WEEKLY PROGRESS UPDATE FOR JANUARY 26 – JANUARY 30, 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 January 26 through January 30, 2004.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of January 30, 2004 is summarized in Table 1.

	Table 1. Drilling progress	s as of Janu	ary 30, 2004	
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
EW-274	Demo Area 1 (EW-D1-1)	203	113	109-199
IW-273	Demo Area 1 (IW-D1-3)	240	93	
MW-299	Northwest Corner (NWP-12)	252	155	
MW-300	J-2 Range (J2P-31)	340	237	135-145; 197-207; 293-303
MW-301	Northwest Corner (NWP-8ba)	248	149	97-107; 220-230
MW-302	J-2 Range (J2P-32)	339	234	
MW-303	J-1 Range (J1P-21)	324	212	
MW-305	J-2 Range (J2P-33)	338	235	
MW-306	J-1 Range (J1P-22)	304	180	
MW-307	J-2 Range (J2P-28)	191	84	
bgs = below bwt = below	ground surface water table			

Completed well installation at EW-274 (EW-D1-1) and MW-301 NWP-8ba); completed final well installation at MW-300 (J-2P-31); commenced well installation at IW-273 (IW-D1-3), MW-299 (NWP-12), and MW-303 (J1P-21); completed drilling of MW-306 (J1P-22); and continued drilling of MW-307 (J2P-28).

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-299, MW-306, and MW-307. Groundwater samples were collected from Bourne water supply and monitoring wells, well COOPCCB at the Bourne Correctional Control Building, and as part of the December round of the Draft 2003 Long-Term Groundwater Monitoring Program. Investigation-derived waste (IDW) samples were collected from the Granular Activated Carbon (GAC) treatment system. Soil samples were collected from the Bourne Landfill and from soil grids at Demo Area 1 and the J-1 Range.

The following are the notes from the January 29, 2004 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Hap Gosner (IAGWSPO) Ben Gregson (IAGWSPO) Dave Hill (IAGWSPO) Bill Gallagher (IAGWSPO) Paul Nixon (IAGWSPO) Karen Wilson (IAGWSPO) COL Bill FitzPatrick (E&RC) Meghan Cassidy (EPA) Jane Dolan (EPA) Len Pinaud (MADEP) Desiree Mover (EPA) Jim Murphy (EPA) Mark Panni (MADEP) Dave Williams (MDPH) Gina Kaso (ACE) Frank Fedele (ACE) Ed Wise (ACE) Katarzyna Chelkowska (ACE) Dave Margolis (ACE) Don Wood (ACE) Darrin Smith (ACE) Travis McCoun (AEC) Scott Michalak (ACE) Scott Belfit (AEC) Mark Begley (EMC) Kim Harriz (AMEC) Mike Goydas (Jacobs) Euan Reavie (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 from Barry Motta (UPRTS) to date.
- #2 Provide update on access agreement to install a monitoring well at Schooner Pass Condominium Association (IAGWSPO). Army Corps Real Estate is working on the access agreement. A letter is to be sent this week to the Condo Association attorney to begin the negotiation process. Meghan Cassidy (EPA) requested periodic updates be provided at Tech meetings until the agreement is approved.

Fieldwork Update

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

- As part of AMEC's investigation, well installation was completed at IW-271 (IW-D1-1), IW-272 (IW-D1-2), and EW-274 (EW-D1-1); continued at IW-273 (IW-D1-3) and MW-301 (NWP-11); and drilling was completed for MW-299 (NWP-12), at 251 ft bgs. Well development was completed at MW-295 (J3P-33) and continues for MW-298 (NWP-11).
- UXO clearance was completed at D2P-6 and continued at BP-6. Well pad construction was completed at NWP-12, CBP-3, D2P-5, and D2P-6.
- Groundwater sampling at Bourne, LTM and/or new wells (including MW-297 and MW-295) continues.
- Soil sampling at 42 grids along the Western Boundary was completed on 12/16/03.
- For the focused investigation of the Central Impact Area Targets 42 and 23, the UXO low order reconnaissance and the UXO transect detailed survey were completed. Soil sampling and lysimeter installation will resume when weather conditions improve. Information on the findings of the UXO clearance and survey are being compiled. Bill Gallagher (IAGWSPO) to let agencies know when this data will be available.
- Preliminary design and construction of the Demo 1 Frank Perkins RD ETR continued.
- The ITE study at the Demo 1 Pew Road location continues.
- As part of ECC's investigation, well installation of MW-300 (J2P-31) was completed and screen installation at MW-303 (J1P-21) commenced. Drilling of MW-302 (J2P-32), MW-305 (J2P-33), and MW-306 (J1P-22) was completed with screen installations scheduled for February. Drilling at MW-307 (J2P-28) continues from 130 ft bgs.
- UXO clearance was completed at J1P-27, J2P-21, J2P-23, and J2P-24. Well pad construction was completed at J2P-28.
- Groundwater samples were collected at MW-291 (LP-11).

- Removal of scrap from J-2 Range Disposal Area 2 continued.
- The J-2 Target Control Pit investigation was completed on 1/7/04.
- The EM-31 survey of the J-3 Range Pyrophoric Flare Site was completed on 1/26/04.
- The EM-31 survey of the J-1 Range Interberm area commenced on 1/26/04, but was suspended due to equipment issues. The survey is expected to resume by next Monday (2/2).
- J-1 Range soil sampling continued.
- Anomaly removal and clearance (including QC) at Demo 1 was completed up to the 120 ft above MSL contour. Soil excavation in grid D4 commenced this week; grid D5 is next. The soil will be screened for UXO in the screening area at Demo1. The screening equipment has been delivered to the site and will be set up for operation next week.
- The CDC crew arrived on site on 1/22. Detonation was conducted for 4 days last week. However the cold weather has caused operation problems with the filters. The crew demobbed on Friday, 1/23 and their return is weather dependent. 1083, 20MM projectiles were destroyed last week, leaving 3169 items to be destroyed, staged at the CDC bunker. Once the crew returns, there will still be 4 weeks remaining on the current contract with which to expend the entire inventory.
- Weather delays due to cold and snowy conditions have reduced productivity, primarily due to
 equipment malfunctions, frozen soil, and the need to limit worker exposure to extreme cold
 for extended periods of time. However, field work is progressing as efficiently as possible
 within these constraints.

ROA Status and Drilling Schedule

Darrin Smith (ACE) reviewed the ROA status and drilling schedule, distributing an ROA status table and drilling schedule.

- ECC drilling rigs are located at J2P-22 and J2P-28. The Cable-Tool rig is setting up on J1P-21 to complete well installation.
- Jane Dolan (EPA) indicated EPA approved of drilling locations J3P-10, J1P-23, J1P-24 and J1P-25 as proposed. Ms. Dolan also noted the IAGWSP agreed to profile for perchlorate at the location of MW-242 and requested that this location, along with J3P-10, be added to the drilling schedule. Ms. Dolan also noted that the ROA for LP-10 has not yet been approved, but the EPA approves of the current location of LP-10.
- Ms. Dolan also requested the IAGWSPO scope additional monitoring wells to be installed at the J-2 Range, sufficient to complete plume delineation.
- Meghan Cassidy (EPA) requested information on the time lag between drilling and obtaining validated profile results. Because drilling is being expedited over well screen installation, there is a considerable time lag between drilling of the well and the receipt of actual groundwater sampling data. In the past, revisions in the plume depictions have been based on validated groundwater data. However, because of the increased time lag in obtaining this data, this practice may need to be revised.

J-2 Range Groundwater Investigation

Dave Hill (IAGWSPO) and Mike Goydas (Jacobs) led a discussion on the plan to delineate the J-2 Range perchlorate plume. Three figures were distributed to the agencies showing various plume depictions based on the fate and transport model simulations.

 The best match for plume concentrations at previously profiled locations was for a plume configuration 21 years after the release to groundwater, with the release occurring over 14 years (controlled source) followed by 7 years without the addition of mass. Although these may not be the actual conditions that produced the plume, the modeled scenario best fit the currently known plume concentrations and configuration. These current conditions include

- very low concentrations of perchlorate in the source area relative to those a little further downgradient.
- Mike Goydas indicated the J-2 Range conceptual model has been refined and the fate and transport model adjusted as required. Based on the transport model, three new well locations are proposed: 1 and 2 (Jefferson Road) and 3 (Wood Road) as shown on the figures. The purpose of well locations 2 and 3 are to intercept the eastern shoulder of the plume, at approximately 1 ppb. The 1 well location is selected as having the highest likelihood of intercepting the core of the plume on Jefferson Road, near its furthest downgradient extent to date. The DEP concurred with the proposed well #1 location. The model predicts the perchlorate concentration will be 1-5 ppb at this location.
- Jane Dolan asked if a simulation had been run using a 40-year source term. Mr. Goydas
 indicated it had, but this assumption resulted in a prediction of higher concentrations of
 perchlorate at Wood Road, then in the source area. These conditions are not observed in
 the data.
- Ms. Dolan requested that the drill rig currently at J2P-22 be moved to begin drilling at the proposed 1 location on Jefferson Road. Ms. Dolan to provide feedback on the proposed characterization approach and review the 3 well locations as soon as possible.

Northwest Corner Update

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

- Drilling of MW-301 (NWP-8ba) was completed, wells are being installed this week. One
 water table well and one well screened at 121-131 ft bgs are being installed to monitor
 perchlorate detections, all around 0.5 ppb.
- Drilling completed at NWP-12, TD of 251 ft bgs. Screen setting call will be later today or tomorrow am.
- Feedback from the agencies is requested regarding using a cable-tool rig to set the
 monitoring wells once the boreholes are drilled and profiled using the Barber rig. This is
 being proposed in order to expedite drilling, but will result in lag time from when the borehole
 is drilled to when groundwater samples are collected. Dave Margolis (ACE) will forward more
 information on what the projected lag times are expected to be.
- The property owner of RSNW02 was sent a certified letter requesting permission to sample this residential well monthly.
- Quarterly sampling of well 4036011 at the Schooner Pass Condominiums has been scheduled for 2/18.
- In response to EPA's request, the IAGWSP has implemented monthly sampling of the 3 shallow wells on Canal View Road, which are located in the core of the perchlorate plume. An email explaining the rationale for only sampling the shallow wells was sent on Wednesday, 1/28. Desiree Moyer (EPA) indicated the EPA felt it was necessary to sample all the well screens at these locations. Ben Gregson (IAGWSPO) requested that EPA review the email that was forwarded before making a final decision.
- A CD of the raw data for the recent MW-270S explosives analysis and validation report was mailed to Todd Borci last week. Ms. Moyer to follow up to see if the CD was received.
- AMEC is working on developing a subregional model for the Northwest Corner.
- SVOC and dyes analytical data for the 3 soil sampling locations in the Northwest Corner was emailed earlier in the week.
- Gina Kaso (ACE) indicated, as mentioned previously, the Army Corps Real Estate group
 would be issuing a request this week for an ROE to the Schooner Pass property to install a
 monitoring well and will start the negotiation process with the Condominium Association
 attorney.
- Draft Northwest Corner Data Summary Reports were sent out to select individuals last Thursday (1/22) via Fedex. The balance of the copies to IART team members were mailed

on Monday, 1/26. An electronic version of the report will be made available on disc, but will be to large to email.

Three additional report copies will be distributed as requested by Desiree Moyer.

Documents and Schedules

Ed Wise (ACE) distributed the Scheduling Issues Table.

- The J-3 Range Supplemental Soil Work Plan MOR approval is on hold pending additional information to be forwarded by the IAGWSP.
- The date for the CRM for the Demo 1 Soil Treatment Plan is still TBD.
- Len Pinaud (MADEP) indicated DEP comments on the J-2 RRA Plan will be sent out today.
 Comments on the J-3 and Central Impact Area RRA Plans, the MSP3 J-2 Polygon Report and the HUTA1/II Reports will be sent next week.
- Jane Dolan and Desiree Moyer (EPA) indicated EPA comments on the Former A Range Additional Delineation Work Plan, the MSP3 J-2 Polygon Report and the Munitions Management Plan will also be sent out next week.

Miscellaneous

Bill Gallagher (IAGWSPO) indicated Leo Yuskus (Haley & Ward) and Ralph Marks (BWD)
requested that the meeting to discuss Western Boundary issues be held as an after meeting
at the next Tech meeting (2/12).

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:

Northwest Corner

- Groundwater samples from MW-277S, MW-278M2, MW-279S, and RSNW03 had detections of perchlorate. The results were similar to previous sampling rounds.
- Profile samples from MW-299 (NWP-12) had detections of various explosives. Of the
 explosive compounds, 2,4-DNT was detected and confirmed by PDA spectra in three
 intervals at 9, 19, and 29 feet below the water table. RDX was detected and confirmed by
 PDA spectra but with interference in one interval at 59 feet below the water table. Well

screens will be set at the depth (-1 to 9 ft bwt) of the water table and at the depth (53 to 63 ft bwt) corresponding to the RDX detection.

Western Boundary

 Groundwater samples from 02-05M1, M2 and duplicate, M3; 02-09M2; 97-2C; and MW-213M2 and M3 had detections of perchlorate. The results were similar to previous sampling rounds.

3. DELIVERABLES SUBMITTED

Weekly Progress Update for January 12 – January 16, 2004	01/26/2004
Weekly Progress Update for January 19 – January 23, 2004	01/30/2004

4. SCHEDULED ACTIONS

Scheduled actions for the week of February 2 include complete well installation at MW-299 (NWP-12) and MW-303 (J1P-21); complete well installation at IW-273 (IW-D1-3); complete drilling at MW-307 (J2P-28); and commence drilling at MW-308 (CBP-3), MW-309 (NWP-9), and MW-311 (D2P-5). Groundwater sampling of Bourne water supply and monitoring wells and as part of the December round of the Draft 2003 Long-Term Groundwater Monitoring Plan will continue.

5. SUMMARY OF ACTIVITES FOR DEMO AREA 1

The Army has proposed a containerized treatment system at Frank Perkins Road, similar to that previously proposed for Pew Road. The Frank Perkins Road treatment system will consist of ion exchange to treat perchlorate and granular activated carbon (GAC) to treat explosives compounds contained in the extracted groundwater.

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 is nearly compete but has been temporarily delayed due to weather conditions.

Excavation of contaminated soil within the Demo 1 depression began on January 28, 2004. Site preparation activities for the Thermal Treatment of excavated soils continues at the H Range just south of Demo Area 1.

SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
4036000-01G-A	4036000-01G	01/26/2004	GROUNDWATER	38	69.8	6	12
4036000-03G-A	4036000-03G	01/26/2004	GROUNDWATER	50	60	6	12
4036000-04G-A	4036000-04G	01/26/2004	GROUNDWATER	54.6	64.6	6	12
4036000-06G-A	4036000-06G	01/26/2004	GROUNDWATER	108	128	6	12
COOPCCB1-A	COOPCCB	01/26/2004	GROUNDWATER	0	0		
COOPCCB1-D	COOPCCB	01/26/2004	GROUNDWATER	0	0		
TW1-88B-A	1-88	01/27/2004	GROUNDWATER	105.5	105.5	69.6	69.6
W02-10M1A	02-10	01/27/2004	GROUNDWATER	135	145	94	104
W02-10M2A	02-10	01/27/2004	GROUNDWATER	110	120	68.61	78.61
W02-10M2D	02-10	01/27/2004	GROUNDWATER	110	120	68.61	78.61
W02-10M3A	02-10	01/27/2004	GROUNDWATER	85	95	43.65	53.65
W02-12M1A	02-12	01/26/2004	GROUNDWATER	109	119	58.35	68.35
W02-12M2A	02-12	01/26/2004	GROUNDWATER	94	104	43.21	53.21
W02-12M3A	02-12	01/26/2004	GROUNDWATER	79	89	28.22	38.22
W02-13M1A	02-13	01/26/2004	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	01/26/2004	GROUNDWATER	83	93	44.2	54.2
W02-13M2D	02-13	01/26/2004	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	01/26/2004	GROUNDWATER	68	78	28.3	38.3
W108DDA	MW-108	01/29/2004	GROUNDWATER	317	327	153	163
W108M1A	MW-108	01/29/2004	GROUNDWATER	297	307	133	143
W108M2A	MW-108	01/29/2004	GROUNDWATER	282	292	118	128
W108M3A	MW-108	01/29/2004	GROUNDWATER	262	272	98	108
W108M4A	MW-108	01/29/2004	GROUNDWATER	240	250	76	86
W108M4D	MW-108	01/29/2004	GROUNDWATER	240	250	76	86
W123M1A	MW-123	01/27/2004	GROUNDWATER	291	301	153	163
W135M2A	MW-135	01/26/2004	GROUNDWATER	280	290	94	104
W135M3A	MW-135	01/26/2004	GROUNDWATER	239	249	53	63
W135M3D	MW-135	01/26/2004	GROUNDWATER	239	249	53	63
W161SSA	MW-161	01/26/2004	GROUNDWATER	145.5	155.5	6	16
W161SSD	MW-161	01/26/2004	GROUNDWATER	145.5	155.5	6	16
W16DDA	MW-16	01/27/2004	GROUNDWATER	355	360	223	228
W16DDD	MW-16	01/27/2004	GROUNDWATER	355	360	223	228
W213M1A	MW-213	01/26/2004	GROUNDWATER	133	143	85.01	95.01
W213M2A	MW-213	01/26/2004	GROUNDWATER	89	99	41.15	51.15
W213M3A	MW-213	01/26/2004	GROUNDWATER	77	82	29.38	34.38

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
W220DDA	MW-220	01/30/2004	GROUNDWATER	299	309	171.83	181.83
W220M1A	MW-220	01/30/2004	GROUNDWATER	248	258	120.85	130.85
W220M1D	MW-220	01/30/2004	GROUNDWATER	248	258	120.85	130.85
W223DDA	MW-223	01/30/2004	GROUNDWATER	260	270	167.86	177.86
W223M1A	MW-223	01/30/2004	GROUNDWATER	211	221	118.79	128.79
W223M2A	MW-223	01/30/2004	GROUNDWATER	185	195	93.31	103.31
W231M1A	MW-231	01/30/2004	GROUNDWATER	210	220	104.15	114.15
W231M2A	MW-231	01/30/2004	GROUNDWATER	165	175	58.33	68.33
W41M1A	MW-41	01/27/2004	GROUNDWATER	235	245	108	118
W41M2A	MW-41	01/27/2004	GROUNDWATER	194	204	67	77
W41M3A	MW-41	01/27/2004	GROUNDWATER	124	134	0	10
W43M1A	MW-43	01/27/2004	GROUNDWATER	223	233	90	100
W43M2A	MW-43	01/27/2004	GROUNDWATER	200	210	67	77
W43M2D	MW-43	01/27/2004	GROUNDWATER	200	210	67	77
W84DDA	MW-84	01/29/2004	GROUNDWATER	190	200	153	163
W84M1A	MW-84	01/29/2004	GROUNDWATER	140	150	103	113
W84M2A	MW-84	01/29/2004	GROUNDWATER	104	114	67	77
W84M3A	MW-84	01/29/2004	GROUNDWATER	79	89	42	52
W84SSA	MW-84	01/29/2004	GROUNDWATER	54	64	17	27
W86M1A	MW-86	01/26/2004	GROUNDWATER	208	218	66	76
W86SSA	MW-86	01/26/2004	GROUNDWATER	143	153	1	11
W89M3A	MW-89	01/26/2004	GROUNDWATER	174	184	32	42
W89M3D	MW-89	01/26/2004	GROUNDWATER	174	184	32	42
W94M1A	MW-94	01/29/2004	GROUNDWATER	160	170	36	46
W94M2A	MW-94	01/29/2004	GROUNDWATER	140	150	16	26
W94SSA	MW-94	01/29/2004	GROUNDWATER	124	134	0	10
XXM971-A	97-1	01/29/2004	GROUNDWATER	83	93	62	72
XXM971-D	97-1	01/29/2004	GROUNDWATER	83	93	62	72
XXM972-A	97-2	01/29/2004	GROUNDWATER	75	85	53	63
XXM973-A	97-3	01/30/2004	GROUNDWATER	75	85	36	46
XXM975-A	97-5	01/29/2004	GROUNDWATER	84	94	76	86
DW012704B-NV	GAC WATER	01/27/2004	IDW	0	0		
DW012704-NV	GAC WATER	01/27/2004	IDW	0	0		
DW012904-NV	GAC WATER	01/29/2004	IDW	0	0		
G299DNA	MW-299	01/26/2004	PROFILE	235	235	138.5	138.5

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SAMPLE_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
G299DOA	MW-299	01/27/2004	PROFILE	245	245	148.5	148.5
MW-306-13	MW-306	01/27/2004	PROFILE	240	240	66	66
MW-306-14	MW-306	01/27/2004	PROFILE	250	250	76	76
MW-306-15	MW-306	01/27/2004	PROFILE	260	260	86	86
MW-306-16	MW-306	01/27/2004	PROFILE	270	270	96	96
MW-306-17	MW-306	01/27/2004	PROFILE	280	280	106	106
MW-306-17FD	MW-306	01/27/2004	PROFILE	280	280	106	106
MW-306-19	MW-306	01/27/2004	PROFILE	290	290	116	116
MW-306-20	MW-306	01/27/2004	PROFILE	300	300	126	126
MW-307-01	MW-307	01/28/2004	PROFILE	111	111	4	4
MW-307-02	MW-307	01/28/2004	PROFILE	131	131	14	14
MW-307-03	MW-307	01/29/2004	PROFILE	141	141	24	24
MW-307-03FD	MW-307	01/29/2004	PROFILE	141	141	24	24
MW-307-04	MW-307	01/29/2004	PROFILE	151	151	34	34
MW-307-05	MW-307	01/30/2004	PROFILE	161	161	44	44
MW-307-06	MW-307	01/30/2004	PROFILE	171	171	54	54
MW-307-07	MW-307	01/30/2004	PROFILE	181	181	64	64
05AG-01	SS15134-A	01/27/2004	SOIL GRID	0	0.25		
05AG-02	SS15134-A	01/27/2004	SOIL GRID	0.25	0.5		
05AG-03	SS15134-A	01/27/2004	SOIL GRID	0.5	1		
05AH-01	SS15135-A	01/28/2004	SOIL GRID	0	0.25		
05AH-01FD	SS15135-A	01/28/2004	SOIL GRID	0	0.25		
05AH-02	SS15135-A	01/28/2004	SOIL GRID	0.25	0.5		
05AH-03	SS15135-A	01/28/2004	SOIL GRID	0.5	1		
05AI-01	SS15136-A	01/28/2004	SOIL GRID	0	0.25		
05AI-02	SS15136-A	01/28/2004	SOIL GRID	0.25	0.5		
05AI-03	SS15136-A	01/28/2004	SOIL GRID	0.5	1		
05AI-03FD	SS15136-A	01/28/2004	SOIL GRID	0.5	1		
05AJ-01	SS15137-A	01/27/2004	SOIL GRID	0	0.25		
05AJ-02	SS15137-A	01/27/2004	SOIL GRID	0.25	0.5		
05AJ-03	SS15137-A	01/27/2004	SOIL GRID	0.5	1		
05CFA-01	SS15138-A	01/29/2004	SOIL GRID	0	0.25		
05CFA-02	SS15138-A	01/29/2004	SOIL GRID	0.25	0.5		
05CFA-03	SS15138-A	01/29/2004	SOIL GRID	0.5	1		
05CM-01	SS15139-A	01/30/2004	SOIL GRID	0	0.25		

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
05CM-02	SS15139-A	01/30/2004	SOIL GRID	0.25	0.5		
05CM-03	SS15139-A	01/30/2004	SOIL GRID	0.5	1		
05CN-01	SS15140-A	01/29/2004	SOIL GRID	0	0.25		
05CN-01FD	SS15140-A	01/29/2004	SOIL GRID	0	0.25		
05CN-02	SS15140-A	01/29/2004	SOIL GRID	0.25	0.5		
05CN-03	SS15140-A	01/29/2004	SOIL GRID	0.5	1		
05CO-01	SS15141-A	01/29/2004	SOIL GRID	0	0.25		
05CO-02	SS15141-A	01/29/2004	SOIL GRID	0.25	0.5		
05CO-02FD	SS15141-A	01/29/2004	SOIL GRID	0.25	0.5		
05CO-03	SS15141-A	01/29/2004	SOIL GRID	0.5	1		
05YA-01	SS15152-A	01/30/2004	SOIL GRID	0	0.25		
05YA-02	SS15152-A	01/30/2004	SOIL GRID	0.25	0.5		
05YA-03	SS15152-A	01/30/2004	SOIL GRID	0.5	1		
05YB-01	SS15153-A	01/30/2004	SOIL GRID	0	0.25		
05YB-02	SS15153-A	01/30/2004	SOIL GRID	0.25	0.5		
05YB-03	SS15153-A	01/30/2004	SOIL GRID	0.5	1		
D3-NE01	TBD	01/30/2004	SOIL GRID	0	0.25		
D4-NW01	TBD	01/30/2004	SOIL GRID	0	0.25		
E3-SE01	TBD	01/30/2004	SOIL GRID	0	0.25		
HC207E1AAA	207E	01/26/2004	SOIL GRID	0	0.5		
HC207E1AAD	207E	01/26/2004	SOIL GRID	0	0.5		
HC207F1AAA	207F	01/26/2004	SOIL GRID	0	0.5		
HC207G1AAA	207G	01/26/2004	SOIL GRID	0	0.5		
HC207H1AAA	207H	01/26/2004	SOIL GRID	0	0.5		
HC207I1AAA	2071	01/26/2004	SOIL GRID	0	0.5		
HC207J1AAA	207J	01/26/2004	SOIL GRID	0	0.5		
HC207K1AAA	207K	01/26/2004	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

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 01/02/04 - 1/31/04

SAMPLE_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA
97-2C-A	97-2	01/21/2004	GROUNDWATER	132	132	68	68	E314.0	PERCHLORATE	
RSNW03-A	RSNW03	01/22/2004	GROUNDWATER	0	0			E314.0	PERCHLORATE	
W02-05M1A	02-05	01/19/2004	GROUNDWATER	110	120	81.44	91.44	E314.0	PERCHLORATE	
W02-05M2A	02-05	01/19/2004	GROUNDWATER	92	102	63.41	73.41	E314.0	PERCHLORATE	
W02-05M2D	02-05	01/19/2004	GROUNDWATER	92	102	63.41	73.41	E314.0	PERCHLORATE	
W02-05M3A	02-05	01/19/2004	GROUNDWATER	70	80	41.37	51.37	E314.0	PERCHLORATE	
W02-09M2A	02-09	01/19/2004	GROUNDWATER	59	69	50.3	60.3	E314.0	PERCHLORATE	
W213M2A	MW-213	01/26/2004	GROUNDWATER	89	99	41.15	51.15	E314.0	PERCHLORATE	
W213M3A	MW-213	01/26/2004	GROUNDWATER	77	82	29.38	34.38	E314.0	PERCHLORATE	
W277SSA	MW-277	01/20/2004	GROUNDWATER	102	112	0	10	E314.0	PERCHLORATE	
W278M2A	MW-278	01/20/2004	GROUNDWATER	97	102	9.79	14.79	E314.0	PERCHLORATE	
W279SSA	MW-279	01/20/2004	GROUNDWATER	66	76	10	20	E314.0	PERCHLORATE	
G299DAA	MW-299	01/13/2004	PROFILE	105	105	8.5	8.5	8330N	2,4-DINITROTOLUENE	YES
G299DAA	MW-299	01/13/2004	PROFILE	105	105	8.5	8.5	8330N	PICRIC ACID	NO
G299DAA	MW-299	01/13/2004	PROFILE	105	105	8.5	8.5	8330N	2-NITROTOLUENE	NO
G299DAA	MW-299	01/13/2004	PROFILE	105	105	8.5	8.5	8330N	2,6-DINITROTOLUENE	NO
G299DAA	MW-299	01/13/2004	PROFILE	105	105	8.5	8.5	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G299DAA	MW-299	01/13/2004	PROFILE	105	105	8.5	8.5	8330N	1,3,5-TRINITROBENZENE	NO
G299DBA	MW-299	01/13/2004	PROFILE	115	115	18.5	18.5	8330N	2,4-DINITROTOLUENE	YES
G299DCA	MW-299	01/14/2004	PROFILE	125	125	28.5	28.5	8330N	2,4-DINITROTOLUENE	YES
G299DCD	MW-299	01/14/2004	PROFILE	125	125	28.5	28.5	8330N	2,4-DINITROTOLUENE	YES
G299DEA	MW-299	01/20/2004	PROFILE	145	145	48.5	48.5	8330N	PICRIC ACID	NO
G299DFA	MW-299	01/21/2004	PROFILE	155	155	58.5	58.5	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES*
G299DFA	MW-299	01/21/2004	PROFILE	155	155	58.5	58.5	8330N	PICRIC ACID	NO
G299DGA	MW-299	01/21/2004	PROFILE	165	165	68.5	68.5	8330N	NITROGLYCERIN	NO

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.

SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BELOW GROUND SURFACE

SED = SAMPLE COLLECTION END DEPTH IN FEET BELOW GROUND SURFACE

BWTS = DEPTH BELOW WATER TABLE, START DEPTH, MEASURED IN FEET

BWTE = DEPTH BELOW WATER TABLE, END DEPTH, MEASURED IN FEET

PDA/YES = Photo Diode Array, Detect Confirmed

PDA/NO = Photo Diode Array, Detect Not Confirmed

^{* =} Interference in sample

^{+ =} PDAs are not good matches