

**WEEKLY PROGRESS UPDATE
FOR MAY 5 – MAY 9, 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 May 5 through May 9, 2003.

1. SUMMARY OF ACTIONS TAKEN

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

Table 1. Drilling progress as of May 9, 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)	352	218	
MW-269	Bourne Area (BP-4)	270	92	
bgs = below ground surface bwt = below water table				

Completed drilling of MW-93 (CIAP-29) and commenced drilling of MW-269 (BP-4). 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 and MW-269. Groundwater samples were collected from Bourne water supply and monitoring wells, recently installed wells, residential wells, and as part of the April Long-Term Groundwater Monitoring Plan. Supplemental soil sampling was conducted at BIP craters.

The following are notes from the May 8, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Ben Gregson (IAGWSPO)	Tina Dolen (IAGWSPO)	Bill Gallagher (IAGWSPO)
Kris Curley (IAGWSPO)	Meghan Cassidy (EPA)	Desiree Moyer (EPA)
Todd Borci (EPA-phone)	Len Pinaud (MADEP)	Mark Panni (MADEP)
Dave Williams (MDPH)	Gina Kaso (ACE)	Heather Sullivan (ACE-phone)
Darrin Smith (ACE)	Katrazyna Chelkowska (ACE-phone)	Kim Harriz (AMEC)
Herb Colby (AMEC-phone)	Dick Skryness (ECC-phone)	Kris Curley (Guild Comm.)
Larry Pannell (Jacobs)		

Punchlist Items

#2 Provide PZ211 Sampling Update (Corps). Property owners moved debris, but piezometer could not be found. Piezometer may be under a pile of loam. Corps is still pursuing sampling

- #3 Provide Use Permit for NWP-1 (Corps). Use Permit for well has been issued. SHPO approval due by 5/12.
- #4 Provide construction information on Bourne baseball field irrigation well (EPA). Information faxed to IAGWSPO on 5/07.
- #5 Evaluate utility of sampling Bourne baseball field irrigation well (Corps). IAGWSPO still considering sampling of irrigation well.
- #6 Provide schedule for SE Range piezometers and wells to be included in synoptic water level round (Corps). Site visit to initiate ROA process scheduled for 5/12 with Jane Dolan's participation. ROAs to be submitted by 5/23. Todd Borci requested that well selection/installation for select locations associated with J Ranges be expedited ahead of the schedule to produce a water table map, which is expected in August. To be discussed in After meeting on 5/22.
- #7 Provide Corrective Action Report for J-2 Range gravel (Corps). CAR to agencies next week.
- #9 Provide date for drilling of J1P-19 (Corps). ROA approval from Karen Wilson pending, will adjust drilling schedule to accommodate this well when ROA approval received.
- #10 Provide date for PDA reversals Report (Corps). Next complete report available on 5/23.
- #11 Provide table for UXO Screening Report RCL/MOR and way forward (Corps). Electronic copies of tables sent out today. Hard copies distributed at Tech meeting.
- #12 Provide date for CRM on Univ. of Texas Fate and Transport Study (EPA/DEP). CRM date TBD, pending EPA's review of comment responses.
- #13 Provide date for scoping meeting for proposed SE Ranges RRAs (IAGWSPO). To be discussed during next week's 5/15 Project Manager's Meeting.
- #14 Provide date for Snake Pond surface water sampling results (Corps). Results due by 5/16.

MSP3 and Southeast Ranges Update

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

NBC Area. Intrusive investigation completed with no significant findings. Table of findings distributed.

J-3 Range Hillside/Barrage Rocket Sites. Revised Schonstedt survey figure for the Hillside site was provided on 5/06. Anticipated completion date for the Schonstedt survey of the Barrage Rocket site is 5/14, with survey results to be provided on 5/22. Four items at the Barrage Rocket site and 1 item at the Hillside site are scheduled to be BIPed in the next two weeks. Ms. Kaso to provide list of items to be BIPed.

Deep Bottom Pond. Schonstedt and geophysical surveys north of the ponds completed.

Figures and tables of findings will be distributed next week. Karen Wilson (IAGWSPO) and Dr. Sue Goodfellow (E&RC) to conduct a site visit today to look at 3 anomalies located on the northern pond shoreline. These anomalies lie within 100 ft buffer of the wetland. The site visit is being conducted to get an approval to do a limited excavation to check if the anomalies are UXO items or generic debris, prior to requesting ConsCom approval to do a full excavation.

Ms. Kaso to provide number of total anomalies identified at the site.

Former K Range. Detailed recon and Schonstedt survey completed for three grids. Data is being compiled in figures and tables.

ROA Status and Monitor Well Installation Schedule

Darrin Smith (Corps) and Heather Sullivan (Corps) provided a brief overview of the drilling schedule and ROA status, respectively.

- Current drill schedule has two rigs continuing drilling at CIAP-29 and BP-4.
- Drilling of injection well IW-D1-1 @ Frank Perkins is scheduled to begin on 5/12.
- Corps will adjust schedule to substitute drilling of NWP-1 for BP-3. Progress of CIAP-29 will be monitored to avoid accruing standby time waiting for ROA approval for NWP-1.

- ROA for J1P-19 was submitted to Karen Wilson last week.
- Meghan Cassidy (EPA) requested John MacPherson (Corps) provide an update on status of the Northwest Corner wells proposed in the NStar easement (added as punchlist item).

Bourne Update

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

- Weekly and monthly sampling of production and monitoring wells continues.
- Drilling of BP-4 (MW-269) commenced.
- UXO clearance is being completed at BP-3 and WS4P-3.
- The Army/NGB is working with Leo Yuskus (Haley and Ward) on rewording sections of the Bourne Response Plan MOR.
- BWD is still working with NStar to obtain access to the NStar easement to install monitoring wells.
- BWD is doing a test of Production well WS-4 to mimic pumping scenarios consistent with the periodic weekend use of the well during the summer season. The well is being pumped for 8 hours, shut down, pumped for 8 hours the next day and then samples are collected from WS-4 and WS4-AS.
- Information on the PDA reversal on a profile sample from J1P-19 was sent out. The original PDA-no detection of RDX in one shallow sample was reversed to PDA-yes in validation. No well screen was set at the depth of this detection. Well screens were set at the intervals of two deeper RDX detections that were PDA-yes with interference. Sampling of the completed well screens indicates RDX has not been detected in these screens. The results from these well screens will continue to be monitored.

Northwest Corner of Camp Edwards

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

- Sampling of six additional Northwest Corner area monitoring wells will be completed by the end of the week.
- Permit to access Corps property to install NWP-1 was obtained. The Corps is still waiting on SHPO approval of the ROA, due 5/12. Todd Borci noted that he had requested the Army/Guard call SHPO to request that this approval be expedited.
- NWP-1 to be scheduled ahead of BP-3 well installation. This issue to be addressed with Leo Yuskus.
- ROA approval has been received for NWP-2, -3, and -4; NStar easement access approval pending.
- Redline-strikeout version of April 24, 2003 Northwest Corner Approach Letter (revised in accordance with EPA comments) was approved by the agencies. Electronic copies distributed today; hard copies distributed at Tech meeting.
- Jane Dolan (EPA), Desiree Moyer (EPA) and Mr. Gallagher completed a site reconnaissance of the area northeast of the Bourne Bridge and identified 3 houses on Rt 6A (Sandwich Road) approximately 2000 to 2500 feet southwest of the Corps property where well 4036009DC is located. Two of these houses do not have accounts with the BWD. The IAGWSPO will contact the property owners directly to determine if they have private drinking water wells.
- Remaining discussion of Northwest Corner investigation was suspended for discussion in an After Tech meeting with participation of Hap Gonser (IAGWSPO).

Miscellaneous

- Bill Gallagher to provide a table of results from excavation of GPiR anomalies at GP-11 with a letter to the agencies next week.

- Ben Gregson (IAGWSPO) to provide a date for Demo 1 Groundwater Schedule and way forward to the agencies in an email by the end of the day. Army/Guard's current approach is to continue with the RRA as proposed and deal with the IRA separately as additional scoped work. EPA/MADEP to evaluate this approach after receiving the schedule.
- To Len Pinaud's (MADEP) inquiry regarding proceeding with the BIP excavations, Heather Sullivan (ACE) reported that 30 of 58 supplemental BIP soil samples had been collected. The ROA approval for remaining samples should be completed in the next week or so. Ms. Sullivan is working with ECC on the final disposition of the soil. Generic language regarding soil disposal will be provided in the RRA/RAM Plan with more specific language to be provided as part of the CRM process. Plan to be submitted by the end of May. No public comment period is proposed for the plan since the work to be completed has been previously presented, only the format/presentation of the information will be changed. EPA/MADEP suggested the IAGWSPO present the information in an IART briefing.
- Gina Kaso reported the CDC is on-site. The unit will be down 2 weeks for maintenance. Update to be provided next week.

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 97-15 and 02-07M3 had detections of perchlorate. The results were similar to the previous sampling rounds.

Central Impact Area

- Groundwater samples from MW-249M2 had a detection of RDX that was confirmed by PDA spectra. The results were similar to the previous sampling round.
- Profile samples from MW-93 had detections of perchlorate, chloroform, and various explosives. Perchlorate was detected in six intervals between 9 feet and 57 feet below the water table. 2,6-DANT was detected and confirmed by PDA spectra, but with interference, at 117 and 157 feet below the water table. 2,6-DNT was detected and confirmed by PDA

spectra, but with interference, at 157 feet below the water table. The original well screens at MW-93 (P-6) were set at 16 to 26 ft and 56 to 66 ft bwt. It was agreed that no additional screens were required at this location.

Demo Area 2

- Groundwater samples from MW-262M1 had a detection of RDX that was confirmed by PDA spectra. This is the first sampling event at this well and the results were consistent with the profile results.

Northwest Corner

- Groundwater samples from RSNW03 and duplicate (Northwest Corner) had a detection of perchlorate. The results were similar to the previous sampling round.

DELIVERABLES SUBMITTED

MSP3 Gun and Mortar Positions Revised Work Plan	05/06/2003
Monthly Progress Report for April 2003	05/09/2003
Weekly Progress Update for April 28 – May 2, 2003	05/09/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of May 12 include complete well installation at MW-93 (CIAP-29), complete drilling of MW-269 (BP-4), and commence drilling of injection well IW-D1-1 in Demo Area 1 and monitoring well NWP-1. 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 May 8, 2003. Responses to EPA and MADEP comments on the Soil RRA/RAM Plan are being developed. Drilling of injection well IW-D1-1 at Frank Perkins Road is scheduled to begin on May 15.

**TABLE 2
SAMPLING PROGRESS
05/04/2003 - 05/10/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HD03270202SS	A03270202	05/06/2003	CRATER GRID	0	0.16		
HD03270202SS	A03270202	05/06/2003	CRATER GRID	0	0.16		
HD03270202SS	A03270202	05/06/2003	CRATER GRID	0	0.16		
HD03270202SS	A03270202	05/06/2003	CRATER GRID	0	0.16		
HD03270202SS	A03270202	05/06/2003	CRATER GRID	0	0.16		
HD03270202SS	A03270202	05/06/2003	CRATER GRID	0	0.16		
HD03270202SS	A03270202	05/06/2003	CRATER GRID	0	0.16		
HD03270202SS	A03270202	05/06/2003	CRATER GRID	0	0.16		
HDJ2155MM01S	J2155MM01	05/06/2003	CRATER GRID	0	0.16		
HDJ2155MM01S	J2155MM01	05/06/2003	CRATER GRID	0	0.16		
HDJ2155MM01S	J2155MM01	05/06/2003	CRATER GRID	0	0.16		
HDJ2155MM01S	J2155MM01	05/06/2003	CRATER GRID	0	0.16		
HDJ2155MM01S	J2155MM01	05/06/2003	CRATER GRID	0	0.16		
HDJ2155MM01S	J2155MM01	05/06/2003	CRATER GRID	0	0.16		
HDJ2155MM01S	J2155MM01	05/06/2003	CRATER GRID	0	0.16		
HDJ2155MM01S	J2155MM01	05/06/2003	CRATER GRID	0	0.16		
HDJ2155MM01S	J2155MM01	05/06/2003	CRATER GRID	0	0.16		
HDJ281MM2SS1	J281MM2	05/06/2003	CRATER GRID	0	0.16		
HDJ281MM2SS2	J281MM2	05/06/2003	CRATER GRID	0	0.16		
HDJ281MM2SS3	J281MM2	05/06/2003	CRATER GRID	0	0.16		
HDJ281MM2SS4	J281MM2	05/06/2003	CRATER GRID	0	0.16		
HDJ281MM2SS5	J281MM2	05/06/2003	CRATER GRID	0	0.16		
HDJ281MM2SS6	J281MM2	05/06/2003	CRATER GRID	0	0.16		
HDJ281MM2SS7	J281MM2	05/06/2003	CRATER GRID	0	0.16		
HDJ281MM2SS8	J281MM2	05/06/2003	CRATER GRID	0	0.16		
HDJ2LAW11SS1	J2LAW11	05/07/2003	CRATER GRID	0	0.16		
HDJ2LAW11SS1	J2LAW11	05/07/2003	CRATER GRID	0	0.16		
HDJ2LAW11SS1	J2LAW11	05/07/2003	CRATER GRID	0	0.16		
HDJ2LAW11SS9	J2LAW11	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEASS	JRANGEA	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEASS	JRANGEA	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEASS	JRANGEA	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEASS	JRANGEA	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEASS	JRANGEA	05/07/2003	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
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
05/04/2003 - 05/10/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HDJRANGEASS	JRANGEA	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEASS	JRANGEA	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEASS	JRANGEA	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDJRANGEDSS	JRANGED	05/07/2003	CRATER GRID	0	0.16		
HDTT0829103S	TT0829103	05/05/2003	CRATER GRID	0	0.16		
HDTT0829103S	TT0829103	05/05/2003	CRATER GRID	0	0.16		
HDTT0829103S	TT0829103	05/05/2003	CRATER GRID	0	0.16		
HDTT0829103S	TT0829103	05/05/2003	CRATER GRID	0	0.16		
HDTT0829103S	TT0829103	05/05/2003	CRATER GRID	0	0.16		
HDTT0829103S	TT0829103	05/05/2003	CRATER GRID	0	0.16		
HDTT0829103S	TT0829103	05/05/2003	CRATER GRID	0	0.16		
HDTT0829103S	TT0829103	05/05/2003	CRATER GRID	0	0.16		
HDTT0829103S	TT0829103	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT0829104S	TT0829104	05/05/2003	CRATER GRID	0	0.16		
HDTT1022107S	TT1022107	05/05/2003	CRATER GRID	0	0.16		
HDTT1022107S	TT1022107	05/05/2003	CRATER GRID	0	0.16		
HDTT1022107S	TT1022107	05/05/2003	CRATER GRID	0	0.16		
HDTT1022107S	TT1022107	05/05/2003	CRATER GRID	0	0.16		
HDTT1022107S	TT1022107	05/05/2003	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
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
05/04/2003 - 05/10/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HDTT1022107S	TT1022107	05/05/2003	CRATER GRID	0	0.16		
HDTT1022107S	TT1022107	05/05/2003	CRATER GRID	0	0.16		
HDTT1022107S	TT1022107	05/05/2003	CRATER GRID	0	0.16		
58MW00016E	FIELDQC	05/08/2003	FIELDQC	0	0		
58MW0015E	FIELDQC	05/09/2003	FIELDQC	0	0		
90MW0038E	FIELDQC	05/06/2003	FIELDQC	0	0		
90MW0080-AE	FIELDQC	05/05/2003	FIELDQC	0	0		
95-16E	FIELDQC	05/07/2003	FIELDQC	0	0		
G269DBE	FIELDQC	05/09/2003	FIELDQC	0	0		
G269DDT	FIELDQC	05/08/2003	FIELDQC	0	0		
G93DOE	FIELDQC	05/06/2003	FIELDQC	0	0		
G93DQE	FIELDQC	05/07/2003	FIELDQC	0	0		
G93DUE	FIELDQC	05/08/2003	FIELDQC	0	0		
HDJ2155MM01S	FIELDQC	05/06/2003	FIELDQC	0	0		
HDJ2155MM02S	FIELDQC	05/06/2003	FIELDQC	0	0		
HDJ2155MM02S	FIELDQC	05/07/2003	FIELDQC	0	0		
HDJRANGEASS	FIELDQC	05/07/2003	FIELDQC	0	0		
HDTT1022107S	FIELDQC	05/05/2003	FIELDQC	0	0		
W252M1F	FIELDQC	05/08/2003	FIELDQC	0	0		
4036000-01G-A	4036000-01G	05/06/2003	GROUNDWATER	38	69.8	6	12
4036000-03G-A	4036000-01G	05/06/2003	GROUNDWATER	50	60	6	12
4036000-04G-A	4036000-01G	05/06/2003	GROUNDWATER	54.6	64.6	6	12
4036000-06G-A	4036000-01G	05/06/2003	GROUNDWATER	108	128	6	12
58MW0015A-A	58MW0015A	05/09/2003	GROUNDWATER	160.68	169.94	36	45
58MW0015B-A	58MW0015B	05/09/2003	GROUNDWATER	130.96	140.22	12.7	22.7
58MW0016A-A	58MW0016A	05/08/2003	GROUNDWATER	175.9	185.05	54.22	63.22
58MW0016B-A	58MW0016B	05/08/2003	GROUNDWATER	151.09	160.74	28.5	38.5
58MW0016B-D	58MW0016B	05/08/2003	GROUNDWATER	151.09	160.74	28.5	38.5
90MW0003-A	90MW0003	05/08/2003	GROUNDWATER	144	149	52.11	57.11
90MW0005-A	90MW0005	05/08/2003	GROUNDWATER	184	189	89.03	94.03
90MW0006-A	90MW0006	05/09/2003	GROUNDWATER	129	134	52.85	57.85
90MW0038-A	90MW0038	05/06/2003	GROUNDWATER	94.75	99.62	29	34
90MW0080-A	90MW0080	05/05/2003	GROUNDWATER	139	144	87.2	92.2
90MW0080-A	90MW0080	05/05/2003	GROUNDWATER	139	144	87.2	92.2

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
05/04/2003 - 05/10/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
95-15-A	95-15	05/05/2003	GROUNDWATER	126	128	77.79	79.79
95-16	95-16	05/07/2003	GROUNDWATER	84	90	31.56	37.56
CMW-1	CMW-1	05/07/2003	GROUNDWATER	180	190	56.31	66.31
G269DAA	MW-269	05/08/2003	GROUNDWATER	185	185	6.2	6.2
G269DBA	MW-269	05/09/2003	GROUNDWATER	195	195	16.2	16.2
G269DEA	MW-269	05/09/2003	GROUNDWATER	220	220	41.2	41.2
G269DFA	MW-269	05/09/2003	GROUNDWATER	230	230	51.2	51.2
PPAWSPW-1-A	PPAWSPW-1	05/08/2003	GROUNDWATER	430	450	158	178
PPAWSPW-2-A	PPAWSPW-2	05/08/2003	GROUNDWATER	336	356	85	105
RS0005FRTP-A	RS0005	05/07/2003	GROUNDWATER				
RS0005FRTP-D	RS0005	05/07/2003	GROUNDWATER				
TW1-88B-A	1-88	05/06/2003	GROUNDWATER	105.5	105.5	69.6	69.6
TW1-88B-D	1-88	05/06/2003	GROUNDWATER	105.5	105.5	69.6	69.6
W02-07M1A	02-07	05/05/2003	GROUNDWATER	135	145	101.14	111.14
W02-07M2A	02-07	05/05/2003	GROUNDWATER	107	117	72.86	82.86
W02-07M3A	02-07	05/05/2003	GROUNDWATER	47	57	13	23
W02-12M1A	02-12	05/06/2003	GROUNDWATER	109	119	58.35	68.35
W02-12M2A	02-12	05/06/2003	GROUNDWATER	94	104	43.21	53.21
W02-12M3A	02-12	05/06/2003	GROUNDWATER	79	89	28.22	38.22
W02-13M1A	02-13	05/06/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	05/06/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	05/06/2003	GROUNDWATER	68	78	28.3	38.3
W03M1A	MW-03	05/09/2003	GROUNDWATER	240	245	196	201
W03M2A	MW-03	05/09/2003	GROUNDWATER	180	185	136	141
W03M2D	MW-03	05/09/2003	GROUNDWATER	180	185	136	141
W109SSA	MW-109	05/08/2003	GROUNDWATER	89	99	1	11
W118M1A	MW-118	05/07/2003	GROUNDWATER	146	156	38	48
W118M2A	MW-118	05/07/2003	GROUNDWATER	116	126	8	18
W118M2D	MW-118	05/07/2003	GROUNDWATER	116	126	8	18
W157M1A	MW-157	05/06/2003	GROUNDWATER	154	164	144	154
W157M2A	MW-157	05/06/2003	GROUNDWATER	110	120	100	110
W179DDA	MW-179	05/09/2003	GROUNDWATER	329	339	188.1	198.1
W179M1A	MW-179	05/08/2003	GROUNDWATER	187	197	46.1	56.1
W18DDA	MW-18	05/08/2003	GROUNDWATER	265	275	222	232

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
05/04/2003 - 05/10/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W18M1A	MW-18	05/08/2003	GROUNDWATER	171	176	128	133
W18M2A	MW-18	05/08/2003	GROUNDWATER	107	112	64	69
W18M2D	MW-18	05/08/2003	GROUNDWATER	107	112	64	69
W216M1A	MW-216	05/05/2003	GROUNDWATER	253	263	51.19	61.19
W216M2A	MW-216	05/05/2003	GROUNDWATER	236	246	34.17	44.17
W216SSA	MW-216	05/07/2003	GROUNDWATER	199	209	0	7.13
W251M1A	MW-251	05/07/2003	GROUNDWATER	128	133		
W251M2A	MW-251	05/07/2003	GROUNDWATER	98	103		
W251M3A	MW-251	05/07/2003	GROUNDWATER	83	88		
W251M3D	MW-251	05/07/2003	GROUNDWATER	83	88		
W252M1A	MW-252	05/08/2003	GROUNDWATER	174	184	60.6	70.6
W252M2A	MW-252	05/08/2003	GROUNDWATER	145	155	31.62	41.61
W252M3A	MW-252	05/08/2003	GROUNDWATER	115	125	1.63	11.63
W42M1A	MW-42	05/07/2003	GROUNDWATER	205	215	137	147
W42M1A	MW-42	05/07/2003	GROUNDWATER	205	215	137	147
W42M2A	MW-42	05/07/2003	GROUNDWATER	185.8	195.8	118	128
W42M2A	MW-42	05/07/2003	GROUNDWATER	185.8	195.8	118	128
W42M3A	MW-42	05/07/2003	GROUNDWATER	165.8	175.8	98	108
WS-4-A	WS-4	05/08/2003	GROUNDWATER	200	220	140	160
WS-4AS-A	WS-4A	05/08/2003	GROUNDWATER	155	165	85.5	95.5
DW050603-NV	GAC WATER	05/06/2003	IDW				
G269DAA	MW-269	05/08/2003	PROFILE	185	185	6.2	6.2
G269DBA	MW-269	05/09/2003	PROFILE	195	195	16.2	16.2
G269DCA	MW-269	05/07/2003	PROFILE	205	205	26.2	26.2
G269DDA	MW-269	05/07/2003	PROFILE	210	210	31.2	31.2
G269DEA	MW-269	05/09/2003	PROFILE	220	220	41.2	41.2
G269DFA	MW-269	05/09/2003	PROFILE	230	230	51.2	51.2
G269DGA	MW-269	05/09/2003	PROFILE	240	240	61.2	61.2
G269DHA	MW-269	05/09/2003	PROFILE	250	250	71.2	71.2
G269DIA	MW-269	05/09/2003	PROFILE	260	260	81.2	81.2
G93DOA	MW-93	05/06/2003	PROFILE	270	270	136.5	136.5
G93DPA	MW-93	05/06/2003	PROFILE	280	280	146.5	146.5
G93DQA	MW-93	05/07/2003	PROFILE	290	290	156.5	156.5
G93DRA	MW-93	05/07/2003	PROFILE	300	300	166.5	166.5

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
05/04/2003 - 05/10/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
G93DSA	MW-93	05/08/2003	PROFILE	310	310	176.5	176.5
G93DTA	MW-93	05/08/2003	PROFILE	320	320	186.5	186.5
G93DUA	MW-93	05/08/2003	PROFILE	330	330	196.5	196.5
G93DUD	MW-93	05/08/2003	PROFILE	330	330	196.5	196.5
G93DVA	MW-93	05/09/2003	PROFILE	340	340	206.5	206.5
G93DWA	MW-93	05/09/2003	PROFILE	350	350	216.5	216.5

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 04/11/03 - 05/10/03**

OGDEN ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN ANALYTE	PDA
95-15-A	95-15	05/05/2003	GROUNDWATER	126	128	77.79	79.79	8330N	NITROGLYCERIN	NO
RS0005FRTP-A	RS0005	05/07/2003	GROUNDWATER					E314.0	PERCHLORATE	
RS0005FRTP-D	RS0005	05/07/2003	GROUNDWATER					E314.0	PERCHLORATE	
W02-07M3A	02-07	05/05/2003	GROUNDWATER	47	57	13	23	E314.0	PERCHLORATE	
W249M2A	MW-249	05/02/2003	GROUNDWATER	174	184	32.9	42.9	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W262M1A	MW-262	04/29/2003	GROUNDWATER	226	236	7.02	17.02	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
G268DOA	MW-268	04/23/2003	PROFILE	200	200	148.35	148.35	OC21V	CHLOROFORM	
G93DBA	MW-93	04/28/2003	PROFILE	142	142	8.5	8.5	E314.0	PERCHLORATE	
G93DCA	MW-93	04/28/2003	PROFILE	150	150	16.5	16.5	E314.0	PERCHLORATE	
G93DDA	MW-93	04/29/2003	PROFILE	160	160	26.5	26.5	E314.0	PERCHLORATE	
G93DEA	MW-93	04/29/2003	PROFILE	170	170	36.5	36.5	E314.0	PERCHLORATE	
G93DFA	MW-93	04/30/2003	PROFILE	180	180	46.5	46.5	E314.0	PERCHLORATE	
G93DGA	MW-93	04/30/2003	PROFILE	190	190	56.5	56.5	E314.0	PERCHLORATE	
G93DJA	MW-93	04/30/2003	PROFILE	220	220	86.5	86.5	8330N	PICRIC ACID	NO
G93DKA	MW-93	04/30/2003	PROFILE	230	230	96.5	96.5	8330N	PICRIC ACID	NO
G93DKD	MW-93	04/30/2003	PROFILE	230	230	96.5	96.5	8330N	PICRIC ACID	NO
G93DLA	MW-93	04/30/2003	PROFILE	240	240	106.5	106.5	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
G93DLA	MW-93	04/30/2003	PROFILE	240	240	106.5	106.5	8330N	PICRIC ACID	NO
G93DLA	MW-93	04/30/2003	PROFILE	240	240	106.5	106.5	8330N	2-NITROTOLUENE	NO
G93DLA	MW-93	04/30/2003	PROFILE	240	240	106.5	106.5	8330N	NITROGLYCERIN	NO
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	2-NITROTOLUENE	NO
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	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 04/11/03 - 05/10/03**

OGDEN ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN ANALYTE	PDA
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	1,3-DINITROBENZENE	NO
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	4-NITROTOLUENE	NO
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	3-NITROTOLUENE	NO
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	2,4-DIAMINO-6-NITROTOLUENE	YES*
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	NITROGLYCERIN	NO
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	2,6-DINITROTOLUENE	NO
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
G93DMA	MW-93	05/02/2003	PROFILE	250	250	116.5	116.5	8330N	1,3,5-TRINITROBENZENE	NO*
G93DNA	MW-93	05/02/2003	PROFILE	260	260	126.5	126.5	8330N	PICRIC ACID	NO
G93DOA	MW-93	05/06/2003	PROFILE	270	270	136.5	136.5	8330N	2,4,6-TRINITROTOLUENE	NO
G93DOA	MW-93	05/06/2003	PROFILE	270	270	136.5	136.5	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G93DOA	MW-93	05/06/2003	PROFILE	270	270	136.5	136.5	8330N	2,6-DINITROTOLUENE	NO
G93DOA	MW-93	05/06/2003	PROFILE	270	270	136.5	136.5	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
G93DOA	MW-93	05/06/2003	PROFILE	270	270	136.5	136.5	8330N	NITROGLYCERIN	NO
G93DOA	MW-93	05/06/2003	PROFILE	270	270	136.5	136.5	8330N	PICRIC ACID	NO
G93DQA	MW-93	05/07/2003	PROFILE	290	290	156.5	156.5	8330N	NITROGLYCERIN	NO
G93DQA	MW-93	05/07/2003	PROFILE	290	290	156.5	156.5	8330N	2,4-DIAMINO-6-NITROTOLUENE	YES*
G93DQA	MW-93	05/07/2003	PROFILE	290	290	156.5	156.5	8330N	PICRIC ACID	NO
G93DQA	MW-93	05/07/2003	PROFILE	290	290	156.5	156.5	8330N	2,6-DINITROTOLUENE	YES*
G93DQA	MW-93	05/07/2003	PROFILE	290	290	156.5	156.5	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
G93DQA	MW-93	05/07/2003	PROFILE	290	290	156.5	156.5	8330N	NITROBENZENE	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 04/11/03 - 05/10/03**

OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G93DRA	MW-93	05/07/2003	PROFILE	300	300	166.5	166.5	8330N	PICRIC ACID	NO
G93DRA	MW-93	05/07/2003	PROFILE	300	300	166.5	166.5	8330N	2,6-DINITROTOLUENE	NO
G93DRA	MW-93	05/07/2003	PROFILE	300	300	166.5	166.5	8330N	NITROGLYCERIN	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