# INTERIM MONTH REPORT FOR AUGUST 1 – AUGUST 13, 2004

# EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019 and 1-2000-0014

# MASSACHUSETTS MILITARY RESERVATION TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from August 1 through August 13, 2004.

### 1. SUMMARY OF REMEDIATION ACTIONS

The following is a description of remediation actions taken as part of or in preparation for Rapid Response Action (RRA) Plans for various Areas of Concern at Camp Edwards through August 13, 2004. A Rapid Response Action is an interim action that may be conducted prior to risk assessments or remedial investigations to address a known, ongoing threat of contamination to groundwater and/or soil.

## Demo Area 1 Groundwater RRA

The Demo Area 1 Groundwater RRA consists of the removal and treatment of contaminated groundwater to control further migration of explosives and perchlorate. An extraction, treatment, and recharge system (ETR) at Frank Perkins Road and Pew Road has been designed and includes a single extraction well, an ex-situ treatment process to remove explosives and perchlorate from the groundwater, and injection wells to return treated water to the aquifer.

The Pew Road containerized treatment system was delivered on August 9, 2004. The Pew Road electrical work was completed on the grounding system and continued at extraction well vault and treatment containers. Installation and hydrostatic testing of the above ground piping to treatment containers was completed at the Pew Road ETR. Installation of electrical and fiber optic cable was completed at the Frank Perkins Road and Pew Road ETR System. The Frank Perkins Road ETR well vault electrical and mechanical work is substantially complete. The groundwater treatment containers for the Frank Perkins Road ETR System are currently under construction at an off-site facility.

# Demo Area 1 Soil RRA

The Demo Area 1 Soil RRA consists of the removal of all geophysical anomalies within the perimeter road (7.4 acres) and the removal and thermal treatment of contaminated soil from in and around the Demo 1 kettle hole. The total amount of soil to be removed and treated is approximately 15,000 cubic yards.

As part of the Soil RRA, excavation of contaminated soil within the Demo 1 depression continues. Excavation of an additional 8-foot lift and grids within the kettle hole is underway. Anomaly removal within the Demo 1 depression continues. Screening of excavated soil continues and is being transported to the thermal treatment feed area at the H Range. Full scale thermal treatment of Demo 1 soil began on July 8, 2004.

# Demo Area 2 Soil RRA

The Demo Area 2 Soil RRA consists of the removal and treatment or disposal of contaminated soil that is a potential source of groundwater contamination. Soil will be treated in the Thermal Desorption Unit.

Excavation of soils at Demo Area 2 was completed on August 2, 2004. Approximately 800 cubic yards was excavated from the soil berm, soil piles, and central grid. Soil was stockpiled at the Demo Area 2 entrance pending transportation to and treatment in the Thermal Desorption Unit.

# J-2 Range Soil RRA

The J-2 Range Soil RRA consists of the removal and treatment of soil in five areas within the J-2 Range that contain selected explosives and perchlorate. Soil will be removed from the Twin Berms Area, Berm 2, Fixed Firing Point 4 (FFP-4), Disposal Area 1, and Disposal Area 2, with total removal approximated at 19,039 square feet and 1,186 cubic yards to a maximum depth of 2.5 feet. Soil will be treated in the Thermal Desorption Unit.

UXO and anomaly removal continues in preparation of soil excavation and other RRA activities. UXO clearance has been completed in the following areas: FFP-3 and 4, the Twin Berms, the Range Road Burn Area, Disposal Area 1, Disposal Area 2, Berm 2, and Berm 5.

# J-3 Range Soil RRA

The J-3 Range Soil RRA consists of the removal and treatment of contaminated soil from two general areas, referred to as the Demolition Area and the Melt/Pour Facility Area. At the Demolition Area, located in the middle of the J-3 Range, soil will be removed from the Detonation Pit, the Burn Box, and the area in the vicinity of Target 2, with total soil removal approximated at 14,000 square feet and 1,300 cubic yards of soil to a maximum depth of 3 feet. At the Melt/Pour Facility, located in the southern portion of the range, approximately 1,500 cubic yards of soil will be removed from an area encompassing approximately 9,100 square feet, to a maximum depth of 6 feet. Soil will be treated in the Thermal Desorption Unit.

Excavation of soils in Detonation Pit and Burn Area, Former Burn Box, and the area west of Detonation Pit was completed. Excavated soil was transported to the Demo Area 1 Soil stockpile area. Screening of the soils commenced in preparation for treatment.

## 2. SUMMARY OF ACTIONS TAKEN

Drilling progress as of August 13, 2004 is summarized in Table 1.

	Table 1. Drilling progress as of August 13, 2004											
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Depth to Water Table (ft bgs)	Completed Well Screens (ft bgs)								
MW-337	J-2 Range (J2P-39)	322	127	244-254; 310-320								
MW-340	J-2 Range (J2P-42)	348	145									
MW-341	Demo Area 1 (D1P-24)	300	160	182-187; 210-220; 265-270; 290-300								
MW-345	J-2 Range (J2P-43)	357	127									
MW-346	J-1 Range (J1P-23)	160	115									
bgs = below	ground surface		·									

Completed well installation at MW-337 (J2P-39) and MW-341 (D1P-24). Completed drilling at MW-340 (J2P-42) and MW-345 (J2P-43). Commenced drilling at MW-346 (J1P-23). Well development continued for recently installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-345 and MW-346. Groundwater samples were collected from Bourne water supply and monitoring wells, residential wells, recently installed wells, Northwest Corner monthly monitoring wells, and as part of the April and August rounds of the Draft 2004 Long-Term Groundwater Monitoring (LTGM) Program. The April 2004 LTGM round was completed on August 2, 2004. Investigation-derived waste (IDW) samples were collected from the Granular Activated Carbon (GAC) treatment system. Soil sampling were collected in and around GP-12, GP-14, GP-19, and along Canal View Road in the Northwest Corner. Pre and post-excavation samples were collected from the J-2 and J-3 Ranges and Target 23 in the Impact Area. Surface water samples were collected near a public beach, a private beach, and near the spit at Snake Pond.

The following are the notes from the August 12, 2004 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

### **Punchlist Items**

- #1 Provide update on ACE obtaining access agreement for new monitoring well on Schooner Pass Condo Assoc property (MADEP). Condo Association lawyer does not return Corps phone calls. Len Pinaud (MADEP) indicated it was unlikely that well will be accepted; this item should be removed from the punchlist. See further discussion under Northwest Corner Update.
- #4 Provide additional information on J-2 Range burn pit sampling (USACE). Three soil samples were collected from base of excavation near area after flares removed at 2.75 ft, 3.25 ft, and 2.5 ft bgs. Todd Borci (EPA) stated that the protocol should be to collect soil samples in the vicinity of the flares prior to their removal from the excavation. Jane Dolan (EPA) to further discuss sampling with Dave Margolis (USACE).
- #5 Provide an alternative location for J3P-34 on northern side of Snake Pond (IAGWSP). IAGWSP/Corps are considering various alternatives for J3P-34. An alternative location in the cul-de-sac is not appropriate. Mr. Borci requested the areas north of ECPZSMP04 be considered and that PZ211 data be reviewed as part of responding to his request for a map of the proposed alternative location.

- #6 Provide a summary and map for J-2 range groundwater (IAGWSP). Gina Kaso (USACE) clarified that a list of all SE Ranges GW actions requested by the agencies and a proposed date for submission would be provided. Tentatively, a meeting has been scheduled for Thursday, 8/19/04. However, this date may change depending upon availability of all info EPA requested.
- #7 Provide status of validation of propellant-related detections at MW-328 (IAGWSP). Information emailed to Ms. Dolan by Tom Davidson last week.
- #8 Provide status of sampling data from the fourth well screen at LP-12 (IAGWSP). Information email to Ms. Dolan by Tom Davidson last week.

# Fieldwork Update

Darrin Smith (USACE) provided an update on the IAGWSP fieldwork.

- As part of AMEC's activities, well pad construction was completed at NWP-18. Screen installation was completed at 1<sup>st</sup> and 2<sup>nd</sup> MW-341 (D1P-24) boreholes and well development began.
- Groundwater sampling at Western Boundary, LGTM, and new wells continues. Bi-weekly surface water samples were collected at Snake Pond. Soil sampling commenced in the Northwest Corner per Project Note 2.
- Rapid Response Action (RRA) soil excavations were completed at Demo Area 2.
- <u>Central Impact Area:</u> Lysimeter installation and associated soil sampling at HUTA 1 is on hold pending the completion of UXO clearance associated with the soil RRA activities being conducted by ECC.
- <u>Demo 1 Groundwater RRA</u>: The Frank Perkins and Pew Road Extraction, Treatment, and Reinjection (ETR) systems construction continued. Treatment containers for the Pew Road system were delivered on 8/10; treatment containers for Perkins Road are expected on 8/23. Pew Road ETR system expected start-up is mid-September. Todd Borci (EPA) and Len Pinaud (MADEP) requested an RCL for the agency comments on the Demo 1 SPEIM. Mr. Borci requested the IAGWSP carefully consider EPA's request that the system performance monitoring be conducted three times per year instead of twice a year, as currently proposed.
- <u>SE Ranges</u>: As part of ECC's activities, well pad construction continued at J3P-43. Drilling was completed at MW-345 (J2P-43). Drilling at MW-346 (J1P-23) continued. Screen installation was completed at MW-336 (J2P-25), MW-343 (J3P-46), and MW-337 (J2P-39). Well development was completed at MW-339, MW-336, and MW-342. Sampling of new wells continues.
- RRAs: Excavation for the J-3 Range Soil RRA continued in the Demolition Area and Melt-Pour Facility. Todd Borci requested that future weekly RRA updates include a tally of total volume of soil excavated for each RRA effort.

### **Demo 1 Work Update**

John McPherson (USACE) provided an update on the Demo 1 Soil RRA fieldwork. Two updated figures were provided, one showing UXO clearance progress and the other showing excavation progress.

- The focus of the RRA continues to be anomaly removal in the bowl area. The north and south slopes' anomalies have been removed to allow for the staging of soil. To date, approximately 15,000 yards of soil has been excavated from Demo 1.
- Three burn pits were cleared to 8 ft bgs, two in quad 42 and one in quad 45. Approximately 130 tons of burn pit soil has been excavated.
- Two sets of information was recently emailed: 1) characterization data of burn pit soil (shown to be non-hazardous), including table cross reference of burn pit soil to roll-off bin. 2) analytical data for burn pit soil. Todd Borci (EPA) requested values for 2,4,7,8-TCDD TEQ for dioxin analysis.

- The Thermal Treatment Unit Report was emailed. Approximately 4500 tons of material was treated last week. Zero tons failed. The unit has been 92.2% operational with an average temperature of 950 degrees. Results from soil batch 24 were emailed. Results for batches 25 and 26 were received yesterday. Run 25D (100 cubic yards) failed at 5.8 ppb perchlorate. Sampling of input soil has indicated perchlorate concentrations of untreated soil range from 2-12 ppb.
- Results of composite samples collected of soil vacuumed from the baghouse were provided in this week's report. The vacuumed dust was stored in drums. Mr. McPherson to check on where drums are stored and relay information to Jane Dolan (EPA). Mr. Borci requested an email outlining all steps taken to locate possible avenues of perchlorate contamination to thermal treatment soil and minimize perchlorate concentrations in processed soil. Ms. Dolan requested the IAGWSP sample the bottom of the cooling chamber, as suggested by Henry Cui (MADEP). The IAGWSP concurred. Ms. Dolan also asked if it was possible to collect a soil sample from the pugmill prior to the dust being mixed in, and whether a steam sample from the pugmill could be condensed and collected. The IAGWSP team replied that was not possible as the plant was currently configured.
- The Thermal Treatment Unit lease is scheduled to end at the end of October. The current assumption is that all RRA soil, including AFCEE's soil excavated from CS-19, will be treated prior to the end of the lease. Mr. Borci requested an updated Thermal Treatment schedule, and expressed concern that excavation activities would not be completed at Demo 1 if funding problems were encountered. Gina Kaso (USACE) emphasized that there were no current budget concerns for completion of the treatment of all soil excavated from Demo 1 and other RRA areas. Currently excavation was not complete, but excavation to native soil was temporarily on hold while burn pit soil was excavated. Work would continue as scoped in the IAW Workplan. An internal meeting would be help in the next two weeks to assess past, present, and way forward for the Demo 1 RRAs and the agencies would be briefed shortly thereafter. Mr. Borci requested that if funding issues did become evident, the IAGWSP inform the agencies as soon as possible.

### **CDC Status**

 Darrin Smith (USACE) indicated 2899 items had been added to the CDC bunker for a total of 8417 items waiting for CDC destruction.

### **ROA Status and Drilling Schedule**

Chris Fairneny (USACE) distributed the ROA status table and drilling schedule.

- ROA approvals were received from the Base POCs for J3P-43 and J1P-20 on 8/10/04.
   These wells will be added to the drill rig schedule next week.
- ROAs for J2P-45 (J2E-7) and J2P-46 (J2E-9) will be submitted to the Base POCs shortly. J2P-46 will be prioritized per Jane Dolan's (EPA) request. Location approvals were received for J2E-8W and -10(swath) were approved by EPA following the meeting which will allow the ROA preparation to proceed.
- Barber Rig #1 finished drilling at J2P-43 yesterday, 8/11 and will begin drilling at J3P-43 on Friday, 8/13.
- Barber Rig #3 set up to drill J1P-23 on 8/9.
- Barber Rig #4 should set up to drill at NWP-18 today.
- A drill rig currently being used by AFCEE is expected to become available on 8/23. This rig will be set up to drill at J2P-44
- Drill Rig TD'ed at J2P-43. Data expected Friday, 8/13.

# J-2 Range Groundwater Investigation

Dave Hill (IAGWSP) led a discussion regarding the progress of the J-2 Range groundwater investigation.

J3/J1 Proposed Areas for Swath ROAs: 1) J3P36/37 Swath – approved by EPA. 2) J3P38, 40, 41, 41 Swath - At Todd Borci's recommendation MW-28 to MW-118 Swath moved to Chadwick Road. MW-28 to J3P-39 swath not approved. Mr. Borci recommended the IAGWSP look at completing a swath west from MW-295. Mr. Hill to reevaluate. 3) Further information was needed to evaluate downgradient well swaths for J-1 Range, such as plume projection toward Wood Road. J-1 Range swaths to be discussed at meeting tentatively scheduled for next Wednesday, 8/18.

<u>Drilling issues for off-site J-2 Range wells discussed</u>, numbers refer to previously proposed well locations. 1B) Met with private property owner, staked location, and prepared map for easement. This location is 250 ft south of original proposed 1 location. Jane Dolan (EPA) requested the team look at alternative locations to the north of Forestdale School, including 3 potential lots, 1 vacant and 2 residential, in housing development near Forestdale School. 2) Stone Garden has a new owner who is not located on-site. 1,4,6) Still attempting to get approval from School for access. 3) still looking at town property. 5b) Have placed calls to property owners.

- Ms. Dolan noted that the schedule was not progressing as originally proposed in April 2004.
- Ms. Dolan noted that the schedule was not progressing as originally proposed. Drilling of the first well had been proposed to begin 7/23. Hap Gonser (IAGWSP) explained that access to public property has been much more difficult to obtain than originally assumed.
- Mr. Borci suggested that pursuit of access to State Forest Land east of Route 130, not be abandoned because of initial resistance from the Division of Fish and Wildlife.
- Ms. Dolan requested the IAGWSP provide a path forward and suggested Mr. Hill speak with Mike Minior (AFCEE) regarding their access process, which seemed to be more successful. Mr. Borci requested maps depicting each property being pursued for access. Gina Kaso (USACE) to provide this information as well as a summary of problems associated with each property access.

Sampling of Sentry Wells C1, C2, C3 discussed. IAGWSP proposal was to sample deepest screen at C1 and C2 and deepest 2 screens at C3. Mr. Borci indicated the EPA had sent an email stating the IAGWSP's proposal was rejected, citing insufficient justification, and had requested a response by 8/10. Mr. Hill indicated that EPA's email had not been received. Mike Goydas (JE) explained that the shallower screens had not been recommended for sampling because particle tracks from these screens terminated downgradient of the source area, as presented in the proposal. Mr. Borci requested a cross section be prepared to allow the EPA to further evaluate the IAGWSP's proposal. The Corps to evaluate when information can be compiled with respect to all other requests and inform the agencies.

Merit of drilling location J2-8E vs. 8W discussed. J2-8E and 8W are proposed locations on Coast Guard property, approximately 400 ft apart. Mr. Hill explained the IAGWSP's position that the easterly well was more appropriate for plume delineation and would hasten the delineation process. Mike Goydas (JE) emphasized that because of the high amount of splaying in the area, the breadth of the plume needed to be defined, which favored the installation of the more easterly well. The more westerly well would likely be duplicative of data from existing well, MW-334. Mr. Borci explained EPA's position that well a closer to the center line of the plume would be more protective of groundwater resources and provide knowledge of the concentration of the plume nearer to its midpoint. IAGWSP to evaluate further and discuss at next week's rescheduled L Range meeting.

# **Northwest Corner Update**

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

 Len Pinaud (MADEP) relayed that based on the lack of response from the Schooner Pass Condo Association, he assumed that access to install NWP-13 near 4036011 would not be granted.

- Mr. Gallagher stated that Terri Martin (MADEP) had informed him that 4036011 had been disconnected and the hookup to town water completed. In addition, the property in the vicinity of 4036011 has now been transferred to the property developer. IAGWSP offered to approach the developer to discuss completing a camera survey of the well prior to decommissioning and sampling of the former water supply well.
- Regarding the hookup of residential wells, the OMA issues have been resolved and the work
  is now under contract. Jay Ehert (USACE) indicated the private property owners seem to
  favor having the hookups proceed at a deliberate pace rather than expeditiously. A schedule
  for completing the hookups is expected from AMEC by the end of the week.
- The drill rig was expected to set up at NWP-18 (MW-344) today. The ROA for NWP-20 was submitted to Karen Wilson, who was involved with staking the proposed well location. It is expected that the ROA will be approved expeditiously and not require submittal to Natural Heritage.
- Mr. Ehert and Kevin Maher (Maher Drilling) are meeting with the property owner of RSNW06
  to determine if a camera survey of his well can be completed using a tripod set-up,
  contingent on his well having a PVC casing. If the survey can be completed, Mr. Gallagher to
  speak to USGS about EPA's request to collect a CFC sample from the well.
- Soil sampling as outlined in the Project Note 2 commenced on 8/10.
- Monthly sampling of Canal View Road wells and residential wells was completed on 8/04; results of residential wells to be distributed after meeting.
- Data from the USGS CFC sampling is still pending.
- The IAGWSP is proposing to move ahead with using the ISTSC3 Model without bang box data, by making basic assumptions about the efficiency of the fireworks combustion. Desiree Moyer (EPA) is expecting feedback on CHPMM's evaluation from EPA technical staff. In the interim, Todd Borci (EPA) suggested and Mr. Gallagher agreed to develop input data for EPA review.
- Verbal comments were received from EPA on the plume shell, including requesting an
  explanation of how higher concentrations of perchlorate in MW-278S, which only had a single
  sampling round, would be addressed. The concentration of perchlorate (19.3 ppb) in MW278S was no longer reflected in the plume map since the well had not been sampled since
  July 2003. EPA also requested an RDX "plume" map. Len Pinaud (MADEP) indicated that
  MADEP had no additional comments.

# **Gun and Mortar RRA**

Paul Nixon (IAGWSP) explained that the IAGWSP was proposing an RRA for GP-6 and GP-17 to remove hotspot contamination of 2,4-DNT. A total of 200-300 cubic yards of soil would be excavated for treatment in the Thermal Treatment Unit. An Implementation Plan & Soil Management Plan was being prepared for the gun positions.

- In addition, an ITE Study at GP-11 and GP-10 would be proposed utilizing bioremediation and alkaline hydrolysis.
- Todd Borci indicated EPA would prefer to see the sites of GP-10 and GP-11, which had higher detections of DNT, addressed in the RRA. In addition, all 2,4-DNT above the State clean-up level of 700 mg/Kg should be removed. Mr. Borci requested the IAGWSP provide a technical basis for the ITE proposal, including how technical problems demonstrated in other studies would be overcome.
- Desiree Moyer (EPA) noted that a response to her request for the RRA Plan and additional information on the ITE had been expected this week. Although, Ben Gregson (IAGWSP) had left a voice mail message, no other response had been received as requested.
- Len Pinaud (MADEP) suggested that the Implementation Plan for the RRA be proposed in a project note. Mr. Borci requested the IAGWSP send an email with the proposal as a scoping document to expedite the process.

## **Document and Schedules**

Ed Wise (USACE) handed out the summary of scheduling issues.

# 3. SUMMARY OF DATA RECEIVED

Table 3 summarizes validated detections of contaminants that exceeded an EPA Maximum Contaminant Level (MCL) of Health Advisory (HA) for drinking water, or exceeded a 4 ppb concentration for perchlorate received for the reporting period of July 30, 2004 through August 13, 2004. During this reporting period, there were no detections that met these criteria.

Table 4 summarizes first time validated detections below the MCL/HA for drinking water or below a 4 ppb concentration for perchlorate received from July 30, 2004 through August 13, 2004. Metals, chloroform, and BEHP are excluded from Table 4 for the following reasons: metals are a natural component of groundwater, particularly at levels below MCLs or HAs; detections of chloroform are pervasive throughout Cape Cod and are not likely the result of military training activities; and BEHP is believed to be largely an artifact of the investigation methods and introduced to the samples during collection or analysis.

First time validated detections of explosives, metals, VOCs, SVOCs, pesticides, herbicides, and perchlorate in groundwater compared to the MCL/HAs are summarized below:

# Explosives in Groundwater Compared to MCL/HAs

For validated data received from July 30, 2004 through August 13, 2004, one well, MW-191M2 (J-1 Range) had a first time validated detection of 4A-DNT. There is no MCL or HA established for 4A-DNT.

### Metals in Groundwater Compared to MCL/HAs

For validated data received from July 30, 2004 through August 13, 2004, no wells had first time validated detections of metals above the MCL/HAs.

## VOCs in Groundwater Compared to MCL/HAs

For validated data received from July 30, 2004 through August 13, 2004, no wells had first time validated detections of SVOCs above or below the MCL/HAs.

# SVOCs in Groundwater Compared to MCL/HAs

For validated data received from July 30, 2004 through August 13, 2004, one well, MW-328M1 had a first time detection of Di-N-Butyl Phthalate. There is no MCL or HA established for Di-N-Butyl Phthalate.

# Pesticides/Herbicides in Groundwater Compared to the MCL/HAs

For validated data received from July 30, 2004 through August 13, 2004, no wells had first time validated detections of pesticides/herbicides above or below the MCL/HAs.

# Perchlorate in Groundwater Compared to MCL/HAs

For validated data received from July 30, 2004 through August 13, 2004, one well, MW-65M2 (J-3 Range), had first time validated detections of perchlorate below the concentration of 4 ppb.

Rush data are summarized in Table 5. These data are for analyses that are performed on a fast turn around time, typically 1-5 days. Perchlorate and explosive analyses for monitoring wells, and perchlorate, 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 5 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 5. 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 5, 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 5 includes detections from the following areas:

# Western Boundary

• Groundwater samples from 02-04M1 and 02-05M1, M2, and M3 had detections of perchlorate. The results were similar to previous sampling rounds.

## Northwest Corner

- A groundwater sample from MW-323M1 had a detection of RDX that was confirmed by PDA spectra. The result was similar to the previous sampling round.
- Groundwater samples from MW-323M2 had detections of perchlorate and RDX. The
  detection of RDX was confirmed by PDA spectra. The results were similar to the previous
  sampling round.
- A groundwater sample from MW-323S had a detection of perchlorate. The result was similar to the previous sampling round.
- Groundwater samples from RSNW01 and RSNW03 had detections of perchlorate. The results were similar to previous sampling rounds.
- Groundwater samples from RSNW06 had detections of RDX and perchlorate. The
  detections of RDX were confirmed by PDA spectra. The results were similar to previous
  sampling rounds.

### J-2 Range

 A groundwater sample from RS003P had a detection of perchlorate. The result was similar to previous sampling rounds. Profile samples from MW-345 (J2P-43) had detections of various explosives. None of the
explosives detections were confirmed by PDA spectra. Well screens will be set at the depth
(185 to 195 ft bwt) corresponding to the depth of perchlorate detections in the profile samples
at MW-327 and at the depth (110 to 120 ft bwt) corresponding to the depth of low level
perchlorate and RDX detections in the profile samples at MW-327.

# 4. DELIVERABLES SUBMITTED

Draft BIP Summary Report for July – September 2003	08/03/2004
Final Proof of Performance Test Report	08/09/2004
Monthly Progress Report # 88 for July 2004	08/10/2004

## 5. SCHEDULED ACTIONS

Scheduled actions through the end of August include complete well installation at MW-340 (J2P-42), MW-344 (NWP-18), MW-345 (J2P-43), MW-346 (J1P-23); complete drilling at MW-347 (J3P-43); and commence drilling at NWP-20. Groundwater sampling of Bourne water supply and monitoring wells, residential wells, recently installed wells, and as part of the August round of the Draft 2004 Long Term Groundwater Monitoring Plan will continue. Soil sampling will be completed in the Northwest Corner. Post-excavation samples will be collected in Demo Area 2.

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
ECC071304J2P01 (p	SSJ2L34001	08/04/2004	CRATER GRID	0	0.2		
ECC072204J301 (po	SSJ3P43001	08/04/2004	CRATER GRID	0	0.2		
ECC072904J301 (po	SSJ3P43002	08/04/2004	CRATER GRID	0	0.2		
ECC072904J302 (po	SSJ2P43003	08/04/2004	CRATER GRID	0	0.2		
ECC072904J303 (po	SSJ3P43004	08/04/2004	CRATER GRID	0	0.2		
ECC080204J301 (po	SSJ3P43005	08/04/2004	CRATER GRID	0	0.2		
ECC080404T2301 (p	SSCIAT23001	08/12/2004	CRATER GRID	0	0.2		
ECC080504J301 (po	SSJ3C7003	08/12/2004	CRATER GRID	0	0.2		
ECC080504J302 (po	SSJ3C7004	08/12/2004	CRATER GRID	0	0.2		
ECC080904T2301 (p	SSCIAT23002	08/12/2004	CRATER GRID	0	0.2		
4036000-01G-A	4036000-01G	08/16/2004	GROUNDWATER	38	69.8	6	12
4036000-01G-A	4036000-01G	08/09/2004	GROUNDWATER	38	69.8	6	12
4036000-01G-A	4036000-01G	08/02/2004	GROUNDWATER	38	69.8	6	12
4036000-04G-A	4036000-04G	08/02/2004	GROUNDWATER	54.6	64.6	6	12
4036000-04G-A	4036000-04G	08/16/2004	GROUNDWATER	54.6	64.6	6	12
4036000-04G-A	4036000-04G	08/09/2004	GROUNDWATER	54.6	64.6	6	12
4036000-06G-A	4036000-06G	08/16/2004	GROUNDWATER	108	128	6	12
4036000-06G-A	4036000-06G	08/02/2004	GROUNDWATER	108	128	6	12
4036000-06G-A	4036000-06G	08/09/2004	GROUNDWATER	108	128	6	12
58MW0009C-A	58MW0009C	08/16/2004	GROUNDWATER				
58MW0011D-A	58MW0011D	08/16/2004	GROUNDWATER				
58MW0011E-A	58MW0011D	08/16/2004	GROUNDWATER				
58MW0011E-A	58MW0011E	08/16/2004	GROUNDWATER				
97-2B-A	97-2B	08/10/2004	GROUNDWATER	121.7	121.7	75.4	75.4
97-2E-A	97-2E	08/10/2004	GROUNDWATER	94.5	94.5	49.8	49.8
97-2G-A	97-2G	08/10/2004	GROUNDWATER	126.8	126.8	73.7	73.7
M-3B-A	M-3	08/12/2004	GROUNDWATER	65	65	6.8	6.8
M-3C-A	M-3	08/12/2004	GROUNDWATER	75	75	16.8	16.8
M-3D-A	M-3	08/12/2004	GROUNDWATER	85	85	26.8	26.8
M-6B-A	M-6	08/09/2004	GROUNDWATER	59	59	7.3	7.3
M-6C-A	M-6	08/09/2004	GROUNDWATER	69	69	17.3	17.3
M-6D-A	M-6	08/09/2004	GROUNDWATER	79	79	27.3	27.3
MW00-4-A	00-4	08/13/2004	GROUNDWATER	64	70	38	44
MW-303M1-	MW-303M1	08/12/2004	GROUNDWATER	299.07	309.1	186.07	196.07
MW-303M2-	MW-303M2	08/12/2004	GROUNDWATER	235.09	245.1	122.09	132.1
MW-303M3-	MW-303M3	08/12/2004	GROUNDWATER	139.74	149.7	26.74	36.69
MW-306D-	MW-306D	08/13/2004	GROUNDWATER	291.66	301.7	167.66	177.66
MW-306M1-	MW-306M1	08/13/2004	GROUNDWATER	184.88	194.9	60.88	70.88
MW-306M2-	MW-306M2	08/13/2004	GROUNDWATER	164.69	174.7	40.69	50.69
MW-306M2-FD	MW-306M2	08/13/2004	GROUNDWATER	164.69	174.7	40.69	50.69
OW00-1D-A	00-1	08/13/2004	GROUNDWATER	91	97		

Profiling methods may include: Volatiles, Explosives, and Perchlorate Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry

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SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
RS003P-A	RS003P	08/04/2004	GROUNDWATER	90	90		
RS004P-A	RS004P	08/04/2004	GROUNDWATER	0	0		
RS005P-A	RS005P	08/04/2004	GROUNDWATER	0	0		
RS006P-A	RS006P	08/04/2004	GROUNDWATER	0	0		
RS007P-A	RS007P	08/04/2004	GROUNDWATER	0	0		
RS009P-A	RS009P	08/04/2004	GROUNDWATER	84	84		
RSNW01-A	RSNW01	08/04/2004	GROUNDWATER	0	0		
RSNW03-A	RSNW03	08/04/2004	GROUNDWATER	0	0		
RSNW06-A	RSNW06	08/04/2004	GROUNDWATER	0	0		
SMR-2-A	SMR-2	08/02/2004	GROUNDWATER	121	131	19	29
TW00-1-A	00-1	08/11/2004	GROUNDWATER	64	70	52.1	58.1
TW00-6-A	00-6	08/11/2004	GROUNDWATER	36	42	9.6	15.6
TW00-7-A	00-7	08/11/2004	GROUNDWATER	57	63	25.5	31.5
TW01-2-A	01-2	08/13/2004	GROUNDWATER	50	56	24.5	30.5
W02-01M1A	02-01	08/04/2004	GROUNDWATER	95	105	42.9	52.9
W02-01M2A	02-01	08/04/2004	GROUNDWATER	83	93	30.9	40.9
W02-01M2D	02-01	08/04/2004	GROUNDWATER	95	105	42.9	52.9
W02-02M1A	02-02	08/12/2004	GROUNDWATER	114.5	124.5	63.5	73.5
W02-02M2A	02-02	08/12/2004	GROUNDWATER	94.5	104.5	42.65	52.65
W02-02M2D	02-02	08/12/2004	GROUNDWATER	94.5	104.5	42.65	52.65
W02-02SSA	02-02	08/12/2004	GROUNDWATER	49.5	59.5	0	10
W02-03M1A	02-03	08/16/2004	GROUNDWATER	130	140	86.1	96.1
W02-03M2A	02-03	08/16/2004	GROUNDWATER	92	102	48.15	58.15
W02-03M3A	02-03	08/16/2004	GROUNDWATER	75	85	31.05	41.05
W02-03M3D	02-03	08/16/2004	GROUNDWATER	75	85	31.05	41.05
W02-07M1A	02-07	08/05/2004	GROUNDWATER	135	145	101.14	111.14
W02-07M2A	02-07	08/05/2004	GROUNDWATER	107	117	72.86	82.86
W02-07M2D	02-07	08/05/2004	GROUNDWATER	107	117	72.86	82.86
W02-07M3A	02-07	08/05/2004	GROUNDWATER	47	57	13	23
W02-08M1A	02-08	08/02/2004	GROUNDWATER	108	113	86.56	91.56
W02-08M2A	02-08	08/02/2004	GROUNDWATER	82	87	60.65	65.65
W02-08M3A	02-08	08/03/2004	GROUNDWATER	62	67	40.58	45.58
W02-09M1A	02-09	08/12/2004	GROUNDWATER	74	84	65.26	75.26
W02-10M1A	02-10	08/09/2004	GROUNDWATER	135	145	94	104
W02-10M2A	02-10	08/09/2004	GROUNDWATER	110	120	68.61	78.61
W02-10M3A	02-10	08/09/2004	GROUNDWATER	85	95	43.65	53.65
W02-10M3D	02-10	08/09/2004	GROUNDWATER	85	95	43.65	53.65
W02-15M1A	02-15	08/05/2004	GROUNDWATER	125	135	75.63	85.63
W02-15M2A	02-15	08/05/2004	GROUNDWATER	101	111	51.5	61.5
W02-15M3A	02-15	08/05/2004	GROUNDWATER	81	91	31.4	41.4
W03SSA	MW-3	08/09/2004	GROUNDWATER	44	54	1	11

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SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W09SSA	MW-9	08/09/2004	GROUNDWATER	113	123	0	10
W108DDA	MW-108	08/11/2004	GROUNDWATER	317	327	153	163
W108DDD	MW-108	08/11/2004	GROUNDWATER	317	327	153	163
W108M1A	MW-108	08/11/2004	GROUNDWATER	297	307	133	143
W108M2A	MW-108	08/11/2004	GROUNDWATER	282	292	118	128
W108M3A	MW-108	08/11/2004	GROUNDWATER	262	272	98	108
W108M4A	MW-108	08/11/2004	GROUNDWATER	240	250	76	86
W110M1A	MW-110	08/13/2004	GROUNDWATER	315.5	325.5	142	152
W110M2A	MW-110	08/13/2004	GROUNDWATER				
W110M2A	MW-110	08/13/2004	GROUNDWATER	248.5	258.5	75	85
W110M3A	MW-110	08/13/2004	GROUNDWATER	220.5	230.5	47	57
W111M1A	MW-111	08/16/2004	GROUNDWATER				
W111M1A	MW-111	08/13/2004	GROUNDWATER				
W112M1A	MW-112	08/16/2004	GROUNDWATER	195	205	56	66
W112M1A	MW-112	08/16/2004	GROUNDWATER				
W112M2A	MW-112	08/16/2004	GROUNDWATER				
W113M1A	MW-113	08/10/2004	GROUNDWATER	240	250	98	108
W113M2A	MW-113	08/10/2004	GROUNDWATER	190	200	48	58
W124M3A	MW-124	08/06/2004	GROUNDWATER	160	170	24	34
W124M3D	MW-124	08/06/2004	GROUNDWATER	160	170	24	34
W129M1A	MW-129	08/06/2004	GROUNDWATER	136	146	66	76
W129M2A	MW-129	08/06/2004	GROUNDWATER	116	126	46	56
W129M3A	MW-129	08/06/2004	GROUNDWATER	96	106	26	36
W130M1A	MW-130	08/02/2004	GROUNDWATER	160	170	57	67
W130SSA	MW-130	08/02/2004	GROUNDWATER	103	113	0	10
W135M1A	MW-135	08/11/2004	GROUNDWATER	319	329	133	143
W135M1A	MW-135	08/12/2004	GROUNDWATER	319	329	133	143
W135M2A	MW-135	08/12/2004	GROUNDWATER	280	290	94	104
W135M3A	MW-135	08/11/2004	GROUNDWATER	239	249	53	63
W138M1A	MW-138	08/06/2004	GROUNDWATER	253	263	132	142
W138M3A	MW-138	08/06/2004	GROUNDWATER	135	145	14	24
W139M1A	MW-139	08/04/2004	GROUNDWATER	194	204	110	120
W139M2A	MW-139	08/04/2004	GROUNDWATER	154	164	70	80
W139M3A	MW-139	08/04/2004	GROUNDWATER	119	129	35	45
W156SSA	MW-156	08/03/2004	GROUNDWATER	77	87	7	17
W159M1A	MW-159	08/10/2004	GROUNDWATER	178.5	188.5	53	63
W159SSA	MW-159	08/09/2004	GROUNDWATER	126.3	136.3	1	11
W159SSA	MW-159	08/11/2004	GROUNDWATER	126.3	136.3	1	11
W165M1A	MW-165	08/05/2004	GROUNDWATER	184.5	194.5	106	116
W165M2A	MW-165	08/06/2004	GROUNDWATER	124.5	134.5	46	56
W165M3A	MW-165	08/05/2004	GROUNDWATER	94.5	104.5	16	26

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SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W176M1A	MW-176	08/10/2004	GROUNDWATER	270	280	158.55	168.55
W176M1D	MW-176	08/10/2004	GROUNDWATER	270	280	158.55	168.55
W176M2A	MW-176	08/10/2004	GROUNDWATER	229	239	117.6	127.6
W177M2A	MW-177	08/12/2004	GROUNDWATER	278	288	87.3	97.3
W178M1A	MW-178	08/12/2004	GROUNDWATER	257	267	117	127
W178M2A	MW-178	08/12/2004	GROUNDWATER	167	177	27	37
W180M1A	MW-180	08/10/2004	GROUNDWATER	300	310	139.2	149.2
W180M2A	MW-180	08/10/2004	GROUNDWATER	195	205	34.5	44.5
W180M3A	MW-180	08/10/2004	GROUNDWATER	171	181	10.3	20.3
W184M1A	MW-184	08/10/2004	GROUNDWATER	186	196	58.2	68.2
W200M1A	MW-200	08/10/2004	GROUNDWATER	294	304	89.8	99.8
W200M2A	MW-200	08/10/2004	GROUNDWATER	255	265	50.72	60.72
W201M1A	MW-201	08/10/2004	GROUNDWATER	306	316	106.9	116.9
W201M2A	MW-201	08/10/2004	GROUNDWATER	286	296	86.9	96.9
W201M3A	MW-201	08/10/2004	GROUNDWATER	266	276	66.5	76.5
W201M3D	MW-201	08/10/2004	GROUNDWATER	266	276	66.5	76.5
W205DDA	MW-205	08/13/2004	GROUNDWATER	266	276	167.6	177.6
W205M1A	MW-205	08/13/2004	GROUNDWATER	167	177	67.6	77.6
W207M1A	MW-207	08/13/2004	GROUNDWATER	254	264	100.52	110.52
W207M2A	MW-207	08/13/2004	GROUNDWATER	224	234	79.33	89.33
W208M1A	MW-208	08/13/2004	GROUNDWATER	195	205	56.18	66.18
W208M1A	MW-208	08/13/2004	GROUNDWATER				
W208M2A	MW-208	08/16/2004	GROUNDWATER				
W210M1A	MW-210	08/05/2004	GROUNDWATER	201	211	99.69	109.69
W210M2A	MW-210	08/05/2004	GROUNDWATER	156	166	54.69	64.69
W210M3A	MW-210	08/05/2004	GROUNDWATER	121	131	19.68	29.68
W213M1A	MW-213	08/03/2004	GROUNDWATER	133	143	85.01	95.01
W213M2A	MW-213	08/03/2004	GROUNDWATER	89	99	41.15	51.15
W213M3A	MW-213	08/03/2004	GROUNDWATER	77	82	29.38	34.38
W214M2A	MW-214	08/02/2004	GROUNDWATER	165	175	78.45	88.45
W214M3A	MW-214	08/03/2004	GROUNDWATER	140	150	53.45	63.45
W216M2A	MW-216	08/03/2004	GROUNDWATER	236	246	34.17	44.17
W216M2D	MW-216	08/03/2004	GROUNDWATER	236	246	34.17	44.17
W223DDA	MW-223	08/10/2004	GROUNDWATER	260	270	167.86	177.86
W223M1A	MW-223	08/10/2004	GROUNDWATER	211	221	118.79	128.79
W223M2A	MW-223	08/10/2004	GROUNDWATER	185	195	93.31	103.31
W225M1A	MW-225	08/06/2004	GROUNDWATER	175	185	77.1	87.1
W225M2A	MW-225	08/06/2004	GROUNDWATER	145	155	46.48	56.48
W225M3A	MW-225	08/06/2004	GROUNDWATER	125	135	26.48	36.48
W225M3D	MW-225	08/06/2004	GROUNDWATER	125	135	26.48	36.48
W226M1A	MW-226	08/09/2004	GROUNDWATER	285	295	172	182

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W226M2A	MW-226	08/09/2004	GROUNDWATER	175	185	61.7	71.7
W226M3A	MW-226	08/09/2004	GROUNDWATER	135	145	21.53	31.53
W230M1A	MW-230	08/02/2004	GROUNDWATER	130	140	23.82	33.82
W230M2A	MW-230	08/02/2004	GROUNDWATER	110	120	3.76	13.76
W233M1A	MW-233	08/05/2004	GROUNDWATER	356	366	157.8	167.8
W233M2A	MW-233	08/05/2004	GROUNDWATER	331	341	132.8	142.8
W233M3A	MW-233	08/05/2004	GROUNDWATER	231	241	32.8	42.8
W234M1A	MW-234	08/02/2004	GROUNDWATER	130	140	25.3	35.3
W234M2A	MW-234	08/02/2004	GROUNDWATER	110	120	1.6	11.6
W255M1A	MW-255	08/05/2004	GROUNDWATER	206	216	96.3	106.3
W255M2A	MW-255	08/05/2004	GROUNDWATER	170	180	60.43	70.43
W255M3A	MW-255	08/05/2004	GROUNDWATER	136	146	26.1	36.1
W257M1A	MW-257	08/11/2004	GROUNDWATER	290	300	145.52	155.52
W257M2A	MW-257	08/11/2004	GROUNDWATER	195	205	51.27	61.27
W263M1A	MW-263	08/02/2004	GROUNDWATER	190	200	83.63	93.63
W263M2A	MW-263	08/02/2004	GROUNDWATER	115	125	8.66	18.66
W263M2D	MW-263	08/02/2004	GROUNDWATER	115	125	8.66	18.66
W267M1A	MW-267	08/12/2004	GROUNDWATER	248	258	18.57	
W268M1A	MW-268	08/12/2004	GROUNDWATER	97	107	48.12	58.12
W268M1D	MW-268	08/12/2004	GROUNDWATER	97	107	48.12	58.12
W269M1A	MW-269	08/09/2004	GROUNDWATER	207	217	31.55	41.55
W269M2A	MW-269	08/09/2004	GROUNDWATER	186	196	9.85	19.85
W276M1A	MW-276	08/06/2004	GROUNDWATER	295	305	114	124
W276M1D	MW-276	08/06/2004	GROUNDWATER	295	305	114	124
W276M2A	MW-276	08/05/2004	GROUNDWATER	234	244	52.88	62.88
W276M3A	MW-276	08/05/2004	GROUNDWATER	185	195	0	10
W277M1A	MW-277	08/04/2004	GROUNDWATER	130	140	26.3	36.3
W277SSA	MW-277	08/04/2004	GROUNDWATER	102	112	0	10
W278M1A	MW-278	08/04/2004	GROUNDWATER	113	123	25.76	35.76
W278M2A	MW-278	08/04/2004	GROUNDWATER	97	102	9.79	14.79
W278M2D	MW-278	08/04/2004	GROUNDWATER	97	102	9.79	14.79
W279M1A	MW-279	08/04/2004	GROUNDWATER	96	106	37.4	47.4
W279M2A	MW-279	08/04/2004	GROUNDWATER	83	88	26.8	31.8
W279SSA	MW-279	08/04/2004	GROUNDWATER	66	76	10	20
W280M1A	MW-280	08/06/2004	GROUNDWATER	255	265	93.99	103.99
W280M2A	MW-280	08/06/2004	GROUNDWATER	202	212	41.64	51.64
W280M3A	MW-280	08/06/2004	GROUNDWATER	185	195	24.12	34.12
W298M1A	MW-298	08/11/2004	GROUNDWATER	191	201	105.11	115.11
W298M2A	MW-298	08/11/2004	GROUNDWATER	174	184	87.58	97.58
W298SSA	MW-298	08/11/2004	GROUNDWATER	83	93	0	10
W299M1A	MW-299	08/11/2004	GROUNDWATER	150	160	52.84	62.84

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SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W299SSA	MW-299	08/11/2004	GROUNDWATER	96	106	0	10
W299SSA	MW-299	08/11/2004	GROUNDWATER				
W301M1A	MW-301	08/12/2004	GROUNDWATER	220	230	121.75	131.75
W301M1D	MW-301	08/12/2004	GROUNDWATER	220	230	121.75	131.75
W301SSA	MW-301	08/12/2004	GROUNDWATER	97	107	1.32	11.32
W32DDA	MW-32	08/03/2004	GROUNDWATER	181.5	186.5	85	90
W32MMA	MW-32	08/04/2004	GROUNDWATER	161.5	171.5	65	75
W32MMD	MW-32	08/04/2004	GROUNDWATER	161.5	171.5	65	75
W32SSA	MW-32	08/04/2004	GROUNDWATER	146.5	151.5	50	55
W33DDA	MW-33	08/03/2004	GROUNDWATER	181.5	186.5	85	90
W33MMA	MW-33	08/03/2004	GROUNDWATER	161.5	171.5	65	75
W33SSA	MW-33	08/03/2004	GROUNDWATER	146.5	151.5	50	55
W34M1A	MW-34	08/05/2004	GROUNDWATER	151	161	73	83
W34M2A	MW-34	08/05/2004	GROUNDWATER	131	141	53	63
W34M3A	MW-34	08/06/2004	GROUNDWATER	111	121	33	43
W36M1A	MW-36	08/03/2004	GROUNDWATER	151	161	74	84
W36M2A	MW-36	08/03/2004	GROUNDWATER	131	141	54	64
W50DDA	MW-50	08/16/2004	GROUNDWATER				
W50DDA	MW-50	08/16/2004	GROUNDWATER	237	247	119	129
W50M1A	MW-50	08/16/2004	GROUNDWATER				
W50M1A	MW-50	08/16/2004	GROUNDWATER	207	217	89	99
W50M2A	MW-50	08/16/2004	GROUNDWATER				
W50M2A	MW-50	08/16/2004	GROUNDWATER	177	187	59	69
W51M1A	MW-51	08/16/2004	GROUNDWATER				
W65M1A	MW-65	08/06/2004	GROUNDWATER	210	220	95	105
W69M1A	MW-69	08/09/2004	GROUNDWATER	190	200	77	87
W69M1D	MW-69	08/09/2004	GROUNDWATER	190	200	77	87
W74M1A	MW-74	08/03/2004	GROUNDWATER	170	180	76	86
W74M2A	MW-74	08/03/2004	GROUNDWATER	125	135	31	41
W74M3A	MW-74	08/11/2004	GROUNDWATER	100	110	6	16
W75M1A	MW-75	08/03/2004	GROUNDWATER	140	150	59	69
W75M2A	MW-75	08/03/2004	GROUNDWATER	115	125	34	44
W75M2D	MW-75	08/03/2004	GROUNDWATER	115	125	34	44
W75SSA	MW-75	08/03/2004	GROUNDWATER	81	91	0	10
W76M1A	MW-76	08/11/2004	GROUNDWATER	125	135	58	68
W76M2A	MW-76	08/11/2004	GROUNDWATER	105	115	38	48
W76SSA	MW-76	08/11/2004	GROUNDWATER	85	95	18	28
W78M1A	MW-78	08/11/2004	GROUNDWATER	135	145	58	68
W78M2A	MW-78	08/12/2004	GROUNDWATER	115	125	38	48
W78M3A	MW-78	08/12/2004	GROUNDWATER	85	95	8	18
JEGACDLM01-	JEGACDLM01	08/02/2004	IDW WATER	0	0		

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JEGACDLM01-	JEGACDLM01	08/05/2004	IDW WATER	0	0		
JEGACDLM01-	JEGACDLM01	08/11/2004	IDW WATER	0	0		
JEGACDLM01-	JEGACDLM01	08/10/2004	IDW WATER	0	0		
JEGACDLM01-	JEGACDLM01	08/09/2004	IDW WATER	0	0		
JEPW304-15	JEPW-304	08/02/2004	IDW WATER	0	0		
MW-345-01	MW-345	08/05/2004	PROFILE	140	140	13	13
MW-345-02	MW-345	08/05/2004	PROFILE	150	150	23	23
MW-345-03	MW-345	08/05/2004	PROFILE	160	160	33	33
MW-345-03FD	MW-345	08/05/2004	PROFILE	160	160	33	33
MW-345-04	MW-345	08/05/2004	PROFILE	170	170	43	43
MW-345-05	MW-345	08/09/2004	PROFILE	180	180	53	53
MW-345-06	MW-345	08/09/2004	PROFILE	190	190	63	63
MW-345-07	MW-345	08/09/2004	PROFILE	200	200	73	73
MW-345-08	MW-345	08/09/2004	PROFILE	210	210	83	83
MW-345-09	MW-345	08/09/2004	PROFILE	220	220	93	93
MW-345-10	MW-345	08/09/2004	PROFILE	240	240	113	113
MW-345-11	MW-345	08/09/2004	PROFILE	250	250	123	123
MW-345-13	MW-345	08/10/2004	PROFILE	260	260	133	133
MW-345-14	MW-345	08/10/2004	PROFILE	270	270	143	143
MW-345-14FD	MW-345	08/10/2004	PROFILE	270	270	143	143
MW-345-15	MW-345	08/10/2004	PROFILE	280	280	153	153
MW-345-16	MW-345	08/10/2004	PROFILE	290	290	163	163
MW-345-17	MW-345	08/10/2004	PROFILE	300	300	173	173
MW-345-18	MW-345	08/10/2004	PROFILE	310	310	183	183
MW-345-19	MW-345	08/10/2004	PROFILE	320	320	193	193
MW-345-20	MW-345	08/10/2004	PROFILE	330	330	203	203
MW-345-21	MW-345	08/10/2004	PROFILE	340	340	213	213
MW-345-22	MW-345	08/10/2004	PROFILE	350	350	223	223
MW-345-23	MW-345	08/11/2004	PROFILE	356	356	229	229
MW-346-01	MW-346	08/13/2004	PROFILE	126	126	11	11
MW-346-02	MW-346	08/13/2004	PROFILE	140	140	25	25
MW-346-03	MW-346	08/13/2004	PROFILE	150	150	35	35
MW-346-03FD	MW-346	08/13/2004	PROFILE	150	150	35	35
ECC071304J2P01 (p	SSJ2L34001	08/04/2004	SOIL GRAB	0	0.2		
ECC072204J301 (pr	SSJ3P43001	08/04/2004	SOIL GRAB	0	0.2		
ECC072904J301 (pr	SSJ3P43002	08/04/2004	SOIL GRAB	0	0.2		
ECC072904J302 (pr	SSJ2P43003	08/04/2004	SOIL GRAB	0	0.2		
ECC072904J303 (pr	SSJ3P43004	08/04/2004	SOIL GRAB	0	0.2		
ECC080204J301 (pr	SSJ3P43005	08/04/2004	SOIL GRAB	0	0.2		
ECC080404T2301 (p	SSCIAT23001	08/12/2004	SOIL GRAB	0	0.2		
ECC080504J301 (pr	SSJ3C7003	08/11/2004	SOIL GRAB	0	0.2		

Profiling methods may include: Volatiles, Explosives, and Perchlorate Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, Perchlorate 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

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
ECC080504J302 (pr	SSJ3C7004	08/11/2004	SOIL GRAB	0	0.2		
ECC080904T2301 (p	SSCIAT23002	08/12/2004	SOIL GRAB	0	0.2		
HC199E1AAA	199E	08/09/2004	SOIL GRID	0	0.5		
HC199E1AAD	199E	08/09/2004	SOIL GRID	0	0.5		
HC199E1BAA	199E	08/09/2004	SOIL GRID	1.5	2		
HC199G1AAA	199G	08/09/2004	SOIL GRID	0	0.5		
HC199G1BAA	199G	08/09/2004	SOIL GRID	1.5	2		
HC54D1AAA	54D	08/10/2004	SOIL GRID	0	0.5		
HC54D1AAD	54D	08/10/2004	SOIL GRID	0	0.5		
HC54D1BAA	54D	08/10/2004	SOIL GRID	1.5	2		
HC54E1AAA	54E	08/10/2004	SOIL GRID	0	0.5		
HC54E1BAA	54E	08/10/2004	SOIL GRID	1.5	2		
HC54F1AAA	54F	08/11/2004	SOIL GRID	0	0.5		
HC54F1BAA	54F	08/11/2004	SOIL GRID	1.5	2		
HC54G1AAA	54G	08/11/2004	SOIL GRID	0	0.5		
HC54G1BAA	54G	08/11/2004	SOIL GRID	1.5	2		
HC54H1AAA	54H	08/11/2004	SOIL GRID	0	0.5		
HC54H1BAA	54H	08/11/2004	SOIL GRID	1.5	2		
HC54I1AAA	541	08/11/2004	SOIL GRID	0	0.5		
HC54I1AAD	541	08/11/2004	SOIL GRID	0	0.5		
HC54I1BAA	541	08/11/2004	SOIL GRID	1.5	2		
HC54J1AAA	SS54J	08/11/2004	SOIL GRID	0	0.5		
HC54J1BAA	SS54J	08/11/2004	SOIL GRID	1.5	2		
HC54K1AAA	SS54K	08/11/2004	SOIL GRID	0	0.5		
HC54K1BAA	SS54K	08/11/2004	SOIL GRID	1.5	2		
HC54L1AAA	54L	08/12/2004	SOIL GRID	0	0.5		
HC54L1AAA	SS54L	08/12/2004	SOIL GRID	0	0.5		
HC54L1BAA	SS54L	08/12/2004	SOIL GRID	1.5	2		
HC54M1AAA	SS54M	08/12/2004	SOIL GRID	0	0.5		
HC54M1BAA	SS54M	08/12/2004	SOIL GRID	1.5	2		
HC54N1AAA	54N	08/10/2004	SOIL GRID	0	0.5		
HC54N1BAA	54N	08/10/2004	SOIL GRID	1.5	2		
HC54O1AAA	540	08/12/2004	SOIL GRID	0	0.5		
HC54O1AAD	540	08/12/2004	SOIL GRID	0	0.5		
HC54O1BAA	540	08/12/2004	SOIL GRID	1.5	2		
HC62A1AAA	62A	08/13/2004	SOIL GRID	0	0.5		
HC62A1BAA	62A	08/13/2004	SOIL GRID	1.5	2		
HC62C1AAA	62C	08/13/2004	SOIL GRID	0	0.5		
HC62C1BAA	62C	08/13/2004	SOIL GRID	1.5	2		
HC62D1AAA	62D	08/13/2004	SOIL GRID	0	0.5		
HC62D1BAA	62D	08/13/2004	SOIL GRID	1.5	2		

Profiling methods may include: Volatiles, Explosives, and Perchlorate Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, Perchlorate 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

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HC62E1AAA	62E	08/16/2004	SOIL GRID				
HC62E1AAD	62E	08/16/2004	SOIL GRID				
HC62E1BAA	62E	08/16/2004	SOIL GRID				
HC62F1AAA	62F	08/16/2004	SOIL GRID				
HC62F1BAA	62F	08/16/2004	SOIL GRID				
HC62H1AAA	62H	08/16/2004	SOIL GRID				
HC62H1BAA	62H	08/16/2004	SOIL GRID				
HD199E1AAA	199E	08/09/2004	SOIL GRID	0	0.08		
HD199G1AAA	199G	08/09/2004	SOIL GRID	0	0.08		
HD66UA1AAA	66UA	08/10/2004	SOIL GRID	0	0.5		
HD66UA1BAA	66UA	08/10/2004	SOIL GRID	3	3		
HD66UB1AAA	66UB	08/10/2004	SOIL GRID	0	0.5		
HD66UB1AAD	66UB	08/10/2004	SOIL GRID	0	0.5		
HD66UB1BAA	66UB	08/10/2004	SOIL GRID	3	3		
HD66UC1AAA	66UC	08/10/2004	SOIL GRID	0	0.5		
HD66UC1BAA	66UC	08/10/2004	SOIL GRID	3	3		
HD66UD1AAA	66UD	08/09/2004	SOIL GRID	0	0.5		
HD66UD1BAA	66UD	08/09/2004	SOIL GRID	3	3		
LKSNK0005AAA	LKSNK0005	08/09/2004	SURFACE WATER	0	0		
LKSNK0006AAA	LKSNK0006	08/09/2004	SURFACE WATER	0	0		
LKSNK0007AAA	LKSNK0007	08/09/2004	SURFACE WATER	0	0		

Profiling methods may include: Volatiles, Explosives, and Perchlorate Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, Perchlorate 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

# TABLE 3 VALIDATED DETECTS EXCEEDING MCLs OR HEALTH ADVISORY LIMITS INTERIM MONTHLY DATA RECEIVED 7/30/04-8/13/04

WELL/LOCID	SAMPLE_ID	SAMPLED	METHOD	ANALYTE	CONC.	FLAG	UNITS	BWTS	BWTE	DW_LIMIT	>DW_LIMIT

# TABLE 4 VALIDATED DETECTS BELOW MCLs OR HEALTH ADVISORY LIMITS NOT PREVIOUSLY DETECTED INTERIM MONTHLY DATA RECEIVED 7/30/04-8/13/04

WELL/LOCID	SAMPLE_ID	SAMPLED	METHOD	ANALYTE	CONC.	FLAG	UNITS	BWTS	BWTE	DW_LIMIT	>DW_LIMIT
WL191M2	W191M2D	05/19/2004	8330N	4-AMINO-2,6-DINITROTOLUENE	0.89		UG/L	8.4	18.4		
WL191M2	W191M2A	05/19/2004	8330N	4-AMINO-2,6-DINITROTOLUENE	0.88		UG/L	8.4	18.4		
WL65M2	W65M2A	05/10/2004	E314.0	PERCHLORATE	0.64	J	UG/L	14	19	4	
WL328M1	W328M1A	05/18/2004	SW8270	DI-N-BUTYL PHTHALATE	0.25	J	UG/L	60.97	70.97		

# TABLE 5 DETECTED COMPOUNDS-UNVALIDATED INTERIM MONTHLY FOR 08/01/04 - 08/16/04

SAMPLE_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
RS003P-A	RS003P	08/04/2004	GROUNDWATER	90	90			E314.0	PERCHLORATE	
RSNW01-A	RSNW01	08/04/2004	GROUNDWATER	0	0			E314.0	PERCHLORATE	
RSNW03-A	RSNW03	08/04/2004	GROUNDWATER	0	0			E314.0	PERCHLORATE	
RSNW06-A	RSNW06	08/04/2004	GROUNDWATER	0	0			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
RSNW06-A	RSNW06	08/04/2004	GROUNDWATER	0	0			E314.0	PERCHLORATE	
W02-04M1A	02-04	07/27/2004	GROUNDWATER	123	133	73.97	83.97	E314.0	PERCHLORATE	
W02-05M1A	02-05	07/27/2004	GROUNDWATER	110	120	81.44	91.44	E314.0	PERCHLORATE	
W02-05M2A	02-05	07/27/2004	GROUNDWATER	92	102	63.41	73.41	E314.0	PERCHLORATE	
W02-05M3A	02-05	07/27/2004	GROUNDWATER	70	80	41.37	51.37	E314.0	PERCHLORATE	
W323M1A	MW-323	07/27/2004	GROUNDWATER	195	205	121.05	131.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W323M2A	MW-323	07/27/2004	GROUNDWATER	120	130	46.05	56.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W323M2A	MW-323	07/27/2004	GROUNDWATER	120	130	46.05	56.05	E314.0	PERCHLORATE	
W323M2D	MW-323	07/27/2004	GROUNDWATER	120	130	46.05	56.05	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W323SSA	MW-323	07/27/2004	GROUNDWATER	78	83	0	10	E314.0	PERCHLORATE	
MW-345-01	MW-345	08/05/2004	PROFILE	140	140	13	13	8330N	2,6-DINITROTOLUENE	NO+
MW-345-01	MW-345	08/05/2004	PROFILE	140	140	13	13	8330N	2-NITROTOLUENE	NO
MW-345-01	MW-345	08/05/2004	PROFILE	140	140	13	13	8330N	3-NITROTOLUENE	NO
MW-345-01	MW-345	08/05/2004	PROFILE	140	140	13	13	8330N	4-NITROTOLUENE	NO
MW-345-01	MW-345	08/05/2004	PROFILE	140	140	13	13	8330N	NITROGLYCERIN	NO
MW-345-01	MW-345	08/05/2004	PROFILE	140	140	13	13	8330N	PICRIC ACID	NO
MW-345-02	MW-345	08/05/2004	PROFILE	150	150	23	23	8330N	4-NITROTOLUENE	NO
MW-345-02	MW-345	08/05/2004	PROFILE	150	150	23	23	8330N	3-NITROTOLUENE	NO
MW-345-02	MW-345	08/05/2004	PROFILE	150	150	23	23	8330N	NITROGLYCERIN	NO
MW-345-02	MW-345	08/05/2004	PROFILE	150	150	23	23	8330N	PICRIC ACID	NO
MW-345-02	MW-345	08/05/2004	PROFILE	150	150	23	23	8330N	2,4-DINITROTOLUENE	NO
MW-345-03	MW-345	08/05/2004	PROFILE	160	160	33	33	8330N	2-NITROTOLUENE	NO
MW-345-03	MW-345	08/05/2004	PROFILE	160	160	33	33	8330N	3-NITROTOLUENE	NO
MW-345-03	MW-345	08/05/2004	PROFILE	160	160	33	33	8330N	4-NITROTOLUENE	NO

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES RECEIVED 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

# TABLE 5 DETECTED COMPOUNDS-UNVALIDATED INTERIM MONTHLY FOR 08/01/04 - 08/16/04

SAMPLE_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
MW-345-03	MW-345	08/05/2004	PROFILE	160	160	33	33	8330N	NITROGLYCERIN	NO
MW-345-03	MW-345	08/05/2004	PROFILE	160	160	33	33	8330N	PICRIC ACID	NO
MW-345-03FD	MW-345	08/05/2004	PROFILE	160	160	33	33	8330N	PICRIC ACID	NO
MW-345-03FD	MW-345	08/05/2004	PROFILE	160	160	33	33	8330N	2-NITROTOLUENE	NO
MW-345-03FD	MW-345	08/05/2004	PROFILE	160	160	33	33	8330N	4-NITROTOLUENE	NO
MW-345-05	MW-345	08/09/2004	PROFILE	180	180	53	53	8330N	PICRIC ACID	NO
MW-345-05	MW-345	08/09/2004	PROFILE	180	180	53	53	8330N	NITROGLYCERIN	NO
MW-345-05	MW-345	08/09/2004	PROFILE	180	180	53	53	8330N	4-NITROTOLUENE	NO
MW-345-05	MW-345	08/09/2004	PROFILE	180	180	53	53	8330N	2-NITROTOLUENE	NO+
MW-345-05	MW-345	08/09/2004	PROFILE	180	180	53	53	8330N	3-NITROTOLUENE	NO
MW-345-08	MW-345	08/09/2004	PROFILE	210	210	83	83	8330N	NITROGLYCERIN	NO
MW-345-08	MW-345	08/09/2004	PROFILE	210	210	83	83	8330N	PICRIC ACID	NO
MW-345-11	MW-345	08/09/2004	PROFILE	250	250	123	123	8330N	PICRIC ACID	NO
MW-345-13	MW-345	08/10/2004	PROFILE	260	260	133	133	8330N	PICRIC ACID	NO
MW-345-13	MW-345	08/10/2004	PROFILE	260	260	133	133	8330N	2-NITROTOLUENE	NO+
MW-345-13	MW-345	08/10/2004	PROFILE	260	260	133	133	8330N	NITROGLYCERIN	NO

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES RECEIVED 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