WEEKLY PROGRESS UPDATE
FOR JUNE 23 – JUNE 27, 2003

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019, 1-2000-0014, & BOURNE-BWSC 4-15031

MASSACHUSETTS MILITARY RESERVATION
TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from June 23 through June 27, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of June 27 is summarized in Table 1.

Table 1. Drilling progress as of June 27, 2003

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-278	Northwest Corner (NWP-2)	230	147	
MW-279	Northwest Corner (NWP-3)	224	155	
MW-276	Bourne Area (BP-3)	210	27	

bgs = below ground surface
bwt = below water table

Completed drilling of MW-278 (NWP-2) and MW-279 (NWP-3), and commenced redrilling of MW-276 (BP-3). Well development continued for newly installed wells.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-276 and MW-279. Groundwater samples were collected from Bourne water supply and monitoring wells, recently installed wells, residential wells, and as part of the April Long-Term Groundwater Monitoring Plan. Surface water samples were collected near a public beach, private beach, and the spit at Snake Pond.

The following are the notes from the June 26, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Hap Gonser (IAGWSPO)
Bill Gallagher (IAGWSPO)
Desiree Moyer (EPA)
Bob Lim (EPA)
Dave Williams (MDPH)
Heather Sullivan (ACE)
Darrin Smith (ACE)
Larry Pannell (Jacobs-phone)
Ben Gregson (IAGWSPO)
LTC Bill FitzPatrick (E&RC)
Todd Borci (EPA)
Len Pinaud (MADEP)
Gina Kaso (ACE)
Ed Wise (ACE)
Kim Harriz (AMEC)
Pam Richardson (IAGWSPO)
Meghan Cassidy (EPA-phone)
Jane Dolan (EPA)
Mark Panni (MADEP)
Frank Fedele (ACE)
Katarzyna Chelkowska (ACE)
Dick Skryness (ECC-phone)

Punchlist Items

#2 Determine ownership of Raccoon Lane (ACE). Homeowner's Association (consisting of the six surrounding property owners) owns both the road and cul-de-sac. Ray Cottengaim (ACE) is investigating the potential to drill in the drainage easement. Todd Borci (EPA) requested the Army Corps investigate the possibility of installing a well on Arnold Road cul-de-sac.

#4 Provide Comments on Corrective Action Report for J-2 Range gravel incident (EPA/MADEP). Jane Dolan (EPA) committed to providing comments by next Tech meeting.

ROA Status/Drilling Schedule

Heather Sullivan (ACE) provided an update on the ROA status and drilling schedule, distributing a 2-page ROA status table and 1-page drilling schedule.

- As EPA requested, unapproved wells have been added to the drilling schedule. CBP-6 still needs to be added. Not all of these locations have ROA submittals or approvals.
- The ROA for J3P-18 was submitted today. ROAs for J3P-32 and J3P-33 will be submitted shortly.
- ECC has contracted Maher for drilling.
- Jane Dolan (EPA) requested that the J-2 Range wells be prioritized ahead of the L Range wells. Ms. Dolan also had questions regarding LP-7, J2P-25, and wells to be installed in the vicinity of Polygons 14/15 and the twin berms. Ms. Sullivan explained that the meeting minutes for the last SE Ranges discussion were being revised in accordance with Ms. Dolan comments. In addition, the Guard/Army Corps expected to discuss additional well locations in today's scheduled J-2 Range Supplemental Groundwater Workplan CRM.
- Desiree Moyer (EPA) requested that NWP-7 be placed on the schedule and prioritized over NWP-6. Bill Gallagher (IAGWSPO) explained that the Guard thought that NWP-6 might be approved prior to NWP-7, because the access agreement with the Army Corps needs to be finalized before NWP-7 can be drilled.
- Meghan Cassidy (EPA) inquired about the Pew Road extraction well for Demo 1 Area. Ms. Sullivan indicated this well would be prioritized when verbal approval for installation of this well is received.

Fieldwork Update

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

- UXO clearance at J1P-19 is progressing slowly due to heavy frag and firing at KD Range this week.
- ECC finished grubbing of grids G6, G7, I8, I9, I10 and J11 at the J-3 Range Hillside site. Grubbing of F10 and G11 will be completed today. Grubbing to continue into next week.
- A walk-through of the J2P-18 drill site was conducted with Dr. Sue Goodfellow (E&RC) and Karen Wilson (IAGWSPO).
- A second BP-3 borehole was started 20 feet from the original borehole. The drill rig is on standby while several profile samples have been collected and are being analyzed to see if this rig is still having interference problems.
- NWP-4 (MW-277) is being developed.
- NWP-3 (NWP-279) is being drilled, close to TD this morning.
- NWP-2 (NWP-278) has TD'ed at 230 ft bgs, waiting for profile results.
- Three crews are conducting groundwater sampling in the Impact Area this week.
- Water levels in wells along the Cape Cod Canal are being measured to monitor the influence of tides on groundwater elevations near the canal.

Northwest Corner of Camp Edwards

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

- Water level at NWP-2 (MW-278) is 83 feet bgs; at NWP-3 (MW-279) is 69 ft bgs.
- Three figures were distributed depicting the cross section locations for the Northwest Corner and the particle backtracks for MW-270 (midpoints of each of the three screens). The shallow well screen backtrack terminates at NWP-3; the deep screen backtrack terminates at J-1 Range at the top of the mound. A draft copy of cross section A-A' was also provided. Unvalidated data for the MW-270 wells are provided on the cross section.
- Desiree Moyer (EPA) requested that the NWP-7 location be moved to the west, near the location of the ice shavings pile.
- Pressure transducers have been placed in MW-270 and two of the Bourne Bridge wells to monitor water level fluctuations. A synoptic water level round will be collected following installation of MW-278 and MW-279.
- RSNW03 was sampled yesterday. The IAGWSPO is attempting to schedule monthly monitoring for the other residential wells on the same schedule, tentatively to start July 9th. Only property owner of RSNW06 has responded to Mr. Gallagher's phone messages. Waiting on responses from property owners of RSNW01 and RSNW02.
- Two emails providing comments on the Project Note were received from EPA. Revision of the note is pending receipt of MADEP comments. Len Pinaud (MADEP) indicated that MADEP comments should be sent tomorrow, 6/27.
- To Meghan Cassidy's inquiry, Mr. Gallagher indicated that an email would be sent stating the chronology of contacts the IAGWSPO has had with the property owners of RSNW03. This email, to be forwarded today, documents information provided/exchanged in four phone calls and three letters.

Bourne Update

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

- There are no new sample results because of the backlog of perchlorate analyses due to the Teflon tape sealant introduced to profile samples by the new drill rig. This sealant caused both chromatographs at Ceimic to be unuseable. Samples have been diverted to a second laboratory. Profile samples have been prioritized for analysis but the weekly Bourne samples are also a priority.
- The IAGWSPO is evaluating alternative locations very close to the original locations for proposed wells CBP-6 and CBP-7. The alternative locations were shown on a figure of the upgradient area from the Monument Beach wellfield distributed at the meeting. The IAGWSPO was proposing to move CBP-6 into the D Range parking area and CBP-7 off the main road in toward a smaller road. EPA indicated that these alternative locations looked OK.
- The IAGWSPO would also like the EPA to reconsider the installation of BP-6, which is upgradient of a monitor well MW-216, where perchlorate was detected only in the shallow screen. The decision was made to wait on the profile results from BP-3 to make a decision on BP-6.
- EPA and MADEP indicated they would provide comment on the Bourne Response Plan MOR.
- Todd Borci asked if the equipment blanks from the "new drill rig" had been run for 8321 analysis. Heather Sullivan to check.
- Drilling of BWD's monitoring wells has been scheduled to start on 7/16.

Documents and Schedules

Heather Sullivan (ACE) reviewed document and schedule issues, distributing a one-page Document Status table.

- The Army/Guard's is working on submitting the Demo 1 RRA/IRA plan soon.
- Meghan Cassidy (EPA) noted EPA had received the revised Demo 1 Sampling Plan and partial comment responses, but the more substantive comments had not been addressed. Hap Gonser (IAGWSPO) indicated it was the Army/Guard's desire to move ahead with the collection of TCLP samples for waste characterization while the Army/Guard and agencies worked through the larger RCRA issues. The sampling information could be obtained and this information and resolution of the other RCRA issues could be presented in one package to the agencies. Ms. Cassidy indicated EPA would review the revisions/responses, however, this still might not resolve the pre-excavation sampling issues.
- EPA received the CIA Eco Risk MOR. At Len Pinuad's request, Ms. Sullivan to check if MADEP has already concurred with the MOR.
- Desiree Moyer (EPA) indicated the HUTAI/II RCL was expected 7/02.

Miscellaneous

- Len Pinaud (MADEP) indicated that IRP representatives have indicated the delay in the Snake Pond Posting is due to the IAGWSPO not having approved SE Ranges plume maps. Ben Gregson (IAGWSPO) stated the Army/Guard had suggested that the IRP use last year's plume maps on the posting and update the posting once the new plume maps, which are currently being revised in accordance with EPA's recent comments, are approved. All parties agreed to discuss and come to an agreement on appropriate plume shells for use in the posting in an after meeting.
- Demo 1 anomaly removal to be discussed in an after meeting.
- Desiree Moyer indicated that AFCEE was planning geophysical work in the CS-19 area and have proposed use of the Guard's staging area for OE Scrap. AFCEE indicated they had coordinated this proposed activity with Ralph Turner (ACE). Guard and Army Corps representatives at the Tech meeting indicated that this was the first they had heard of this proposal and would discuss further with AFCEE. Update on this issue to be presented at the 7/10 Tech meeting.

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. Explosive analyses for monitoring wells, and explosive and volatile organic compound (VOC) analyses for groundwater profile samples, are conducted in this timeframe, as well as any analyses pursuant to a special request. The rush data are not validated, but are provided as an indication of the most recent preliminary results. Table 3 summarizes only detects, and does not show samples with non-detects.

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

Table 3 includes detections from the following areas:

Bourne Area

- Groundwater samples from 02-03M1; 02-05M2; 02-09M2; 02-13M2; 97-2; 97-5; MW-213M2 and duplicate, M3; and MW-80M1 and duplicate, M2 had detections of perchlorate. The results were similar to the previous sampling rounds

Demo Area 1

- Groundwater samples from MW-211M2 had detections of perchlorate. The results were similar to the previous sampling rounds.

Northwest Corner

- Groundwater samples from RSNW03 and RSNW06 had detections of perchlorate. The results were similar to previous sampling rounds.

- Groundwater samples from MW-270S, M1 and duplicate, D had detections of perchlorate. This is the first sampling event at this well and the results were consistent with the profile results.

- Profile results from MW-278 (NWP-2) had detections of perchlorate and various explosives. Perchlorate was detected in two intervals between 17 and 27 feet below the water table. 2,4-DNT, 2,6-DNT, 2,4-DANT, TNT, and 1,3,5-trinitrobenzene were detected and confirmed by PDA spectra, but with interference, in various intervals between 17 and 137 feet below the water table. Well screens were set at the depth (-3 to 7 ft bwt) of the water table, at the depth (14 to 19 ft bwt) of the highest perchlorate detections, and at the depth (30 to 40 ft bwt) corresponding to the projected depth that the particle track from 4036011 would intersect the MW-278 borehole.

DELIVERABLES SUBMITTED

Weekly Progress Update for June 16 – June 20, 2003	06/26/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of June 30 include complete well installation at MW-278 (NWP-2) and MW-279 (NWP-3) and commence drilling of WS4P-3. Groundwater sampling at Bourne water supply and monitoring wells, recently installed wells, and as part of the April Long-Term Groundwater Monitoring Plan will continue.

4. SUMMARY OF ACTIVITIES FOR DEMO AREA 1

Pumping and treating groundwater near the toe of the Demo Area 1 plume and at Frank Perkins Road has been selected as an Interim Action to address the Demo Area 1 Groundwater Operable Unit. Efforts to resolve EPA and DEP comments on the Draft RRA/RAM Plan for the Groundwater Operable Unit are ongoing. Responses to EPA and MADEP comments on the Soil RRA/RAM Plan are being developed.

TABLE 2
SAMPLING PROGRESS
06/22/2003 - 06/28/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
G276DAE	FIELDQC	06/27/2003	FIELDQC	0	0		
G279DHE	FIELDQC	06/23/2003	FIELDQC	0	0		
G279DKE	FIELDQC	06/24/2003	FIELDQC	0	0		
TW1-88A-E	FIELDQC	06/24/2003	FIELDQC	0	0		
W239M1T	FIELDQC	06/23/2003	FIELDQC	0	0		
W268M1T	FIELDQC	06/26/2003	FIELDQC	0	0		
W276DAT	FIELDQC	06/27/2003	FIELDQC	0	0		
4036000-01G-A	4036000-01G	06/24/2003	GROUNDWATER	38	69.8	6	12
4036000-06G-A	4036000-06G	06/24/2003	GROUNDWATER	108	128	6	12
RSNW03-A	RSNW03	06/25/2003	GROUNDWATER				
TW00-2D-A	00-2D	06/25/2003	GROUNDWATER	71	77		
TW00-2S-A	00-2S	06/24/2003	GROUNDWATER	29	35	1.17	7.17
TW1-88A-A	1-88A	06/24/2003	GROUNDWATER	102.9	102.9	67.4	67.4
W02-10M1A	02-10	06/23/2003	GROUNDWATER	135	145	94	104
W02-10M2A	02-10	06/24/2003	GROUNDWATER	110	120	68.61	78.61
W02-10M2D	02-10	06/24/2003	GROUNDWATER	110	120	68.61	78.61
W02-10M3A	02-10	06/24/2003	GROUNDWATER	85	95	43.65	53.65
W02-13M1A	02-13	06/24/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M1D	02-13	06/24/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	06/24/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	06/24/2003	GROUNDWATER	68	78	28.3	38.3
W153M1A	MW-153	06/24/2003	GROUNDWATER	199	209	108	118
W153M1A-QA	MW-153	06/24/2003	GROUNDWATER	199	209	108	118
W155M1A	MW-155	06/25/2003	GROUNDWATER	124	134	99	109
W155M1A-QA	MW-155	06/25/2003	GROUNDWATER	124	134	99	109
W185M1A	MW-185	06/26/2003	GROUNDWATER	247	257	110.9	120.9
W185M2A	MW-185	06/26/2003	GROUNDWATER	156	166	19.5	29.5
W18M1A	MW-18	06/26/2003	GROUNDWATER	171	176	128	133
W190M1A	MW-190	06/26/2003	GROUNDWATER	145	155	44.32	54.32
W190M2A	MW-190	06/26/2003	GROUNDWATER	110	120	9.3	19.3
W190M2D	MW-190	06/26/2003	GROUNDWATER	110	120	9.3	19.3
W191M1A	MW-191	06/26/2003	GROUNDWATER	137	142	25.2	30.2
W191M1A-QA	MW-191	06/26/2003	GROUNDWATER	137	142	25.2	30.2
W191M2A	MW-191	06/26/2003	GROUNDWATER	120	130	8.4	18.4

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
Other Sample Types methods are variable
SBD = Sample Begin Depth, measured in feet bgs
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SAMPLING PROGRESS
06/22/2003 - 06/28/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W191M2A-QA	MW-191	06/26/2003	GROUNDWATER	120	130	8.4	18.4
W191SSA	MW-191	06/26/2003	GROUNDWATER	106	116	0	10
W202M1A	MW-202	06/25/2003	GROUNDWATER	264	274	117.7	127.7
W204M1A	MW-204	06/26/2003	GROUNDWATER	141	151	81	91
W204M1A-QA	MW-204	06/26/2003	GROUNDWATER	141	151	81	91
W204M2A	MW-204	06/26/2003	GROUNDWATER	76	86	17.2	27.2
W204M2A-QA	MW-204	06/26/2003	GROUNDWATER	76	86	17.2	27.2
W223M1A	MW-223	06/25/2003	GROUNDWATER	211	221	118.79	128.79
W235DDA	MW-235	06/27/2003	GROUNDWATER	320	330	191.6	201.6
W235M1A	MW-235	06/27/2003	GROUNDWATER	154	164	25.3	35.3
W235SSA	MW-235	06/27/2003	GROUNDWATER	127	137	0	10
W238M1A	MW-238	06/25/2003	GROUNDWATER	183	193	85.46	95.46
W238M2A	MW-238	06/25/2003	GROUNDWATER	125	135	27.55	37.55
W239M1A	MW-239	06/23/2003	GROUNDWATER	180	190	159.8	169.8
W239M2A	MW-239	06/23/2003	GROUNDWATER	150	160	129.85	139.85
W239M3A	MW-239	06/23/2003	GROUNDWATER	60	70	39.85	49.85
W242M1A	MW-242	06/23/2003	GROUNDWATER	235	245	141.68	151.68
W242M2A	MW-242	06/23/2003	GROUNDWATER	165	175	71.75	81.75
W247M1A	MW-247	06/23/2003	GROUNDWATER	180	190	157.72	167.72
W247M2A	MW-247	06/23/2003	GROUNDWATER	125	135	102.78	112.78
W247M3A	MW-247	06/23/2003	GROUNDWATER	95	105	72.8	82.8
W248M1A	MW-248	06/26/2003	GROUNDWATER	218	228	106.34	116.34
W248M2A	MW-248	06/25/2003	GROUNDWATER	178	188	66.5	76.5
W248M3A	MW-248	06/25/2003	GROUNDWATER	143	153	31.5	41.5
W250M1A	MW-250	06/23/2003	GROUNDWATER	185	195	174.65	184.65
W250M2A	MW-250	06/23/2003	GROUNDWATER	145	155	134.82	144.82
W250M3A	MW-250	06/23/2003	GROUNDWATER	95	105	84.85	94.85
W250M3D	MW-250	06/23/2003	GROUNDWATER	95	105	84.85	94.85
W267M1A	MW-267	06/25/2003	GROUNDWATER	248	258		
W268M1A	MW-268	06/25/2003	GROUNDWATER	97	107		
W269M1A	MW-269	06/25/2003	GROUNDWATER	207	217		
W269M1D	MW-269	06/25/2003	GROUNDWATER	207	217		
W269M2A	MW-269	06/25/2003	GROUNDWATER	186	196		
W81DDA	MW-81	06/27/2003	GROUNDWATER	184	194	156	166

Profiling methods include: Volatiles and Explosives
Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry
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SAMPLING PROGRESS
06/22/2003 - 06/28/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W81M1A	MW-81	06/27/2003	GROUNDWATER	128	138	100	110
W81M3A	MW-81	06/27/2003	GROUNDWATER	53	58	25	30
W82DDA	MW-82	06/24/2003	GROUNDWATER	125	135	97	107
W82M1A	MW-82	06/23/2003	GROUNDWATER	104	114	76	86
W82M2A	MW-82	06/23/2003	GROUNDWATER	78	88	50	60
W82M3A	MW-82	06/24/2003	GROUNDWATER	54	64	26	36
W82SSA	MW-82	06/23/2003	GROUNDWATER	25	35	0	10
XXM971-A	97-1	06/24/2003	GROUNDWATER	83	93	62	72
XXM972-A	97-2	06/24/2003	GROUNDWATER	75	85	53	63
G276DAA	MW-276b	06/27/2003	PROFILE	190	190	6.65	6.65
G276DBA	MW-276b	06/27/2003	PROFILE	200	200	16.65	16.65
G276DCA	MW-276b	06/27/2003	PROFILE	210	210	26.65	26.65
G279DFA	MW-279	06/23/2003	PROFILE	150	150	80.95	80.95
G279DFA-QA	MW-279	06/23/2003	PROFILE	150	150	80.95	80.95
G279DGA	MW-279	06/23/2003	PROFILE	160	160	90.95	90.95
G279DGA-QA	MW-279	06/23/2003	PROFILE	160	160	90.95	90.95
G279DHA	MW-279	06/23/2003	PROFILE	170	170	100.95	100.95
G279DHA-QA	MW-279	06/23/2003	PROFILE	170	170	100.95	100.95
G279DIA	MW-279	06/23/2003	PROFILE	180	180	110.95	110.95
G279DIA-QA	MW-279	06/23/2003	PROFILE	180	180	110.95	110.95
G279DJA	MW-279	06/23/2003	PROFILE	190	190	120.95	120.95
G279DJA-QA	MW-279	06/23/2003	PROFILE	190	190	120.95	120.95
G279DKA	MW-279	06/24/2003	PROFILE	200	200	130.95	130.95
G279DKA-QA	MW-279	06/24/2003	PROFILE	200	200	130.95	130.95
G279DLA	MW-279	06/24/2003	PROFILE	210	210	140.95	140.95
G279DLA-QA	MW-279	06/24/2003	PROFILE	210	210	140.95	140.95
G279DMA	MW-279	06/27/2003	PROFILE	220	220	150.95	150.95
G279DNA	MW-279	06/27/2003	PROFILE	224	224	154.95	154.95
LKSNK0005AAA	LKSNK0005	06/24/2003	SURFACE WATER				
LKSNK0006AAA	LKSNK0006	06/24/2003	SURFACE WATER				
LKSNK0007AAA	LKSNK0007	06/24/2003	SURFACE WATER				
LKSNK0007AAD	LKSNK0007	06/24/2003	SURFACE WATER				

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TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 05/30/03 - 06/28/03

OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
RSNW03-A	RSNW03	06/25/2003	GROUNDWATER					E314.0	PERCHLORATE	
RSNW06	RSNW06	06/10/2003	GROUNDWATER					E314.0	PERCHLORATE	
W02-03M1A	02-03	06/19/2003	GROUNDWATER	130	140	86.1	96.1	E314.0	PERCHLORATE	
W02-05M2A	02-05	06/20/2003	GROUNDWATER	92	102	63.41	73.41	E314.0	PERCHLORATE	
W02-09M2A	02-09	06/17/2003	GROUNDWATER	59	69	50.3	60.3	E314.0	PERCHLORATE	
W02-13M2A	02-13	06/17/2003	GROUNDWATER	83	93	44.2	54.2	E314.0	PERCHLORATE	
W211M2A1	MW-211	06/20/2003	GROUNDWATER	175	185	29.7	39.7	E314.0	PERCHLORATE	
W211M2A2	MW-211	06/20/2003	GROUNDWATER	175	185	29.7	39.7	E314.0	PERCHLORATE	
W213M2A	MW-213	06/19/2003	GROUNDWATER	89	99	41.15	51.15	E314.0	PERCHLORATE	
W213M2D	MW-213	06/19/2003	GROUNDWATER	89	99	41.15	51.15	E314.0	PERCHLORATE	
W213M3A	MW-213	06/19/2003	GROUNDWATER	77	82	29.38	34.38	E314.0	PERCHLORATE	
W270DDA	MW-270	06/16/2003	GROUNDWATER	132	137	108.96	113.96	E314.0	PERCHLORATE	
W270M1A	MW-270	06/16/2003	GROUNDWATER	132	137	50.89	55.89	E314.0	PERCHLORATE	
W270M1D	MW-270	06/16/2003	GROUNDWATER	74	79	50.89	55.89	E314.0	PERCHLORATE	
W270SSA	MW-270	06/16/2003	GROUNDWATER	22	32	0	10	E314.0	PERCHLORATE	
W80M1A	MW-80	06/10/2003	GROUNDWATER	130	140	86	96	E314.0	PERCHLORATE	
W80M1D	MW-80	06/10/2003	GROUNDWATER	130	140	86	96	E314.0	PERCHLORATE	
W80M2A	MW-80	06/11/2003	GROUNDWATER	100	110	56	66	E314.0	PERCHLORATE	
XXM972-A	97-2	06/24/2003	GROUNDWATER	75	85	53	63	E314.0	PERCHLORATE	
XXM975-A	97-5	06/20/2003	GROUNDWATER	84	94	76	86	E314.0	PERCHLORATE	
G278DAA	MW-278	06/18/2003	PROFILE	100	100	16.73	16.73	8330N	NITROGLYCERIN	No
G278DAA	MW-278	06/18/2003	PROFILE	100	100	16.73	16.73	8330N	2,4,6-TRINITROTOLUENE	YES*

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OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G278DAA	MW-278	06/18/2003	PROFILE	100	100	16.73	16.73	E314.0	PERCHLORATE	
G278DAA	MW-278	06/18/2003	PROFILE	100	100	16.73	16.73	8330N	2,4-DINITROTOLUENE	YES*
G278DAA	MW-278	06/18/2003	PROFILE	100	100	16.73	16.73	8330N	1,3-DINITROBENZENE	No
G278DAA	MW-278	06/18/2003	PROFILE	100	100	16.73	16.73	8330N	2,6-DINITROTOLUENE	YES*
G278DAA	MW-278	06/18/2003	PROFILE	100	100	16.73	16.73	8330N	PENTAERYTHRITOL TETRANITRATE	No
G278DAA	MW-278	06/18/2003	PROFILE	100	100	16.73	16.73	8330N	2,4-DIAMINO-6-NITROTOLUENE	No
G278DAA	MW-278	06/18/2003	PROFILE	100	100	16.73	16.73	8330N	PICRIC ACID	No
G278DBA	MW-278	06/18/2003	PROFILE	110	110	26.73	26.73	8330N	2,4,6-TRINITROTOLUENE	YES*
G278DBA	MW-278	06/18/2003	PROFILE	110	110	26.73	26.73	8330N	1,3-DINITROBENZENE	No
G278DBA	MW-278	06/18/2003	PROFILE	110	110	26.73	26.73	8330N	2,4-DINITROTOLUENE	YES*
G278DBA	MW-278	06/18/2003	PROFILE	110	110	26.73	26.73	8330N	PICRIC ACID	No
G278DBA	MW-278	06/18/2003	PROFILE	110	110	26.73	26.73	8330N	PENTAERYTHRITOL TETRANITRATE	No
G278DBA	MW-278	06/18/2003	PROFILE	110	110	26.73	26.73	8330N	NITROGLYCERIN	No
G278DBA	MW-278	06/18/2003	PROFILE	110	110	26.73	26.73	E314.0	PERCHLORATE	
G278DBA	MW-278	06/18/2003	PROFILE	110	110	26.73	26.73	8330N	2,6-DINITROTOLUENE	YES*
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO*
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	2-NITROTOLUENE	NO
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	4-NITROTOLUENE	NO
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	3-NITROTOLUENE	NO*
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	PICRIC ACID	NO
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	2,6-DINITROTOLUENE	NO
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	PENTAERYTHRITOL TETRANITRATE	NO*

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OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	NITROGLYCERIN	NO*
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	1,3-DINITROBENZENE	NO
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	2,4,6-TRINITROTOLUENE	NO*
G278DCA	MW-278	06/18/2003	PROFILE	120	120	36.73	36.73	8330N	1,3,5-TRINITROBENZENE	YES*
G278DDA	MW-278	06/18/2003	PROFILE	130	130	46.73	46.73	8330N	4-NITROTOLUENE	NO
G278DDA	MW-278	06/18/2003	PROFILE	130	130	46.73	46.73	8330N	2,6-DINITROTOLUENE	NO
G278DDA	MW-278	06/18/2003	PROFILE	130	130	46.73	46.73	8330N	NITROGLYCERIN	NO
G278DDA	MW-278	06/18/2003	PROFILE	130	130	46.73	46.73	8330N	PICRIC ACID	NO
G278DEA	MW-278	06/18/2003	PROFILE	140	140	56.73	56.73	8330N	2-NITROTOLUENE	NO
G278DEA	MW-278	06/18/2003	PROFILE	140	140	56.73	56.73	8330N	2,4,6-TRINITROTOLUENE	NO*
G278DEA	MW-278	06/18/2003	PROFILE	140	140	56.73	56.73	8330N	2,6-DINITROTOLUENE	NO
G278DEA	MW-278	06/18/2003	PROFILE	140	140	56.73	56.73	8330N	PICRIC ACID	NO
G278DEA	MW-278	06/18/2003	PROFILE	140	140	56.73	56.73	8330N	4-NITROTOLUENE	NO
G278DEA	MW-278	06/18/2003	PROFILE	140	140	56.73	56.73	8330N	NITROGLYCERIN	NO*
G278DEA	MW-278	06/18/2003	PROFILE	140	140	56.73	56.73	8330N	3-NITROTOLUENE	NO*
G278DFA	MW-278	06/18/2003	PROFILE	150	150	66.73	66.73	8330N	4-NITROTOLUENE	NO
G278DFA	MW-278	06/18/2003	PROFILE	150	150	66.73	66.73	8330N	2-NITROTOLUENE	NO
G278DFA	MW-278	06/18/2003	PROFILE	150	150	66.73	66.73	8330N	PICRIC ACID	NO
G278DFA	MW-278	06/18/2003	PROFILE	150	150	66.73	66.73	8330N	2,6-DINITROTOLUENE	NO
G278DFA	MW-278	06/18/2003	PROFILE	150	150	66.73	66.73	8330N	2,4,6-TRINITROTOLUENE	NO*
G278DFA	MW-278	06/18/2003	PROFILE	150	150	66.73	66.73	8330N	NITROGLYCERIN	NO
G278DFD	MW-278	06/19/2003	PROFILE	150	150	66.73	66.73	8330N	3-NITROTOLUENE	NO

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OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G278DFD	MW-278	06/19/2003	PROFILE	150	150	66.73	66.73	8330N	NITROGLYCERIN	NO
G278DFD	MW-278	06/19/2003	PROFILE	150	150	66.73	66.73	8330N	2-NITROTOLUENE	NO
G278DFD	MW-278	06/19/2003	PROFILE	150	150	66.73	66.73	8330N	PICRIC ACID	NO
G278DFD	MW-278	06/19/2003	PROFILE	150	150	66.73	66.73	8330N	2,6-DINITROTOLUENE	NO
G278DGA	MW-278	06/19/2003	PROFILE	160	160	76.73	76.73	8330N	PICRIC ACID	NO
G278DGA	MW-278	06/19/2003	PROFILE	160	160	76.73	76.73	8330N	2,6-DINITROTOLUENE	NO
G278DGA	MW-278	06/19/2003	PROFILE	160	160	76.73	76.73	8330N	NITROGLYCERIN	NO
G278DHA	MW-278	06/19/2003	PROFILE	170	170	86.73	86.73	8330N	2,4-DIAMINO-6-NITROTOLUENE	YES*
G278DHA	MW-278	06/19/2003	PROFILE	170	170	86.73	86.73	8330N	2,6-DINITROTOLUENE	NO
G278DHA	MW-278	06/19/2003	PROFILE	170	170	86.73	86.73	8330N	1,3-DINITROBENZENE	NO
G278DHA	MW-278	06/19/2003	PROFILE	170	170	86.73	86.73	8330N	PICRIC ACID	NO
G278DHA	MW-278	06/19/2003	PROFILE	170	170	86.73	86.73	8330N	2-NITROTOLUENE	NO
G278DHA	MW-278	06/19/2003	PROFILE	170	170	86.73	86.73	8330N	4-NITROTOLUENE	NO
G278DHA	MW-278	06/19/2003	PROFILE	170	170	86.73	86.73	8330N	2,4,6-TRINITROTOLUENE	NO*
G278DHA	MW-278	06/19/2003	PROFILE	170	170	86.73	86.73	8330N	NITROGLYCERIN	NO*
G278DHA	MW-278	06/19/2003	PROFILE	170	170	86.73	86.73	8330N	3-NITROTOLUENE	NO*
G278DIA	MW-278	06/19/2003	PROFILE	180	180	96.73	96.73	8330N	4-NITROTOLUENE	NO
G278DIA	MW-278	06/19/2003	PROFILE	180	180	96.73	96.73	8330N	NITROGLYCERIN	NO
G278DIA	MW-278	06/19/2003	PROFILE	180	180	96.73	96.73	8330N	3-NITROTOLUENE	NO
G278DIA	MW-278	06/19/2003	PROFILE	180	180	96.73	96.73	8330N	2-NITROTOLUENE	NO
G278DIA	MW-278	06/19/2003	PROFILE	180	180	96.73	96.73	8330N	2,4,6-TRINITROTOLUENE	YES*
G278DIA	MW-278	06/19/2003	PROFILE	180	180	96.73	96.73	8330N	PICRIC ACID	NO

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G278DIA	MW-278	06/19/2003	PROFILE	180	180	96.73	96.73	8330N	2,6-DINITROTOLUENE	NO
G278DJA	MW-278	06/19/2003	PROFILE	190	190	106.73	106.73	8330N	PICRIC ACID	NO
G278DJA	MW-278	06/19/2003	PROFILE	190	190	106.73	106.73	8330N	2,6-DINITROTOLUENE	NO
G278DJA	MW-278	06/19/2003	PROFILE	190	190	106.73	106.73	8330N	NITROGLYCERIN	NO
G278DKA	MW-278	06/19/2003	PROFILE	200	200	116.73	116.73	8330N	2-NITROTOLUENE	NO
G278DKA	MW-278	06/19/2003	PROFILE	200	200	116.73	116.73	8330N	2,4,6-TRINITROTOLUENE	YES*
G278DKA	MW-278	06/19/2003	PROFILE	200	200	116.73	116.73	8330N	3-NITROTOLUENE	NO
G278DKA	MW-278	06/19/2003	PROFILE	200	200	116.73	116.73	8330N	4-NITROTOLUENE	NO
G278DKA	MW-278	06/19/2003	PROFILE	200	200	116.73	116.73	8330N	2,6-DINITROTOLUENE	NO
G278DKA	MW-278	06/19/2003	PROFILE	200	200	116.73	116.73	8330N	NITROGLYCERIN	NO
G278DKA	MW-278	06/19/2003	PROFILE	200	200	116.73	116.73	8330N	PICRIC ACID	NO
G278DLA	MW-278	06/19/2003	PROFILE	210	210	126.73	126.73	8330N	2,6-DINITROTOLUENE	NO
G278DLA	MW-278	06/19/2003	PROFILE	210	210	126.73	126.73	8330N	NITROGLYCERIN	NO
G278DLA	MW-278	06/19/2003	PROFILE	210	210	126.73	126.73	8330N	PICRIC ACID	NO
G278DMA	MW-278	06/20/2003	PROFILE	220	220	136.73	136.73	8330N	2,4,6-TRINITROTOLUENE	YES*
G278DMA	MW-278	06/20/2003	PROFILE	220	220	136.73	136.73	8330N	2,6-DINITROTOLUENE	NO
G278DMA	MW-278	06/20/2003	PROFILE	220	220	136.73	136.73	8330N	NITROGLYCERIN	NO
G278DMA	MW-278	06/20/2003	PROFILE	220	220	136.73	136.73	8330N	PICRIC ACID	NO
G278DNA	MW-278	06/20/2003	PROFILE	230	230	146.73	146.73	8330N	2,6-DINITROTOLUENE	NO
G278DNA	MW-278	06/20/2003	PROFILE	230	230	146.73	146.73	8330N	NITROGLYCERIN	NO
G278DNA	MW-278	06/20/2003	PROFILE	230	230	146.73	146.73	8330N	PICRIC ACID	NO

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