WEEKLY PROGRESS UPDATE
FOR APRIL 29 – MAY 3, 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 April 30 through May 3, 2002.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of May 3 is summarized in Table 1.

Table 1. Drilling progress as of May 3, 2002

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-212	Central Impact Area (CIAP-13)	368	160	308-318, 333-343
MW-213	Central Impact Area (CIAP-26)	246	197	
MW-214	Demo Area 1 (D1P-11)	290	202	
MW-215	Former K Range (J2P-16)	110	4	
MW-216	Containment Pad (RRAP-1)	115		
02-07	Bourne monitoring well	151	119	47-57, 107-117, 137-147
02-15	Bourne monitoring well	164	114	

bgs = below ground surface
bwt = below water table

Completed installation of well MW-212 (CIAP-13) and Bourne well 02-07, commenced installation of MW-213 (CIAP-26), completed drilling of well MW-214 (D1P-11) and Bourne well 02-15, and commenced drilling of wells MW-215 (J2P-16) and MW-216 (RRAP-1). Continued well development for newly installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from wells MW-214 and 02-15. Groundwater samples were collected from the Bourne water supply wells, sentry wells and monitoring wells and as part of a pump test of Base Water Supply Well 4. Groundwater samples were collected as part of the April Long Term Groundwater Monitoring round. Water samples were collected from the GAC treatment system and the FS-12 treatment system. Soil samples were collected from gun firing positions Old GP-3, GP-8, GP-10, GP-11, and GP-15 as part of the Gun and Mortar Firing Positions Additional Characterization soil sampling. Soil samples were collected from the J-1 and J-3 Ranges as part of the J-1/J-3/L Additional Delineation soil sampling. A post-detonation soil sample was collected from the Central Impact Area.

As part of the Munitions Survey Project, soil samples were collected from the J-2 Range Polygons.

The Guard, EPA, and MADEP had a meeting on May 2 to discuss technical issues, including the following:

Attendees

Ben Gregson (IAGWSPO)	MAJ Bill Meyer (IAGWSPO)	Tina Dolen (IAGWSPO)
Karen Wilson (IAGWSPO)	Dave Hill (IAGWSPO)	Bill Gallagher (IAGWSPO)
LTC Bill FitzPatrick (MAARNG)	Desiree Moyer (EPA)	Mike Jasinski (EPA)
Todd Borci (EPA-phone)	Len Pinaud (MADEP)	Mark Panni (MADEP)
Darrell Deleppo (ACE)	Ed Wise (ACE)	Heather Sullivan (ACE)
Rob Foti (ACE)	John MacPherson (ACE)	Rob Clemens (AMEC)
Kim Harriz (AMEC)	John Rice (AMEC)	Herb Colby (AMEC-phone)
Jay Clausen (AMEC)	Maria Pologruto (AMEC)	Leo Montroy (Tt-phone)
Susan Stewart (Tt-phone)	Joe Dauchy (Tetra tech)	Larry Hudgins (Tetra tech)
Ken Valder (Tetra tech)	John Webster (Tetra tech)	Doug Lam (Tetra tech)
Dave Williams (MDPH)	Ken Gaynor (Jacobs)	Adam Balogh (TRC-phone)
Ralph Marks (Bourne Water District)		Mike Minor (AFCEE)

Punchlist Items

#3 Provide summary of RAD results for MW-181 (AMEC). Summary write-up provided by email. Hard copies distributed at meeting.

#4 Provide all test results from chemical monitoring wells for WS-1, -2, -3 (JPO). LTC FitzPatrick (MAARNG) indicated that wells were sampled 2 to 3 weeks ago. JPO to provide results to Ben Gregson (IAGWSPO) as soon as available.

#8 Provide Perchlorate sampling results from Range Control's new well (AMEC). Results were non detect. Table of results for wells sampled (so far) as part of the Central Impact Area Perchlorate Sampling Plan will be provided tomorrow via email.

#9 Coordinate split samples from IRP's Snake Pond Beaches' drive point samples. (AMEC). AMEC is setting up to sample with Jacobs on a biweekly schedule, beginning in mid-May. Splits will be analyzed for explosives and perchlorate.

ASR Witness Update

MAJ Myer (IAGWSPO) led the discussion on the ASR interview schedule. A list of remaining interviewee's prioritized by the private investigator was distributed to the agencies.

- MAJ Myer explained that the list compiled and prioritized by the private investigator was being provided to the agencies so that the Guard, agencies, and the Corps could discuss the prioritization together as a team. Although the private investigator had highlighted (with shading) what he considered to be the important interviewee's, the Guard did not agree with all his selections. The Guard was not interested in conducting interviews with those personnel with general knowledge of Camp Edwards. Examples of interviews that the Guard felt would not be very productive were those with: an ex-Textron truck driver who transported explosives, an ex-base employee who worked at the Salvage yard and similar former employees without any apparent specific knowledge of investigation areas. The Guard did feel that interviews with people with specific information such as knowledge of the ASP, BOMARC facility, J-2 Range burial sites were good candidates and should be prioritized.
- Todd Borci (EPA) requested that the Navy contacts that he specified in an earlier email be included within the current scope of work. MAJ Myer to discuss with Mr. Borci by phone after the meeting.
- Conference call set up for Wednesday May 8, 2002 @9am to discuss prioritization. EPA requested that the Guard have their prioritized list ready for the conference call.

Munitions Survey Project Update

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

HUTA2. Karen Wilson (IAGWSPO) is providing oversite of site restoration activities at Transects 2,3,4.

J Range Polygons. Crews are working at J-2 Range Polygon 2, Anomaly M. More than 1000, 20mm projectiles have been uncovered from the 10 ft by 12 ft by 4 ft excavation. Investigation of the A, F, I, L anomalies is completed. Anomalies E and B have been covered with polyethylene sheeting and sandbagged, to be revisited once Health and Safety related issues have been addressed. Some results have been received for soil samples collected at Anomaly E. Analytical results for the whitish material uncovered in Anomaly B indicate that it is amosite (one type of asbestos fiber). Excavation (40 ft by 15 ft by 7 ft) of J-2 Range Polygon 6A is also ongoing. Mr. Foti indicated that installation of the three, J-2 Range wells, slated for early June, may be delayed due to the large effort to complete the excavation at Polygon 2 and may even be constrained by excavation activities at Polygon 6. Todd Borci wondered if enough was already known about the extent of Polygon 2 to pause excavation activities to allow for the well drilling and installation. Mike Jasinski (EPA) suggested that the SE corner of the polygon (Anomalies U and T) be cleared prior to installing wells. All parties agreed to complete excavation of Anomaly M, then continue with excavation of SE corner of Polygon 2, and revisit options/schedule in a couple weeks.

Other Areas - Eastern Test Site dig maps to be discussed as separate agenda item. Grubbing to be conducted at U Range on Friday 5/03. Surveyors to be on-site next week. The geophysical investigation of Demo 1 is complete. Internal draft of dig maps will be available Friday 5/03, to agencies possibly by 5/06. Conference call to be scheduled early next week to discuss picks. Corps to send email with data and recommendations.

BIPs - 10 items that were found in J-2 Range Polygons 32 and 33 as follows are scheduled to be BIPed Friday, 5/03:

6, 66MM HEAT Rocket M412 BD Fuzes (1 attached to rocket motor)
1, 66MM HEAT Rocket Warhead with M412 BD Fuze
3, 66MM HEAT Rocket Motors with M412 BD Fuze

Eastern Test Site Anomaly Picks

Doug Lam (Tetra Tech) presented the processed EM61 survey data for the Eastern Test Site. Contoured anomaly maps were projected as part of the presentation.

- The EM61 survey was completed along lines spaced 1 meter apart, with data collected every 0.2 meters along each line. The gridding algorithm was used at 0.2 m, 0.5 m, and 1 m node spacings to produce three separate contour maps. The objective of the survey was to look for munition burial areas.
- The Eastern Test Site is characterized by heavy cratering and several mounds. The mounds were highlighted on the dig maps with a white outline. The mounds partially contain pieces of automotive and other scrap. Surface scrap metal clearance was completed prior to the survey. However, because the area vegetation was only cleared to a two-foot height, heavy equipment was not mobilized to clear the larger scrap material.
- Dependent on the grid spacing, the number of individual anomalies displayed by the processing software varied. At 0.2 m node spacing, there were 2980 anomalies; at 0.5 m node spacing, 1077 anomalies; and at 1 m node spacing, 362 anomalies. Tetra Tech considers the 1 m spacing to be the most useful for developing picks.
- Most of the anomalies appeared to represent 100lbs or less of metal within 2 feet of ground surface, or what would be characteristic of a single munition round.

- Tetra Tech selected 8 anomalies, which based on the decay rate of metallic objects, appeared to be more massive than the anomalies that they did not pick. The selected anomalies included one at the reported former location of an observation tower.
- MAJ Myer inquired as to the EPA's expectations for further investigation once the excavations of agreed upon picks was completed. Todd Borci indicated that chemical testing might be invoked under certain conditions as specified in the Workplan, otherwise if no burial areas were uncovered, the area would be folded into the rest of the Central Impact Area investigation.

Central Impact Area Update

Jay Clausen (AMEC) provided an update on the Central Impact Area Column Study Test.

- Influent concentrations for the column test ranged from 2-4 ppb perchlorate (field colorimetric method), 7-8 ppb RDX, and <1 ppb HMX.
- Effluent concentrations for 36 hours showed no breakthrough of explosives. 72 hour explosive sample results and all perchlorate results are due from the laboratory next week. The field colorimetric method indicated that there was no breakthrough of perchlorate during the test.
- A summary report will be provided following the receipt of the laboratory data.
- Based on the information received to date, AMEC will likely recommend going ahead with the pump test.

Perchlorate Sampling Plan

Jay Clausen (AMEC) outlined the Guard's general site-wide approach to characterizing Perchlorate in groundwater.

Current Activities

1. EPA Approval of Additional Laboratory Capacity Using STL-Savannah. Additional lab capacity is desperately needed to implement expanding Perchlorate analysis program. Todd Borci indicated that comments regarding QA improvements he forwarded on 5/01 needed to be addressed prior to the approval of the laboratory. STL-Savannah is currently working on resolving these issues.
2. Supplemental Analysis of Bourne Samples Using ARA Perchlorate Methods. Alternative methods are being evaluated for use in verifying the 314 Method, particularly for profile samples that typically have interferents.
3. Implementation of Central Impact Area Perchlorate Sampling Plan. Groundwater sampling proposed in plan is 50% complete. Remaining groundwater sampling to be adsorbed into Long Term Groundwater Monitoring Program. Soil sampling to be completed in the next couple months.
4. Identification of Wells to be Sampled for Perchlorate Site-Wide. The Guard is evaluating the status of available data and identifying data gaps in perchlorate distribution relative to existing wells (prioritized as follows) : LTGM Wells, Wells Upgradient of WS-4, Sentry/Sentinel Wells, Camp Edwards Perimeter Wells, Wells in Obvious Source Areas. A map was distributed that shows all MMR wells in the AMEC database coded to indicate wells that have never been sampled for perchlorate, wells that are proposed to be sampled under previous scopes but for which no data is yet available at the 0.35 MDL, wells that have data at the 0.35 MDL and wells which have data at a higher MDL, but are not currently scoped to be resampled. This map to be used as a planning tool to select additional wells for sampling. Mike Jasinski (EPA) stated that all screens at locations MW-21, MW-46, MW-47, MW-69 should be included in the additional sampling.

5. Update GW Model with Bourne Specific Information. The model needs to be updated with hydrogeologic data being collected now, so that accurate information on contaminant migration can be developed. Updating and calibration of model will take approximately 60 days to complete the steps as follows: Collect well chemical data not just profile results, revise bedrock surface, collect synoptic water-level measurements, develop two models and compare (1993 vs. 2002), recalibrate if necessary
6. Collect Soil Samples (127 locations). Soil sampling programs have been proposed for perchlorate characterization in several potential source areas including Demo 1, Central Impact Area, U Range, Gun and Mortar, J1, J2, and J3 Ranges. All samples will be collected in the next two months.
7. Installation and Profiling of RRA-1 (Containment Pad well) for Perchlorate. To be completed in next 2 weeks. Profiling to be completed to 200 ft. Todd Borci requested that this well also be profiled for VOCs because of diesel odor in the area detected during a site walk. Ben Gregson (IAGWSPO) to consider this request.
8. Tritium/Helium Age Dating of Groundwater. Dating the water from the Bourne area should help pinpoint the date and therefore possible origin of Perchlorate in the water. This information can also be useful in calibrating the regional groundwater model. The USGS has selected 30 well screens for the dating. 10 wells to be sampled next week. Heather Sullivan (ACE) to identify which wells are to be sampled next week and the turn-around-time for the analysis. Mike Jasinski requested that MW-80M1 and MW-213 be added to the list of ten for immediate dating. MW-80M1 was recommended because this well had the first and most consistent detections of perchlorate at approximately 2 ppb. Ms. Sullivan indicated that because this well has a 10-foot (not 5 foot) screen, it is not on USGS's list. Mr. Clausen explained that the ten-foot screens were too wide to provide an accurate/useful age date. Mr. Jasinski to speak with Denis LeBlanc (USGS) regarding the utility of age-dating water from a ten-foot screen.

<u>Planned Activities (prioritized as follows)</u>

9. Sample Wells Identified in Step 4
10. Run particle tracks on all perchlorate detections. Use model revised in Step 5 for Bourne area detections, Use J Range Sub regional Model for J Range detections, and Use Regional Model for all other detections.
11. Identify Need and Location for Additional Monitoring Wells
12. Conduct Additional Soil Sampling, as necessary.

- Todd Borci commented that he felt the Guard also needed to consider immediately scoping three wells to identify the source of perchlorate in the Bourne well field. At least one well (located approximately 1000 feet along the existing particle track from MW-80M1) could be drilled while the regional groundwater model was being revised to avoid delays in characterizing this problem. Mr. Borci reasoned that the model revisions would not change the direction of the particle backtracks, only the distance of the backtrack. Therefore, any well within 1000 feet along the current backtrack would likely intersect the upgradient perchlorate plume. The investigation of the perchlorate source at the Bourne well field needed to be addressed separately from the site-wide analysis of perchlorate extent and sources.
- Ben Gregson (EPA) explained that it was the Guard's reasoning that the source of the groundwater contamination in Bourne is approximately 30 years upgradient. Perchlorate has already been detected in the Bourne well field. Sixty days (time to update the model) is not too long to wait to get accurate information on which to base further investigatory work to identify the source of the perchlorate. Sixty days will have little impact on contaminant concentrations in the Bourne-area groundwater.
- Mark Panni (MADEP) suggested that the Guard scope an additional well, while recalibrating the model, and then use the revised model and data from the new well to scope additional wells.

- Mr. Gregson indicated that the Guard/Corps/AMEC would confer on an appropriate approach for identifying the perchlorate source to the Bourne wellfield, including considering scoping of one to three wells. To be discussed further as an agenda item at the 5/09 Tech meeting.

Bourne Area Update

John Rice (AMEC) provided an update on the Bourne area investigation.

- Explosive results for finished water samples that were collected from the Bourne Water District distribution lines have been reported. Perchlorate results were due yesterday 5/01, but have not been received yet.
- One distribution sample had a detection of 2,6-DNT at 0.28 ppb. A SIM analysis is being completed on the remaining sample volume to evaluate if this detection is a false positive. There is no promulgated drinking water standard for 2,6-DNT, however the DWEL is 40 ppb and the Region IX PRG (10^{-6} cancer risk) is 0.05 ppb.
- Mike Jasinski requested a table that shows various Bourne area wells with sampling frequencies. Mr. Jasinski also requested that Haley and Ward's comments on the Bourne area cross-sections be forwarded to the Guard, so that the cross-sections can be revised and sent to the IART Team.
- Len Pinaud (MADEP) reported that Jeff Rose (MADEP Water Supply) asked that the finished water in the distribution lines not be sampled for explosives, once the 2,6-DNT detection is evaluated. Analysis should be limited to perchlorate. Ralph Marks (BWD) concurred.
- One sentry well location northeast of WS-4 had been agreed upon by all parties; an ROA is in the process of being completed for this well. A second suitable sentry well location is still being scoped.
- Ralph Marks indicated that the Pump Test of WS-4 was starting. The Bourne Water District (BWD) requested help with sampling the pump test effluent daily at 7 pm during the week that the 12-hour daily pumping portion of the test is being conducted.
- Ralph Marks further stated that today's Tech meeting would be the last in which the Bourne Water District would participate. The BWD would be focusing on getting the water main for WS-4 hooked up so that this well could be added to the distribution system. Mr. Marks was concerned that if WS-4 did not prove to be satisfactory for use, the connection to the Sandwich system would not provide enough water for the summer season. The BWD was looking to the Guard for remediation and restoration of the well field, as opposed to investigation of the area, which seemed to be the primary focus of activity to date. Although none of the Bourne Water Supply wells had detects of perchlorate in the last 3 sampling rounds (last 3 weeks), in accordance with the wishes of Bourne citizens, the BWD would not pump the Bourne wells if perchlorate was in the area of the well field. The BWD expected to use the well field again once wellhead treatment for perchlorate was arranged.

J-1, J-3, L Ranges Plume Maps

Herb Colby (AMEC) fielded comments on the revised J-1, J-3, L Range Plume maps and cross sections (separate RDX, HMX, Perchlorate maps) that had been distributed to the Tech team at the 4/25 Tech meeting. Cross-sections to accompany the plan-view perchlorate plume map were also distributed.

- Mike Jasinski indicated that data (which was listed in an accompanying table) from several wells was missing from the RDX map including 90WT0008, 90WT0010, LRWS6-1, MW-12, MW-152, MW-169, MW-192, MW-28, and SMR-4. Some of these wells may not be in the frame of the map, but some were on the HMX map. Some wells were not labeled, such as MW-6, which was on the edge of the map. In addition, the data indicated that wells MW-142, 90MP0059, and 90MW0101A should be coded red (detects of RDX) rather then green (non detects).
- Mr. Colby indicated that some wells had had early or singular detects of RDX and then were non detect in subsequent sampling rounds. These wells were coded green based on the premise that the maps should reflect the current groundwater quality, not what it may have been at one time. Considerable discussion ensued on this point. Dave Hill (IAGWSPO) reasoned that since these maps were being developed for the investigation stage of the project, the maps should depict any detection in a well, regardless of the number of the detections. The plume boundaries, however, could be drawn interpretatively, such that any one detection in a well may not be included within a plume. All parties generally agreed with this approach.
- Considerable discussion then ensued on whether isolated wells with explosive detects (i.e. surrounded by wells without detects or gaps in well coverage) should be depicted simply with red dots (signifying a detection) or also encircled with a yellow-infilled, dashed line indicating a plume boundary. Mike Jasinski noted inconsistencies, such as encircling the detection at 90MW0054 with a plume, but not encircling the detections at other singular wells such as 90MW0034 and MW-130. This issue applied to all three maps. Mr. Colby indicated that the different ways of dealing with singular detections was based on the strength of the detections and whether data was available from any surrounding wells. Mr. Borci's opinion was that all the singular detections should be encircled by plume boundaries. Len Pinaud (DEP) expressed the feeling that it was inappropriate, and inconsistent with AFCEE conventions, to draw mini-plume boundaries around isolated well detections, but that they should be instead depicted as red dots. Mr. Borci relented to the concurrence of most parties. Isolated wells with explosive detections will not be drawn as plumes unless and until detections occur at adjacent well sites such that the contamination is reasonably interpreted to be contiguous between the sites.
- Todd Borci requested that MW-198 be more central in the RDX plume, similar to how it was depicted on the perchlorate plume map. Mr. Colby concurred.
- Mike Jasinski requested that the Guard be consistent with the IRP program in the way that the plumes are depicted underneath a pond. The IRP procedure is to dash the lines in the pond with a fill-in color as a darker, but same shade as the pond itself. The yellow or "land" plume color would show up in the pond in an area of upwelling only.
- Mike Jasinski also requested that the MDL for a non detect (below what concentration) be shown on the map. A range could be used if the MDLs varied.
- For the HMX map, Mike Jasinski requested that the well numbers be checked and that all the wells coded as green be labeled.
- Todd Borci requested that TNT and associated breakdown products be added to the HMX map. MAJ Myer (IAGWSPO) indicated that a separate map would be drafted for TNT instead.
- For the Perchlorate map, Mike Jasinski, in addition to previous comments related to consistency of representing singular detections as a plume or red dot, requested that the cross-sections use the same rose-color to depict the perchlorate plume as was used in the plan view map. In addition, at least one detection of perchlorate was seen in wells MW-125, MW-127 and MW-128 and the maps should show these locations as detections.

- Mr. Jasinski also requested that the cross sections show historic detections in a range. At a minimum, the data for those wells with a history of singular or early detections, followed by multiple non detects should be posted on the cross section with the latest data.
- Ed Wise (ACE) pointed out that Cross-Section 4-17c was a North-South orientation not a West-East orientation as labeled on the map.

IART Agenda

The agenda for the May 28 IART (to be convened at the Quashnet Valley Country Club, Mashpee) was set as follows:

6:00pm Meeting Minute Approval, Review Agenda
6:15pm Review Action Items
6:30pm Late Breaking News (Handout A)
6:35pm Investigation Update (Handout B) to include Bourne Update, J Range Polygons Update. (Include copies of J-2 Polygon 2 ground-based geophysical map and overall anomaly map for J Ranges).
7:35pm Break
7:45pm SE Corner of the Ranges (Handout C). Groundwater discussion.
8:30pm Open Discussion/Other Issues
8:50pm Agenda Planning/Action Items
9:00pm Adjourn

Miscellaneous

- John Rice (AMEC) indicated that the schedule for all installed 200 series wells was emailed yesterday 5/01; to be resent.
- MW-206 has not been developed due to exclusion zones. MW-209 has been developed and will be sampled this week.
- LTGM Plan Comment Resolution Meeting by conference call next week, possibly 5/6. Heather Sullivan (ACE) to arrange.

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:

- Groundwater samples from Bourne supply wells 4036000-01G, 4036000-03G, 4036000-04G, and 4036000-06G had detections of chloroform. The results were similar to previous sampling rounds.

- Groundwater samples from 90MW0054 (Snake Pond Area) had a detection of RDX that was confirmed by PDA spectra. The results were similar to previous sampling rounds.

- Groundwater samples from Bourne sentry wells 97-1, 97-2B, 97-2C, 97-2D, 97-G and 97-5 and well MW-80M1 (Far Field well) had detections of chloroform. The results were similar to previous sampling rounds.

- Groundwater samples from Bourne sentry well 97-2E and well MW-80M3 (Far Field well) had detections of chloroform and 1,4-dichlorobenzene. This is the first time 1,4-dichlorobenzene has been detected at these wells.

- Groundwater samples from Bourne sentry well 97-2F had detections of chloroform and chloromethane. This is the first time chloromethane has been detected at this well.

- Groundwater samples from Bourne sentry well 97-3 had detections of chloroform and TCE. The results were similar to previous sampling rounds.

- Groundwater samples from Bourne monitoring well 02-04M1 had detections of perchlorate, chloroform and TCE. This is the first sampling event for this well. Perchlorate was not detected in this interval in the profile results. The detections of VOCs were consistent with the profile results.

- Groundwater samples from Bourne monitoring well 02-04M2 had detections of chloroform and TCE. This is the first sampling event for this well. TCE was not detected in this interval in the profile results. The detection of chloroform was consistent with the profile results.

- Groundwater samples from Bourne monitoring well 02-04M3, and 02-13M3 had detections of chloroform. This is the first sampling event for these wells and the results were consistent with the profile results.

- Groundwater samples from Bourne monitoring wells 02-05M1, 02-09M2, and 02-13M1 had detections of perchlorate. This is the first sampling event for these wells. Results were consistent with the profile results for 02-05M1, and 02-09M2. There were no detections of perchlorate in 02-13M1 profile results.

- Groundwater samples from 02-13M2 had detections of perchlorate and chloroform. This is the first sampling event for this well. Results for chloroform were consistent with the profile results, however there were no detections of perchlorate in the profile results for samples from this well.

- Groundwater samples from MW-108M4 (Burgoyne Road) had detections of RDX and HMX that were confirmed by PDA spectra. The results were similar to previous sampling rounds.

- Groundwater samples from MW-209M1 (Central Impact Area) had detections of RDX that were confirmed by PDA spectra. This is the first sampling round for this well and the results were consistent with the profile results.

- Groundwater samples from MW-31M and duplicate (Demo Area 1) had detections of RDX, HMX, and MNX that were confirmed by PDA spectra. This is the first time MNX has been detected in samples from this well.

- Groundwater profile samples from Bourne well 02-15 had detections of 2,6-DNT (1 interval), 3-nitrotoluene (1 interval), 4A-DNT (1 interval), 4-nitrotoluene (1 interval), nitroglycerin (6 intervals), acetone (4 intervals), chloroform (12 intervals), and 2-butanone (1 interval). The detection of 2,6-DNT was confirmed by PDA spectra, but with interference. The detection of 3-nitrotoluene was not confirmed by PDA spectra, but with interference.

- Groundwater profile samples from MW-214 (D1P-11) had a detection of perchlorate (1 interval).

3. DELIVERABLES SUBMITTED

Weekly Progress Update for April 15 – April 19, 2002	04/29/02
Draft Supplemental Background Investigation Report	05/02/02

4. SCHEDULED ACTIONS

Scheduled actions for the week of May 6 include complete installation of MW-213 (CIAP-26), 02-15 (Bourne), and MW-214 (D1P-11), complete drilling of MW-215 (J2P-16) and MW-216 (RRAP-1), and commence drilling at CIAP-23. Complete Supplemental Phase IIB soil sampling, continue Gun and Mortar Firing Positions soil sampling, and continue soil sampling at J-1, J-3 and L Ranges.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

Additional delineation of the downgradient portion of the groundwater plume will be conducted prior to finalizing the Feasibility Study for the Groundwater Operable Unit. Well installation at D1P-11 (MW-214) located on Frank Perkins Road will be completed next week. Planning efforts were initiated to locate additional monitoring wells west of Pew Road. Magnetic anomaly investigations in accordance with the Post-Screening Investigation Work Plan continued.

TABLE 2
SAMPLING PROGRESS
04/27/2002 - 05/03/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
HDA04220201AA	A04220201	05/03/2002	CRATER GRAB	0.00	0.25		
97-2BE	FIELDQC	05/01/2002	FIELDQC	0.00	0.00		
97-2E	FIELDQC	05/03/2002	FIELDQC	0.00	0.00		
97-2GT	FIELDQC	04/30/2002	FIELDQC	0.00	0.00		
G02-15DFE	FIELDQC	04/29/2002	FIELDQC	0.00	0.00		
G02-15DGE	FIELDQC	04/29/2002	FIELDQC	0.00	0.00		
G02-15DGT	FIELDQC	04/29/2002	FIELDQC	0.00	0.00		
G02-15DME	FIELDQC	04/30/2002	FIELDQC	0.00	0.00		
HC05A31CAE	FIELDQC	05/02/2002	FIELDQC	0.00	0.00		
HC05AAA1AAE	FIELDQC	04/30/2002	FIELDQC	0.00	0.00		
HC05ECA1CAE	FIELDQC	04/29/2002	FIELDQC	0.00	0.00		
HC05TC1CAE	FIELDQC	05/01/2002	FIELDQC	0.00	0.00		
HC102NAB1AAE	FIELDQC	05/03/2002	FIELDQC	0.00	0.00		
HC53W1BAE	FIELDQC	05/03/2002	FIELDQC	0.00	0.00		
HC60B1AAE	FIELDQC	04/29/2002	FIELDQC	0.00	0.00		
HC60D1AAE	FIELDQC	04/30/2002	FIELDQC	0.00	0.00		
HC61D1BAE	FIELDQC	05/02/2002	FIELDQC	0.00	0.00		
HC64K1BAE	FIELDQC	05/01/2002	FIELDQC	0.00	0.00		
HD59E1AAE	FIELDQC	04/29/2002	FIELDQC	0.00	0.00		
W02-04M3E	FIELDQC	04/29/2002	FIELDQC	0.00	0.00		
W02-12M2E	FIELDQC	04/29/2002	FIELDQC	0.00	0.00		
W18M1T	FIELDQC	05/01/2002	FIELDQC	0.00	0.00		
W18M2F	FIELDQC	05/01/2002	FIELDQC	0.00	0.00		
W80M1T	FIELDQC	05/02/2002	FIELDQC	0.00	0.00		
4036000-01G	4036000-01G	05/01/2002	GROUNDWATER				
4036000-03G	4036000-03G	05/01/2002	GROUNDWATER				
4036000-04G	4036000-04G	05/01/2002	GROUNDWATER				
4036000-06G	4036000-06G	05/01/2002	GROUNDWATER				
97-1	97-1	05/02/2002	GROUNDWATER	83.00	93.00	62.00	72.00
97-2	97-2	05/03/2002	GROUNDWATER	75.00	85.00	53.00	63.00
97-2BA	97-2B	04/30/2002	GROUNDWATER		121.70		74.00
97-2CA	97-2C	04/30/2002	GROUNDWATER		132.00		72.93
97-2DA	97-2D	04/30/2002	GROUNDWATER		115.40		66.57
97-2EA	97-2E	04/30/2002	GROUNDWATER		94.50		62.94
97-2FA	97-2F	04/30/2002	GROUNDWATER		120.00		80.00
97-2GA	97-2G	04/30/2002	GROUNDWATER		126.80		77.93
97-3	97-3	05/02/2002	GROUNDWATER	75.00	85.00	36.00	46.00
97-5	97-5	05/02/2002	GROUNDWATER	84.00	94.00	76.00	86.00
M-3BAA	M-3	05/03/2002	GROUNDWATER		65.00		6.80
M-3CAA	M-3	05/03/2002	GROUNDWATER		75.00		16.80
M-3DAA	M-3	05/03/2002	GROUNDWATER		85.00		26.80

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TABLE 2
SAMPLING PROGRESS
04/27/2002 - 05/03/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W02-04M1A	02-04	04/29/2002	GROUNDWATER	123.00	133.00	73.97	83.97
W02-04M2A	02-04	04/29/2002	GROUNDWATER	98.00	108.00	48.93	58.93
W02-04M3A	02-04	04/29/2002	GROUNDWATER	83.00	93.00	34.01	44.01
W02M1A	MW-02	05/01/2002	GROUNDWATER	212.00	217.00	75.00	80.00
W02M2A	MW-02	05/01/2002	GROUNDWATER	170.00	175.00	33.00	38.00
W102M1A	MW-102	05/03/2002	GROUNDWATER	267.00	277.00	123.00	133.00
W102M2A	MW-102	05/03/2002	GROUNDWATER	237.00	247.00	93.00	103.00
W103M1A	MW-103	05/03/2002	GROUNDWATER	298.00	308.00	156.00	166.00
W103M2A	MW-103	05/03/2002	GROUNDWATER	282.00	292.00	140.00	150.00
W108M1A	MW-108	05/01/2002	GROUNDWATER	297.00	307.00	133.00	143.00
W108M2A	MW-108	05/01/2002	GROUNDWATER	282.00	292.00	118.00	128.00
W108M3A	MW-108	05/02/2002	GROUNDWATER	262.00	272.00	98.00	108.00
W108M4A	MW-108	05/02/2002	GROUNDWATER	240.00	250.00	76.00	86.00
W144M1A	MW-144	04/29/2002	GROUNDWATER	125.00	135.00	97.00	107.00
W144M2A	MW-144	04/29/2002	GROUNDWATER	130.00	140.00	109.00	119.00
W144SSA	MW-144	04/29/2002	GROUNDWATER	26.00	36.00	5.00	15.00
W145M1A	MW-145	04/29/2002	GROUNDWATER	125.00	135.00	97.00	107.00
W147M1A	MW-147	04/29/2002	GROUNDWATER	167.00	177.00	94.00	104.00
W147M2A	MW-147	04/29/2002	GROUNDWATER	150.00	160.00	77.00	87.00
W147M2D	MW-147	04/29/2002	GROUNDWATER	150.00	160.00	77.00	87.00
W147M3A	MW-147	04/30/2002	GROUNDWATER	82.00	92.00	9.00	19.00
W18M1A	MW-18	05/01/2002	GROUNDWATER	171.00	176.00	128.00	133.00
W18M2A	MW-18	05/01/2002	GROUNDWATER	107.00	112.00	64.00	69.00
W18M2D	MW-18	05/01/2002	GROUNDWATER	107.00	112.00	64.00	69.00
W209M1A	MW-209	04/30/2002	GROUNDWATER	240.00	250.00	121.00	131.00
W209M2A	MW-209	04/30/2002	GROUNDWATER	220.00	230.00	110.00	120.00
W23M2A	MW-23	05/01/2002	GROUNDWATER	189.00	194.00	67.00	72.00
W42M1A	MW-42	05/01/2002	GROUNDWATER	205.00	215.00	137.00	147.00
W42M2A	MW-42	05/01/2002	GROUNDWATER	185.80	195.80	118.00	128.00
W45M2A	MW-45	04/29/2002	GROUNDWATER	110.00	120.00	18.00	28.00
W74M2A	MW-74	04/30/2002	GROUNDWATER	125.00	135.00	31.00	41.00
W80DDA	MW-80	05/02/2002	GROUNDWATER	158.00	168.00	114.00	124.00
W80M1A	MW-80	05/02/2002	GROUNDWATER	130.00	140.00	86.00	96.00
W80M2A	MW-80	05/03/2002	GROUNDWATER	100.00	110.00	56.00	66.00
W80M3A	MW-80	05/02/2002	GROUNDWATER	70.00	80.00	26.00	36.00
W81M2A	MW-81	05/03/2002	GROUNDWATER	83.00	93.00	55.00	65.00
W81SSA	MW-81	05/03/2002	GROUNDWATER	25.00	35.00	0.00	10.00
WS-4PT1A	WS-4PT	05/02/2002	GROUNDWATER				
DW042902	GAC WATER	04/29/2002	IDW	0.00	0.00		
DW050202	GAC WATER	05/02/2002	IDW	0.00	0.00		
FS12TSEF	FS12TSEF	04/30/2002	PROCESS WATER				

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TABLE 2
SAMPLING PROGRESS
04/27/2002 - 05/03/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
FS12TSIN	FS12TSIN	04/30/2002	PROCESS WATER				
G02-15DCA	02-15	04/29/2002	PROFILE	70.00	70.00	19.80	19.80
G02-15DDA	02-15	04/29/2002	PROFILE	80.00	80.00	29.80	29.80
G02-15DEA	02-15	04/29/2002	PROFILE	90.00	90.00	39.80	39.80
G02-15DFA	02-15	04/29/2002	PROFILE	100.00	100.00	49.80	49.80
G02-15DGA	02-15	04/29/2002	PROFILE	110.00	110.00	59.80	59.80
G02-15DHA	02-15	04/30/2002	PROFILE	120.00	120.00	69.80	69.80
G02-15DIA	02-15	04/30/2002	PROFILE	130.00	130.00	79.80	79.80
G02-15DJA	02-15	04/30/2002	PROFILE	140.00	140.00	89.80	89.80
G02-15DKA	02-15	04/30/2002	PROFILE	150.00	150.00	99.80	99.80
G02-15DLA	02-15	04/30/2002	PROFILE	160.00	160.00	109.80	109.80
G02-15DMA	02-15	04/30/2002	PROFILE	164.00	164.00	113.80	113.80
G214DAA	MW-214	04/29/2002	PROFILE	100.00	100.00	12.40	12.40
G214DBA	MW-214	04/29/2002	PROFILE	110.00	110.00	22.40	22.40
G214DCA	MW-214	04/29/2002	PROFILE	120.00	120.00	32.40	32.40
G214DDA	MW-214	04/29/2002	PROFILE	130.00	130.00	42.40	42.40
G214DEA	MW-214	04/29/2002	PROFILE	140.00	140.00	52.40	52.40
G214DFA	MW-214	04/29/2002	PROFILE	150.00	150.00	62.40	62.40
G214DFD	MW-214	04/29/2002	PROFILE	150.00	150.00	62.40	62.40
G214DGA	MW-214	04/29/2002	PROFILE	160.00	160.00	72.40	72.40
G214DHA	MW-214	04/29/2002	PROFILE	170.00	170.00	82.40	82.40
G214DIA	MW-214	04/30/2002	PROFILE	180.00	180.00	92.40	92.40
G214DJA	MW-214	04/30/2002	PROFILE	190.00	190.00	102.40	102.40
G214DKA	MW-214	04/30/2002	PROFILE	200.00	200.00	112.40	112.40
G214DLA	MW-214	04/30/2002	PROFILE	210.00	210.00	122.40	122.40
G214DMA	MW-214	04/30/2002	PROFILE	220.00	220.00	132.40	132.40
G214DNA	MW-214	04/30/2002	PROFILE	230.00	230.00	142.40	142.40
G214DOA	MW-214	04/30/2002	PROFILE	240.00	240.00	152.40	152.40
G214DPA	MW-214	04/30/2002	PROFILE	250.00	250.00	162.40	162.40
G214DQA	MW-214	04/30/2002	PROFILE	260.00	260.00	172.40	172.40
G214DRA	MW-214	04/30/2002	PROFILE	270.00	270.00	182.40	182.40
G214DSA	MW-214	04/30/2002	PROFILE	280.00	280.00	192.40	192.40
G214DTA	MW-214	04/30/2002	PROFILE	290.00	290.00	202.40	202.40
HC05A11AAA	05A1	05/01/2002	SOIL GRID	0.00	0.25		
HC05A11BAA	05A1	05/01/2002	SOIL GRID	0.25	0.50		
HC05A11CAA	05A1	05/01/2002	SOIL GRID	0.50	1.00		
HC05A11CAD	05A1	05/01/2002	SOIL GRID	0.50	1.00		
HC05A21AAA	05A2	05/01/2002	SOIL GRID	0.00	0.25		
HC05A21BAA	05A2	05/01/2002	SOIL GRID	0.25	0.50		
HC05A21CAA	05A2	05/01/2002	SOIL GRID	0.50	1.00		
HC05A31AAA	05A3	05/02/2002	SOIL GRID	0.00	0.25		

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04/27/2002 - 05/03/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
HC05A31BAA	05A3	05/02/2002	SOIL GRID	0.25	0.50		
HC05A31CAA	05A3	05/02/2002	SOIL GRID	0.50	1.00		
HC05AAA1AAA	05AAA	04/30/2002	SOIL GRID	0.00	0.50		
HC05AAA1BAA	05AAA	04/30/2002	SOIL GRID	0.50	1.00		
HC05AAA1CAA	05AAA	04/30/2002	SOIL GRID	1.00	2.00		
HC05EAA1AAA	05EAA	04/30/2002	SOIL GRID	0.00	0.50		
HC05EAA1BAA	05EAA	04/30/2002	SOIL GRID	0.50	1.00		
HC05EAA1CAA	05EAA	04/30/2002	SOIL GRID	1.00	2.00		
HC05EBA1AAA	05EBA	04/29/2002	SOIL GRID	0.00	0.50		
HC05EBA1BAA	05EBA	04/29/2002	SOIL GRID	0.50	1.00		
HC05EBA1CAA	05EBA	04/29/2002	SOIL GRID	1.00	2.00		
HC05ECA1AAA	05ECA	04/29/2002	SOIL GRID	0.00	0.50		
HC05ECA1BAA	05ECA	04/29/2002	SOIL GRID	0.50	1.00		
HC05ECA1CAA	05ECA	04/29/2002	SOIL GRID	1.00	2.00		
HC05ECB1AAA	05ECB	04/29/2002	SOIL GRID	0.00	0.50		
HC05ECB1BAA	05ECB	04/29/2002	SOIL GRID	0.50	1.00		
HC05ECB1BAD	05ECB	04/29/2002	SOIL GRID	0.50	1.00		
HC05ECB1CAA	05ECB	04/29/2002	SOIL GRID	1.00	2.00		
HC05P1A1AAA	05P1A	04/30/2002	SOIL GRID	0.00	0.50		
HC05P1A1BAA	05P1A	04/30/2002	SOIL GRID	0.50	1.00		
HC05P1A1CAA	05P1A	04/30/2002	SOIL GRID	1.00	2.00		
HC05P1A1CAD	05P1A	04/30/2002	SOIL GRID	0.50	1.00		
HC05P1B1AAA	05P1B	04/30/2002	SOIL GRID	0.00	0.50		
HC05P1B1BAA	05P1B	04/30/2002	SOIL GRID	0.50	1.00		
HC05P1B1CAA	05P1B	04/30/2002	SOIL GRID	1.00	2.00		
HC05PA1AAA	05PA	05/01/2002	SOIL GRID	0.00	0.25		
HC05PA1BAA	05PA	05/01/2002	SOIL GRID	0.25	0.50		
HC05PA1CAA	05PA	05/01/2002	SOIL GRID	0.50	1.00		
HC05PB1AAA	05PB	05/02/2002	SOIL GRID	0.00	0.25		
HC05PB1BAA	05PB	05/02/2002	SOIL GRID	0.25	0.50		
HC05PB1CAA	05PB	05/02/2002	SOIL GRID	0.50	1.00		
HC05PB1CAD	05PB	05/02/2002	SOIL GRID	0.50	1.00		
HC05Q1A1AAA	05Q1A	04/29/2002	SOIL GRID	0.00	0.50		
HC05Q1A1BAA	05Q1A	04/29/2002	SOIL GRID	0.50	1.00		
HC05Q1A1CAA	05Q1A	04/29/2002	SOIL GRID	1.00	2.00		
HC05TA1AAA	05TA	04/30/2002	SOIL GRID	0.00	0.50		
HC05TA1BAA	05TA	04/30/2002	SOIL GRID	0.50	1.00		
HC05TA1CAA	05TA	04/30/2002	SOIL GRID	1.00	2.00		
HC05TB1AAA	05TA	04/30/2002	SOIL GRID	0.00	0.50		
HC05TB1BAA	05TB	04/30/2002	SOIL GRID	0.50	1.00		
HC05TB1BAD	05TB	04/30/2002	SOIL GRID	0.50	1.00		

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04/27/2002 - 05/03/2002

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HC05TB1CAA	05TB	04/30/2002	SOIL GRID	1.00	2.00		
HC05TC1AAA	05TC	05/01/2002	SOIL GRID	0.00	0.25		
HC05TC1CAA	05TC	05/01/2002	SOIL GRID	0.50	1.00		
HC05TC1DAA	05TC	05/01/2002	SOIL GRID	0.25	0.50		
HC102IAA1AAA	102IAA	05/02/2002	SOIL GRID	0.00	0.50		
HC102IAA1BAA	102IAA	05/02/2002	SOIL GRID	0.50	1.00		
HC102IAA1CAA	102IAA	05/02/2002	SOIL GRID	1.00	2.00		
HC102IAB1AAA	102IAB	05/02/2002	SOIL GRID	0.00	0.50		
HC102IAB1BAA	102IAB	05/02/2002	SOIL GRID	0.50	1.00		
HC102IAB1CAA	102IAB	05/02/2002	SOIL GRID	1.00	2.00		
HC102IAB1CAD	102IAB	05/02/2002	SOIL GRID	1.00	2.00		
HC102LCA1AAA	102LCA	05/03/2002	SOIL GRID	0.00	0.50		
HC102LCA1BAA	102LCA	05/03/2002	SOIL GRID	0.50	1.00		
HC102LCA1CAA	102LCA	05/03/2002	SOIL GRID	1.00	2.00		
HC102LCB1AAA	102LCB	05/03/2002	SOIL GRID	0.00	0.50		
HC102LCB1BAA	102LCB	05/03/2002	SOIL GRID	0.50	1.00		
HC102LCB1CAA	102LCB	05/03/2002	SOIL GRID	1.00	2.00		
HC102LCC1AAA	102LCC	05/03/2002	SOIL GRID	0.00	0.50		
HC102LCC1BAA	102LCC	05/03/2002	SOIL GRID	0.50	1.00		
HC102LCC1CAA	102LCC	05/03/2002	SOIL GRID	1.00	2.00		
HC102NAB1AAA	102NAB	05/03/2002	SOIL GRID	0.00	0.25		
HC102NAB1BAA	102NAB	05/03/2002	SOIL GRID	0.25	0.50		
HC102NAB1CAA	102NAB	05/03/2002	SOIL GRID	0.50	1.00		
HC102NAB1DAA	102NAB	05/03/2002	SOIL GRID	1.50	2.00		
HC53J1AAA	53J	05/03/2002	SOIL GRID	0.00	0.50		
HC53J1BAA	53J	05/03/2002	SOIL GRID	1.50	2.00		
HC53U1AAA	53U	05/03/2002	SOIL GRID	0.00	0.50		
HC53U1BAA	53U	05/03/2002	SOIL GRID	1.50	2.00		
HC53U1BAD	53U	05/03/2002	SOIL GRID	1.50	2.00		
HC53W1AAA	153W	05/03/2002	SOIL GRID	0.00	0.50		
HC53W1BAA	153W	05/03/2002	SOIL GRID	1.50	2.00		
HC59A1AAA	59A	04/29/2002	SOIL GRID	0.00	0.50		
HC59A1BAA	59A	04/29/2002	SOIL GRID	1.50	2.00		
HC59G1AAA	59G	04/29/2002	SOIL GRID	0.00	0.50		
HC59G1BAA	59G	04/29/2002	SOIL GRID	1.50	2.00		
HC59H1AAA	59H	04/29/2002	SOIL GRID	0.00	0.50		
HC59H1BAA	59H	04/29/2002	SOIL GRID	1.50	2.00		
HC60A1AAA	60A	04/29/2002	SOIL GRID	0.00	0.50		
HC60A1BAA	60A	04/29/2002	SOIL GRID	1.50	2.00		
HC60B1AAA	60B	04/29/2002	SOIL GRID	0.00	0.50		
HC60B1BAA	60B	04/29/2002	SOIL GRID	1.50	2.00		

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OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
HC60C1AAA	60C	04/30/2002	SOIL GRID	0.00	0.50		
HC60C1BAA	60C	04/30/2002	SOIL GRID	1.50	2.00		
HC60D1AAA	60D	04/30/2002	SOIL GRID	0.00	0.50		
HC60D1BAA	60D	04/30/2002	SOIL GRID	1.50	2.00		
HC60D1BAD	60D	04/30/2002	SOIL GRID	1.50	2.00		
HC60E1AAA	60E	04/29/2002	SOIL GRID	0.00	0.50		
HC60E1BAA	60E	04/29/2002	SOIL GRID	1.50	2.00		
HC60I1AAA	60I	04/29/2002	SOIL GRID	0.00	0.50		
HC60I1BAA	60I	04/29/2002	SOIL GRID	1.50	2.00		
HC60J1AAA	60J	04/29/2002	SOIL GRID	0.00	0.50		
HC60J1BAA	60J	04/29/2002	SOIL GRID	1.50	2.00		
HC60K1AAA	60K	04/30/2002	SOIL GRID	0.00	0.50		
HC60K1BAA	60K	04/30/2002	SOIL GRID	1.50	2.00		
HC61C1AAA	61C	05/02/2002	SOIL GRID	0.00	0.50		
HC61C1BAA	61C	05/02/2002	SOIL GRID	1.50	2.00		
HC61D1AAA	61D	05/02/2002	SOIL GRID	0.00	0.50		
HC61D1BAA	61D	05/02/2002	SOIL GRID	1.50	2.00		
HC61E1AAA	61E	05/01/2002	SOIL GRID	0.00	0.50		
HC61E1BAA	61E	05/01/2002	SOIL GRID	1.50	2.00		
HC61F1AAA	61F	05/02/2002	SOIL GRID	0.00	0.50		
HC61F1BAA	61F	05/02/2002	SOIL GRID	1.50	2.00		
HC61G1AAA	61G	05/02/2002	SOIL GRID	0.00	0.50		
HC61G1BAA	61G	05/02/2002	SOIL GRID	1.50	2.00		
HC61H1AAA	61H	05/01/2002	SOIL GRID	0.00	0.50		
HC61H1BAA	61H	05/01/2002	SOIL GRID	1.50	2.00		
HC61I1AAA	61I	05/01/2002	SOIL GRID	0.00	0.50		
HC61I1BAA	61I	05/01/2002	SOIL GRID	1.50	2.00		
HC61J1AAA	61J	05/01/2002	SOIL GRID	0.00	0.50		
HC61J1BAA	61J	05/01/2002	SOIL GRID	1.50	2.00		
HC61J1BAD	61J	05/01/2002	SOIL GRID	1.50	2.00		
HC61K1AAA	61K	05/02/2002	SOIL GRID	0.00	0.50		
HC61K1BAA	61K	05/02/2002	SOIL GRID	1.50	2.00		
HC61L1AAA	61L	05/02/2002	SOIL GRID	0.00	0.50		
HC61L1BAA	61L	05/02/2002	SOIL GRID	1.50	2.00		
HC61R1AAA	61R	05/02/2002	SOIL GRID	0.00	0.50		
HC61R1BAA	61R	05/02/2002	SOIL GRID	1.50	2.00		
HC64F1AAA	64F	05/01/2002	SOIL GRID	0.00	0.50		
HC64F1BAA	64F	05/01/2002	SOIL GRID	1.50	2.00		
HC64J1AAA	64J	04/30/2002	SOIL GRID	0.00	0.50		
HC64J1BAA	64J	04/30/2002	SOIL GRID	1.50	2.00		
HC64K1AAA	64K	05/01/2002	SOIL GRID	0.00	0.50		

Profiling methods include: Volatiles, Explosives and Perchlorate
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
04/27/2002 - 05/03/2002

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
HC64K1BAA	64K	05/01/2002	SOIL GRID	1.50	2.00		
HC64L1AAA	64L	05/01/2002	SOIL GRID	0.00	0.50		
HC64L1BAA	64L	05/01/2002	SOIL GRID	1.50	2.00		
HC64M1AAA	64M	04/30/2002	SOIL GRID	0.00	0.50		
HC64M1BAA	64M	04/30/2002	SOIL GRID	1.50	2.00		
HD05A11BAA	05A1	05/01/2002	SOIL GRID	0.25	0.50		
HD05P1B5CAA	05P1B	04/30/2002	SOIL GRID	1.00	2.00		
HD05TA1AAA	05TA	04/30/2002	SOIL GRID	0.00	0.50		
HD59E1AAA	59E	04/29/2002	SOIL GRID	0.00	0.50		
HD59E3AAA	59E	04/29/2002	SOIL GRID	0.00	0.50		
HD59E5AAA	59E	04/29/2002	SOIL GRID	0.00	0.50		
J2.F.T32.XC1.1.0	N/A	04/29/2002	SOIL GRID	0.00	3.00		
J2.F.T32.XC1.2.0	N/A	04/29/2002	SOIL GRID	2.75	3.00		

Profiling methods include: Volatiles, Explosives and Perchlorate
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 04/13/02 - 05/03/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
4036000-01G	4036000-01G	05/01/2002	GROUNDWATER					OC21V	CHLOROFORM	
4036000-03G	4036000-03G	05/01/2002	GROUNDWATER					OC21V	CHLOROFORM	
4036000-04G	4036000-04G	05/01/2002	GROUNDWATER					OC21V	CHLOROFORM	
4036000-06G	4036000-06G	05/01/2002	GROUNDWATER					OC21V	CHLOROFORM	
90MW0054	90MW0054	04/20/2002	GROUNDWATER	107.00	112.00	91.83	96.83	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
97-1	97-1	05/02/2002	GROUNDWATER	83.00	93.00	62.00	72.00	OC21V	CHLOROFORM	
97-2BA	97-2B	04/30/2002	GROUNDWATER		121.70		74.00	OC21V	CHLOROFORM	
97-2CA	97-2C	04/30/2002	GROUNDWATER		132.00		72.93	OC21V	CHLOROFORM	
97-2DA	97-2D	04/30/2002	GROUNDWATER		115.40		66.57	OC21V	CHLOROFORM	
97-2EA	97-2E	04/30/2002	GROUNDWATER		94.50		62.94	OC21V	1,4-DICHLOROBENZENE	
97-2EA	97-2E	04/30/2002	GROUNDWATER		94.50		62.94	OC21V	CHLOROFORM	
97-2FA	97-2F	04/30/2002	GROUNDWATER		120.00		80.00	OC21V	CHLOROFORM	
97-2FA	97-2F	04/30/2002	GROUNDWATER		120.00		80.00	OC21V	CHLOROMETHANE	
97-2GA	97-2G	04/30/2002	GROUNDWATER		126.80		77.93	OC21V	CHLOROFORM	
97-3	97-3	05/02/2002	GROUNDWATER	75.00	85.00	36.00	46.00	OC21V	CHLOROFORM	
97-3	97-3	05/02/2002	GROUNDWATER	75.00	85.00	36.00	46.00	OC21V	TRICHLOROETHYLENE (TCE)	
97-5	97-5	05/02/2002	GROUNDWATER	84.00	94.00	76.00	86.00	OC21V	CHLOROFORM	
W02-04M1A	02-04	04/29/2002	GROUNDWATER	123.00	133.00	73.97	83.97	E314.0	PERCHLORATE	
W02-04M1A	02-04	04/29/2002	GROUNDWATER	123.00	133.00	73.97	83.97	OC21V	CHLOROFORM	
W02-04M1A	02-04	04/29/2002	GROUNDWATER	123.00	133.00	73.97	83.97	OC21V	TRICHLOROETHYLENE (TCE)	
W02-04M2A	02-04	04/29/2002	GROUNDWATER	98.00	108.00	48.93	58.93	OC21V	CHLOROFORM	
W02-04M2A	02-04	04/29/2002	GROUNDWATER	98.00	108.00	48.93	58.93	OC21V	TRICHLOROETHYLENE (TCE)	
W02-04M3A	02-04	04/29/2002	GROUNDWATER	83.00	93.00	34.01	44.01	OC21V	CHLOROFORM	
W02-05M1A	02-05	04/19/2002	GROUNDWATER	110.00	120.00	81.44	91.44	E314.0	PERCHLORATE	
W02-09M2A	02-09	04/26/2002	GROUNDWATER	59.00	69.00	50.30	60.30	E314.0	PERCHLORATE	
W02-13M1A	02-13	04/26/2002	GROUNDWATER	98.00	108.00	58.33	68.33	E314.0	PERCHLORATE	
W02-13M2A	02-13	04/27/2002	GROUNDWATER	83.00	93.00	44.20	54.20	E314.0	PERCHLORATE	
W02-13M2A	02-13	04/27/2002	GROUNDWATER	83.00	93.00	44.20	54.20	OC21V	CHLOROFORM	
W02-13M3A	02-13	04/27/2002	GROUNDWATER	68.00	78.00	28.30	38.30	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 BGS
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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
PDA/NO = Photo Diode Array, Detect Not Confirmed
* = Interference in sample

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 04/13/02 - 05/03/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W209M1A	MW-209	04/30/2002	GROUNDWATER	240.00	250.00	121.00	131.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
W31MMA	MW-31	04/22/2002	GROUNDWATER	113.00	123.00	28.00	38.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
W31MMA	MW-31	04/22/2002	GROUNDWATER	113.00	123.00	28.00	38.00	8330NX	HEXAHYDRO-1-MONONITROSO-3	YES
W31MMA	MW-31	04/22/2002	GROUNDWATER	113.00	123.00	28.00	38.00	8330NX	OCTAHYDRO-1,3,5,7-TETRANITR	YES
W31MMD	MW-31	04/22/2002	GROUNDWATER	113.00	123.00	28.00	38.00	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3,5	YES
W31MMD	MW-31	04/22/2002	GROUNDWATER	113.00	123.00	28.00	38.00	8330NX	HEXAHYDRO-1-MONONITROSO-3	YES
W31MMD	MW-31	04/22/2002	GROUNDWATER	113.00	123.00	28.00	38.00	8330NX	OCTAHYDRO-1,3,5,7-TETRANITR	YES
W80M1A	MW-80	05/02/2002	GROUNDWATER	130.00	140.00	86.00	96.00	OC21V	CHLOROFORM	
W80M3A	MW-80	05/02/2002	GROUNDWATER	70.00	80.00	26.00	36.00	OC21V	1,4-DICHLOROBENZENE	
W80M3A	MW-80	05/02/2002	GROUNDWATER	70.00	80.00	26.00	36.00	OC21V	CHLOROFORM	
G02-15DBA	02-15	04/26/2002	PROFILE	60.00	60.00	9.80	9.80	8330N	NITROGLYCERIN	NO
G02-15DBA	02-15	04/26/2002	PROFILE	60.00	60.00	9.80	9.80	OC21V	ACETONE	
G02-15DBA	02-15	04/26/2002	PROFILE	60.00	60.00	9.80	9.80	OC21V	CHLOROFORM	
G02-15DCA	02-15	04/29/2002	PROFILE	70.00	70.00	19.80	19.80	8330N	3-NITROTOLUENE	NO*
G02-15DCA	02-15	04/29/2002	PROFILE	70.00	70.00	19.80	19.80	8330N	4-NITROTOLUENE	NO
G02-15DCA	02-15	04/29/2002	PROFILE	70.00	70.00	19.80	19.80	8330N	NITROGLYCERIN	NO
G02-15DCA	02-15	04/29/2002	PROFILE	70.00	70.00	19.80	19.80	OC21V	ACETONE	
G02-15DCA	02-15	04/29/2002	PROFILE	70.00	70.00	19.80	19.80	OC21V	CHLOROFORM	
G02-15DDA	02-15	04/29/2002	PROFILE	80.00	80.00	29.80	29.80	OC21V	CHLOROFORM	
G02-15DEA	02-15	04/29/2002	PROFILE	90.00	90.00	39.80	39.80	OC21V	CHLOROFORM	
G02-15DFA	02-15	04/29/2002	PROFILE	100.00	100.00	49.80	49.80	OC21V	CHLOROFORM	
G02-15DGA	02-15	04/29/2002	PROFILE	110.00	110.00	59.80	59.80	OC21V	CHLOROFORM	
G02-15DHA	02-15	04/30/2002	PROFILE	120.00	120.00	69.80	69.80	8330N	2,6-DINITROTOLUENE	YES*
G02-15DHA	02-15	04/30/2002	PROFILE	120.00	120.00	69.80	69.80	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
G02-15DHA	02-15	04/30/2002	PROFILE	120.00	120.00	69.80	69.80	8330N	NITROGLYCERIN	NO
G02-15DHA	02-15	04/30/2002	PROFILE	120.00	120.00	69.80	69.80	OC21V	ACETONE	
G02-15DHA	02-15	04/30/2002	PROFILE	120.00	120.00	69.80	69.80	OC21V	CHLOROFORM	
G02-15DIA	02-15	04/30/2002	PROFILE	130.00	130.00	79.80	79.80	OC21V	CHLOROFORM	
G02-15DJA	02-15	04/30/2002	PROFILE	140.00	140.00	89.80	89.80	OC21V	CHLOROFORM	

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TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 04/13/02 - 05/03/02

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G02-15DKA	02-15	04/30/2002	PROFILE	150.00	150.00	99.80	99.80	8330N	NITROGLYCERIN	NO
G02-15DKA	02-15	04/30/2002	PROFILE	150.00	150.00	99.80	99.80	OC21V	ACETONE	
G02-15DKA	02-15	04/30/2002	PROFILE	150.00	150.00	99.80	99.80	OC21V	CHLOROFORM	
G02-15DKA	02-15	04/30/2002	PROFILE	150.00	150.00	99.80	99.80	OC21V	METHYL ETHYL KETONE (2-BUT/	
G02-15DLA	02-15	04/30/2002	PROFILE	160.00	160.00	109.80	109.80	8330N	NITROGLYCERIN	NO
G02-15DLA	02-15	04/30/2002	PROFILE	160.00	160.00	109.80	109.80	OC21V	CHLOROFORM	
G02-15DMA	02-15	04/30/2002	PROFILE	164.00	164.00	113.80	113.80	8330N	NITROGLYCERIN	NO
G02-15DMA	02-15	04/30/2002	PROFILE	164.00	164.00	113.80	113.80	OC21V	CHLOROFORM	
G214DHA	MW-214	04/29/2002	PROFILE	170.00	170.00	82.40	82.40	E314.0	PERCHLORATE	

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SED = SAMPLE COLLECTION END DEPTH IN FEET BGS
BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET
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* = Interference in sample