WEEKLY PROGRESS UPDATE
FOR DECEMBER 8 – DECEMBER 12, 2003

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 December 8 through December 12, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of December 12 is summarized in Table 1.

Table 1. Drilling progress as of December 12, 2003

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
IW-271	Demo Area 1 (IW-D1-1)	330	297	
IW-272	Demo Area 1 (IW-D1-2)	331	236	
MW-300	J-2 Range (J2P-31)	340	237	32-42; 94-104; 190-200
MW-301	Northwest Corner (NWP-8ba)	100	2	
MW-302	J-2 Range (J2P-32)	310	201	
MW-303	J-1 Range (J1P-21)	180	67	

bgs = below ground surface
bwt = below water table

Completed well installation of MW-300 (J2P-31), commenced well installation of IW-271 (IW-D1-1), and IW-272 (IW-D1-2), continued drilling of MW-301 (NWP-8ba), and commenced drilling of MW-302 (J2P-32) and MW-303 (J1P-21).

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-301, MW-302, and MW-303. Groundwater samples were collected from Bourne water supply and monitoring wells, from recently installed wells and drive points, and from residential wells. Soil samples were collected from Gun and Mortar Positions near the western boundary. An Investigation-derived waste (IDW) sample was collected from the Granular Activated Carbon (GAC) treatment system.

The following are the notes from the December 11, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Hap Gonser (IAGWSPO)	Ben Gregson (IAGWSPO)	Dave Hill (IAGWSPO)
Pam Richardson (IAGWSPO)	Bill Gallagher (IAGWSPO)	Paul Nixon (IAGWSPO)
Tina Dloen (IAGWSPO)	COL Bill FitzPatrick (E&RC)	Todd Borci (EPA)
Meghan Cassidy (EPA)	Jane Dolan (EPA)	Desiree Moyer (EPA)
Bob Lim (EPA)	Len Pinaud (MADEP)	Mark Panni (MADEP)
Dave Williams (MDPH)	Gina Kaso (ACE)	Frank Fedele (ACE)
Ed Wise (ACE)	Katarzyna Chelkowska (ACE)	Dave Margolis (ACE)
Kim Harriz (AMEC)	Dick Skryness (ECC-phone)	Paul Hunt (ECC)
Mike Goydas (Jacobs)		

Punchlist Items

#1 Provide update on requested access letter to Regional Technical School (IAGWSP). Bill Gallagher (IAGWSPO) has not received the requested written response.

#2 Provide update on access agreement to install a monitoring well at Schooner Pass Condominium Association (IAGWSPO). Hap Gonser indicated a letter is being drafted requesting that the NGB issue a directive to the Army Corps real estate group to acquire an easement to install the well. Obtaining easements to install monitoring wells on private property, rather than getting only a ROE agreement, is the new protocol established for both AFCEE and IAGWSP's projects. The directive from the NGB to obtain the easement for Schooner Pass property should be issued in 2 to 3 weeks. Funding is also an issue, but appears likely to be resolved without causing any delay in the process. NGB has indicated that the NEPA process needs to be followed, regardless of EPA's contention that is not applicable under the Consent Order. The IAGWSPO's intent is to prepare a Right of Environmental Consideration to address this requirement. Once the Army Corps obtains the directive from the NGB, and other applicable paperwork, an appraisal will be completed and the terms of the easement negotiated with the property owner. The process of the obtaining the easement is of indeterminate length but is projected to take several months. However, it may to be possible to begin drilling of the well based on an access agreement while the easement process is being finalized. Todd Borci (EPA) requested Mr. Gonser ask John McDonagh (IAGWSPO) to contact Bill Walsh-Rogalski (EPA), regarding the legal requirements for the process. Len Pinaud (MADEP) requested that the IAGWSPO make all parties involved aware of the need for expediency in installing the well. Gina Kaso (ACE) to evaluate the projected schedule for obtaining the easement. Mr. Pinaud to request the Schooner Pass Condominium Association allow the IAGWSPO access for monthly sampling of the well 4036011, rather than the only quarterly, due to delay in the schedule to install the monitor well. Meghan Cassidy (EPA) requested the IAGWPO set forth the necessary steps to gain access to install wells on private property. Mr. Gonser indicated the IAGWSP would attempt to obtain a generic directive from the NGB for multiple easements at unspecified locations for monitor well installation on private property, so that this process could be expedited in the future.

#4 Provide EPA with more information and photographs of the burn area (IAGWSPO). Two photos were provided by email.

#5 Provide EPA more information on 25 lbs of HE reported to have been uncovered during anomaly excavation at Demo 1 (Army Corps). Discovery was actually of 0.25 lbs of HE, specification of 25 lbs was a typographical error.

Northwest Corner Update

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

- Drilling of MW-301 (NWP-8ba) continues from last week, total depth of 95 feet to date.
- UXO clearance completed at NWP-12. The well pad still needs to be constructed.
- As a follow up to EPA's concern regarding erosion at the canal overlook at NWP-10 as result of well development, a photograph of well development effluent was shown to the agencies. The photograph depicted a low flow rate from the GAC discharge units, indicating that substantial erosion from the discharge was not likely.
- Soil sampling at grids 199E, 199G, and 66X for hexachloroethane and dyes analysis is scheduled to be completed next week. The 66X grid is under a foot of water. AMEC will wait for the water to dissipate or a different grid can be selected. Desiree Moyer (EPA) indicated EPA would recommend an alternative grid location after reviewing the data.
- Results of latest round of residential well sampling (RSNW03, RSNW06) were consistent with prior results. Mr. Gallagher indicated he would make another attempt to contact property owners of RSNW02 to establish a monthly or at least another round of sampling, particularly in light of the detections of perchlorate in profile samples from MW-297.
- AMEC's regional model has been recalibrated based on the synoptic water level data collected at the Northwest Corner. The groundwater contours have significantly changed from the MMR-9 model, now reflecting a more northerly groundwater flow direction, which is perpendicular to the canal. AMEC is in the process of developing the subregional model for the Northwest Corner. At EPA's request, Mr. Gallagher to forward figure showing new groundwater contours in the Northwest Corner.
- Todd Borci (EPA) requested the IAGWSPO coordinate with Len Pinaud (MADEP) regarding any activities pursuant to obtaining an easement to install a monitor well on Schooner Pass Condominium Property.
- Groundwater sampling at Well 4036011 is scheduled for next week.
- The Northwest Corner Data Summary Report is scheduled to be submitted on 1/23/03.
- 100% anomaly clearance at GP-16 is close to being completed. AMEC to attempt to locate the last four anomalies with an all-metal detector. This activity is scheduled for Friday, 12/12.
- One soil sample was collected of soil in the burn pit observed at anomaly M082. Samples were submitted for VOC, SVOC, metals, perchlorate and explosive analysis. Analysis of dioxin/furan is on hold pending further discussion based on the SVOC data. Preliminary data were acquired for the SVOC analysis. A copy of the preliminary data was distributed to the agencies. The data show four SVOC compounds were detected in the samples; no SVOC TICS were identified as dioxin or furans. Based on these results, the IAGWSP requested the agencies excuse the dioxin/furan analysis, which is expensive relative to the other analyses and viewed as unnecessary.
- Desiree Moyer (EPA) made several requests for additional investigation of the Northwest Corner including:
  - A proposed well location north of MW-297 along the canal, prior to the end of the year.
  - Monthly sampling and analysis of wells located on Canal View Road, due to the presence of drinking water wells downgradient.
  - Sampling of HW-2 and HW-3 to provide additional groundwater quality information downgradient.
- IAGWSP personnel to discuss EPA's requests internally and provide a response.

Fieldwork Update

Frank Fedele (ACE) provided an update on the IAGWSP fieldwork.

- As part of AMEC's investigation, well installation was completed at MW-295 (J3P-33) – two screens; and MW-298 (NWP-11) – three screens, well installation continued for IW-272 (IW-

D1-2) and IW-271 (IW-D1-1) on Frank Perkins Road; and drilling was completed for IW-273 (IW-D1-3) on Pew Road. Drilling continues at MW-301 (NWP-8ba).

- Well development was completed at MW-297 (NWP-10) and EW-275 (EW-D1-2) and continues for MW-295 (J3P-33).
- UXO clearance was completed at NWP-12, CBP-3, and D2P-5 and continued at D2P-6.
- GP-16 anomaly excavation continues. An all-metal detector is being used in an attempt to locate the four remaining anomalies.
- Groundwater sampling at Bourne, LTM and/or new wells continues.
- Soil sampling at 42 grids along the Western Boundary continued, 12 grids remain to be sampled.
- Reconnaissance for UXO low order detonation continued in the vicinity of Target 42 in the Central Impact Area. Lysimeter installation is scheduled to begin today.
- Preliminary design and construction of the Demo 1 Frank Perkins RD ETR continued.
- As part of ECC's investigation, well installation of MW-300 (J2P-31) was completed. Drilling of MW-302 (J2P-32) and MW-303 (J1P-21) continued.
- Well development was completed at MW-291 (LP-11) and MW-293 (J2P-29).
- UXO clearance was conducted at J2P-28.
- Removal of scrap from J-2 Range Disposal Area 2 continued. Items placed on plastic in the polygon areas are being sorted, with scrap being collected in drums and OE being staged at the CDC bunker. The sorting is based on visual observation only. Todd Borci requested that EPA be contacted to explain exactly how the scrap removal was being conducted, since the Workplan has not been approved.
- The J-2 Target Control Pit investigation continues. Excavation of pits 3B and 3C were completed. One 60mm Mortar was uncovered in the 5-6 ft lift in pit 3C. Soil samples were collected. Currently crews are working on excavation of pits 4D and 4J. Pits 4B, 5B, 6B and 8F remain.
- Jane Dolan (EPA) inquired about the status of a Safety Plan for L Range soil sampling. Mr. Fedele indicated ECC is still reviewing different methods to clear the area.
- Anomaly removal and clearance continued at Demo 1. The status of anomaly excavation and removal was provided in a figure. Grids completed this week included C7 and D7. Currently working on clearance at grid C8. Grids D8 and E8 are the only grids needing anomaly removal outside the kettle area.
- Vegetation clearance of the access road and the well pad for the production well in the kettle hole was completed. The utilities have partially been installed. Fill was brought in to construct the foundation for the treatment unit. MW-19 will be retained as a monitoring point.
- Soil excavation inside the perimeter road commenced. Excavation of two soil quads in E4 (quads are 50 ft by 50 ft, one quarter of an anomaly grid) was competed to a foot depth for a total of 158 yards of soil excavated. Post excavation samples were collected. Results from one quad were ND for perchlorate. Results from the other quad are pending.
- UXO clearance in the kettle will be completed after much of the soil excavation between the kettle and the perimeter road is completed.
- Mr. Borci questioned the identification of only one burn pit during the UXO clearance, stating Tetra Tech had identified six inside the perimeter road during the anomaly identification survey. These pits had been covered over to be addressed in the anomaly removal. Mr. Fedele to determine the location and status of burn pits uncovered by Tetra Tech and report back to the agencies.

ROA Status and Drilling Schedule

Dave Margolis (ACE) and Darrin Smith (ACE) reviewed the ROA status and drilling schedule, distributing the drilling schedule.

- Changes to the ROA status table this week included, ROA approval for the well location at H Range for the thermal treatment unit.
- AMEC drill rigs are located at IW-D1-1 and NWP-8ba. The next proposed drilling locations are NWP-8a and NWP-9. Drilling of both these locations are contingent on the profile results from NWP-8ba.
- ECC drilling rigs are located at J2P-32 and J1P-21. The next drilling locations are J2P-33, the location of which has not been finalized, and the Demo 1 Production Well. Well installation with a cable tool rig begins on 1/12/04 with the installation of J2P-30 (the Jefferson Road Well).

J-2 Range Groundwater Investigation

Dave Hill (IAGWSPO) led a discussion on the plan to delineate the J-2 Range perchlorate plume.

- IAGWSPO recommendations for locating the next drilling location for plume delineation was outlined in a 12/10 email forwarded by Mr. Hill. The next recommended location was a well (J2P-33) on Wood Road, 375 feet east of MW-300. Installation of this well would complete the transect along Wood Road. Data obtained from the new well will be plugged into the flow model to pick downgradient well locations. The most likely location was on Jefferson Road, but dependent on the width of the plume, another well could be recommended on Wood Road or a well in between Jefferson and Wood Roads. Mike Goydas (Jacobs) explained that their recommendation for the next drilling location was dependent upon the width of the plume, which is inversely proportional to the length of the plume. For a set mass of contaminant, a plume splayed over a large area would not expected to have migrated as far downgradient as a more compact plume. The recommendation was not contingent upon a specific concentration cut-off for detections at J2P-33.
- Todd Borci requested the IAGWSPO provide more specific criteria for selecting the next drilling location, prior to receiving the results. This would enable the agencies to reflect on the strategy, rather than having to make a decision on the spot when the results are received.
- Karen Wilson (IAGWSPO), responding to Jane Dolan's question regarding approval of a drilling location between Jefferson and Wood Roads, indicated that the habitat to the east of Barlow Road is not as sensitive as the habitat on the west side of the road. Any well location proposed in this area would need to go through the ROA review process, but approval of the location would be likely.
- IAGWSPO agreed to provide the following information:
  - PDF copies of the updated figures showing trajectories of two plume simulations, based on revised flow components.
  - North/south oriented cross section down the axis of the plume, to include the capture zone of the Co-op water supply well.
  - More specific rationale for selection of the next well location.
  - Data from initial profile samples from J2P-32 as soon as received.
- At Ms. Dolan's request, Mr. Hill agreed to send letter to Water Supply Co-op requesting access to sample the deep wells and C-7 and C-4. Sampling of MW-63D was not completed as requested by EPA, because this well was sampled only three months prior in September 2003.
- All parties agreed to set MW-300 screens straddling the highest concentrations of perchlorate in the two separate intervals of detections in profile samples: 32-42 ft bwt, 94-104 ft bwt and at the interval corresponding to screen depth of MW-293M1.

Documents and Schedules

Ed Wise (ACE) distributed the Scheduling Issues Table.

- The J-1 and J-3 Range Supplemental Groundwater Work Plans were sent out yesterday (12/10) and should be received today.
- Expected distribution dates for some of the other Southeast Ranges Workplan RCLs and MORs has been changed slightly. J-3 Range RRA Plan RCL should be sent out tomorrow, 12/12. L Range Groundwater Workplan MOR is expected to submitted 12/17.
- Demo 1 RRA Plan MOR is expected to be submitted 12/17.
- Len Pinaud indicated MADEP comments on the Demo 1 Groundwater Report Addendum would be sent by the end of the week, 12/12. Comments on other high priority documents would also be submitted shortly.

2. SUMMARY OF DATA RECEIVED

Rush data are summarized in Table 3. These data are for analyses that are performed on a fast turn around time, typically 1-5 days. 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 3 summarizes only detects, and does not show samples with non-detects.

The status of the explosive detections with respect to confirmation using Photo Diode Array (PDA) spectra is indicated in Table 3. PDA is a procedure that has been implemented for the explosive analysis, to reduce the likelihood of false positive identifications. Where the PDA status is “YES” in Table 3, the detected compound is verified as properly identified. Where the status is “NO”, the identification of an explosive has been determined to be a false positive. Where the status is blank, PDA has not yet been used to evaluate the detection, or PDA is not applicable because the analyte is a VOC or perchlorate. Most explosive detections verified by PDA are confirmed to be present upon completion of validation. Table 3 includes the following detections:

Table 3 includes detections from the following areas:

Western Boundary

- Groundwater samples from 02-03M3, 02-13M1, MW-213M2, and MW-213M3 and duplicate had detections of perchlorate. The results were similar to previous sampling rounds.

Northwest Corner

- A groundwater sample from RSNW03 had a detection of perchlorate. The result was similar to the previous sampling rounds.

- A groundwater sample from MW-284M1 had a detection of RDX that was confirmed by PDA spectra. The result was similar to the previous sampling rounds.

- Groundwater samples from MW-284M2 had detections of RDX and perchlorate. The detection of RDX was confirmed by PDA spectra. The results were similar to the previous sampling rounds.

Southeast Ranges

- A groundwater sample from MW-265M2 had a detection of RDX that was confirmed by PDA spectra. The result was similar to the previous sampling rounds.

- A groundwater sample from MW-286M2 had a detection of RDX that was confirmed by PDA spectra. This is the first sampling event at this well and the results were consistent with the profile results.

DELIVERABLES SUBMITTED

Monthly Progress Report for November 2003	12/09/2003
Draft Summary Report July-September 2002 UXO Detonations	12/12/2003
Weekly Progress Update for December 1 – December 5, 2003	12/12/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of December 15 include complete drilling of MW-301 (NWP-8ba) and continue drilling of MW-302 (J2P-32) and MW-303 (J1P-21). Groundwater sampling of Bourne water supply and monitoring wells and recently installed wells will continue. Groundwater sampling as part of the December round of the Draft 2003 Long-Term Groundwater Monitoring Plan will commence. Soil sampling will be conducted at Gun and Mortar Positions and in the Northwest Corner.

4. SUMMARY OF ACTIVITIES FOR DEMO AREA 1

The Response to Comments for the Draft Groundwater Report Addendum for the Demo Area 1 Groundwater Operable Unit will be finalized pending the receipt of DEP comments. Installation of extraction and injection wells for the Groundwater RRA is ongoing. Installation of subsurface piping and well vaults for the Frank Perkins Road Extraction, Treatment and Recharge System continues. Modeling activities in support of the Feasibility Study are ongoing.

Geophysical anomaly and soil excavation within the Demo Area 1 depression continues. Responses to EPA and DEP comments on the Soil Treatment Plan were submitted on December 4, 2003. Site preparation activities for the Thermal Treatment of excavated soils was initiated at the H Range just north of Demo Area 1.

TABLE 2
SAMPLING PROGRESS
12/7/2003 - 12/13/2003

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
4036000-01G-A	4036000-01G	12/08/2003	GROUNDWATER	38	69.8	6	12
4036000-06G-A	4036000-06G	12/08/2003	GROUNDWATER	108	128	6	12
PHOP01-A	DP OP01	12/10/2003	GROUNDWATER	44	46	39.06	41.06
PHOP02-A	DP OP02	12/10/2003	GROUNDWATER	68	70	61.2	63.2
RSNW01-A	RSNW01	12/10/2003	GROUNDWATER	0	0		
RSNW03-A	RSNW03	12/10/2003	GROUNDWATER	0	0		
RSNW03-A	RSNW03	12/10/2003	GROUNDWATER	0	0		
W02-03M1A	02-03	12/08/2003	GROUNDWATER	130	140	86.1	96.1
W02-03M2A	02-03	12/09/2003	GROUNDWATER	92	102	48.15	58.15
W02-03M3A	02-03	12/08/2003	GROUNDWATER	75	85	31.05	41.05
W02-05M1A	02-05	12/09/2003	GROUNDWATER	110	120	81.44	91.44
W02-05M2A	02-05	12/09/2003	GROUNDWATER	92	102	63.41	73.41
W02-05M3A	02-05	12/09/2003	GROUNDWATER	70	80	41.37	51.37
W02-07M3A	02-07	12/08/2003	GROUNDWATER	47	57	13	23
W02-08M1A	02-08	12/09/2003	GROUNDWATER	108	113	86.56	91.56
W02-08M2A	02-08	12/09/2003	GROUNDWATER	82	87	60.65	65.65
W02-08M3A	02-08	12/09/2003	GROUNDWATER	62	67	40.58	45.58
W02-13M1A	02-13	12/08/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M1D	02-13	12/08/2003	GROUNDWATER	68	78	28.3	38.3
W02-13M2A	02-13	12/08/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	12/08/2003	GROUNDWATER	68	78	28.3	38.3
W02-15M1A	02-15	12/11/2003	GROUNDWATER	125	135	75.63	85.63
W02-15M2A	02-15	12/11/2003	GROUNDWATER	101	111	51.5	61.5
W02-15M3A	02-15	12/12/2003	GROUNDWATER	81	91	31.4	41.4
W195SSA	MW-195	12/11/2003	GROUNDWATER	34	39	0	5
W213M2A	MW-213	12/08/2003	GROUNDWATER	89	99	41.15	51.15
W254M1A	MW-254	12/11/2003	GROUNDWATER	230	240	165.75	175.75
W254M2A	MW-254	12/11/2003	GROUNDWATER	190	200	125.73	135.73
W254M2D	MW-254	12/11/2003	GROUNDWATER	190	200	125.73	135.73
W255M3A	MW-255	12/11/2003	GROUNDWATER	136	146	26.1	36.1
W256DDA	MW-256	12/09/2003	GROUNDWATER	297	307	168.17	178.17
W256M1A	MW-256	12/09/2003	GROUNDWATER	198	208	69.16	79.16
W256M1A	MW-286	12/09/2003	GROUNDWATER	198	208	69.16	79.16
W261M1A	MW-261	12/10/2003	GROUNDWATER	210	220	49.37	59.37
W261M2A	MW-261	12/10/2003	GROUNDWATER	170	180	9.47	19.47

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
BWTE = Depth below water table, end depth, measured in feet

TABLE 2
SAMPLING PROGRESS
12/7/2003 - 12/13/2003

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W264M1A	MW-264	12/09/2003	GROUNDWATER	192	202	160.94	170.94
W264M2A	MW-264	12/09/2003	GROUNDWATER	136	146	105	115
W266M1A	MW-266	12/08/2003	GROUNDWATER	307	317	160.26	170.26
W266M2A	MW-266	12/08/2003	GROUNDWATER	239	249	92.26	102.26
W277SSA	MW-277	12/12/2003	GROUNDWATER	102	112	0	10
W279M1A	MW-279	12/10/2003	GROUNDWATER	96	106	37.4	47.4
W279M2A	MW-279	12/10/2003	GROUNDWATER	83	88	26.8	31.8
W279SSA	MW-279	12/10/2003	GROUNDWATER	66	76	10	20
W285M1A	MW-285	12/09/2003	GROUNDWATER	179	189	1.49	11.49
W287M1A	MW-287	12/08/2003	GROUNDWATER	160	170	25.45	35.45
W287SSA	MW-287	12/08/2003	GROUNDWATER	133	143	0	10
W80DDA	MW-80	12/10/2003	GROUNDWATER	158	168	114	124
W80M1A	MW-80	12/10/2003	GROUNDWATER	130	140	86	96
W80M2A	MW-80	12/10/2003	GROUNDWATER	100	110	56	66
W80M3A	MW-80	12/11/2003	GROUNDWATER	70	80	26	36
W80M3D	MW-80	12/11/2003	GROUNDWATER	70	80	26	36
W80SSA	MW-80	12/10/2003	GROUNDWATER	43	53	0	10
W81DDA	MW-81	12/11/2003	GROUNDWATER	184	194	156	166
W81M1A	MW-81	12/11/2003	GROUNDWATER	128	138	100	110
W81M2A	MW-81	12/11/2003	GROUNDWATER	83	93	55	65
W81M3A	MW-81	12/11/2003	GROUNDWATER	53	58	25	30
W81M3D	MW-81	12/11/2003	GROUNDWATER	53	58	25	30
W81SSA	MW-81	12/11/2003	GROUNDWATER	25	35	0	10
W82DDA	MW-82	12/12/2003	GROUNDWATER	125	135	97	107
W82M1A	MW-82	12/11/2003	GROUNDWATER	104	114	76	86
W82M2A	MW-82	12/11/2003	GROUNDWATER	78	88	50	60
W82M3A	MW-82	12/12/2003	GROUNDWATER	54	64	26	36
W82M3D	MW-82	12/12/2003	GROUNDWATER	54	64	26	36
W82SSA	MW-82	12/12/2003	GROUNDWATER	25	35	0	10
DW120903-NV	GAC WATER	12/09/2003	IDW	0	0		
G301DAA	MW-301	12/12/2003	PROFILE	100	100	1.8	1.8
MW-302-01	MW-302	12/10/2003	Profile	120	120	17	17
MW-302-02	MW-302	12/10/2003	Profile	130	130	27	27
MW-302-03	MW-302	12/10/2003	Profile	140	140	37	37
MW-302-03FD	MW-302	12/10/2003	Profile	140	140	37	37

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TABLE 2
SAMPLING PROGRESS
12/7/2003 - 12/13/2003

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
MW-302-04	MW-302	12/10/2003	Profile	150	150	47	47
MW-302-05	MW-302	12/10/2003	Profile	160	160	57	57
MW-302-06	MW-302	12/10/2003	Profile	170	170	67	67
MW-302-07	MW-302	12/10/2003	Profile	180	180	77	77
MW-302-08	MW-302	12/10/2003	Profile	190	190	87	87
MW-302-09	MW-302	12/10/2003	Profile	200	200	97	97
MW-302-10	MW-302	12/11/2003	Profile	210	210	107	107
MW-302-11	MW-302	12/11/2003	Profile	220	220	117	117
MW-302-12	MW-302	12/11/2003	Profile	230	230	127	127
MW-302-13	MW-302	12/11/2003	Profile	240	240	137	137
MW-302-13FD	MW-302	12/11/2003	Profile	240	240	137	137
MW-302-14	MW-302	12/11/2003	Profile	250	250	147	147
MW-302-15	MW-302	12/11/2003	Profile	260	260	157	157
MW-302-16	MW-302	12/11/2003	Profile	270	270	167	167
MW-302-17	MW-302	12/12/2003	Profile	280	280	177	177
MW-302-18	MW-302	12/12/2003	Profile	290	290	187	187
MW-302-19	MW-302	12/12/2003	Profile	300	300	197	197
MW-302-20	MW-302	12/12/2003	Profile	310	310	207	207
MW-303-01	MW-303	12/11/2003	Profile	120	120	8	8
MW-303-02	MW-303	12/11/2003	Profile	130	130	18	18
MW-303-03	MW-303	12/11/2003	Profile	140	140	28	28
MW-303-03FD	MW-303	12/11/2003	Profile	140	140	28	28
MW-303-04	MW-303	12/11/2003	Profile	150	150	38	38
MW-303-05	MW-303	12/12/2003	Profile	160	160	48	48
MW-303-06	MW-303	12/12/2003	Profile	170	170	58	58
HC201F1AAA	201F	12/12/2003	SOIL GRID	0	0.5		
HC201F1BAA	201F	12/12/2003	SOIL GRID	1.5	2		
HC201G1AAA	201G	12/12/2003	SOIL GRID	0	0.5		
HC201G1BAA	201G	12/12/2003	SOIL GRID	1.5	2		
HC201H1AAA	201H	12/10/2003	SOIL GRID	0	0.5		
HC201H1BAA	201H	12/10/2003	SOIL GRID	1.5	2		
HC201I1AAA	201I	12/10/2003	SOIL GRID	0	0.5		
HC201I1AAD	201I	12/10/2003	SOIL GRID	0	0.5		
HC201I1BAA	201I	12/10/2003	SOIL GRID	1.5	2		
HC51S1AAA	51S	12/12/2003	SOIL GRID	0	0.5		

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
BWTE = Depth below water table, end depth, measured in feet

TABLE 2
SAMPLING PROGRESS
12/7/2003 - 12/13/2003

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
HC51S1BAA	51S	12/12/2003	SOIL GRID	1.5	2		
HC51T1AAA	51T	12/12/2003	SOIL GRID	0	0.5		
HC51T1BAA	51T	12/12/2003	SOIL GRID	1.5	2		
HC69J1AAA	69J	12/10/2003	SOIL GRID	0	0.5		
HC69J1BAA	69J	12/10/2003	SOIL GRID	1.5	2		
HC69K1AAA	69K	12/10/2003	SOIL GRID	0	0.5		
HC69K1BAA	69K	12/10/2003	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
BWTE = Depth below water table, end depth, measured in feet

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 11/14/03 - 12/13/03

SAMPLE_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
RSNW03-A	RSNW03	12/10/2003	GROUNDWATER	0	0			E314.0	PERCHLORATE	
W02-03M3A	02-03	12/08/2003	GROUNDWATER	75	85	31.05	41.05	E314.0	PERCHLORATE	
W02-13M1A	02-13	12/08/2003	GROUNDWATER	98	108	58.33	68.33	E314.0	PERCHLORATE	
W213M2A	MW-213	12/08/2003	GROUNDWATER	89	99	41.15	51.15	E314.0	PERCHLORATE	
W213M3A	MW-213	12/05/2003	GROUNDWATER	77	82	29.38	34.38	E314.0	PERCHLORATE	
W213M3D	MW-213	12/05/2003	GROUNDWATER	77	82	29.38	34.38	E314.0	PERCHLORATE	
W265M2A	MW-265	12/01/2003	GROUNDWATER	225	235	97.6	107.6	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W284M1A	MW-284	12/02/2003	GROUNDWATER	115	125	90.55	100.55	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W284M2A	MW-284	12/02/2003	GROUNDWATER	45	55	21.2	31.2	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W284M2A	MW-284	12/02/2003	GROUNDWATER	45	55	21.2	31.2	E314.0	PERCHLORATE	
W286M2A	MW-286	12/02/2003	GROUNDWATER	205	215	81.42	91.42	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.
SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BELOW GROUND SURFACE
SED = SAMPLE COLLECTION END DEPTH IN FEET BELOW GROUND SURFACE
BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET
BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET
PDA/YES = Photo Diode Array, Detect Confirmed
PDA/NO = Photo Diode Array, Detect Not Confirmed
*** = Interference in sample**
+ = PDAs are not good matches