WEEKLY PROGRESS UPDATE FOR DECEMBER 16 – DECEMBER 20, 2002

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019 & 1-2000-0014 MASSACHUSETTS MILITARY RESERVATION TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from December 16 through December 20, 2002.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of December 20 is summarized in Table 1.

| | Table 1. Drilling progre | ss as of Dece | mber 20, 2002 | |
|------------------|--------------------------|----------------------------|--------------------------------|------------------------------------|
| Boring Number | Purpose of Boring/Well | Total Depth (ft bgs) | Saturated Depth (ft bwt) | Completed Well Screens (ft bgs) |
| MW-251 | J-3 Range (J3P-26) | 170 | 165 | 83-88; 98-103; 128-133 |
| MW-252 | Demo Area 1 (D1P-18) | 250 | 136 | |
| MW-253 | J-1 Range (J1P-18) | 317 | 188 | |
| MW-254 | K Range (KP-2) | 130 | | |
| bgs = below | ground surface | | | |

bgs = below ground surface bwt = below water table

Completed well installation of MW-251 (J3P-26), completed drilling of MW-253 (J1P-18), continued drilling of MW-252 (D1P-18), and commenced drilling of MW-254 (KP-2). 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-252, MW-253 and MW-254. Groundwater samples were collected from Bourne water supply and monitoring wells, as part of the December LTGM round, and from the Gallo Ice Rink well. Water samples were collected from the GAC treatment system. As part of the Munitions Survey Project, post-detonation BIP samples were collected from J-2 and U Ranges.

The following are the notes from the December 19, 2002 Technical Team meeting at the IAGWSPO:

Participants

Ben Gregson (IAGWSPO)
Bill Gallagher (IAGWSPO)
Jane Dolan (EPA-phone)
Len Pinaud (MADEP)
Frank Fedele (ACE)
Rob Foti (ACE)
Marc Grant (AMEC-phone)
John Rice (AMEC-phone)
Mike Goydas (Jacobs)
Leo Montroy (Tt-phone)

Tina Dolen (IAGWSPO)
Karen Wilson (IAGWSPO)
Meghan Cassidy (EPA-phone)
Mark Panni (MADEP-phone)
Ed Wise (ACE)
Sheila Holt (ACE-phone)
Kim Harriz (AMEC)
Herb Colby (AMEC-phone)
Larry Hudgins (Tetra Tech)
Susan Stewart (Tt-phone)

Dave Hill (IAGWSPO)
Todd Borci (EPA-phone)
Desiree Moyer (EPA-phone)
Gina Kaso (ACE)
Heather Sullivan (ACE-phone)
Darrin Smith (ACE)
Maria Pologruto (AMEC)
Dick Skryness (ECC)
John Webster (Tetra Tech)

Punchlist Items

- #3 <u>Determine status of sampling the Gallo Skating Rink well (Guard).</u> Attempt will be made to sample the well Friday, 12/20.
- #5 Provide data validation summary for MW-187, MW-188 and MW-215 (Corps). Additional data emailed last Friday, 12/13. Remaining set of data from MW-187 will be available shortly.
- #8 Provide ASR inquiry letter for Indiana Head NAVSTA and Tyndall AFB for EPA review (Corps). Draft letter to be forwarded to Jane Dolan today. Ms. Dolan noted that a 104e request may have been previously sent to Tyndall. Ms. Dolan to check further.
- #9 Provide EPA updated 104e documents table (Corps). Table to be emailed with draft letter (see #8).
- #10 Provide EPA/DEP with J-3 Range particle tracks (Corps). Particle tracks to be emailed to agencies today. Two sets of particle tracks were generated. The first set was generated with the older version of the subregional model. In this model run, particle tracks that are not captured in the FS-12 treatment system go under the pond and exit the footprint of the pond at the south end in the vicinity of the three proposed wells. The second set of particle tracks was generated with the recently updated version of the subregional model in which the transmissivity contrast between the pond bottom and aquifer had been increased. This adjustment was done to calibrate the modeled plume to intersect the middle screen of MW-171 (located on the spit) to match the field data. More of the particle tracks generated using this model were captured by the FS-12 treatment system. Some of the tracks continued under the pond exiting in an area east of the beaches. The agencies will review the particle tracks and discuss further at a later date.

MSP3 and Southeast Ranges Update

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

<u>J-2 Range Polygons.</u> Crews completed Polygon 1 excavations this week. A final update of discoveries will likely be provided by 01/09/03. BIPs have been scheduled for Polygon 2 today. <u>U Range.</u> Multiple BIPs of 3.5-inch rockets with suspect fuzes are scheduled for today. Todd Borci requested that detail regarding unique demil operations be included in future BIP notifications. Geophysical and Schonstedt surveys of the range to be discussed in an after meeting today.

<u>Drilling</u> – J3P-26 (MW-251) was completed and developed by the drilling crew. Property owners to be notified within 48 hours of sampling event. Crews are currently drilling at J1P-18 and developing J3P-19.

CDC Update

Frank Fedele (ACE) gave a brief update on the status of the CDC.

- CDC operations were conducted on 12/03-12/06; 12/09-12/12.
- During these 8 days, 2688 items were detonated, including small arms, cartridge cases, flares, mortars, 20MM and 40MM projectiles and cartridge cases. Approximately 300 items were destroyed per day.
- Operations were discontinued this week due to a heart attack suffered by an individual on the crew. A replacement individual has not been found.
- The crew will demob over the next two weeks. Operations will continue beginning 01/07 through the end of January. Dependent on other scheduled events, there is a possibility that the operational schedule could be extended into February. However, extension of the schedule is completely conditional on the needs of the other facility for which the unit had previously been scheduled to provide service. Todd Borci requested the Guard ensure that all possible steps and coordination occur such that the entire stockpile of waste munitions can be disposed during the current mobilization of the CDC. Gina Kaso emphasized the Corps does not have control over whether or not the CDC can remain at MMR past the commitment date of 01/31.

Bourne Update

Bill Gallagher (IAGWSPO) summarized issues discussed in the Guard's 12/18 meeting with the Bourne Water District and Haley and Ward.

- Monthly sampling of the Bourne-area wells continues. Detects were noted in monitor wells
 1-88 and 02-13. There have been detects in these wells in the past.
- All comments on the Draft Bourne Perchlorate Response Plan have been received. Of the comments made, Leo Yuskus (Haley & Ward) stressed the following:
 - the BWD favored continued weekly sampling of certain specific wells that they would need information on in case an emergency required them to turn back on Bourne Supply Well 3 or 4. The BWD did not object to decreasing the sampling to monthly for other wells.
 - the BWD requested contingency wells between the Far Field Wells and sentinel wells.
 - the BWD did not feel that the southern and northern boundaries of the contamination in the wellfield were clearly defined. Therefore, related language in the Workplan was objectionable (the Guard had already previously agreed to change this language in the Final version of the Plan). The BWD would not pursue this issue further, preferring to leave this matter to be resolved at the agencies' discretion.
 - the BWD wanted further clarification on EPA Comment 21, which related to EPA's desire to have wells that were to be installed with AFCEE funding to follow IAGWSP protocols in an effort to maintain consistency. The greatest concern was that screen intervals greater than 10 feet were proposed to be used. The IAGWSPO feels that since these wells have a purpose other than defining nature and extent of contamination, that this should not be a requirement for these wells. The BWD agreed to work with the IAGWSP, but would not commit to installing only 10-foot screens.
- IART and MADEP comments on the Bourne Plan requested that the Guard look at the need for additional downgradient well(s). Particle backtracks from the USGS BHW wells showed that these are directly downgradient of the wells with the highest levels of perchlorate (02-13, MW-80) and therefore, in the Guard's opinion, no additional downgradient wells were needed. Todd Borci recommended the Guard provide forward particle tracks from some of the contaminated wells to the north and south, such as 02-13, to better demonstrate this point. Mr. Gallagher also noted that additional downgradient wells were not being sought by the BWD or the MADEP Water Supply Division. Mr. Borci noted the IAGWSPO did not necessarily have the same objectives as the BWD or MADEP Water Supply.

- Another comment on the Bourne Plan noted there was no clear trigger for installation of the contingency wells. The Guard agreed and will work on this part of the plan.
- Based on the IART's desire for a Bourne plume map and similar comment from MADEP on the plan, the Guard indicated that they would update the previous internal draft map with new data and provide to all parties for review. Mr. Borci requested a plume map be drafted consistent with the protocols used for the other IAGWSP plumes and then this map be provided to the agencies for review. Following incorporation of the agencies' comments, this map could then be provided for the BWD's review. The map should in some way account for the MADEP's Drinking Water Advice for the Town of Bourne.
- The Guard's Response to Comment letter for the Draft Bourne Perchlorate Response Plan will incorporate all agency comments and BWD comments. RCL to be submitted to all parties on 01/15. CRM to be scheduled for 01/29. Len Pinaud (MADEP) requested the BWD be notified of these dates.
- At Mr. Borci's request, all parties agreed to discuss new Bourne well locations in an after Tech meeting on 01/09. Draft plume map to be submitted to agencies as soon as available.

Training Ranges Update

- Bill Gallagher (IAGWSPO) noted that based on information provided in the Range Control log recently distributed by Nick Iaiennaro (ACE), another FSP scoping meeting for the Training Areas was warranted.
- Todd Borci noted that he was interested in detonation/demolition activities that occurred on roads of the western training areas. Were these sites already included in the Phase IIb? Mr. Gallagher noted that while not all places that activities were reported were sampled, for areas that were sampled, no residual explosive constituents were detected in soil. Mr. Borci requested copies of the data that Mr. Gallagher was basing his statements on regarding suspected detonation areas which have been sampled, noting that the previous sampling was based entirely upon site reconnaissance, and correct locations may be able to be located with greater precision with this new information. Therefore, Mr. Borci recommended the Training Ranges FSP be held a few weeks pending review of the Phase IIb Report. Len Pinaud concurred with this approach.
- Mr. Gallagher indicated the Guard was considering rethinking some of the analysis parameters.
- Mr. Borci indicated, in particular, he would like the Guard to look into where Tobbin Road was located. Ed Pesche and Ralph Turner were named as potential sources for this information.

Miscellaneous

- Gina Kaso (ACE) noted the additional MSP3 site investigations would commence beginning 01/06 and would include Ox Pond, NBC, the Former Demo Site, Gun and Mortar firing positions and the ASP. ROA's for the first four sites are in place; the Corps is working on the ROA for the ASP site.
- Ms. Kaso requested an after meeting be scheduled on 01/16 to discuss the OE Characterization Workplan; the Corps to develop an agenda. The J-3 Range Barrage and Hillside sites would be included under the OE Characterization Plan, since they are not known to be burial or disposal sites. Further discussion on this matter can be addressed at the 01/16 meeting. Mr. Borci noted his disagreement with inclusion of these sites in the OE Characterization scope of work as opposed to the MSP3 scope of work. EPA objected to the proposal for the J-3 Range Hillside and Barrage rocket sites for two reasons (1) the Corps requested EPA prioritize MSP3 sites early on in the 2002 calendar year, and these sites were higher in the priority list. This work was necessary to be completed in order to fold the findings in to the J3 range reports now being produced; and (2) that the MSP3

- scope of work is different (less extensive) than would have been generated for OE Characterization Work Plan work.
- Ms. Kaso noted the tentative schedule was for the Final Draft OE Characterization Workplan
 to be submitted in July 03. Additional information could be provided in the 01/16 meeting.
 Tetra Tech will be under contract to complete the fieldwork and report writing for this effort.

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 and upgradient

- Groundwater samples from 02-01M1; 02-02M2, M1; 02-03M3; 02-04M1; 02-05M1, M2; 02-07M3; 02-08M2, M3; 02-09M1; 02-12M3; 02-13M2; 1-88A, B; 97-5; MW-80M1, M2; MW-213M2, M3; and MW-233M3 had detections of perchlorate. The results were similar to the previous sampling rounds.
- Groundwater samples from MW-216S had detections of perchlorate and PETN. The PETN
 detection was not confirmed by PDA spectra. The results were similar to previous sampling
 rounds except that, PETN has never been a validated detection in this well.
- Groundwater samples from MW-226M1 had a detection of perchlorate. This is the first detection of perchlorate in this well.
- Groundwater samples from 00-2D had detections of 2,6-DNT, acetone and TCE. The detection of 2,6-DNT was not confirmed by PDA spectra. This is the first time acetone and TCE have been detected in this well.
- Groundwater samples from 00-7 had a detection of acetone. This is the first time acetone has been detected in this well.
- Groundwater samples from 02-04M3, M2, and M1 had detections of TCE. The results were similar to the previous sampling rounds.

- Groundwater samples from 02-05M2 had detections of acetone and toluene. This is the first time acetone and toluene have been detected in this well.
- Sixty-eight groundwater samples and duplicate samples had detections of chloroform.

Central Impact Area

• Groundwater samples from 58MW0018B and 58MW0020B had detections of RDX that were confirmed by PDA spectra. The results were similar to the previous sampling rounds.

Southeast Ranges

- Groundwater samples from MW-132S had detections of RDX, HMX, and PETN. The
 detections of RDX and HMX were confirmed by PDA spectra and the results were similar to
 the previous sampling rounds. The detection of PETN was not confirmed by PDA spectra
 and has never been a validated detection in this well.
- Profile samples from MW-253 (J1P-18) had detections of explosives and VOCs. None of the detections of explosives were confirmed by PDA spectra. Screens have not yet been selected for this location.

DELIVERABLES SUBMITTED

Draft IAGWSP Technical Team Memo 02-5, Site-Wide Perchlorate Characterization Report

12/20/02

3. SCHEDULED ACTIONS

Scheduled actions for the week of December 23 include weekly groundwater sampling at the Bourne water supply and monitoring wells.

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. Pumping and treating groundwater at the toe of the Demo 1 plume and at Frank Perkins Road has been selected as an Interim Action to address the Demo 1 Area Groundwater Operable Unit. A Rapid Response Action/Release Abatement Measure (RRA/RAM) is also being planned to address soil contamination at Demo 1. Drilling at D1P-18 and UXO clearance at D1P-19 continued this week.

| OGDEN_ID | GIS_LOCID | LOGDATE | SAMP_TYPE | SBD | SED | BWTS | BWTE |
|---------------|-------------|------------|-------------|-----|-----|------|------|
| G252DEE | FIELDQC | 12/17/2002 | FIELDQC | 0 | 0 | | |
| G253DAE | FIELDQC | 12/18/2002 | FIELDQC | 0 | 0 | | |
| G253DIE | FIELDQC | 12/19/2002 | FIELDQC | 0 | 0 | | |
| M-1B-E | FIELDQC | 12/18/2002 | FIELDQC | 0 | 0 | | |
| M-3D-E | FIELDQC | 12/16/2002 | FIELDQC | 0 | 0 | | |
| M-3D-T | FIELDQC | 12/16/2002 | FIELDQC | 0 | 0 | | |
| M-7B-E | FIELDQC | 12/17/2002 | FIELDQC | 0 | 0 | | |
| W02-10M2T | FIELDQC | 12/20/2002 | FIELDQC | 0 | 0 | | |
| W02-12M1T | FIELDQC | 12/17/2002 | FIELDQC | 0 | 0 | | |
| W213M1T | FIELDQC | 12/18/2002 | FIELDQC | 0 | 0 | | |
| WS-4AD-E | FIELDQC | 12/19/2002 | FIELDQC | 0 | 0 | | |
| WS-4SD-T | FIELDQC | 12/19/2002 | FIELDQC | 0 | 0 | | |
| 4036000-01G-A | 4036000-01G | 12/17/2002 | GROUNDWATER | | | 6 | 12 |
| 4036000-03G-A | 4036000-03G | 12/17/2002 | GROUNDWATER | 50 | 60 | 6 | 12 |
| 4036000-04G-A | 4036000-04G | 12/17/2002 | GROUNDWATER | | | 6 | 12 |
| 4036000-06G-A | 4036000-06G | 12/17/2002 | GROUNDWATER | | | 6 | 12 |
| GLSKRNK-A | GLSKRNK | 12/20/2002 | GROUNDWATER | | | | |
| GLSKRNK-D | GLSKRNK | 12/20/2002 | GROUNDWATER | | | | |
| M-1B-A | M-1 | 12/18/2002 | GROUNDWATER | | 45 | | |
| M-1C-A | M-1 | 12/18/2002 | GROUNDWATER | | 55 | | |
| M-1D-A | M-1 | 12/18/2002 | GROUNDWATER | | 65 | | |
| M-1D-D | M-1 | 12/18/2002 | GROUNDWATER | | 65 | | |
| M-2B-A | M-2 | 12/16/2002 | GROUNDWATER | | 65 | | |
| M-2C-A | M-2 | 12/16/2002 | GROUNDWATER | | 75 | | |
| M-2D-A | M-2 | 12/16/2002 | GROUNDWATER | | 85 | | |
| M-3B-A | M-3 | 12/16/2002 | GROUNDWATER | | 65 | | |
| M-3C-A | M-3 | 12/16/2002 | GROUNDWATER | | 75 | | |
| M-3D-A | M-3 | 12/16/2002 | GROUNDWATER | | 85 | | |
| M-4B-A | M-4 | 12/18/2002 | GROUNDWATER | | 69 | | |
| M-4C-A | M-4 | 12/18/2002 | GROUNDWATER | | 79 | | |
| M-4D-A | M-4 | 12/18/2002 | GROUNDWATER | | 89 | | |
| M-5B-A | M-5 | 12/18/2002 | GROUNDWATER | | 65 | | |
| M-5C-A | M-5 | 12/18/2002 | GROUNDWATER | | 75 | | |
| M-5D-A | M-5 | 12/18/2002 | GROUNDWATER | | 85 | | |

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

| OGDEN_ID | GIS_LOCID | LOGDATE | SAMP_TYPE | SBD | SED | BWTS | BWTE |
|-----------|-----------|------------|-------------|-----|-------|-------|-------|
| M-6B-A | M-6 | 12/17/2002 | GROUNDWATER | | 59 | | |
| M-6C-A | M-6 | 12/17/2002 | GROUNDWATER | | 69 | | |
| M-6D-A | M-6 | 12/17/2002 | GROUNDWATER | | 79 | | |
| M-7B-A | M-7 | 12/17/2002 | GROUNDWATER | | 59 | | |
| M-7C-A | M-7 | 12/17/2002 | GROUNDWATER | | 65 | | |
| M-7D-A | M-7 | 12/17/2002 | GROUNDWATER | | 75 | | |
| MW00-4-A | 00-4 | 12/17/2002 | GROUNDWATER | 64 | 70 | 38 | 44 |
| TW00-1-A | 00-1 | 12/19/2002 | GROUNDWATER | 64 | 70 | | |
| TW00-2D-A | 00-2 | 12/19/2002 | GROUNDWATER | 71 | 77 | 43.95 | 49.95 |
| TW00-5-A | 00-5 | 12/16/2002 | GROUNDWATER | 50 | 56 | 15.5 | 21.5 |
| TW00-7-A | 00-7 | 12/16/2002 | GROUNDWATER | 57 | 63 | 25.5 | 31.5 |
| TW01-1-A | 01-1 | 12/16/2002 | GROUNDWATER | 62 | 67 | 55.21 | 60.21 |
| TW1-88A-A | 1-88 | 12/17/2002 | GROUNDWATER | | 102.9 | 0 | 67.4 |
| W02-03M1A | 02-03 | 12/16/2002 | GROUNDWATER | 130 | 140 | 86.1 | 96.1 |
| W02-03M2A | 02-03 | 12/16/2002 | GROUNDWATER | 92 | 102 | 48.15 | 58.15 |
| W02-03M3A | 02-03 | 12/16/2002 | GROUNDWATER | 75 | 85 | 31.05 | 41.05 |
| W02-04M1A | 02-04 | 12/16/2002 | GROUNDWATER | 123 | 133 | 73.97 | 83.97 |
| W02-04M2A | 02-04 | 12/16/2002 | GROUNDWATER | 98 | 108 | 48.93 | 58.93 |
| W02-04M3A | 02-04 | 12/16/2002 | GROUNDWATER | 83 | 93 | 34.01 | 44.01 |
| W02-08M1A | 02-08 | 12/16/2002 | GROUNDWATER | 108 | 113 | 86.56 | 91.56 |
| W02-08M2A | 02-08 | 12/16/2002 | GROUNDWATER | 82 | 87 | 60.65 | 65.65 |
| W02-08M3A | 02-08 | 12/19/2002 | GROUNDWATER | 62 | 67 | 40.58 | 45.58 |
| W02-09M1A | 02-09 | 12/20/2002 | GROUNDWATER | 74 | 84 | 65.26 | 75.26 |
| W02-10M1A | 02-10 | 12/20/2002 | GROUNDWATER | 135 | 145 | 94 | 104 |
| W02-10M2A | 02-10 | 12/20/2002 | GROUNDWATER | 110 | 120 | 68.61 | 78.61 |
| W02-10M3A | 02-10 | 12/20/2002 | GROUNDWATER | 85 | 95 | 43.65 | 53.65 |
| W02-10M3D | 02-10 | 12/20/2002 | GROUNDWATER | 85 | 95 | 43.65 | 53.65 |
| W02-12M1A | 02-12 | 12/17/2002 | GROUNDWATER | 109 | 119 | 58.35 | 68.35 |
| W02-12M2A | 02-12 | 12/17/2002 | GROUNDWATER | 94 | 104 | 43.21 | 53.21 |
| W02-12M3A | 02-12 | 12/17/2002 | GROUNDWATER | 79 | 89 | 28.22 | 38.22 |
| W02-12M3D | 02-12 | 12/17/2002 | GROUNDWATER | 79 | 89 | 28.22 | 38.22 |
| W02-13M1A | 02-13 | 12/17/2002 | GROUNDWATER | 98 | 108 | 58.33 | 68.33 |
| W02-13M2A | 02-13 | 12/17/2002 | GROUNDWATER | 83 | 93 | 44.2 | 54.2 |
| W02-13M3A | 02-13 | 12/17/2002 | GROUNDWATER | 68 | 78 | 28.3 | 38.3 |

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

| OGDEN_ID | GIS_LOCID | LOGDATE | SAMP_TYPE | SBD | SED | BWTS | BWTE |
|-------------|-----------|------------|-------------|-----|-----|--------|--------|
| W213M1A | MW-213 | 12/18/2002 | GROUNDWATER | 133 | 143 | 85.01 | 95.01 |
| W213M2A | MW-213 | 12/18/2002 | GROUNDWATER | 89 | 99 | 41.15 | 51.15 |
| W213M3A | MW-213 | 12/18/2002 | GROUNDWATER | 77 | 82 | 29.38 | 34.38 |
| W216M1A | MW-216 | 12/18/2002 | GROUNDWATER | 253 | 263 | 51.19 | 61.19 |
| W216M2A | MW-216 | 12/18/2002 | GROUNDWATER | 236 | 246 | 34.17 | 44.17 |
| W216M2D | MW-216 | 12/18/2002 | GROUNDWATER | 236 | 246 | 34.17 | 44.17 |
| W216SSA | MW-216 | 12/18/2002 | GROUNDWATER | 199 | 209 | 0 | 7.13 |
| W219M1A | MW-219 | 12/17/2002 | GROUNDWATER | 357 | 367 | 178 | 188 |
| W219M2A | MW-219 | 12/17/2002 | GROUNDWATER | 332 | 342 | 153.05 | 163.05 |
| W219M3A | MW-219 | 12/17/2002 | GROUNDWATER | 315 | 325 | 135.8 | 145.8 |
| W219M4A | MW-219 | 12/17/2002 | GROUNDWATER | 225 | 235 | 45.7 | 55.7 |
| W226M1A | MW-226 | 12/19/2002 | GROUNDWATER | 285 | 295 | 172 | 182 |
| W226M2A | MW-226 | 12/19/2002 | GROUNDWATER | 175 | 185 | 61.7 | 71.7 |
| W226M3A | MW-226 | 12/19/2002 | GROUNDWATER | 135 | 145 | 21.53 | 31.53 |
| W233M1A | MW-233 | 12/19/2002 | GROUNDWATER | 356 | 366 | 157.8 | 167.8 |
| W233M2A | MW-233 | 12/19/2002 | GROUNDWATER | 331 | 341 | 132.8 | 142.8 |
| W233M3A | MW-233 | 12/19/2002 | GROUNDWATER | 231 | 241 | 32.8 | 42.8 |
| W82DDA | MW-82 | 12/18/2002 | GROUNDWATER | 125 | 135 | 97 | 107 |
| W82M2A | MW-82 | 12/18/2002 | GROUNDWATER | 78 | 88 | 50 | 60 |
| W82M3A | MW-82 | 12/18/2002 | GROUNDWATER | 54 | 64 | 26 | 36 |
| WS-4AD-A | WS-4A | 12/19/2002 | GROUNDWATER | 218 | 228 | 148.5 | 158.5 |
| WS-4AD-D | WS-4A | 12/19/2002 | GROUNDWATER | 155 | 165 | 85.5 | 95.5 |
| WS-4AS-A | WS-4A | 12/19/2002 | GROUNDWATER | 155 | 165 | 85.5 | 95.5 |
| XXM971-A | 97-1 | 12/20/2002 | GROUNDWATER | 83 | 93 | 62 | 72 |
| XXM972-A | 97-2 | 12/20/2002 | GROUNDWATER | 75 | 85 | 53 | 63 |
| XXM975-A | 97-5 | 12/20/2002 | GROUNDWATER | 84 | 94 | 76 | 86 |
| DW121702-NV | GAC WATER | 12/17/2002 | IDW | | | | |
| G252DEA | MW-252 | 12/17/2002 | PROFILE | 160 | 160 | 46.5 | 46.5 |
| G252DFA | MW-252 | 12/17/2002 | PROFILE | 170 | 170 | 56.5 | 56.5 |
| G252DGA | MW-252 | 12/18/2002 | PROFILE | 180 | 180 | 66.5 | 66.5 |
| G252DHA | MW-252 | 12/18/2002 | PROFILE | 190 | 190 | 76.5 | 76.5 |
| G252DIA | MW-252 | 12/19/2002 | PROFILE | 200 | 200 | 86.5 | 86.5 |
| G252DJA | MW-252 | 12/19/2002 | PROFILE | 210 | 210 | 96.5 | 96.5 |
| G252DKA | MW-252 | 12/19/2002 | PROFILE | 220 | 220 | 106.5 | 106.5 |

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

| OGDEN_ID | GIS_LOCID | LOGDATE | SAMP_TYPE | SBD | SED | BWTS | BWTE |
|-----------------|----------------|------------|-------------|-----|------|-------|-------|
| G252DLA | MW-252 | 12/19/2002 | PROFILE | 230 | 230 | 116.5 | 116.5 |
| G252DMA | MW-252 | 12/19/2002 | PROFILE | 240 | 240 | 126.5 | 126.5 |
| G252DNA | MW-252 | 12/19/2002 | PROFILE | 250 | 250 | 136.5 | 136.5 |
| G253DAA | MW-253 | 12/18/2002 | PROFILE | 135 | 135 | 5.6 | 5.6 |
| G253DBA | MW-253 | 12/18/2002 | PROFILE | 140 | 140 | 10.6 | 10.6 |
| G253DCA | MW-253 | 12/18/2002 | PROFILE | 150 | 150 | 20.6 | 20.6 |
| G253DDA | MW-253 | 12/18/2002 | PROFILE | 160 | 160 | 30.6 | 30.6 |
| G253DEA | MW-253 | 12/18/2002 | PROFILE | 170 | 170 | 40.6 | 40.6 |
| G253DFA | MW-253 | 12/18/2002 | PROFILE | 180 | 180 | 50.6 | 50.6 |
| G253DFD | MW-253 | 12/18/2002 | PROFILE | 180 | 180 | 50.6 | 50.6 |
| G253DGA | MW-253 | 12/18/2002 | PROFILE | 190 | 190 | 60.6 | 60.6 |
| G253DHA | MW-253 | 12/18/2002 | PROFILE | 200 | 200 | 70.6 | 70.6 |
| G253DIA | MW-253 | 12/19/2002 | PROFILE | 210 | 210 | 80.6 | 80.6 |
| G253DJA | MW-253 | 12/19/2002 | PROFILE | 220 | 220 | 90.6 | 90.6 |
| G253DKA | MW-253 | 12/19/2002 | PROFILE | 230 | 230 | 100.6 | 100.6 |
| G253DLA | MW-253 | 12/19/2002 | PROFILE | 240 | 240 | 110.6 | 110.6 |
| G253DMA | MW-253 | 12/19/2002 | PROFILE | 250 | 250 | 120.6 | 120.6 |
| G253DNA | MW-253 | 12/19/2002 | PROFILE | 260 | 260 | 130.6 | 130.6 |
| G253DOA | MW-253 | 12/19/2002 | PROFILE | 270 | 270 | 140.6 | 140.6 |
| G253DPA | MW-253 | 12/19/2002 | PROFILE | 280 | 280 | 150.6 | 150.6 |
| G253DQA | MW-253 | 12/19/2002 | PROFILE | 290 | 290 | 160.6 | 160.6 |
| G253DRA | MW-253 | 12/19/2002 | PROFILE | 300 | 300 | 170.6 | 170.6 |
| G253DSA | MW-253 | 12/19/2002 | PROFILE | 310 | 310 | 180.6 | 180.6 |
| G253DTA | MW-253 | 12/19/2002 | PROFILE | 317 | 317 | 187.6 | 187.6 |
| G254DAA | MW-254 | 12/19/2002 | PROFILE | 70 | 70 | | |
| G254DBA | MW-254 | 12/19/2002 | PROFILE | 80 | 80 | | |
| G254DCA | MW-254 | 12/19/2002 | PROFILE | 90 | 90 | | |
| G254DCD | MW-254 | 12/19/2002 | PROFILE | 90 | 90 | | |
| G254DDA | MW-254 | 12/19/2002 | PROFILE | 100 | 100 | | |
| G254DEA | MW-254 | 12/19/2002 | PROFILE | 110 | 110 | | |
| G254DFA | MW-254 | 12/19/2002 | PROFILE | 120 | 120 | | |
| J2.A.T1A.021.1. | 0 J2.T1A.021.R | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| J2.A.T1A.021.1. | J2.T1A.021.R | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| J2.A.T1A.021.2. | 0 J2.T1A.021.R | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |

Profiling methods include: Volatiles and Explosives

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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

| OGDEN_ID GIS_LOCID | LOGDATE | SAMP_TYPE | SBD | SED | BWTS | BWTE |
|-------------------------------|------------|-------------|------|------|------|------|
| J2.A.T1A.021.3.0 J2.T1A.021.R | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| J2.A.T1A.022.1.0 J2.T1A.022.R | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| J2.A.T1A.022.2.0 J2.T1A.022.R | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| J2.A.T1A.022.3.0 J2.T1A.022.R | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| J2.A.T1A.022.3. J2.T1A.022.R | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| J2.F.T1B.XC1.1. J2 TARGET 1B | 12/19/2002 | SOIL | 0 | 3.25 | | |
| J2.F.T1B.XC1.2. J2 TARGET 1B | 12/19/2002 | SOIL | 3.25 | 3.5 | | |
| J2.F.T1B.XC1.3. J2 TARGET 1B | 12/19/2002 | SOIL | 1 | 1.25 | | |
| J2.F.T1C.XC1.1. J2 TARGET 1C | 12/19/2002 | SOIL | 0 | 3 | | |
| J2.F.T1C.XC1.2. J2 TARGET 1C | 12/19/2002 | SOIL | 3 | 3.25 | | |
| J2.F.T1C.XC1.2. J2 TARGET 1C | 12/19/2002 | SOIL | 3 | 3.25 | | |
| UR.A.L1A.1.0 | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1A.2.0 | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1A.3.0 | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| UR.A.L1B.1.0 | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1B.2.0 | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1B.3.0 | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| UR.A.L1C.1.0 | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1C.2.0 | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1C.3.0 | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| UR.A.L1D.1.0 | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1D.1.D | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1D.2.0 | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1D.3.0 | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| UR.A.L1E.1.0 | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1E.2.0 | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1E.3.0 | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| UR.A.L1F.1.0 | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1F.2.0 | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1F.3.0 | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| UR.A.L1G.1.0 | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1G.2.0 | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1G.3.0 | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| UR.A.L1H.1.0 | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |

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

| OGDEN_ID | GIS_LOCID | LOGDATE | SAMP_TYPE | SBD | SED | BWTS | BWTE |
|--------------|-----------|------------|-------------|-----|------|------|------|
| UR.A.L1H.1.D | | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1H.2.0 | | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1H.3.0 | | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |
| UR.A.L1J.1.0 | | 12/18/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1J.2.0 | | 12/19/2002 | CRATER GRID | 0 | 0.17 | | |
| UR.A.L1J.3.0 | | 12/19/2002 | CRATER GRAB | 0 | 0.17 | | |

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

| OGDEN ID | LOCID OR WELL | SAMPLED | SAMP TYPE | SBD | SED | BWTS | BWTE | METHOD | OGDEN ANALYTE | PDA |
|-------------|---------------|------------|-------------|-------|--------|-------|-------|--------|---|-----|
| 58MW0018B-A | 58MW0018B | 12/10/2002 | GROUNDWATER | 175.9 | 185.58 | 34.55 | 44.55 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE | YES |
| 58MW0020B-A | 58MW0020B | 12/10/2002 | GROUNDWATER | | 205 | 0 | 43 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE | YES |
| TW00-2D-A | 00-2 | 12/19/2002 | GROUNDWATER | 71 | 77 | 43.95 | 49.95 | OC21V | TRICHLOROETHYLENE (TCE) | |
| TW00-2D-A | 00-2 | 12/19/2002 | GROUNDWATER | 71 | 77 | 43.95 | 49.95 | OC21V | ACETONE | |
| TW00-2D-A | 00-2 | 12/19/2002 | GROUNDWATER | 71 | 77 | 43.95 | 49.95 | 8330N | 2,6-DINITROTOLUENE | NO |
| TW00-7-A | 00-7 | 12/16/2002 | GROUNDWATER | 57 | 63 | 25.5 | 31.5 | OC21V | ACETONE | |
| TW1-88A-A | 1-88 | 12/17/2002 | GROUNDWATER | | 102.9 | 0 | 67.4 | E314.0 | PERCHLORATE | |
| TW1-88B-A | 1-88 | 12/13/2002 | GROUNDWATER | | 105.5 | 0 | 69.6 | E314.0 | PERCHLORATE | |
| W02-01M1A | 02-01 | 12/10/2002 | GROUNDWATER | 95 | 105 | 42.9 | 52.9 | E314.0 | PERCHLORATE | |
| W02-02M1A | 02-02 | 12/11/2002 | GROUNDWATER | 114.5 | 124.5 | 63.5 | 73.5 | E314.0 | PERCHLORATE | |
| W02-02M2D | 02-02 | 12/11/2002 | GROUNDWATER | 94.5 | 104.5 | 42.65 | 52.65 | E314.0 | PERCHLORATE | |
| W02-03M3A | 02-03 | 12/16/2002 | GROUNDWATER | 75 | 85 | 31.05 | 41.05 | E314.0 | PERCHLORATE | |
| W02-04M1A | 02-04 | 12/16/2002 | GROUNDWATER | 123 | 133 | 73.97 | 83.97 | OC21V | TRICHLOROETHYLENE (TCE) | |
| W02-04M1A | 02-04 | 12/16/2002 | GROUNDWATER | 123 | 133 | 73.97 | 83.97 | E314.0 | PERCHLORATE | |
| W02-04M2A | 02-04 | 12/16/2002 | GROUNDWATER | 98 | 108 | 48.93 | 58.93 | OC21V | TRICHLOROETHYLENE (TCE) | |
| W02-04M3A | 02-04 | 12/16/2002 | GROUNDWATER | 83 | 93 | 34.01 | 44.01 | OC21V | TRICHLOROETHYLENE (TCE) | |
| W02-05M1A | 02-05 | 12/12/2002 | GROUNDWATER | 110 | 120 | 81.44 | 91.44 | E314.0 | PERCHLORATE | |
| W02-05M2A | 02-05 | 12/13/2002 | GROUNDWATER | 92 | 102 | 63.41 | 73.41 | E314.0 | PERCHLORATE | |
| W02-05M2A | 02-05 | 12/13/2002 | GROUNDWATER | 92 | 102 | 63.41 | 73.41 | OC21V | ACETONE | |
| W02-05M2A | 02-05 | 12/13/2002 | GROUNDWATER | 92 | 102 | 63.41 | 73.41 | OC21V | TOLUENE | |
| W02-07M3A | 02-07 | 12/11/2002 | GROUNDWATER | 47 | 57 | 13 | 23 | E314.0 | PERCHLORATE | |
| W02-08M2A | 02-08 | 12/16/2002 | GROUNDWATER | 82 | 87 | 60.65 | 65.65 | 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

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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

^{* =} Interference in sample

^{+ =} PDAs are not good matches

| OGDEN ID | LOCID OR WELL | SAMPLED | SAMP TYPE | SBD | SED | BWTS | BWTE | METHOD | OGDEN ANALYTE | PDA |
|-----------|---------------|------------|-------------|-----|-----|-------|-------|--------|--|-----|
| W02-08M3A | 02-08 | 12/19/2002 | GROUNDWATER | 62 | 67 | 40.58 | 45.58 | E314.0 | PERCHLORATE | |
| W02-09M1A | 02-09 | 12/20/2002 | GROUNDWATER | 74 | 84 | 65.26 | 75.26 | E314.0 | PERCHLORATE | |
| W02-12M3D | 02-12 | 12/17/2002 | GROUNDWATER | 79 | 89 | 28.22 | 38.22 | E314.0 | PERCHLORATE | |
| W02-13M2A | 02-13 | 12/17/2002 | GROUNDWATER | 83 | 93 | 44.2 | 54.2 | E314.0 | PERCHLORATE | |
| W132SSA | MW-132 | 12/10/2002 | GROUNDWATER | 37 | 47 | 0 | 10 | 8330N | OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET | YES |
| W132SSA | MW-132 | 12/10/2002 | GROUNDWATER | 37 | 47 | 0 | 10 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE | YES |
| W132SSA | MW-132 | 12/10/2002 | GROUNDWATER | 37 | 47 | 0 | 10 | 8330N | PENTAERYTHRITOL TETRANITRATE | NO |
| W213M2A | MW-213 | 12/18/2002 | GROUNDWATER | 89 | 99 | 41.15 | 51.15 | E314.0 | PERCHLORATE | |
| W213M3A | MW-213 | 12/18/2002 | GROUNDWATER | 77 | 82 | 29.38 | 34.38 | E314.0 | PERCHLORATE | |
| W216SSA | MW-216 | 12/18/2002 | GROUNDWATER | 199 | 209 | 0 | 7.13 | 8330N | PENTAERYTHRITOL TETRANITRATE | NO |
| W216SSA | MW-216 | 12/18/2002 | GROUNDWATER | 199 | 209 | 0 | 7.13 | E314.0 | PERCHLORATE | |
| W226M1A | MW-226 | 12/19/2002 | GROUNDWATER | 285 | 295 | 172 | 182 | E314.0 | PERCHLORATE | |
| W233M3A | MW-233 | 12/19/2002 | GROUNDWATER | 231 | 241 | 32.8 | 42.8 | E314.0 | PERCHLORATE | |
| W80M1A | MW-80 | 12/12/2002 | GROUNDWATER | 130 | 140 | 86 | 96 | E314.0 | PERCHLORATE | |
| W80M2A | MW-80 | 12/12/2002 | GROUNDWATER | 100 | 110 | 56 | 66 | E314.0 | PERCHLORATE | |
| XXM975-A | 97-5 | 12/20/2002 | GROUNDWATER | 84 | 94 | 76 | 86 | E314.0 | PERCHLORATE | |
| M-1B-A | M-1 | 12/18/2002 | GROUNDWATER | | 45 | | | OC21V | CHLOROFORM | |
| M-1C-A | M-1 | 12/18/2002 | GROUNDWATER | | 55 | | | OC21V | CHLOROFORM | |
| M-1D-A | M-1 | 12/18/2002 | GROUNDWATER | | 65 | | | OC21V | CHLOROFORM | |
| M-1D-D | M-1 | 12/18/2002 | GROUNDWATER | | 65 | | | OC21V | CHLOROFORM | |
| M-2B-A | M-2 | 12/16/2002 | GROUNDWATER | | 65 | | | OC21V | CHLOROFORM | |
| M-2C-A | M-2 | 12/16/2002 | GROUNDWATER | | 75 | | | OC21V | CHLOROFORM | |

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

^{* =} Interference in sample

^{+ =} PDAs are not good matches

| OGDEN ID | LOCID OR WELL | SAMPLED | SAMP TYPE | SBD | SED | BWTS | BWTE | METHOD | OGDEN ANALYTE | PDA |
|------------|---------------|------------|-------------|-----|-----|-------------|-------|--------|---------------|-----|
| M-2D-A | M-2 | 12/16/2002 | GROUNDWATER | | 85 | | | OC21V | CHLOROFORM | |
| M-3B-A | M-3 | 12/16/2002 | GROUNDWATER | | 65 | | | OC21V | CHLOROFORM | |
| M-3C-A | M-3 | 12/16/2002 | GROUNDWATER | | 75 | | | OC21V | CHLOROFORM | |
| M-3D-A | M-3 | 12/16/2002 | GROUNDWATER | | 85 | | | OC21V | CHLOROFORM | |
| M-4B-A | M-4 | 12/18/2002 | GROUNDWATER | | 69 | | | OC21V | CHLOROFORM | |
| M-4C-A | M-4 | 12/18/2002 | GROUNDWATER | | 79 | | | OC21V | CHLOROFORM | |
| M-4D-A | M-4 | 12/18/2002 | GROUNDWATER | | 89 | | | OC21V | CHLOROFORM | |
| M-5B-A | M-5 | 12/18/2002 | GROUNDWATER | | 65 | | | OC21V | CHLOROFORM | |
| M-5C-A | M-5 | 12/18/2002 | GROUNDWATER | | 75 | | | OC21V | CHLOROFORM | |
| M-5D-A | M-5 | 12/18/2002 | GROUNDWATER | | 85 | | | OC21V | CHLOROFORM | |
| M-6B-A | M-6 | 12/17/2002 | GROUNDWATER | | 59 | | | OC21V | CHLOROFORM | |
| M-6C-A | M-6 | 12/17/2002 | GROUNDWATER | | 69 | | | OC21V | CHLOROFORM | |
| M-6D-A | M-6 | 12/17/2002 | GROUNDWATER | | 79 | | | OC21V | CHLOROFORM | |
| M-7B-A | M-7 | 12/17/2002 | GROUNDWATER | | 59 | | | OC21V | CHLOROFORM | |
| M-7C-A | M-7 | 12/17/2002 | GROUNDWATER | | 65 | | | OC21V | CHLOROFORM | |
| M-7D-A | M-7 | 12/17/2002 | GROUNDWATER | | 75 | | | OC21V | CHLOROFORM | |
| MW00-4-A | 00-4 | 12/17/2002 | GROUNDWATER | 64 | 70 | 38 | 44 | OC21V | CHLOROFORM | |
| TW00-1-A | 00-1 | 12/19/2002 | GROUNDWATER | 64 | 70 | | | OC21V | CHLOROFORM | |
| TW00-2D-A | 00-2 | 12/19/2002 | GROUNDWATER | 71 | 77 | 43.95 | 49.95 | OC21V | CHLOROFORM | |
| TW00-4DA-A | 00-4D | 12/13/2002 | GROUNDWATER | | 75 | 0 | 0 | OC21V | CHLOROFORM | |
| TW00-4DA-D | 00-4D | 12/13/2002 | GROUNDWATER | | 75 | 0 | 0 | OC21V | CHLOROFORM | |
| TW00-4DB-A | 00-4D | 12/13/2002 | GROUNDWATER | | 85 | 0 | 0 | OC21V | CHLOROFORM | |

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

| OGDEN ID | LOCID OR WELL | SAMPLED | SAMP TYPE | SBD | SED | BWTS | BWTE | METHOD | OGDEN ANALYTE | PDA |
|-----------|---------------|------------|-------------|-------|-------|-------|-------|--------|---------------|-----|
| TW00-5-A | 00-5 | 12/16/2002 | GROUNDWATER | 50 | 56 | 15.5 | 21.5 | OC21V | CHLOROFORM | |
| TW00-6-A | 00-6 | 12/13/2002 | GROUNDWATER | 36 | 42 | 9.6 | 15.6 | OC21V | CHLOROFORM | |
| TW00-7-A | 00-7 | 12/16/2002 | GROUNDWATER | 57 | 63 | 25.5 | 31.5 | OC21V | CHLOROFORM | |
| W02-01M1A | 02-01 | 12/10/2002 | GROUNDWATER | 95 | 105 | 42.9 | 52.9 | OC21V | CHLOROFORM | |
| W02-01M2A | 02-01 | 12/11/2002 | GROUNDWATER | 83 | 93 | 30.9 | 40.9 | OC21V | CHLOROFORM | |
| W02-02M1A | 02-02 | 12/11/2002 | GROUNDWATER | 114.5 | 124.5 | 63.5 | 73.5 | OC21V | CHLOROFORM | |
| W02-02M2A | 02-02 | 12/11/2002 | GROUNDWATER | 94.5 | 104.5 | 42.65 | 52.65 | OC21V | CHLOROFORM | |
| W02-02M2D | 02-02 | 12/11/2002 | GROUNDWATER | 94.5 | 104.5 | 42.65 | 52.65 | OC21V | CHLOROFORM | |
| W02-02SSA | 02-02 | 12/11/2002 | GROUNDWATER | 49.5 | 59.5 | 0 | 10 | OC21V | CHLOROFORM | |
| W02-03M1A | 02-03 | 12/16/2002 | GROUNDWATER | 130 | 140 | 86.1 | 96.1 | OC21V | CHLOROFORM | |
| W02-03M2A | 02-03 | 12/16/2002 | GROUNDWATER | 92 | 102 | 48.15 | 58.15 | OC21V | CHLOROFORM | |
| W02-03M3A | 02-03 | 12/16/2002 | GROUNDWATER | 75 | 85 | 31.05 | 41.05 | OC21V | CHLOROFORM | |
| W02-04M1A | 02-04 | 12/16/2002 | GROUNDWATER | 123 | 133 | 73.97 | 83.97 | OC21V | CHLOROFORM | |
| W02-04M2A | 02-04 | 12/16/2002 | GROUNDWATER | 98 | 108 | 48.93 | 58.93 | OC21V | CHLOROFORM | |
| W02-04M3A | 02-04 | 12/16/2002 | GROUNDWATER | 83 | 93 | 34.01 | 44.01 | OC21V | CHLOROFORM | |
| W02-05M1A | 02-05 | 12/12/2002 | GROUNDWATER | 110 | 120 | 81.44 | 91.44 | OC21V | CHLOROFORM | |
| W02-05M2A | 02-05 | 12/13/2002 | GROUNDWATER | 92 | 102 | 63.41 | 73.41 | OC21V | CHLOROFORM | |
| W02-05M3A | 02-05 | 12/13/2002 | GROUNDWATER | 70 | 80 | 41.37 | 51.37 | OC21V | CHLOROFORM | |
| W02-10M1A | 02-10 | 12/20/2002 | GROUNDWATER | 135 | 145 | 94 | 104 | OC21V | CHLOROFORM | |
| W02-10M2A | 02-10 | 12/20/2002 | GROUNDWATER | 110 | 120 | 68.61 | 78.61 | OC21V | CHLOROFORM | |
| W02-10M3A | 02-10 | 12/20/2002 | GROUNDWATER | 85 | 95 | 43.65 | 53.65 | OC21V | CHLOROFORM | |
| W02-10M3D | 02-10 | 12/20/2002 | GROUNDWATER | 85 | 95 | 43.65 | 53.65 | OC21V | CHLOROFORM | |

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^{* =} Interference in sample

^{+ =} PDAs are not good matches

| OGDEN ID | LOCID OR WELL | SAMPLED | SAMP TYPE | SBD | SED | BWTS | BWTE | METHOD | OGDEN ANALYTE | PDA |
|-----------|---------------|------------|-------------|-----|-----|--------|--------|--------|---------------|-----|
| W02-12M1A | 02-12 | 12/17/2002 | GROUNDWATER | 109 | 119 | 58.35 | 68.35 | OC21V | CHLOROFORM | |
| W02-15M1A | 02-15 | 12/12/2002 | GROUNDWATER | 125 | 135 | 75.63 | 85.63 | OC21V | CHLOROFORM | |
| W02-15M2A | 02-15 | 12/12/2002 | GROUNDWATER | 101 | 111 | 51.5 | 61.5 | OC21V | CHLOROFORM | |
| W02-15M3A | 02-15 | 12/12/2002 | GROUNDWATER | 81 | 91 | 31.4 | 41.4 | OC21V | CHLOROFORM | |
| W213M1A | MW-213 | 12/18/2002 | GROUNDWATER | 133 | 143 | 85.01 | 95.01 | OC21V | CHLOROFORM | |
| W213M2A | MW-213 | 12/18/2002 | GROUNDWATER | 89 | 99 | 41.15 | 51.15 | OC21V | CHLOROFORM | |
| W213M3A | MW-213 | 12/18/2002 | GROUNDWATER | 77 | 82 | 29.38 | 34.38 | OC21V | CHLOROFORM | |
| W216M1A | MW-216 | 12/18/2002 | GROUNDWATER | 253 | 263 | 51.19 | 61.19 | OC21V | CHLOROFORM | |
| W216SSA | MW-216 | 12/18/2002 | GROUNDWATER | 199 | 209 | 0 | 7.13 | OC21V | CHLOROFORM | |
| W219M1A | MW-219 | 12/17/2002 | GROUNDWATER | 357 | 367 | 178 | 188 | OC21V | CHLOROFORM | |
| W219M2A | MW-219 | 12/17/2002 | GROUNDWATER | 332 | 342 | 153.05 | 163.05 | OC21V | CHLOROFORM | |
| W219M3A | MW-219 | 12/17/2002 | GROUNDWATER | 315 | 325 | 135.8 | 145.8 | OC21V | CHLOROFORM | |
| W219M4A | MW-219 | 12/17/2002 | GROUNDWATER | 225 | 235 | 45.7 | 55.7 | OC21V | CHLOROFORM | |
| W226M1A | MW-226 | 12/19/2002 | GROUNDWATER | 285 | 295 | 172 | 182 | OC21V | CHLOROFORM | |
| W226M2A | MW-226 | 12/19/2002 | GROUNDWATER | 175 | 185 | 61.7 | 71.7 | OC21V | CHLOROFORM | |
| W226M3A | MW-226 | 12/19/2002 | GROUNDWATER | 135 | 145 | 21.53 | 31.53 | OC21V | CHLOROFORM | |
| W233M1A | MW-233 | 12/19/2002 | GROUNDWATER | 356 | 366 | 157.8 | 167.8 | OC21V | CHLOROFORM | |
| W233M2A | MW-233 | 12/19/2002 | GROUNDWATER | 331 | 341 | 132.8 | 142.8 | OC21V | CHLOROFORM | |
| W233M3A | MW-233 | 12/19/2002 | GROUNDWATER | 231 | 241 | 32.8 | 42.8 | OC21V | CHLOROFORM | |
| WS-4AD-A | WS-4A | 12/19/2002 | GROUNDWATER | 218 | 228 | 148.5 | 158.5 | OC21V | CHLOROFORM | |
| WS-4AD-D | WS-4A | 12/19/2002 | GROUNDWATER | 155 | 165 | 85.5 | 95.5 | OC21V | CHLOROFORM | |
| WS-4AS-A | WS-4A | 12/19/2002 | GROUNDWATER | 155 | 165 | 85.5 | 95.5 | OC21V | CHLOROFORM | |

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|----------|---------------|------------|-----------|-----|-----|------|------|--------|---|-----|
| G252DAA | MW-252 | 12/12/2002 | PROFILE | 120 | 120 | 6.5 | 6.5 | 8330N | 1,3-DINITROBENZENE | NO |
| G252DAA | MW-252 | 12/12/2002 | PROFILE | 120 | 120 | 6.5 | 6.5 | 8330N | 4-AMINO-2,6-DINITROTOLUENE | NO |
| G252DAA | MW-252 | 12/12/2002 | PROFILE | 120 | 120 | 6.5 | 6.5 | 8330N | 2,6-DINITROTOLUENE | NO* |
| G252DAA | MW-252 | 12/12/2002 | PROFILE | 120 | 120 | 6.5 | 6.5 | 8330N | PICRIC ACID | NO |
| G252DAA | MW-252 | 12/12/2002 | PROFILE | 120 | 120 | 6.5 | 6.5 | 8330N | NITROGLYCERIN | NO |
| G252DAA | MW-252 | 12/12/2002 | PROFILE | 120 | 120 | 6.5 | 6.5 | 8330N | 3-NITROTOLUENE | NO |
| G252DAA | MW-252 | 12/12/2002 | PROFILE | 120 | 120 | 6.5 | 6.5 | E314.0 | PERCHLORATE | |
| G252DAA | MW-252 | 12/12/2002 | PROFILE | 120 | 120 | 6.5 | 6.5 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE | NO |
| G252DBA | MW-252 | 12/12/2002 | PROFILE | 130 | 130 | 16.5 | 16.5 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE | NO |
| G252DBA | MW-252 | 12/12/2002 | PROFILE | 130 | 130 | 16.5 | 16.5 | 8330N | NITROGLYCERIN | NO |
| G252DCA | MW-252 | 12/13/2002 | PROFILE | 140 | 140 | 26.5 | 26.5 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE | NO |
| G252DCA | MW-252 | 12/13/2002 | PROFILE | 140 | 140 | 26.5 | 26.5 | 8330N | NITROGLYCERIN | NO |
| G252DDA | MW-252 | 12/13/2002 | PROFILE | 150 | 150 | 36.5 | 36.5 | 8330N | NITROGLYCERIN | NO |
| G252DDA | MW-252 | 12/13/2002 | PROFILE | 150 | 150 | 36.5 | 36.5 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE | NO |
| G252DDA | MW-252 | 12/13/2002 | PROFILE | 150 | 150 | 36.5 | 36.5 | E314.0 | PERCHLORATE | |
| G252DGA | MW-252 | 12/18/2002 | PROFILE | 180 | 180 | 66.5 | 66.5 | 8330N | NITROGLYCERIN | NO |
| G252DGA | MW-252 | 12/18/2002 | PROFILE | 180 | 180 | 66.5 | 66.5 | 8330N | PICRIC ACID | NO |
| G252DGA | MW-252 | 12/18/2002 | PROFILE | 180 | 180 | 66.5 | 66.5 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE | NO |
| G252DGA | MW-252 | 12/18/2002 | PROFILE | 180 | 180 | 66.5 | 66.5 | 8330N | 4-AMINO-2,6-DINITROTOLUENE | NO |
| G252DHA | MW-252 | 12/18/2002 | PROFILE | 190 | 190 | 76.5 | 76.5 | 8330N | 3-NITROTOLUENE | NO |
| G252DHA | MW-252 | 12/18/2002 | PROFILE | 190 | 190 | 76.5 | 76.5 | 8330N | PICRIC ACID | NO |
| G252DHA | MW-252 | 12/18/2002 | PROFILE | 190 | 190 | 76.5 | 76.5 | 8330N | NITROGLYCERIN | NO |

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| OGDEN ID | LOCID OR WELL | SAMPLED | SAMP TYPE | SBD | SED | BWTS | BWTE | METHOD | OGDEN ANALYTE | PDA |
|----------|---------------|------------|-----------|-----|-----|-------------|------|--------|---|-----|
| G252DHA | MW-252 | 12/18/2002 | PROFILE | 190 | 190 | 76.5 | 76.5 | 8330N | HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE | NO |

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