INTERIM MONTH REPORT FOR DECEMBER 1 – DECEMBER 9, 2005

EPA REGION I ADMINISTRATIVE ORDERS SDWA 1-97-1019 and 1-2000-0014

MASSACHUSETTS MILITARY RESERVATION TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from December 1 through December 9, 2005.

1. SUMMARY OF REMEDIATION ACTIONS

The following is a description of remediation actions taken as part of or in preparation for Rapid Response Action (RRA) Plans for various Areas of Concern at Camp Edwards through December 9, 2005. A Rapid Response Action is an interim action that may be conducted prior to risk assessments or remedial investigations to address a known, ongoing threat of contamination to groundwater and/or soil.

Demo Area 1 Groundwater RRA

The Demo Area 1 Groundwater RRA consists of the removal and treatment of contaminated groundwater to control further migration of explosives and perchlorate. Extraction, treatment, and recharge systems (ETR) at Frank Perkins Road and Pew Road include single extraction wells, ex-situ treatment processes to remove explosives and perchlorate from the groundwater and injection wells to return treated water to the aquifer.

The Pew Road ETR continues operation at a flow rate of 100 gallons per minute (gpm). Perchlorate and hexahydro-1,3,5-trinitro-1,3,5-triazine (RDX) have been detected in influent samples. The Granular Activated Carbon (GAC) media was exchanged in the first and second pair of treatment vessels on March 9, 2005 and again on August 1, 2005. Perchlorate breakthrough was detected after the first pair of GAC vessels and has not been detected after the second pair of GAC vessels. RDX has not been detected in any mid-fluent samples. Perchlorate and RDX have not been detected in samples collected from the effluent. As of December 9, 2005, approximately 63 million gallons of water have been treated and re-injected at the Pew Road ETR System.

The Frank Perkins Road ETR continues operation at a flow rate of 220 gpm. Perchlorate, RDX, and octahydro-1,3,5,7-tetranitro-1,3,5,7-tetrazocine (HMX) have been detected in influent samples. Perchlorate was detected in mid-fluent samples collected after the first pair of GAC vessels in each of the three treatment containers. The GAC vessels are followed by ion exchange (IX) vessels, which are designed for treatment of perchlorate. Perchlorate and RDX have not been detected in mid-fluent samples collected after the IX vessels or in effluent samples. As of December 9, 2005, approximately 135 million gallons of water had been treated and re-injected at the Frank Perkins Road ETR System.

Groundwater samples were collected as part of the Demo Area 1 System Performance and Ecological Impact Monitoring (SPEIM).

Demo Area 1 Soil RRA

The Demo Area 1 Soil RRA consisted of the removal of all geophysical anomalies within the perimeter road (7.4 acres) and the removal and thermal treatment of contaminated soil from in

and around the Demo 1 kettle hole. A total of 16,641 cubic yards of soil was excavated at Demo Area 1, with an additional 195 cubic yards excavated at Demo Area 1 burn pits.

Site restoration activities continued.

J-2 Range Groundwater RRA

The J-2 Range Groundwater RRA consists of removal and treatment of contaminated groundwater to control further migration of explosives and perchlorate. ETR systems include single extraction wells, ex-situ treatment processes to remove explosives and perchlorate from the groundwater, and infiltration basins to return treated water to the aquifer.

In early December, drilling of extraction well J-2 EW0002 commenced and construction of the well pad for J-2 EW001 was completed.

J-3 Range Groundwater RRA

The J-3 Range Groundwater RRA consists of removal and treatment of contaminated groundwater to control further migration of explosives and perchlorate. ETR systems include single extraction wells, ex-situ treatment processes to remove explosives and perchlorate from the groundwater and use of the existing Fuel Spill-12 (FS-12) infiltration gallery to return treated water to the aquifer.

Site work was not conducted for the J-3 Range Groundwater RRA in early December.

2. SUMMARY OF ACTIONS TAKEN

Drilling progress as of December 9, 2005 is summarized in Table 1.

Table 1. Dri	Table 1. Drilling progress as of December 9, 2005											
Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Depth to Water Table (ft bgs)	Completed Well Screens (ft bgs)								
DP-405	Northwest Corner (NWP-21/GP-19)	121	81									
MW-406	Demo 2 (D2P-10)	230	178	203-213; 225-230								
DP-426	Impact Area (CIADP-19)											
DP-423	Impact Area (CIADP-16)											
DP-424	Impact Area (CIADP-17)											
MW-430	J-1 Range (J1P-30)	235	107									
ft bgs = feet	below ground surface	•										

Completed well installation at MW-406 (D2P-10). Commenced drilling at DP-423 (CIADP-16), DP-424 (CIADP-17), and MW-430 (J1P-30). Well development of recently installed wells continued.

Samples collected during the reporting period are summarized in Table 2. Groundwater profile samples were collected from MW-430. Groundwater samples were collected from recently installed wells, and as part of the December round of the 2005 Long-Term Groundwater Monitoring (LTGM) Plan. The August round of the LTGM Plan was completed on December 8, 2005. The December round of the Demo Area 1 SPEIM commenced on December 7, 2005.

Blown-in-Place (BIP) items at the Central Impact Area: December 1, 2005: One (1) 4.2 inch Mortar (at DP-11). BIP items at the J-2 Range: December 1, 2005: Sixteen (16) 30 mm T330 Projectile rounds (at Grids M-19/M-20) and December 8, 2005: Twenty one (21) 30 mm T330 Projectile rounds (at Grids M-19/M-20). Pre-BIP samples were not collected for the J-2 Range BIPs conducted on December 1, 2005, due to safety concerns. Pre- and post-BIP samples were collected in accordance with the sampling protocol for other BIP events.

Anomaly investigation as part of the J-1 Range Supplemental Geophysical Anomaly Investigation was not conducted during the first part of December. Table 3 showing a grid sheet summary for excavations and munitions recovered for the J-1 Range Geophysical Investigation will be included in the December Monthly Progress Report.

Anomaly investigation as part of the J-2 Range Supplemental Geophysical Anomaly Investigation continued at Grids M-19 and M-20. Table 4 showing a grid sheet summary for excavations and munitions recovered for the J-2 Range Geophysical Investigation will be included in the December Monthly Progress Report.

There have been no munitions and explosives of concern (MEC) items destroyed in the controlled detonation chamber (CDC) during early December.

The Technical Team of the Impact Area Groundwater Study Program office at Camp Edwards did not meet between December 1 and 9.

3. SUMMARY OF DATA RECEIVED

Table 5 summarizes the detections that exceeded an EPA Maximum Contaminant Level (MCL) or Health Advisory (HA) for drinking water for explosives, or exceeded a 4 ppb concentration for perchlorate received for the period of November 23 through December 9, 2005.

Table 6 summarizes first-time validated detections of explosives below the MCL/HA for drinking water or of perchlorate below a 4 ppb concentration received from November 23 through December 9, 2005.

First time validated detections of explosives and perchlorate in groundwater compared to the MCL/HAs are summarized below:

Explosives in Groundwater Compared to MCL/HAs

For validated data received from November 23 through December 9, 2005, one well, MW-398M2 (J-1 Range), had a first-time validated detection of RDX above the HA of 2 ppb. Two wells, MW-393M2 (J-2 Range) and MW-399M1 (J-1 Range), had first-time validated detections of RDX below the HA of 2 ppb. Three wells, MW-265M2, MW-398M2 (J-1 Range), and MW-201M2 (Impact Area), had detections of HMX below the HA of 400 ppb.

Perchlorate in Groundwater Compared to MCL/HAs

For validated data received from November 23 through December 9, 2005, no wells had first-time validated detections of perchlorate above the concentration of 4 ppb. Two wells, MW-239M1 (J-3 Range) and MW-393M1 (J-2 Range) had first-time validated detections of perchlorate below the concentration of 4 ppb.

Rush data received from December 1 through December 9, 2005 are summarized in Table 7. These data are for analyses that are performed on a fast turn around time, typically 1-10 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 7 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 7. 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 7, 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.

During the reporting period December 1 to 9, no rush data with detections were received, therefore Table 7 is not included in this report.

4. DELIVERABLES SUBMITTED

Draft Northwest Corner Interim Groundwater Monitoring Plan	12/01/2005
Draft Demo Area 1 Decision Document	12/02/2005
Monthly Progress Report # 104 for November 2005	12/09/2005

5. SCHEDULED ACTIONS

Scheduled actions through the end of December include complete installation of MW-430 (J1P-30), and complete drilling at DP-423 (CIADP-16), DP-424 (CIADP-17), CIADP-19, CIADP-06 and CIADP-03. Groundwater sampling of recently installed wells and as part of the December round of the 2005 LTGM and the Demo 1 SPEIM will continue. Well development will continue for recently installed wells. Activities conducted as part of the Demo 1 groundwater RRA, the Demo Area 1 soil RRA site restoration, the J-2 groundwater RRA, and the J-2 Range Supplemental Geophysical Anomaly Investigation will continue. Treatment media at the Pew Road ETR will be changed to ion exchange resin in lead vessels.

SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
ECC112905CIADP01 (post)	SSCIADP001	CIA	12/01/2005	CRATER_DISCRETE	0	0.2		
ECC112105J2SUP01-A	SSJ2M20001	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC112105J2SUP01-B	SSJ2M20001	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC112105J2SUP01-C	SSJ2M20001	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC112105J2SUP01-D	SSJ2M20001	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC112105J2SUP01-E	SSJ2M20001	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC112105J2SUP01-F	SSJ2M20001	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC112905CIADP01 (post)	SSCIADP001	CIA	12/01/2005	CRATER_GRID	0	0.2		
ECC113005J2SUP01-A	SSJ2M20002	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC113005J2SUP01-B	SSJ2M20002	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC113005J2SUP01-C	SSJ2M20002	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC113005J2SUP01-D	SSJ2M20002	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC113005J2SUP01-E	SSJ2M20002	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC113005J2SUP01-F	SSJ2M20002	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC113005J2SUP01-H	SSJ2M20002	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC113005J2SUP01-I	SSJ2M20002	J-2 RANGE	12/01/2005	CRATER_GRID	0	0.2		
ECC120105J2SUP02A (post)	SSJ2M19002	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120105J2SUP02B (post)	SSJ2M19002	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120105J2SUP02C (post)	SSJ2M19002	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120105J2SUP02D (post)	SSJ2M19002	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120205J2SUP05 (post)	SSJ2M19005	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01A (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01B (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01C (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01D (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01E (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01F (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01G (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01J (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01K (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01L (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
ECC120705J2SUP01M (post)	SSJ2M19007	J-2 RANGE	12/08/2005	CRATER_GRID	0	0.2		
90MW0022-A	90MW0022	J-3 RANGE	12/02/2005	GROUNDWATER	112	117	72.79	77.79
90WT0004-A	90WT0004	J-3 RANGE	12/02/2005	GROUNDWATER	35	45	3	13
MW-211M1-	MW-211	DEMO 1	12/08/2005	GROUNDWATER	200	210	55	65
MW-211M2-	MW-211	DEMO 1	12/08/2005	GROUNDWATER	175	185	29.7	39.7
MW-225M1-	MW-225	DEMO 1	12/09/2005	GROUNDWATER	175	185	77.1	87.1
MW-225M2-	MW-225	DEMO 1	12/09/2005	GROUNDWATER	145	155	46.48	56.48

Profiling methods may include: Volatiles, Explosives, and Perchlorate Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry

Other Sample Types methods are variable

SBD = Sample Begin Depth, measured in feet bgs

SED = Sample End Depth, measured in feet bgs

BWTS = Depth below water table, start depth, measured in feet

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

AOC = Area of Concern

SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
MW-225M3-	MW-225	DEMO 1	12/09/2005	GROUNDWATER	125	135	26.48	36.48
MW-231M1-	MW-231	DEMO 1	12/09/2005	GROUNDWATER	210	220	104.15	114.15
MW-231M2-	MW-231	DEMO 1	12/09/2005	GROUNDWATER	165	175	58.33	68.33
MW-231M2-FD	MW-231	DEMO 1	12/09/2005	GROUNDWATER	165	175	58.33	68.33
MW-240M1-	MW-240	DEMO 1	12/09/2005	GROUNDWATER	198	208	100	110
MW-240M1-FD	MW-240	DEMO 1	12/09/2005	GROUNDWATER	198	208	100	110
MW-240M2-	MW-240	DEMO 1	12/09/2005	GROUNDWATER	125	135	26.45	36.45
MW-248M3-	MW-248	DEMO 1	12/07/2005	GROUNDWATER	143	153	31.5	41.5
MW-258M1-	MW-258	DEMO 1	12/07/2005	GROUNDWATER	109	119	64.1	74.1
MW-341M2-	MW-341	DEMO 1	12/08/2005	GROUNDWATER	265	270	105.66	110.66
MW-341M3-	MW-341	DEMO 1	12/08/2005	GROUNDWATER	210	220	50.66	60.66
MW-341M4-	MW-341	DEMO 1	12/08/2005	GROUNDWATER	182	187	22.66	27.66
MW-352M1 -	MW-352	DEMO 1	12/07/2005	GROUNDWATER	115	125	96.7	106.7
MW-352M2-	MW-352	DEMO 1	12/07/2005	GROUNDWATER	65	75	46.63	56.63
MW-352M3 -	MW-352	DEMO 1	12/07/2005	GROUNDWATER	43	53	25.3	35.3
MW-353M1-	MW-353	DEMO 1	12/07/2005	GROUNDWATER	107	117	96.57	106.57
MW-367M1-	MW-367	J-2 RANGE	12/08/2005	GROUNDWATER	205.15	215.15	117.65	127.65
MW-367M2-	MW-367	J-2 RANGE	12/08/2005	GROUNDWATER	167.14	177.14	79.64	89.64
MW-392D-	MW-392	J-3 RANGE	12/07/2005	GROUNDWATER	315.27	325.27	213.8	223.8
MW-392M1-	MW-392	J-3 RANGE	12/07/2005	GROUNDWATER	150.38	160.38	48.91	58.91
TW1-88B-A	1-88	WESTERN BOU	12/01/2005	GROUNDWATER	105.5	105.5	69.6	69.6
W02-01M1A	02-01	WESTERN BOU	12/01/2005	GROUNDWATER	95	105	42.9	52.9
W02-01M2A	02-01	WESTERN BOU	12/01/2005	GROUNDWATER	83	93	30.9	40.9
W02-02M1A	02-02	WESTERN BOU	12/01/2005	GROUNDWATER	114.5	124.5	63.5	73.5
W02-02M2A	02-02	WESTERN BOU	12/01/2005	GROUNDWATER	94.5	104.5	42.65	52.65
W02-02SSA	02-02	WESTERN BOU	12/01/2005	GROUNDWATER	49.5	59.5	0	10
W02-04M1A	02-04	WESTERN BOU	12/01/2005	GROUNDWATER	123	133	73.97	83.97
W02-04M2A	02-04	WESTERN BOU	12/01/2005	GROUNDWATER	98	108	48.93	58.93
W02-04M3A	02-04	WESTERN BOU	12/01/2005	GROUNDWATER	83	93	34.01	44.01
W02-08M1A	02-08	WESTERN BOU	12/01/2005	GROUNDWATER	108	113	86.56	91.56
W02-08M2A	02-08	WESTERN BOU	12/01/2005	GROUNDWATER	82	87	60.65	65.65
W02-08M3A	02-08	WESTERN BOU	12/02/2005	GROUNDWATER	62	67	40.58	45.58
W02-08M3D	02-08	WESTERN BOU	12/02/2005	GROUNDWATER	62	67	40.58	45.58
W02-10M1A	02-10	WESTERN BOU	12/01/2005	GROUNDWATER	135	145	94	104
W02-10M1D	02-10	WESTERN BOU	12/01/2005	GROUNDWATER	135	145	94	104
W02-10M2A	02-10	WESTERN BOU	12/01/2005	GROUNDWATER	110	120	68.61	78.61
W02-10M3A	02-10	WESTERN BOU	12/01/2005	GROUNDWATER	85	95	43.65	53.65
W102M1A	MW-102	CIA	12/07/2005	GROUNDWATER	267	277	123	133

Profiling methods may include: Volatiles, Explosives, and Perchlorate Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry

Other Sample Types methods are variable

SBD = Sample Begin Depth, measured in feet bgs

SED = Sample End Depth, measured in feet bgs

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

AOC = Area of Concern CIA = Central Impact Area

SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE	
W102M2A	MW-102	CIA	12/07/2005	GROUNDWATER	237	247	93	103	
W108DDA	MW-108	CIA	12/07/2005	GROUNDWATER	317	327	153	163	
W108M1A	MW-108	CIA	12/07/2005	GROUNDWATER	297	307	133	143	
W108M3A	MW-108	CIA	12/07/2005	GROUNDWATER	262	272	98	108	
W108M4A	MW-108	CIA	12/07/2005	GROUNDWATER	240	250	76	86	
W110M2A	MW-110	CIA	12/08/2005	GROUNDWATER	248.5	258.5	75	85	
W110M2D	MW-110	CIA	12/08/2005	GROUNDWATER	248.5	258.5	75	85	
W123M1A	MW-123	CIA	12/07/2005	GROUNDWATER	291	301	153	163	
W123M2A	MW-123	CIA	12/07/2005	GROUNDWATER	236	246	98	108	
W123M2D	MW-123	CIA	12/07/2005	GROUNDWATER	236	246	98	108	
W133M1A	MW-133	CIA	12/08/2005	GROUNDWATER	352	362	136	146	
W133M2A	MW-133	CIA	12/08/2005	GROUNDWATER	321	331	105	115	
W136M1A	MW-136	J-1 RANGE	12/02/2005	GROUNDWATER	124	134	17	27	
W136SSA	MW-136	J-1 RANGE	12/02/2005	GROUNDWATER	107	117	0	10	
W166M1A	MW-166	J-1 RANGE	12/02/2005	GROUNDWATER	218	223	112	117	
W166M2A	MW-166	J-1 RANGE	12/02/2005	GROUNDWATER	150	160	44	54	
W166M2D	MW-166	J-1 RANGE	12/02/2005	GROUNDWATER	150	160	44	54	
W178M1A	MW-178	CIA	12/08/2005	GROUNDWATER	257	267	117	127	
W178M2A	MW-178	CIA	12/08/2005	GROUNDWATER	167	177	27	37	
W207M1A	MW-207	CIA	12/05/2005	GROUNDWATER	254	264	100.52	110.52	
W207M2A	MW-207	CIA	12/06/2005	GROUNDWATER	224	234	79.33	89.33	
W208M1A	MW-208	CIA	12/09/2005	GROUNDWATER	195	205	56.18	66.18	
W208M2A	MW-208	CIA	12/09/2005	GROUNDWATER	158	168	18.41	28.41	
W212M1A	MW-212	CIA	12/08/2005	GROUNDWATER	333	343	125.6	135.6	
W233M1A	MW-233	WESTERN BOU	12/09/2005	GROUNDWATER	356	366	157.8	167.8	
W233M2A	MW-233	WESTERN BOU	12/09/2005	GROUNDWATER	331	341	132.8	142.8	
W233M3A	MW-233	WESTERN BOU	12/09/2005	GROUNDWATER	231	241	32.8	42.8	
W233M3D	MW-233	WESTERN BOU	12/09/2005	GROUNDWATER	231	241	32.8	42.8	
W23M1A	MW-23	CIA	12/06/2005	GROUNDWATER	225	235	103	113	
W23M1D	MW-23	CIA	12/06/2005	GROUNDWATER	225	235	103	113	
W254M2A	MW-254	J-2 RANGE	12/05/2005	GROUNDWATER	190	200	125.73	135.73	
W262M1A	MW-262	DEMO 2	12/09/2005	GROUNDWATER	226	236	7.02	17.02	
W277SSA	MW-277	NW CORNER	12/05/2005	GROUNDWATER	102	112	0	10	
W277SSD	MW-277	NW CORNER	12/05/2005	GROUNDWATER	102	112	0	10	
W278SSA	MW-278	NW CORNER	12/05/2005	GROUNDWATER	80	90	0	10	
W279SSA	MW-279	NW CORNER	12/05/2005	2005 GROUNDWATER		76	10	20	
W287M1A	MW-287	NW CORNER	12/08/2005	/2005 GROUNDWATER		170	25.45	35.45	
W287SSA	MW-287	NW CORNER	12/08/2005	GROUNDWATER	133	143	0	10	

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BWTS = Depth below water table, start depth, measured in feet

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AOC = Area of Concern

SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE	
W298M2A	MW-298	NW CORNER	12/08/2005	GROUNDWATER	174	184	87.58	97.58	
W298SSA	MW-298	NW CORNER	12/08/2005	GROUNDWATER	83	93	0	10	
W301SSA	MW-301	NW CORNER	12/07/2005	GROUNDWATER	97	107	1.32	11.32	
W303M1A	MW-303	J-1 RANGE	12/02/2005	GROUNDWATER	300	310	187	197	
W303M2A	MW-303	J-1 RANGE	12/02/2005	GROUNDWATER	235	245	122	132	
W303M3A	MW-303	J-1 RANGE	12/02/2005	GROUNDWATER	140	150	27	37	
W303M3D	MW-303	J-1 RANGE	12/02/2005	GROUNDWATER	140	150	27	37	
W318M2A	MW-318	J-2 RANGE	12/06/2005	GROUNDWATER	205	215	84	94	
W318M2D	MW-318	J-2 RANGE	12/06/2005	GROUNDWATER	205	215	84	94	
W323M1A	MW-323	NW CORNER	12/07/2005	GROUNDWATER	195	205	121.05	131.05	
W323M2A	MW-323	NW CORNER	12/07/2005	GROUNDWATER	120	130	46.05	56.05	
W323SSA	MW-323	NW CORNER	12/07/2005	GROUNDWATER	73	83	0	10	
W50DDA	MW-50	CIA	12/08/2005	GROUNDWATER	237	247	119	129	
W50M1A	MW-50	CIA	12/08/2005	GROUNDWATER	207	217	89	99	
W50M1D	MW-50	CIA	12/08/2005	GROUNDWATER	207	217	89	99	
W50M2A	MW-50	CIA	12/08/2005	GROUNDWATER	177	187	59	69	
W65M2A	MW-65	NW CORNER	12/05/2005	GROUNDWATER	129	134	14	19	
W65SSA	MW-65	NW CORNER	12/05/2005	GROUNDWATER	116	126	1	11	
W66M2A	MW-66	NW CORNER	12/06/2005	GROUNDWATER	140.8	150.8	22	32	
W66SSA	MW-66	NW CORNER	12/06/2005	GROUNDWATER	125.7	135.7	7	17	
W86M1A	MW-86	CIA	12/06/2005	GROUNDWATER	208	218	66	76	
W86M2A	MW-86	CIA	12/06/2005	GROUNDWATER	158	168	16	26	
W86SSA	MW-86	CIA	12/06/2005	GROUNDWATER	143	153	1	11	
W88M1A	MW-88	CIA	12/06/2005	GROUNDWATER	233	243	92	102	
W88M2A	MW-88	CIA	12/06/2005	GROUNDWATER	213	223	72	82	
W95M1A	MW-95	CIA	12/06/2005	GROUNDWATER	202	212	78	88	
W95M1D	MW-95	CIA	12/06/2005	GROUNDWATER	202	212	78	88	
W95M2A	MW-95	CIA	12/06/2005	GROUNDWATER	167	177	43	53	
W96M1A	MW-96	CIA	12/09/2005	GROUNDWATER	206	216	70	80	
W96M2A	MW-96	CIA	12/09/2005	GROUNDWATER	160	170	24	34	
MW-430-02	MW-430	J-1 RANGE	12/07/2005	PROFILE	130	135	23.17	28.17	
MW-430-03	MW-430	J-1 RANGE	12/08/2005	PROFILE	140	145	33.17	38.17	
MW-430-03FD	MW-430	J-1 RANGE	12/08/2005	PROFILE	140	145	33.17	38.17	
MW-430-04	MW-430	J-1 RANGE	12/08/2005	PROFILE	150	155	43.17	48.17	
MW-430-05	MW-430	J-1 RANGE	12/08/2005	PROFILE	160	165	53.17	58.17	
MW-430-06	MW-430	J-1 RANGE	12/08/2005	PROFILE	170	175	63.17	68.17	
MW-430-07	MW-430	J-1 RANGE	12/08/2005	PROFILE	180	185	73.17	78.17	
MW-430-08	MW-430	J-1 RANGE	12/08/2005	PROFILE	190	195	83.17	88.17	

Profiling methods may include: Volatiles, Explosives, and Perchlorate Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry

Other Sample Types methods are variable

SBD = Sample Begin Depth, measured in feet bgs

SED = Sample End Depth, measured in feet bgs

BWTS = Depth below water table, start depth, measured in feet

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

AOC = Area of Concern

SAMPLE_ID	GIS_LOCID	AOC	LOGDATE	SAMP_TYPE	SBD	SED	BWTS	BWTE
MW-430-09	MW-430	J-1 RANGE	12/09/2005	PROFILE	200	205	93.17	98.17
MW-430-10	MW-430	J-1 RANGE	12/09/2005	PROFILE	210	215	103.17	108.17
MW-430-11	MW-430	J-1 RANGE	12/09/2005	PROFILE	220	225	113.17	118.17
MW-430-12	MW-430	J-1 RANGE	12/09/2005	PROFILE	230	235	123.17	128.17
ECC112905CIADP01 (pre)	SSCIADP001	CIA	12/01/2005	SOIL_COMPOSITE	0	0.2		
ECC120105J2SUP02A (pre)	SSJ2M19002	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120105J2SUP02B (pre)	SSJ2M19002	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120105J2SUP02C (pre)	SSJ2M19002	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120105J2SUP02D (pre)	SSJ2M19002	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120205J2SUP05 (pre)	SSJ2M19005	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01A (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01B (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01C (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01D (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01E (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01F (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01G (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01J (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01K (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01L (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		
ECC120705J2SUP01M (pre)	SSJ2M19007	J-2 RANGE	12/07/2005	SOIL_COMPOSITE	0	0.2		

Profiling methods may include: Volatiles, Explosives, and Perchlorate Groundwater methods include: Volatiles, Semivolatiles, Explosives, Pesticides, Herbicides, Metals, Perchlorate and Wet Chemistry

Other Sample Types methods are variable

SBD = Sample Begin Depth, measured in feet bgs

SED = Sample End Depth, measured in feet bgs

BWTS = Depth below water table, start depth, measured in feet

BWTE = Depth below water table, end depth, measured in feet AOC = Area of Concern

CIA = Central Impact Area

TABLE 5 VALIDATED DETECTS EXCEEDING MCLs OR HEALTH ADVISORY LIMITS INTERIM MONTHLY DATA RECEIVED 11/23/05-12/09/05

WELL/LOCID	SAMPLE ID	SAMPLED	AOC	METHOD	ANALYTE	CONC.	FLAG	UNITS	BWTS	BWTE	DW LIMIT >DW LI	MIT
MW-1	W01SSA	09/06/2005	CIA	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	2.6		UG/L	0	10	2 X	
MW-1	W01M2A	09/06/2005	CIA	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	6		UG/L	44	49	2 X	
MW-1	W01M2D	09/06/2005	CIA	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	6.5		UG/L	44	49	2 X	
MW-153	W153M1A	09/07/2005	L RANGE	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	3.2	J	UG/L	108	118	2 X	
MW-178	W178M1A	09/06/2005	CIA	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	4.4		UG/L	117	127	2 X	
MW-201	W201M2A	09/08/2005	CIA	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	4.4		UG/L	86.9	96.9	2 X	
MW-201	W201M2D	09/08/2005	CIA	8330NX	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	4.3		UG/L	86.9	96.9	2 X	
MW-265	W265M3A	08/31/2005	J-1 RANGE	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	2.7		UG/L	72.44	82.44	2 X	
MW-265	W265M2A	08/31/2005	J-1 RANGE	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	2.9		UG/L	97.6	107.6	2 X	
MW-303	W303M2A	08/30/2005	J-1 RANGE	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	26		UG/L	122	132	2 X	
MW-368	MW-368M2-	10/28/2005	J-2 RANGE	SW8330	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	11		UG/L	99.23	109.23	2 X	
MW-368	MW-368M2-FD	10/28/2005	J-2 RANGE	SW8330	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	12		UG/L	99.23	109.23	2 X	
MW-398	MW-398M2-	10/19/2005	J-1 RANGE	SW8330	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	120		UG/L	40.63	50.63	2 X	
MW-398	MW-398M2-FD	10/19/2005	J-1 RANGE	SW8330	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	120		UG/L	40.63	50.63	2 X	
MW-265	W265M3A	08/31/2005	J-1 RANGE	E314.0	PERCHLORATE	4.6		UG/L	72.44	82.44	4 X	
MW-265	W265M2A	08/31/2005	J-1 RANGE	E314.0	PERCHLORATE	23.4		UG/L	97.6	107.6	4 X	
MW-278	W278SSA	09/16/2005	NW CORNER	E314.0	PERCHLORATE	15.4		UG/L	0	10	4 X	
MW-279	W279SSA	09/16/2005	NW CORNER	E314.0	PERCHLORATE	24.4		UG/L	10	20	4 X	
MW-284	W284M2A	09/19/2005	NW CORNER	E314.0	PERCHLORATE	4.1		UG/L	21.2	31.2	4 X	
MW-303	W303M2A	08/30/2005	J-1 RANGE	E314.0	PERCHLORATE	13.5		UG/L	122	132	4 X	
MW-368	MW-368M2-	10/28/2005	J-2 RANGE	E314.0	PERCHLORATE	50.8		UG/L	99.23	109.23	4 X	
MW-368	MW-368M2-FD	10/28/2005	J-2 RANGE	E314.0	PERCHLORATE	51.5		UG/L	99.23	109.23	4 X	
MW-368	MW-368M1-	10/28/2005	J-2 RANGE	E314.0	PERCHLORATE	19.3		UG/L	133.85	143.85	4 X	

TABLE 6 VALIDATED DETECTS BELOW MCLs OR HEALTH ADVISORY LIMITS NOT PREVIOUSLY DETECTED INTERIM MONTHLY DATA RECEIVED 11/23/05-12/09/05

WELL/LOCID	SAMPLE ID	SAMPLED	AOC	METHOD	ANALYTE	CONC.	FLAG	UNITS	BWTS	BWTE	DW LIMIT	>DW_LIM	IIT
MW-393M2	MW-393M2-	10/26/2005	J-2 RANGE	SW8330	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	0.78		UG/L	130.56	140.56	2		
MW-399M1	MW-399M1-	11/02/2005	J-1 RANGE	SW8330	HEXAHYDRO-1,3,5-TRINITRO-1,3,5-T	0.54		UG/L	139	149	2		
MW-398M2	MW-398M2-	10/19/2005	J-1 RANGE	SW8330	OCTAHYDRO-1,3,5,7-TETRANITRO-1,	15		UG/L	40.63	50.63	400		
MW-398M2	MW-398M2-FD	10/19/2005	J-1 RANGE	SW8330	OCTAHYDRO-1,3,5,7-TETRANITRO-1,	14		UG/L	40.63	50.63	400		
WL201M2	W201M2A	09/08/2005	CIA	8330NX	OCTAHYDRO-1,3,5,7-TETRANITRO-1,	0.32		UG/L	86.9	96.9	400		
WL201M2	W201M2D	09/08/2005	CIA	8330NX	OCTAHYDRO-1,3,5,7-TETRANITRO-1,	0.29		UG/L	86.9	96.9	400		
WL265M2	W265M2A	08/31/2005	J-1 RANGE	8330N	OCTAHYDRO-1,3,5,7-TETRANITRO-1,	0.33		UG/L	97.6	107.6	400		
MW-393M1	MW-393M1-	10/26/2005	J-2 RANGE	E314.0	PERCHLORATE	1.6	J	UG/L	180.42	190.42	4		
WL239M1	W239M1A	09/26/2005	J-3 RANGE	E314.0	PERCHLORATE	0.46	J	UG/L	159.8	169.8	4		

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

DW LIMIT = EITHER THE MCL OR LOWEST HEALTH ADVISORY CONCENTRATION (CHILD, ADULT OR LIFETIME)

>DW LIMIT = EQUALS OR EXCEEDS EITHER THE MCL OR LOWEST HEALTH ADVISORY CONCENTRATION (CHILD, ADULT, OR LIFETIME)

J = ESTIMATED DETECT

AOC = Area of Concern

TABLE 7 DETECTED COMPOUNDS-UNVALIDATED INTERIM MONTHLY FOR 12/01/05 - 12/09/05

SAMPLE ID	LOCID OR WELL	SAMPLED	SAMP TYPE	AOC	SBD	SED	BWTS	BWTE	METHOD	ANALYTE	PDA

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES RECEIVED 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

AOC = Area of Concern

CIA = Central Impact Area

+ = Interference in sample