WEEKLY PROGRESS UPDATE
FOR MARCH 24 – MARCH 28, 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 March 24 through March 28, 2003.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of March 28 is summarized in Table 1.

Table 1. Drilling progress as of March 28, 2003

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-100	Central Impact Area (CIAP-30)	10		
MW-263	J-2 Range (J2P-17)	354	244	115-125; 190-200
MW-264	J-3 Range (J3P-35)	233	199	136-146; 192-202
MW-265	J-1 Range (J1P-16)	315	186	
MW-266	Central Impact Area (CIAP-27)	10		

bgs = below ground surface
bwt = below water table

Completed well installation of MW-263 (J2P-17) and MW-264 (J3P-35), completed drilling of MW-265 (J1P-16), and commenced drilling of MW-100 (CIAP-30) and MW-266 (CIAP-27). 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-265. Groundwater samples were collected from Bourne water supply and monitoring wells, and as part of the April Long-Term Groundwater Monitoring Plan. Water samples were collected from the GAC treatment system. Soil samples were collected from Demo Area 2 and Gun Position 15.

The following are the notes from the March 27, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

Participants

Ben Gregson (IAGWSPO)
LTC Bill FitzPatrick (E&RC)
Desiree Moyer (EPA)
Mark Panni (MADEP)
Nick Iaiennaro (ACE)
Kim Harriz (AMEC)
Dave Hill (IAGWSPO)
Todd Borci (EPA)
Jane Dolan (EPA)
Dave Williams (MDPH)
Heather Sullivan (ACE)
Larry Panell (Jacobs)
Bill Gallagher (IAGWSPO)
Meghan Cassidy (EPA)
Len Pinaud (MADEP)
Gina Kaso (ACE)
Marc Grant (AMEC-phone)

Punchlist Items

#2 Provide email comments on the MW-219 Corrective Action Report (EPA). Email received.

#3 Renew ROE with property owner for PZ211 (Corps). PZ211 will be sampled as soon as possible, since verbal permission was provided by the property owner. The Corps is setting up a site visit next week for the contractor to inspect debris around the well. The Corps continues to pursue the written access agreement.

#6 Provide info on M804A1 LITR rounds and update to perchlorate munition table (Corps). Nick Iaiennaro (ACE) provided information from the MIDAS database and table update regarding the M804A1 LITR rounds. Although these rounds were reportedly used at MMR, Range Control records do not distinguish their use from the M804 LITR rounds that contain much less perchlorate. The M804A1 rounds do have several physical features that distinguish them from the M804 rounds, and Mr. Iaiennaro noted that he has never seen an M804A1 round at the base.

#7 Provide figure with private well from the Schooner Pass WWTP application (Corps). Figure from the WWTP application was distributed along with an aerial photo at the same scale. A red outlined box on the aerial photo marks the possible location of the private well.

#8 Provide sampling date for MW-241, MW-242, MW-236, MW-238 (Corps).
MW-236, sampled 3/20; explosives results shortly; 28 day TAT for perchlorate results.
MW-238, sampled 3/3; results are non detect for both explosives and perchlorate.
MW-241, sampled 3/6; explosives results shortly; perchlorate results in a couple weeks.
MW-242, sampled 3/7; explosives results shortly; perchlorate results in a couple weeks.

#9 Provide sampling date and result from 4036011 (Corps). Well was sampled on 2/27. Explosives and perchlorate were non detect. RDX was detected below the reporting limit at 0.21 ug/L (unvalidated).

#10 Provide information on Rifle Grenades found at Ox Pond (Corps). Nick Iaiennaro (ACE) distributed technical data and energetics data from the MIDAS database on the three types of rifle grenades found at Ox Pond: M22 Smoke Grenades, M23 Illuminating Grenades, and M23A1 Smoke Grenades. The M23A1 Smoke Grenades contain a minute amount of perchlorate in the ignition composition.

MSP3 and Southeast Ranges Update

Heather Sullivan (ACE) provided an update on the MSP3 task and SE Ranges fieldwork.
Ox Pond – Intrusive investigation was completed. Items were primarily shallow and consisted of scrap. One expended rifle grenade was uncovered. A walk through of the area is scheduled for Friday 3/28.
Gun&Mortar – All intrusive investigations completed. A draft table with findings was distributed.
Former Demo sites (Inactive Demo sites) – Intrusive investigation has been completed. No significant findings. Draft table of findings distributed.
ASP – All geophysical work completed. Area south of B could not be surveyed due to difficult terrain. Currently compiling data for the area north of Area E and the Witness #9 Area.
J-3 Range Hillside/Barrage Rocket Sites – Schonstedt survey of the Hillside site is 25% complete.

- Todd Borci requested sampling dates and due dates for analytical results for soil samples collected at burn pits at the gun positions, including GP-15.

Northwest Corner of Camp Edwards

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

- The IAGWSPO has identified four Port of Call property owners that possibly have (had) a well located on their property as shown on a map found in the Schooner Pass WWTP application (see Punchlist item #7). Tina Dolen (IAGWSPO) is drafting a letter to the property owners inquiring about the potential well. The EPA suggested that the IAGWSPO

contact each property owner personally, rather than by a letter. The approach to contacting the property owners to be discussed further after the Tech meeting.

- The USGS forwarded a location map and driller's log of wells located at the southeast corner of the Bourne Bridge, which was distributed to the agencies. Mr. Gallagher completed a reconnaissance of the wells yesterday, 3/26. The wells appeared to be in good condition and viable for sampling. Ben Gregson (IAGWSPO) pointed out that these wells fall near a forward particle track from well 95-6B, which had a low level perchlorate detection in one sampling round. The IAGWSPO proposes to sample these wells.
- Location and construction information on the 95-15 wells was obtained from Rose Forbes.
- The ROA process was initiated with AMEC locating the four proposed drilling locations in the field. There were minor adjustments to the locations to accommodate the drilling equipment. A figure was distributed to the agencies that showed the adjusted locations. NWP-1 would be placed near the southeast corner of the lower parking lot on the Corps property, rather than at the northeast corner where it was shown on the figure to get some separation from well 4036009DC. The agencies approved of the locations as shown on the figure, with the slight adjustment of the NWP-1 location as specified by Mr. Gallagher. Corps to move ahead with the ROA process
- Ray Cottengaim (ACE) requested the Army compose a letter to the Corps requesting access to drill NWP-1 on Corps property. Ben Gregson drafted this letter and it is expected to be faxed out today.
- Jane Dolan (EPA) requested the Corps identify the source of water for restroom facilities provided at a park near the Bourne Bridge.
- Ms. Dolan also identified a potential Irrigation Well used for the fields used by the Waldorf School. Ms. Dolan is waiting for the school's business manager to return her phone call and will provide information to the IAGWSPO when it is received.

Drilling and ROA Status

- Heather Sullivan (ACE) reviewed the status of wells being drilled and those proposed to be drilled. A one-page drilling schedule and 2-page ROA status table were distributed.
- Drill Rig #2 – completed J3P-35 and is offsite for repairs. This drill rig is next scheduled to drill at CIAP-27
- Drill Rig #3 is setting screens at J2P-17. Drill Rig #4 continues drilling at J1P-16. One of these drill rigs when finished at the current location may be moved to begin drilling for the Pew Road Extraction System.
- ROAs for proposed wells CIAP-29 and CIAP-30 were submitted to Karen Wilson (IAGWSPO) and Dr. Sue Goodfellow (E&RC) and approved without submission to Natural Heritage or SHPO.
- Currently, there are no ROA approvals pending. ROA submittals for the Northwest Corner and Demo Area 1 wells will be completed shortly.
- Discussion of new SE Ranges wells and drilling schedule for ECC/Jacobs to be discussed in two weeks following receipt of agency comments on the Workplans.

Miscellaneous

- Gina Kaso (ACE) stated that comments (primarily EPA comments) on MSP documents for 6 sites are outstanding as addressed in her recent email. Next week the Corps will develop a schedule for contract closeout for Tetra Tech that will begin in May. For this schedule, a date will be established after which the current draft reports will be finalized by Tetra Tech, regardless of whether comments have been received from the agencies or not. These comments, if received after the specified date, will be addressed by the new contractor.
- Len Pinaud (MADEP) requested information on the line item listed as 7.62 mm links in the findings table for the Former Demo Area.

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 00-2 had detections of 4A-DNT, 2,6-DNT, nitroglycerin, and picric acid that were not confirmed by PDA spectra. There have never been validated detections of explosives in this well.

- Groundwater samples from MW-80M1 and duplicate, M2, and 97-5 and duplicate had detections of perchlorate. The results were similar to the previous sampling rounds.

Central Impact Area

- Groundwater samples from MW-235M1 had detections of RDX and HMX that were confirmed by PDA spectra. The results were similar to the previous sampling rounds.

Southeast Ranges

- Groundwater samples from MW-250M3 had a detection of RDX that was confirmed by PDA spectra. This is the first detection of RDX in this well. The result is similar to the profile results.

- Groundwater samples from MW-215M1, M2; MW-234M1, M2; MW-247M2; MW-250M3 and duplicate had detections of various explosives that were confirmed by PDA spectra. The results were similar to the previous sampling rounds.

- Groundwater samples from MW-241M1 and duplicate and MW-242M2 had detections of various explosives that were not confirmed by PDA spectra. There have never been validated detections of explosives in these wells.

- Groundwater samples from MW-242M1 had detections of 2-nitrotoluene, 3-nitrotoluene, 1,3,5-trinitrobenzene, 4-nitrotoluene, 2,6-DNT, 2A-DNT, 4A-DNT, and picric acid. The detection of 1,3,5-trinitrobenzene was confirmed by PDA spectra, but with interference. There have never been validated detections of explosives in this well.

- Profile results from MW-265 (J1P-16) had detections of perchlorate, RDX, and VOCs. Perchlorate was detected in four intervals, between 82 and 112 feet below the water table. RDX was detected and confirmed by PDA spectra in two intervals, between 92 and 102 feet below the water table. Well screens were set at the depth (71 to 81 ft bwt) above the detections to monitor the aquifer, at the depth (96 to 106 ft bwt) of the highest perchlorate and RDX detections, and at the depths (136 to 146 ft bwt) at which the forward particle track from MW-164M1 intersects the MW-265 borehole.

DELIVERABLES SUBMITTED

Weekly Progress Update for March 17 – March 21, 2003 03/28/2003

3. SCHEDULED ACTIONS

Scheduled actions for the week of March 31 include commence well installation of MW-265 (J1P-16), continue drilling at MW-266 (CIAP-27) and MW-100 (CIAP-30), and commence drilling at BP-2. Groundwater sampling at Bourne water supply and monitoring wells, at newly installed wells, and as part of the April Long-Term Groundwater Monitoring Plan will continue. Soil sampling at Demo Area 2 Trench excavations will commence this week.

4. SUMMARY OF ACTIVITIES FOR DEMO 1

Additional delineation of the downgradient portion of the groundwater plume is being conducted prior to finalizing the Feasibility Study for the Groundwater Operable Unit and as the Interim Action for groundwater remediation is being designed.

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. A Response to Comments Letter (RCL) addressing EPA and DEP comments on the Demo 1 Groundwater RRA/RAM Plan was submitted on March 14, 2003. A preliminary resolution meeting was conducted on March 27, 2003 and will be continued on April 10, 2003. Another Draft RRA/RAM Plan, prepared to address soil contamination, was submitted on February 19th. EPA and MADEP comments on the Soil RRA/RAM Plan are expected shortly.

TABLE 2
SAMPLING PROGRESS
03/22/2003 - 03/29/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
G265DDE	FIELDQC	03/24/2003	FIELDQC	0	0		
G265DHE	FIELDQC	03/25/2003	FIELDQC	0	0		
G265DHT	FIELDQC	03/25/2003	FIELDQC	0	0		
G265DPE	FIELDQC	03/26/2003	FIELDQC	0	0		
G265DPT	FIELDQC	03/26/2003	FIELDQC	0	0		
G265DSE	FIELDQC	03/27/2003	FIELDQC	0	0		
G265DST	FIELDQC	03/27/2003	FIELDQC	0	0		
HC03250301AE	FIELDQC	03/25/2003	FIELDQC	0	0		
HD13C4-11BAE	FIELDQC	03/27/2003	FIELDQC	0	0		
TW00-2D-E	FIELDQC	03/26/2003	FIELDQC	0	0		
TW01-1-E	FIELDQC	03/25/2003	FIELDQC	0	0		
W165M2T	FIELDQC	03/28/2003	FIELDQC	0	0		
XXM973-E	FIELDQC	03/24/2003	FIELDQC	0	0		
4036000-01G-A	4036000-01G	03/25/2003	GROUNDWATER	38	69.8	6	12
4036000-03G-A	4036000-03G	03/25/2003	GROUNDWATER	50	60	6	12
4036000-04G-A	4036000-04G	03/25/2003	GROUNDWATER	54.6	64.6	6	12
4036000-06G-A	4036000-06G	03/25/2003	GROUNDWATER	108	128	6	12
TW00-1-A	00-1	03/25/2003	GROUNDWATER	64	70	52.1	58.1
TW00-2D-A	00-2	03/26/2003	GROUNDWATER	71	77	43.95	49.95
TW00-2S-A	00-2	03/25/2003	GROUNDWATER	29	35	1.17	7.17
TW01-1-A	01-1	03/25/2003	GROUNDWATER	62	67	55.21	60.21
W02-12M1A	02-12	03/26/2003	GROUNDWATER	109	119	58.35	68.35
W02-12M1D	02-12	03/26/2003	GROUNDWATER	109	119	58.35	68.35
W02-12M2A	02-12	03/26/2003	GROUNDWATER	94	104	43.21	53.21
W02-12M3A	02-12	03/26/2003	GROUNDWATER	79	89	28.22	38.22
W02-13M1A	02-13	03/25/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	03/25/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	03/25/2003	GROUNDWATER	68	78	28.3	38.3
W125M1A	MW-125	03/27/2003	GROUNDWATER	232	242	182	192
W125SSA	MW-125	03/27/2003	GROUNDWATER	50	60	0	10
W127SSA	MW-127	03/27/2003	GROUNDWATER	99	109	0	10
W128SSA	MW-128	03/27/2003	GROUNDWATER	87	97	0	10
W129M1A	MW-129	03/24/2003	GROUNDWATER	136	146	66	76
W129M2A	MW-129	03/24/2003	GROUNDWATER	116	126	46	56

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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03/22/2003 - 03/29/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W129M3A	MW-129	03/24/2003	GROUNDWATER	96	106	26	36
W130SSA	MW-130	03/27/2003	GROUNDWATER	103	113	0	10
W132SSA	MW-132	03/27/2003	GROUNDWATER	37	47	0	10
W136M1A	MW-136	03/26/2003	GROUNDWATER	124	134	17	27
W136SSA	MW-136	03/26/2003	GROUNDWATER	107	117	0	10
W139M1A	MW-139	03/28/2003	GROUNDWATER	194	204	110	120
W139M2A	MW-139	03/28/2003	GROUNDWATER	154	164	70	80
W139M3A	MW-139	03/28/2003	GROUNDWATER	119	129	35	45
W139M3D	MW-139	03/28/2003	GROUNDWATER	119	129	35	45
W162M1A	MW-162	03/26/2003	GROUNDWATER	190.5	200.5	114.28	124.28
W162M2A	MW-162	03/27/2003	GROUNDWATER	125.5	135.5	49.28	59.28
W162M2D	MW-162	03/27/2003	GROUNDWATER	125.5	135.5	49.28	59.28
W162M3A	MW-162	03/27/2003	GROUNDWATER	85.5	95.5	9.28	19.28
W163SSA	MW-163	03/27/2003	GROUNDWATER	38	48	0	10
W165M1A	MW-165	03/27/2003	GROUNDWATER	184.5	194.5	106	116
W165M2A	MW-165	03/27/2003	GROUNDWATER	124.5	134.5	46	56
W165M3A	MW-165	03/28/2003	GROUNDWATER	94.5	104.5	16	26
W172M1A	MW-172	03/28/2003	GROUNDWATER	199	209	134	144
W172M2A	MW-172	03/28/2003	GROUNDWATER	169	179	104	114
W172M3A	MW-172	03/28/2003	GROUNDWATER	109	119	44	54
W31DDA	MW-31	03/27/2003	GROUNDWATER	133	138	48	53
W31MMA	MW-31	03/27/2003	GROUNDWATER	113	123	28	38
W31SSA	MW-31	03/28/2003	GROUNDWATER	98	103	13	18
W34M1A	MW-34	03/24/2003	GROUNDWATER	151	161	73	83
W34M2A	MW-34	03/24/2003	GROUNDWATER	131	141	53	63
W34M3A	MW-34	03/24/2003	GROUNDWATER	111	121	33	43
W34M3D	MW-34	03/24/2003	GROUNDWATER	111	121	33	43
W36M1A	MW-36	03/25/2003	GROUNDWATER	151	161	74	84
W36M2A	MW-36	03/25/2003	GROUNDWATER	131	141	54	64
W57M2A	MW-57	03/24/2003	GROUNDWATER	148	158	62	72
W57M3A	MW-57	03/24/2003	GROUNDWATER	117	127	31	41
W74M1A	MW-74	03/24/2003	GROUNDWATER	170	180	76	86
W74M1D	MW-74	03/24/2003	GROUNDWATER	170	180	76	86
W74M2A	MW-74	03/25/2003	GROUNDWATER	125	135	31	41

Profiling methods include: Volatiles and Explosives
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03/22/2003 - 03/29/2003

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W74M3A	MW-74	03/24/2003	GROUNDWATER	100	110	6	16
W75M1A	MW-75	03/25/2003	GROUNDWATER	140	150	59	69
W75M2A	MW-75	03/26/2003	GROUNDWATER	115	125	34	44
W76M1A	MW-76	03/25/2003	GROUNDWATER	125	135	58	68
W76M2A	MW-76	03/26/2003	GROUNDWATER	105	115	38	48
W76M2D	MW-76	03/26/2003	GROUNDWATER	105	115	38	48
W77M1A	MW-77	03/26/2003	GROUNDWATER	180	190	98	108
W77M2A	MW-77	03/26/2003	GROUNDWATER	120	130	38	48
W78M1A	MW-78	03/26/2003	GROUNDWATER	135	145	58	68
W78M2A	MW-78	03/27/2003	GROUNDWATER	115	125	38	48
W78M3A	MW-78	03/26/2003	GROUNDWATER	85	95	8	18
W93M2A	MW-93	03/28/2003	GROUNDWATER	145	155	16	26
W96M1A	MW-96	03/28/2003	GROUNDWATER	206	216	70	80
XXM973-A	97-3	03/24/2003	GROUNDWATER	75	85	36	46
XXM975-A	97-5	03/24/2003	GROUNDWATER	84	94	76	86
XXM975-D	97-5	03/24/2003	GROUNDWATER	84	94	76	86
DW032403-NV	GAC WATER	03/24/2003	IDW	0	0		
DW032503-NV	GAC WATER	03/25/2003	IDW				
DW032603-NV	GAC WATER	03/26/2003	IDW				
DW032803B-NV	GAC WATER	03/28/2003	IDW				
DW032803-NV	GAC WATER	03/28/2003	IDW				
G265DDA	MW-265	03/24/2003	PROFILE	160	160	31.5	31.5
G265DEA	MW-265	03/24/2003	PROFILE	170	170	41.5	41.5
G265DFA	MW-265	03/24/2003	PROFILE	180	180	51.5	51.5
G265DGA	MW-265	03/24/2003	PROFILE	190	190	61.5	61.5
G265DHA	MW-265	03/25/2003	PROFILE	200	200	71.5	71.5
G265DIA	MW-265	03/25/2003	PROFILE	210	210	81.5	81.5
G265DJA	MW-265	03/25/2003	PROFILE	220	220	91.5	91.5
G265DJD	MW-265	03/25/2003	PROFILE	220	220	91.5	91.5
G265DKA	MW-265	03/25/2003	PROFILE	230	230	101.5	101.5
G265DLA	MW-265	03/25/2003	PROFILE	240	240	111.5	111.5
G265DMA	MW-265	03/25/2003	PROFILE	250	250	121.5	121.5
G265DNA	MW-265	03/25/2003	PROFILE	260	260	131.5	131.5
G265DOA	MW-265	03/25/2003	PROFILE	270	270	141.5	141.5

Profiling methods include: Volatiles and Explosives
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03/22/2003 - 03/29/2003

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G265DPA	MW-265	03/26/2003	PROFILE	280	280	151.5	151.5
G265DQA	MW-265	03/26/2003	PROFILE	290	290	161.5	161.5
G265DRA	MW-265	03/26/2003	PROFILE	300	300	171.5	171.5
G265DSA	MW-265	03/27/2003	PROFILE	310	310	181.5	181.5
G265DTA	MW-265	03/27/2003	PROFILE	315	315	186.5	186.5
HC03250301AA	03250301	03/25/2003	SOIL GRID				
HD13C4-11AAA	13C4-11	03/27/2003	SOIL GRID	0	0.25		
HD13C4-11AAD	13C4-11	03/27/2003	SOIL GRID	0	0.25		
HD13C4-11BAA	13C4-11	03/27/2003	SOIL GRID	0.25	0.5		
HD13C4-11CAA	13C4-11	03/27/2003	SOIL GRID	0.5	1		
HD13C4-21AAA	13C4-21	03/27/2003	SOIL GRID	0	0.25		
HD13C4-21BAA	13C4-21	03/27/2003	SOIL GRID	0.25	0.5		
HD13C4-21CAA	13C4-21	03/27/2003	SOIL GRID	0.5	1		
HD13C4-61AAA	13C4-61	03/27/2003	SOIL GRID	0	0.25		
HD13C4-61BAA	13C4-61	03/27/2003	SOIL GRID	0.25	0.5		
HD13C4-61CAA	13C4-61	03/27/2003	SOIL GRID	0.5	1		
HDGP15SA1A	GP15	03/25/2003	SOIL GRID	0	0.25		
HDGP15SA2A	GP15	03/25/2003	SOIL GRID	0	0.25		

Profiling methods include: Volatiles and Explosives
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TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 02/21/03 - 03/22/03

OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
TW00-2D-A	00-2	03/04/2003	GROUNDWATER	71	77	43.95	49.95	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
TW00-2D-A	00-2	03/04/2003	GROUNDWATER	71	77	43.95	49.95	8330N	2,6-DINITROTOLUENE	NO*
TW00-2D-A	00-2	03/04/2003	GROUNDWATER	71	77	43.95	49.95	8330N	PICRIC ACID	NO
TW00-2D-A	00-2	03/04/2003	GROUNDWATER	71	77	43.95	49.95	8330N	NITROGLYCERIN	NO
W215M1A	MW-215	03/03/2003	GROUNDWATER	240	250	133.85	143.85	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W215M2A	MW-215	03/03/2003	GROUNDWATER	205	215	98.9	108.9	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W215M2A	MW-215	03/03/2003	GROUNDWATER	205	215	98.9	108.9	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W234M1A	MW-234	03/07/2003	GROUNDWATER	130	140	25.3	35.3	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W234M1A	MW-234	03/07/2003	GROUNDWATER	130	140	25.3	35.3	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W234M1A	MW-234	03/07/2003	GROUNDWATER	130	140	25.3	35.3	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
W234M1A	MW-234	03/07/2003	GROUNDWATER	130	140	25.3	35.3	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
W234M2A	MW-234	03/10/2003	GROUNDWATER	110	120	1.6	11.6	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
W234M2A	MW-234	03/10/2003	GROUNDWATER	110	120	1.6	11.6	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W234M2A	MW-234	03/10/2003	GROUNDWATER	110	120	1.6	11.6	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
W234M2A	MW-234	03/10/2003	GROUNDWATER	110	120	1.6	11.6	8330N	2,4,6-TRINITROTOLUENE	YES
W235M1A	MW-235	03/04/2003	GROUNDWATER	154	164	25.3	35.3	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W235M1A	MW-235	03/04/2003	GROUNDWATER	154	164	25.3	35.3	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W241M1A	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	NITROGLYCERIN	NO
W241M1A	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
W241M1A	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	3-NITROTOLUENE	NO
W241M1A	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	4-NITROTOLUENE	NO
W241M1A	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	PICRIC ACID	NO

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OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W241M1A	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
W241M1A	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	2,6-DINITROTOLUENE	NO
W241M1A	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	2-NITROTOLUENE	NO
W241M1D	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	2,6-DINITROTOLUENE	NO
W241M1D	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
W241M1D	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	3-NITROTOLUENE	NO
W241M1D	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	PICRIC ACID	NO
W241M1D	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	2-NITROTOLUENE	NO
W241M1D	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	NITROGLYCERIN	NO
W241M1D	MW-241	03/07/2003	GROUNDWATER	97	107	2.75	12.75	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
W242M1A	MW-242	03/06/2003	GROUNDWATER	235	245	141.68	151.68	8330N	3-NITROTOLUENE	NO
W242M1A	MW-242	03/06/2003	GROUNDWATER	235	245	141.68	151.68	8330N	1,3,5-TRINITROBENZENE	YES*
W242M1A	MW-242	03/06/2003	GROUNDWATER	235	245	141.68	151.68	8330N	4-NITROTOLUENE	NO
W242M1A	MW-242	03/06/2003	GROUNDWATER	235	245	141.68	151.68	8330N	4-AMINO-2,6-DINITROTOLUENE	NO
W242M1A	MW-242	03/06/2003	GROUNDWATER	235	245	141.68	151.68	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
W242M1A	MW-242	03/06/2003	GROUNDWATER	235	245	141.68	151.68	8330N	2,6-DINITROTOLUENE	NO
W242M1A	MW-242	03/06/2003	GROUNDWATER	235	245	141.68	151.68	8330N	PICRIC ACID	NO
W242M1A	MW-242	03/06/2003	GROUNDWATER	235	245	141.68	151.68	8330N	2-NITROTOLUENE	NO
W242M2A	MW-242	03/05/2003	GROUNDWATER	165	175	71.75	81.75	8330N	1,3,5-TRINITROBENZENE	NO
W247M2A	MW-247	03/20/2003	GROUNDWATER	125	135	102.78	112.78	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W250M3A	MW-250	03/21/2003	GROUNDWATER	95	105	84.85	94.85	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W250M3D	MW-250	03/21/2003	GROUNDWATER	95	105	84.85	94.85	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES

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OGDEN_ID	LOCID OR WELL	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
W80M1A	MW-80	03/18/2003	GROUNDWATER	130	140	86	96	E314.0	PERCHLORATE	
W80M1D	MW-80	03/18/2003	GROUNDWATER	130	140	86	96	E314.0	PERCHLORATE	
W80M2A	MW-80	03/19/2003	GROUNDWATER	100	110	56	66	E314.0	PERCHLORATE	
XXM975-A	97-5	03/24/2003	GROUNDWATER	84	94	76	86	E314.0	PERCHLORATE	
XXM975-D	97-5	03/24/2003	GROUNDWATER	84	94	76	86	E314.0	PERCHLORATE	
G265DAA	MW-265	03/21/2003	PROFILE	130	130	1.5	1.5	OC21V	CHLOROFORM	
G265DAA	MW-265	03/21/2003	PROFILE	130	130	1.5	1.5	OC21V	METHYL ETHYL KETONE (2-BUTANONE)	
G265DAA	MW-265	03/21/2003	PROFILE	130	130	1.5	1.5	OC21V	ACETONE	
G265DAA	MW-265	03/21/2003	PROFILE	130	130	1.5	1.5	8330N	PICRIC ACID	NO
G265DAA	MW-265	03/21/2003	PROFILE	130	130	1.5	1.5	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
G265DBA	MW-265	03/21/2003	PROFILE	140	140	11.5	11.5	OC21V	CARBON DISULFIDE	
G265DBA	MW-265	03/21/2003	PROFILE	140	140	11.5	11.5	OC21V	CHLOROFORM	
G265DBA	MW-265	03/21/2003	PROFILE	140	140	11.5	11.5	OC21V	METHYL ETHYL KETONE (2-BUTANONE)	
G265DBA	MW-265	03/21/2003	PROFILE	140	140	11.5	11.5	OC21V	ACETONE	
G265DBA	MW-265	03/21/2003	PROFILE	140	140	11.5	11.5	8330N	PICRIC ACID	NO
G265DCA	MW-265	03/21/2003	PROFILE	150	150	21.5	21.5	OC21V	CHLOROFORM	
G265DCA	MW-265	03/21/2003	PROFILE	150	150	21.5	21.5	OC21V	METHYL ETHYL KETONE (2-BUTANONE)	
G265DCA	MW-265	03/21/2003	PROFILE	150	150	21.5	21.5	OC21V	ACETONE	
G265DCA	MW-265	03/21/2003	PROFILE	150	150	21.5	21.5	OC21V	CHLOROMETHANE	
G265DCA	MW-265	03/21/2003	PROFILE	150	150	21.5	21.5	8330N	2,6-DINITROTOLUENE	NO
G265DCA	MW-265	03/21/2003	PROFILE	150	150	21.5	21.5	8330N	PICRIC ACID	NO
G265DCA	MW-265	03/21/2003	PROFILE	150	150	21.5	21.5	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO

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G265DDA	MW-265	03/24/2003	PROFILE	160	160	31.5	31.5	OC21V	CARBON DISULFIDE	
G265DDA	MW-265	03/24/2003	PROFILE	160	160	31.5	31.5	OC21V	ACETONE	
G265DDA	MW-265	03/24/2003	PROFILE	160	160	31.5	31.5	OC21V	CHLOROFORM	
G265DEA	MW-265	03/24/2003	PROFILE	170	170	41.5	41.5	OC21V	ACETONE	
G265DEA	MW-265	03/24/2003	PROFILE	170	170	41.5	41.5	OC21V	CARBON DISULFIDE	
G265DEA	MW-265	03/24/2003	PROFILE	170	170	41.5	41.5	OC21V	CHLOROFORM	
G265DEA	MW-265	03/24/2003	PROFILE	170	170	41.5	41.5	8330N	PICRIC ACID	NO
G265DEA	MW-265	03/24/2003	PROFILE	170	170	41.5	41.5	8330N	4-NITROTOLUENE	NO
G265DFA	MW-265	03/24/2003	PROFILE	180	180	51.5	51.5	OC21V	CHLOROFORM	
G265DGA	MW-265	03/24/2003	PROFILE	190	190	61.5	61.5	OC21V	CHLOROFORM	
G265DGA	MW-265	03/24/2003	PROFILE	190	190	61.5	61.5	OC21V	ACETONE	
G265DHA	MW-265	03/25/2003	PROFILE	200	200	71.5	71.5	OC21V	CHLOROFORM	
G265DIA	MW-265	03/25/2003	PROFILE	210	210	81.5	81.5	E314.0	PERCHLORATE	
G265DIA	MW-265	03/25/2003	PROFILE	210	210	81.5	81.5	OC21V	ACETONE	
G265DJA	MW-265	03/25/2003	PROFILE	220	220	91.5	91.5	E314.0	PERCHLORATE	
G265DJA	MW-265	03/25/2003	PROFILE	220	220	91.5	91.5	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
G265DJD	MW-265	03/25/2003	PROFILE	220	220	91.5	91.5	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
G265DJD	MW-265	03/25/2003	PROFILE	220	220	91.5	91.5	E314.0	PERCHLORATE	
G265DKA	MW-265	03/25/2003	PROFILE	230	230	101.5	101.5	OC21V	CHLOROFORM	
G265DKA	MW-265	03/25/2003	PROFILE	230	230	101.5	101.5	E314.0	PERCHLORATE	
G265DKA	MW-265	03/25/2003	PROFILE	230	230	101.5	101.5	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
G265DLA	MW-265	03/25/2003	PROFILE	240	240	111.5	111.5	OC21V	CHLOROFORM	

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G265DLA	MW-265	03/25/2003	PROFILE	240	240	111.5	111.5	E314.0	PERCHLORATE	
G265DMA	MW-265	03/25/2003	PROFILE	250	250	121.5	121.5	OC21V	CHLOROFORM	
G265DOA	MW-265	03/25/2003	PROFILE	270	270	141.5	141.5	OC21V	CHLOROFORM	
G265DPA	MW-265	03/26/2003	PROFILE	280	280	151.5	151.5	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO
G265DPA	MW-265	03/26/2003	PROFILE	280	280	151.5	151.5	OC21V	ACETONE	
G265DPA	MW-265	03/26/2003	PROFILE	280	280	151.5	151.5	8330N	PICRIC ACID	NO
G265DPA	MW-265	03/26/2003	PROFILE	280	280	151.5	151.5	OC21V	CHLOROFORM	
G265DQA	MW-265	03/26/2003	PROFILE	290	290	161.5	161.5	OC21V	CHLOROFORM	
G265DRA	MW-265	03/26/2003	PROFILE	300	300	171.5	171.5	OC21V	CHLOROFORM	
G265DSA	MW-265	03/27/2003	PROFILE	310	310	181.5	181.5	OC21V	CHLOROFORM	
G265DTA	MW-265	03/27/2003	PROFILE	315	315	186.5	186.5	OC21V	CHLOROFORM	

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