explosives
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TABLE 2
SAMPLING PROGRESS
04/27/2003 - 05/03/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W249M1A	MW-249	05/02/2003	GROUNDWATER	243	253	101.95	111.95
W249M2A	MW-249	05/02/2003	GROUNDWATER	174	184	32.9	42.9
W259M1A	MW-259	04/30/2003	GROUNDWATER	189	199	7.62	17.62
W259M1D	MW-259	04/30/2003	GROUNDWATER	189	199	7.62	17.62
W261M1A	MW-261	04/30/2003	GROUNDWATER	210	220	49.37	59.37
W261M2A	MW-261	04/30/2003	GROUNDWATER	170	180	9.47	19.47
W262M1A	MW-262	04/29/2003	GROUNDWATER	226	236	7.02	17.02
W262M1A	MW-262	04/29/2003	GROUNDWATER	226	236	7.02	17.02
W59M1A	MW-59	04/30/2003	GROUNDWATER	165	170	32	38
W59M1D	MW-59	04/30/2003	GROUNDWATER	165	170	32	38
W59M2A	MW-59	04/30/2003	GROUNDWATER	150	160	18	28
G93DBA	MW-93	04/28/2003	PROFILE	142	142	8.5	8.5
G93DCA	MW-93	04/28/2003	PROFILE	150	150	16.5	16.5
G93DDA	MW-93	04/29/2003	PROFILE	160	160	26.5	26.5
G93DEA	MW-93	04/29/2003	PROFILE	170	170	36.5	36.5
G93DFA	MW-93	04/30/2003	PROFILE	180	180	46.5	46.5
G93DGA	MW-93	04/30/2003	PROFILE	190	190	56.5	56.5
G93DHA	MW-93	04/30/2003	PROFILE	200	200	66.5	66.5
G93DIA	MW-93	04/30/2003	PROFILE	210	210	76.5	76.5
G93DJA	MW-93	04/30/2003	PROFILE	220	220	86.5	86.5
G93DKA	MW-93	04/30/2003	PROFILE	230	230	96.5	96.5
G93DKD	MW-93	04/30/2003	PROFILE	230	230	96.5	96.5
G93DLA	MW-93	04/30/2003	PROFILE	240	240	106.5	106.5
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5
G93DNA	MW-93	05/02/2003	PROFILE	260	260	126.5	126.5
HCDEMO2T1A	DEMO2T1	05/02/2003	SOIL GRAB	0	0.16		
HCDEMO2T2A	DEMO2T2	05/02/2003	SOIL GRAB	0	0.16		
HCDEMO2T3A	DEMO2T3	05/02/2003	SOIL GRAB	0	0.16		
HCDEMO2T4A	DEMO2T4	05/02/2003	SOIL GRAB	0	0.16		
HCDEMO2T4D	DEMO2T4	05/02/2003	SOIL GRAB	0	0.16		

Profiling methods include: Volatiles and Explosives
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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 04/04/03 - 05/03/03

OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
RS0005FRTP-A	RS0005	04/30/2003	GROUNDWATER					E314.0	PERCHLORATE	
W02-05M1A	02-05	04/25/2003	GROUNDWATER	110	120	81.44	91.44	E314.0	PERCHLORATE	
W02-05M2A	02-05	04/28/2003	GROUNDWATER	92	102	63.41	73.41	E314.0	PERCHLORATE	
W02-05M2D	02-05	04/28/2003	GROUNDWATER	92	102	63.41	73.41	E314.0	PERCHLORATE	
W02-05M3A	02-05	04/29/2003	GROUNDWATER	70	80	41.37	51.37	E314.0	PERCHLORATE	
W02-13M1A	02-13	04/29/2003	GROUNDWATER	98	108	58.33	68.33	E314.0	PERCHLORATE	
W02-13M2A	02-13	04/29/2003	GROUNDWATER	83	93	44.2	54.2	E314.0	PERCHLORATE	
W112M1A	MW-112	04/25/2003	GROUNDWATER	195	205	56	66	E314.0	PERCHLORATE	
W213M2A	MW-213	04/21/2003	GROUNDWATER	89	99	41.15	51.15	E314.0	PERCHLORATE	
W213M3A	MW-213	04/21/2003	GROUNDWATER	77	82	29.38	34.38	E314.0	PERCHLORATE	
XXM975-A	97-5	04/23/2003	GROUNDWATER	84	94	76	86	E314.0	PERCHLORATE	
XXM975-D	97-5	04/23/2003	GROUNDWATER	84	94	76	86	E314.0	PERCHLORATE	

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