

**WEEKLY PROGRESS UPDATE  
FOR FEBRUARY 10 – FEBRUARY 14, 2003**

**EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019, 1-2000-0014,  
& BOURNE-BWSC-4-1503-1**

**MASSACHUSETTS MILITARY RESERVATION  
TRAINING RANGE AND IMPACT AREA**

The following summary of progress is for the period from February 10 through February 14, 2003.

**1. SUMMARY OF ACTIONS TAKEN**

Drilling progress as of February 14 is summarized in Table 1.

<b>Table 1. Drilling progress as of February 14, 2003</b>				
<b>Boring Number</b>	<b>Purpose of Boring/Well</b>	<b>Total Depth (ft bgs)</b>	<b>Saturated Depth (ft bwt)</b>	<b>Completed Well Screens (ft bgs)</b>
MW-255	Demo Area 1 (D1P-19)	270	164	
MW-258	Demo Area 1 (D1P-17)	210	166	
MW-260	Demo Area 2 (D2P-4)	230	60	
bgs = below ground surface bwt = below water table				

Commenced well installation of MW-258 (D1P-17), and completed drilling of MW-255 (D1P-19) and MW-260 (D2P-4).

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-255, MW-260. Groundwater samples were collected from Bourne water supply and monitoring wells, and recently installed wells. The December Long Term Groundwater monitoring round was completed. Collected profile split samples with Jacobs Engineering from well 58MW0021.

The following are the notes from the February 13, 2003 Technical Team meeting of the Impact Area Groundwater Study Program office at Camp Edwards:

**Participants**

MAJ Bill Myer (IAGWSPO)	Tina Dolen (IAGWSPO)	Dave Hill (IAGWSPO)
Bill Gallagher (IAGWSPO)	LTC Will Tyminski (E&RC)	Todd Borci (EPA-phone)
Jane Dolan (EPA)	Desiree Moyer (EPA)	Meghan Cassidy (EPA-phone)
Len Pinaud (MADEP)	Mark Panni (MADEP)	Dave Williams (MDPH)
Gina Kaso (ACE)	Ed Wise (ACE)	Heather Sullivan (ACE -phone)
Don Wood (ACE)	Sheila Holt (ACE -phone)	Katarzyna Chelkowska (ACE -phone)
Kim Harriz (AMEC)	John Rice (AMEC-phone)	Herb Colby (AMEC-phone)
Dick Skrynness (ECC)	Leo Yuskus (Haley & Ward)	John Brawley (Tt-phone)

**Punchlist Items**

- #2 Provide comment on MW-219 Corrective Action Report (EPA/MADEP). EPA comments to be forwarded by the end of the day, likely in the format of an approval with attached information.
- #3 Provide ASR inquiry letter for Indian Head NAVSTA (Corps). Letter to Indian Head is ready for signature to be sent out shortly.
- #6 Provide witness interview questions regarding the J-1 and J-3 Ranges for agency review (Corps). Comments were forwarded yesterday evening, 2/12.
- #8 Provide status of “white paper” on alternatives to dispose the numerous 40mm grenades with fuzes (Corps). The paper which addresses inert and energetic small arms specific to MMR is under internal ECC review to be forwarded to the Corps at the end of the week. The technologies reviewed focused on several thermal options that would be viable to destroy all designated munitions including the 40MM rounds. Corps to provide a date next week when additional information will be available.
- #9 Renew access agreements for PZ208 and PZ211 (Corps). A signed access agreement was received for PZ208. The access agreement for PZ211 is still being pursued.
- #12 Provide Camp Edwards Long-Term Range Use Schedule for agency review (Corps). COL Cunha has requested more information regarding what the list will be used for, due to increased base security concerns. Bill Gallagher to coordinate communication between COL Cunha and Todd Borci.
- #13 Provide status for sampling dry wells (Corps). 47 wells, including 32 dry wells, were proposed for perchlorate sampling in the Site-Wide Perchlorate Report. These wells have been scheduled to be sampled in March.
- #14 Provide updated Central Impact Area plume map and cross section (Corps). Maps are not ready for release yet. All EPA corrections that were requested are being made, except for the reorientation of some of the cross sections to be parallel to groundwater flow. The reorientation will require additional time to complete.

**MSP3 and Southeast Ranges Update**

Gina Kaso (ACE) provided an update on the MSP3 tasks.

Ox Pond. The Schonstedt survey was completed. A draft map of findings should be available the week of February 17<sup>th</sup>. An ROA for potential anomaly excavations was submitted for approval and is due the first week in March.

Gun&Mortar. Anomaly excavation commenced on 2/10 at Former F Range anomalies that had been previously agreed upon with the agencies. 25 anomalies have been investigated to date. Burn residue was encountered at anomalies M012 and M017. Soil excavated from these areas was placed on polyethylene sheeting and covered. The Draft Final MSP3 Gun & Mortar Workplan will be resubmitted to the regulatory agencies on February 18, 2003.

Former Demo sites (Inactive Demo sites). The Schonstedt and EM61 surveys are completed. Data will be available next week.

J Ranges. OE items are being moved to the CDC bunker.

NBC Ranges. The EM61 and Schonstedt surveys are completed. Data will be available at the end of February.

J-3 Range Barrage and Hillside Sites in SE Ranges. A detailed recon of these areas with a Schonstedt will begin shortly. AMEC is drafting a letter, to be submitted today, that outlines steps for the soil investigation for the Additional Delineation Workplan including the schedule for Tetra Tech's geophysical investigation. The general steps are that the Schonstedt data will be reviewed and the geophysical grids will be laid out based on AMEC's recommendation. Todd Borci (EPA) agreed to review the letter, requesting that EPA be involved with the data review. Dave Hill (IAGWSP0) concurred with Mr. Borci's request.

SE Ranges Field Work. UXO clearance at J1P-16 continued and is likely to continue for an additional week; this area is saturated with anomalies primarily attributed to OE fragment.

Karen Wilson will be conducting a site visit at drilling location J3P-35A. Jane Dolan (EPA) repeated her request for information on ordnance discoveries at J1P-16, J1P-17, J1P-18 and D1P-18. John Rice (AMEC) to forward USA's ordnance discovery information to Rob Foti/Heather Sullivan (Corps) for the Corps to review and distribute.

CDC. Gina Kaso stated an updated total of 19768 items are scheduled for destruction in the CDC. Through Wednesday 2/12, 9722 items have been destroyed. 10046 remain. The CDC is scheduled to stay until 2/21. Additional time may be available after the 21<sup>st</sup>, contingent on funding and prior commitments. The chamber was shut down earlier this week for repairs.

### **Bourne Update**

Bill Gallagher (IAGWSPO) summarized issues related to the Bourne area.

- Weekly and monthly groundwater sampling continues. There were no significant new detections.
- Two screens at MW-257 (WS4P-4) were installed. Sample results may be available in several weeks, after well development and sampling are completed. Five additional well locations upgradient of the Bourne area have been approved for drilling by the agencies. The ROA for WS4P-3 has been approved, the ROAs for the other 4 wells are pending SHPO approval. There has been no specific order determined for the installation of these wells.
- Chemists from MADEP's Wall Experiment Station have requested QA data for the 0.5 ppb Perchlorate MDL check standard for several days, particularly for samples related to Corrective Action Reports and the Bourne pumping and sentry wells. MADEP Division of Water Supply wants a review of this data to evaluate whether the Army/NGB contract laboratories can actually achieve a reporting limit for Perchlorate below 2 ppb.
- Based on discussions with the agencies, the Army/NGB intend to complete the Bourne Perchlorate Response Plan MOR in accordance with agreements made at the Comment Resolution Meeting. This includes groundwater sampling of monitoring and production wells and the installation of all proposed monitoring wells, with the contingency wells to be installed based on results of BP-2, BP-3, BP-4 and BP-5. However, there will be a caveat in the MOR that the agreed upon sampling will continue for a non-specified period of time at which point, based on a new regulatory guideline or DoD guidance, the long term monitoring for the Bourne area will be reevaluated. There are also several outstanding items that were requested by the agencies and BWD during the CRM that the Army/NGB agreed to consider. Responses will be provided in the MOR regarding these requests.

### **Miscellaneous**

- Todd Borci (EPA) requested the Fate & Transport CRM be forwarded to the new TOSC members, including RCL and past comments. Army/NGB/Corps will discuss Mr. Borci's request internally.

## **2. SUMMARY OF DATA RECEIVED**

Rush data are summarized in Table 3. These data are for analyses that are performed on a fast turnaround 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 02-01M2; 02-09M1, M2; 02-13M2; and MW-80M1, M2 had detections of perchlorate. The results were similar to the previous sampling rounds.
- Eleven groundwater samples and duplicate samples had detections of chloroform.

#### Central Impact Area and Downgradient

- Groundwater samples from 58MW0003; 58MW0015B; MW-38M3, M4; MW-39M2 and duplicate; MW-43M2; MW-93M1, M2 and duplicate; MW-94M1; MW-95M1, M2; MW-96M2; and MW-206M1 had detections of various explosives that were confirmed by PDA spectra. The results were similar to the previous sampling rounds.

#### Demo Area 1

- Profile samples from MW-255 (D1P-19) had detections of 2,6-DNT and perchlorate. 2,6-DNT was detected and confirmed by PDA spectra in one interval at 104 feet below the water table. Perchlorate was detected in two intervals between 64 feet and 74 feet below the water table. Well screens will be set at the depth (30 to 40 ft bwt) corresponding to the clean zone above the perchlorate detections, at the depth (64 to 74 ft bwt) of the perchlorate detections, and at the depth (100 to 110 ft bwt) corresponding to the clean zone below the perchlorate detections.

#### Demo Area 2

- Profile samples from MW-260 (D2P-4) had detections of RDX and 2,6-DNT. RDX was detected and confirmed by PDA spectra, but with interference in three intervals at 20, 40, and 60 feet below the water table. 2,6-DNT was detected and confirmed by PDA spectra, but with interference, at 60 feet below the water table. The well screen will be set at the depth (1 to 11 ft bwt) corresponding to the particle track from the center of Demo Area 2.

#### Southeast Ranges

- Groundwater samples from MW-217M1, M2; MW-227M1 and duplicate, M2; and MW-228M2 had detections of various explosives that were confirmed by PDA spectra. The results were similar to the previous sampling rounds.

- Groundwater samples from MW-157M3 and duplicate had detections of HMX that were confirmed by PDA spectra. This is the first sampling event and the results were consistent with the profile results.
- Groundwater samples from MW-228S had detections of RDX and HMX that were confirmed by PDA spectra. This is the first detection of RDX in this well. The detection of HMX was similar to the previous sampling rounds.

#### **DELIVERABLES SUBMITTED**

Draft L-Range Supplemental Soil Workplan	02/10/2003
Draft MSP3 SCAR Site Report	02/11/2003
Draft J-2 Range Supplemental Soil Workplan	02/11/2003
Draft J-2 Range Investigation Area Supplemental Groundwater Workplan	02/11/2003
Weekly Progress Update for February 3 – February 7, 2003	02/13/2003

#### **3. SCHEDULED ACTIONS**

Scheduled actions for the week of February 17 include complete well installation of MW-255 (D1P-19), MW-258 (D1P-17), and MW-260 (D2P-4), and commence drilling of Demo Area 2 proposed well D2P-3. Groundwater sampling of the Bourne water supply and monitoring wells will continue.

#### **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. Well installation at D1P-19 (MW-255) and D1P-17 (MW-258) will be completed next week.

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. The Draft RRA/RAM Plan, describing this action, was submitted to the agencies and the IART on January 21, 2003. The informal public comment period on this document ended on February 11, 2003. A Rapid Response Action/Release Abatement Measure (RRA/RAM) is also being prepared to address soil contamination at Demo Area 1. A poster board session and a presentation on the Soil RRA/RAM will be conducted at the Impact Area Review Team meeting on February 25th. The informal comment period on the Soil RRA/RAM will begin on February 25, 2003.

**TABLE 2  
SAMPLING PROGRESS  
02/08/2003 - 02/15/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
58MW0018C-E	FIELDQC	02/12/2003	FIELDQC	0	0		
58MW0018C-E	FIELDQC	02/13/2003	FIELDQC	0	0		
G255DBE	FIELDQC	02/11/2003	FIELDQC	0	0		
G255DFE	FIELDQC	02/12/2003	FIELDQC	0	0		
G255DPE	FIELDQC	02/13/2003	FIELDQC	0	0		
G58MW0021DE	FIELDQC	02/03/2003	FIELDQC	0	0		
G58MW0021FE	FIELDQC	02/04/2003	FIELDQC	0	0		
G58MW0021HF	FIELDQC	02/05/2003	FIELDQC	0	0		
LRMW0003-T	FIELDQC	02/12/2003	FIELDQC	0	0		
TW1-88A-E	FIELDQC	02/11/2003	FIELDQC	0	0		
W02-08M2T	FIELDQC	02/11/2003	FIELDQC	0	0		
W228M2T	FIELDQC	02/10/2003	FIELDQC	0	0		
W229M3T	FIELDQC	02/14/2003	FIELDQC	0	0		
W229M4T	FIELDQC	02/13/2003	FIELDQC	0	0		
4036000-04G-A	4036000-04G	02/11/2003	GROUNDWATER	54.6	64.6	6	12
4036000-06G-A	4036000-06G	02/11/2003	GROUNDWATER	108	128	6	12
58MW0018C-A	58MW0018C	02/12/2003	GROUNDWATER	149.92	159.6	0	10
LRMW0003-A	LRMW0003	02/12/2003	GROUNDWATER	95	105	69.68	94.68
TW1-88A-A	1-88	02/11/2003	GROUNDWATER			67.4	67.4
W02-01M1A	02-01	02/13/2003	GROUNDWATER	95	105	42.9	52.9
W02-01M2A	02-01	02/12/2003	GROUNDWATER	83	93	30.9	40.9
W02-02M1A	02-02	02/12/2003	GROUNDWATER	114.5	124.5	63.5	73.5
W02-02M2A	02-02	02/12/2003	GROUNDWATER	94.5	104.5	42.65	52.65
W02-02SSA	02-02	02/12/2003	GROUNDWATER	49.5	59.5	0	10
W02-03M1A	02-03	02/12/2003	GROUNDWATER	130	140	86.1	96.1
W02-03M2A	02-03	02/12/2003	GROUNDWATER	92	102	48.15	58.15
W02-03M3A	02-03	02/12/2003	GROUNDWATER	75	85	31.05	41.05
W02-08M1A	02-08	02/11/2003	GROUNDWATER	108	113	86.56	91.56
W02-08M2A	02-08	02/11/2003	GROUNDWATER	82	87	60.65	65.65
W02-08M3A	02-08	02/11/2003	GROUNDWATER	62	67	40.58	45.58
W02-09M1A	02-09	02/11/2003	GROUNDWATER	74	84	65.26	75.26
W02-09M2A	02-09	02/11/2003	GROUNDWATER	59	69	50.3	60.3
W02-09SSA	02-09	02/11/2003	GROUNDWATER	7	17	0	10
W02-12M1A	02-12	02/11/2003	GROUNDWATER	109	119	58.35	68.35

**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  
02/08/2003 - 02/15/2003**

OGDEN_ID	GIS_LOCID	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
W02-12M2A	02-12	02/11/2003	GROUNDWATER	94	104	43.21	53.21
W02-12M3A	02-12	02/11/2003	GROUNDWATER	79	89	28.22	38.22
W02-13M1A	02-13	02/11/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M1D	02-13	02/11/2003	GROUNDWATER	98	108	58.33	68.33
W02-13M2A	02-13	02/11/2003	GROUNDWATER	83	93	44.2	54.2
W02-13M3A	02-13	02/11/2003	GROUNDWATER	68	78	28.3	38.3
W126M1A	MW-126	02/14/2003	GROUNDWATER	118	128	19	29
W126M1D	MW-126	02/14/2003	GROUNDWATER	118	128	19	29
W157M3A	MW-157	02/13/2003	GROUNDWATER	70	80	53.94	63.94
W157M3D	MW-157	02/13/2003	GROUNDWATER	70	80	53.94	63.94
W217M1A	MW-217	02/10/2003	GROUNDWATER	148	153	143	148
W217M2A	MW-217	02/10/2003	GROUNDWATER	138	143	133	138
W220M1A	MW-220	02/14/2003	GROUNDWATER	248	258	120.85	130.85
W220SSA	MW-220	02/14/2003	GROUNDWATER	126	136	0	10
W221M1A	MW-221	02/10/2003	GROUNDWATER	216	226	70.79	80.79
W221M2A	MW-221	02/10/2003	GROUNDWATER	178	188	32.85	42.85
W221M3A	MW-221	02/10/2003	GROUNDWATER	156	166	10.86	20.86
W227M1A	MW-227	02/10/2003	GROUNDWATER	130	140	76.38	86.38
W227M1D	MW-227	02/10/2003	GROUNDWATER	130	140	76.38	86.38
W227M2A	MW-227	02/10/2003	GROUNDWATER	110	120	56.38	66.38
W227M3A	MW-227	02/10/2003	GROUNDWATER	65	75	11.39	21.39
W228M1A	MW-228	02/10/2003	GROUNDWATER	241	251	134.6	144.6
W228M2A	MW-228	02/10/2003	GROUNDWATER	126	136	20	30
W228SSA	MW-228	02/10/2003	GROUNDWATER	104	114	10	20
W229M1A	MW-229	02/13/2003	GROUNDWATER	286	296	173.27	183.27
W229M2A	MW-229	02/14/2003	GROUNDWATER	206	216	93.28	103.28
W229M3A	MW-229	02/13/2003	GROUNDWATER	141	151	28.27	38.27
W229M4A	MW-229	02/13/2003	GROUNDWATER	117	127	4.18	14.18
W230M1A	MW-230	02/14/2003	GROUNDWATER	130	140	23.82	33.82
W230M2A	MW-230	02/14/2003	GROUNDWATER	110	120	3.76	13.76
W232M1A	MW-232	02/11/2003	GROUNDWATER	77.5	82.5	34.94	39.94
W232M2A	MW-232	02/13/2003	GROUNDWATER	61	66	18.41	23.41
W82SSA	MW-82	02/12/2003	GROUNDWATER	25	35	0	10
G255DAA	MW-255	02/11/2003	PROFILE	110	110	4	4

**Profiling methods include: Volatiles and Explosives**

**Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, and Wet Chemistry**

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02/08/2003 - 02/15/2003**

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G255DBA	MW-255	02/11/2003	PROFILE	120	120	14	14
G255DCA	MW-255	02/11/2003	PROFILE	130	130	24	24
G255DDA	MW-255	02/11/2003	PROFILE	140	140	34	34
G255DEA	MW-255	02/11/2003	PROFILE	150	150	44	44
G255DFA	MW-255	02/12/2003	PROFILE	160	160	54	54
G255DFD	MW-255	02/12/2003	PROFILE	160	160	54	54
G255DGA	MW-255	02/12/2003	PROFILE	170	170	64	64
G255DHA	MW-255	02/12/2003	PROFILE	180	180	74	74
G255DIA	MW-255	02/12/2003	PROFILE	190	190	84	84
G255DJA	MW-255	02/12/2003	PROFILE	200	200	94	94
G255DKA	MW-255	02/12/2003	PROFILE	210	210	104	104
G255DLA	MW-255	02/12/2003	PROFILE	220	220	114	114
G255DLD	MW-255	02/12/2003	PROFILE	220	220	114	114
G255DMA	MW-255	02/12/2003	PROFILE	230	230	124	124
G255DOA	MW-255	02/13/2003	PROFILE	250	250	144	144
G255DPA	MW-255	02/13/2003	PROFILE	260	260	154	154
G255DQA	MW-255	02/13/2003	PROFILE	270	270	164	164
G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6
G260DBA	MW-260	02/14/2003	PROFILE	190	190	19.6	19.6
G260DCA	MW-260	02/14/2003	PROFILE	200	200	29.6	29.6
G260DDA	MW-260	02/14/2003	PROFILE	210	210	39.6	39.6
G260DEA	MW-260	02/14/2003	PROFILE	220	220	49.6	49.6
G260DFA	MW-260	02/14/2003	PROFILE	230	230	59.6	59.6
G58MW0021BA	MW0021	02/03/2003	PROFILE	205	205		
G58MW0021CA	MW0021	02/03/2003	PROFILE	215	215		
G58MW0021DA	MW0021	02/03/2003	PROFILE	225	225		
G58MW0021EA	MW0021	02/04/2003	PROFILE	235	235		
G58MW0021FA	MW0021	02/04/2003	PROFILE	245	245		
G58MW0021GA	MW0021	02/05/2003	PROFILE	255	255		
G58MW0021GD	MW0021	02/05/2003	PROFILE	255	255		
G58MW0021HA	MW0021	02/05/2003	PROFILE	265	265		
G58MW0021IA	MW0021	02/06/2003	PROFILE	275	275		
G58MW0021JA	MW0021	02/10/2003	PROFILE	285	285		
G58MW0021KA	MW0021	02/10/2003	PROFILE	295	295		

**Profiling methods include: Volatiles and Explosives**

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02/08/2003 - 02/15/2003**

<b>OGDEN_ID</b>	<b>GIS_LOCID</b>	<b>LOGDATE</b>	<b>SAMP_TYPE</b>	<b>SBD</b>	<b>SED</b>	<b>BWTS</b>	<b>BWTE</b>
G58MW0021LA	MW0021	02/11/2003	PROFILE	305	305		
G58MW0021MA	MW0021	02/12/2003	PROFILE	315	315		
G58MW0021OA	MW0021	02/12/2003	PROFILE	334	334		
G58MW0021PA	MW0021	02/13/2003	PROFILE	350	350		

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**TABLE 3  
DETECTED COMPOUNDS-UNVALIDATED  
SAMPLES COLLECTED 01/17/03 - 02/15/03**

OGDEN ID	LOCID OR WELL	SAMPLED	SAMP TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN ANALYTE	PDA
58MW0003-A	58MW0003	02/04/2003	GROUNDWATER	118.1	124	0	5	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
58MW0015B-A	58MW0015B	02/05/2003	GROUNDWATER	130.96	140.22	12.7	22.7	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W02-01M2A	02-01	02/12/2003	GROUNDWATER	83	93	30.9	40.9	E314.0	PERCHLORATE	
W02-09M1A	02-09	02/11/2003	GROUNDWATER	74	84	65.26	75.26	E314.0	PERCHLORATE	
W02-09M2A	02-09	02/11/2003	GROUNDWATER	59	69	50.3	60.3	E314.0	PERCHLORATE	
W02-13M2A	02-13	02/11/2003	GROUNDWATER	83	93	44.2	54.2	E314.0	PERCHLORATE	
W157M3A	MW-157	02/13/2003	GROUNDWATER	70	80	53.94	63.94	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W157M3D	MW-157	02/13/2003	GROUNDWATER	70	80	53.94	63.94	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W206M1A	MW-206	02/05/2003	GROUNDWATER	178.5	188.5	19.57	29.57	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W206M1A	MW-206	02/05/2003	GROUNDWATER	178.5	188.5	19.57	29.57	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W217M1A	MW-217	02/10/2003	GROUNDWATER	148	153	143	148	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W217M2A	MW-217	02/10/2003	GROUNDWATER	138	143	133	138	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W227M1A	MW-227	02/10/2003	GROUNDWATER	130	140	76.38	86.38	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W227M1D	MW-227	02/10/2003	GROUNDWATER	130	140	76.38	86.38	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W227M2A	MW-227	02/10/2003	GROUNDWATER	110	120	56.38	66.38	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W227M2A	MW-227	02/10/2003	GROUNDWATER	110	120	56.38	66.38	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W228M2A	MW-228	02/10/2003	GROUNDWATER	126	136	20	30	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W228M2A	MW-228	02/10/2003	GROUNDWATER	126	136	20	30	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W228SSA	MW-228	02/10/2003	GROUNDWATER	104	114	10	20	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W228SSA	MW-228	02/10/2003	GROUNDWATER	104	114	10	20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W38M3A	MW-38	01/31/2003	GROUNDWATER	170	180	52	62	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W38M4A	MW-38	01/31/2003	GROUNDWATER	132	142	14	24	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
W39M2A	MW-39	02/03/2003	GROUNDWATER	175	185	39	49	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W39M2A	MW-39	02/03/2003	GROUNDWATER	175	185	39	49	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W39M2D	MW-39	02/03/2003	GROUNDWATER	175	185	39	49	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W39M2D	MW-39	02/03/2003	GROUNDWATER	175	185	39	49	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W43M2A	MW-43	02/04/2003	GROUNDWATER	200	210	67	77	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W80M1A	MW-80	02/06/2003	GROUNDWATER	130	140	86	96	E314.0	PERCHLORATE	
W80M2A	MW-80	02/06/2003	GROUNDWATER	100	110	56	66	E314.0	PERCHLORATE	
W93M1A	MW-93	02/03/2003	GROUNDWATER	185	195	56	66	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W93M2A	MW-93	02/03/2003	GROUNDWATER	145	155	16	26	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W93M2A	MW-93	02/03/2003	GROUNDWATER	145	155	16	26	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W93M2D	MW-93	02/03/2003	GROUNDWATER	145	155	16	26	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,3,5,7-TET	YES
W93M2D	MW-93	02/03/2003	GROUNDWATER	145	155	16	26	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W94M1A	MW-94	02/04/2003	GROUNDWATER	160	170	36	46	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W95M1A	MW-95	02/04/2003	GROUNDWATER	202	212	78	88	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W95M2A	MW-95	02/05/2003	GROUNDWATER	167	177	43	53	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W96M2A	MW-96	02/03/2003	GROUNDWATER	160	170	24	34	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES
W02-08M2A	02-08	02/11/2003	GROUNDWATER	82	87	60.65	65.65	OC21V	CHLOROFORM	
W02-08M3A	02-08	02/11/2003	GROUNDWATER	62	67	40.58	45.58	OC21V	CHLOROFORM	
W02-09M1A	02-09	02/11/2003	GROUNDWATER	74	84	65.26	75.26	OC21V	CHLOROFORM	
W02-09M2A	02-09	02/11/2003	GROUNDWATER	59	69	50.3	60.3	OC21V	CHLOROFORM	
W02-09SSA	02-09	02/11/2003	GROUNDWATER	7	17	0	10	OC21V	CHLOROFORM	
W82DDA	MW-82	02/06/2003	GROUNDWATER	125	135	97	107	OC21V	CHLOROFORM	

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W82M1A	MW-82	02/06/2003	GROUNDWATER	104	114	76	86	OC21V	CHLOROFORM	
W82M2A	MW-82	02/06/2003	GROUNDWATER	78	88	50	60	OC21V	CHLOROFORM	
W82M2D	MW-82	02/06/2003	GROUNDWATER	78	88	50	60	OC21V	CHLOROFORM	
W82M3A	MW-82	02/06/2003	GROUNDWATER	54	64	26	36	OC21V	CHLOROFORM	
W82SSA	MW-82	02/12/2003	GROUNDWATER	25	35	0	10	OC21V	CHLOROFORM	
G255DAA	MW-255	02/11/2003	PROFILE	110	110	4	4	8330N	PICRIC ACID	NO
G255DAA	MW-255	02/11/2003	PROFILE	110	110	4	4	8330N	1,3,5-TRINITROBENZENE	NO
G255DAA	MW-255	02/11/2003	PROFILE	110	110	4	4	8330N	2,6-DINITROTOLUENE	NO
G255DBA	MW-255	02/11/2003	PROFILE	120	120	14	14	8330N	1,3,5-TRINITROBENZENE	NO
G255DGA	MW-255	02/12/2003	PROFILE	170	170	64	64	E314.0	PERCHLORATE	
G255DHA	MW-255	02/12/2003	PROFILE	180	180	74	74	E314.0	PERCHLORATE	
G255DKA	MW-255	02/12/2003	PROFILE	210	210	104	104	8330N	NITROGLYCERIN	NO
G255DKA	MW-255	02/12/2003	PROFILE	210	210	104	104	8330N	2,6-DINITROTOLUENE	YES
G255DLA	MW-255	02/12/2003	PROFILE	220	220	114	114	8330N	NITROGLYCERIN	NO
G255DMA	MW-255	02/12/2003	PROFILE	230	230	124	124	8330N	NITROGLYCERIN	NO
G255DOA	MW-255	02/13/2003	PROFILE	250	250	144	144	8330N	NITROGLYCERIN	NO
G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6	8330N	NITROBENZENE	NO
G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6	8330N	1,3,5-TRINITROBENZENE	NO
G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6	8330N	2,4,6-TRINITROTOLUENE	NO
G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6	8330N	2,6-DINITROTOLUENE	NO*
G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6	8330N	PICRIC ACID	NO

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G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6	8330N	2,4-DIAMINO-6-NITROTOLUENE	NO
G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6	8330N	NITROGLYCERIN	NO
G260DAA	MW-260	02/14/2003	PROFILE	180	180	9.6	9.6	8330N	1,3-DINITROBENZENE	NO
G260DBA	MW-260	02/14/2003	PROFILE	190	190	19.6	19.6	8330N	NITROGLYCERIN	NO
G260DBA	MW-260	02/14/2003	PROFILE	190	190	19.6	19.6	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES*
G260DCA	MW-260	02/14/2003	PROFILE	200	200	29.6	29.6	8330N	1,3-DINITROBENZENE	NO
G260DCA	MW-260	02/14/2003	PROFILE	200	200	29.6	29.6	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO*
G260DCA	MW-260	02/14/2003	PROFILE	200	200	29.6	29.6	8330N	NITROGLYCERIN	NO
G260DDA	MW-260	02/14/2003	PROFILE	210	210	39.6	39.6	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES*
G260DDA	MW-260	02/14/2003	PROFILE	210	210	39.6	39.6	8330N	NITROGLYCERIN	NO
G260DEA	MW-260	02/14/2003	PROFILE	220	220	49.6	49.6	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	NO
G260DEA	MW-260	02/14/2003	PROFILE	220	220	49.6	49.6	8330N	NITROGLYCERIN	NO
G260DFA	MW-260	02/14/2003	PROFILE	230	230	59.6	59.6	8330N	NITROGLYCERIN	NO
G260DFA	MW-260	02/14/2003	PROFILE	230	230	59.6	59.6	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-TRIAZINE	YES*
G260DFA	MW-260	02/14/2003	PROFILE	230	230	59.6	59.6	8330N	2,6-DINITROTOLUENE	YES*

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