WEEKLY PROGRESS UPDATE
FOR JULY 31 – AUGUST 4, 2000

EPA REGION I ADMINISTRATIVE ORDER SDWA I-97-1019
MASSACHUSETTS MILITARY RESERVATION
TRAINING RANGE AND IMPACT AREA

The following summary of progress is for the period from July 31 to August 4, 2000.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of August 4 is summarized in Table 1.

Table 1. Drilling progress as of August 4, 2000

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-112	Impact Area Response Well (P-24)	240	90	
MW-113	Impact Area Response Well (P-25)	190	47	

bgs = below ground surface
bwt = below water table

Completed drilling on MW-112 (P-24) and continued drilling on MW-113 (P-25). UXO clearance of the J-2 Range drill pads and access roads continued. Development of newly installed wells continued.

Samples collected during the reporting period are summarized in Table 2. Groundwater samples were collected from the Demo 1 Response wells, August Long Term Monitoring wells, and a Sagamore Water Supply Well. Groundwater profile samples were collected during the drilling of MW-112 and MW-113. Deep soil samples were collected during the drilling of MW-112 and MW-113. Soil samples were collected from grids in the L Range (Area 103) and from Target 24 (Area 104).

The Guard, EPA, and MADEP had a meeting on August 3 to discuss technical issues, including the following:

- Jacobs presented an update of the CS-19 investigation. Continue to work on the response to comments, which are under internal review. Responses should be ready for the agencies on Monday. George Peterson was introduced and will be managing the Feasibility Study. A meeting has been scheduled for August 10th at 8:00 to go over available technologies. EPA asked if Jacobs has Ogden's Demo-1 technology report. Jacobs indicated that they have the report and EPA comments.

- There was no update on the Water Supply Investigation. DEP asked if the Guard was going to comment on the EA. The Guard indicated that they already provided comments. DEP requested a copy of the Guard's comments. EPA indicated that the JPO denied Tom Cambareri's request for an extension on the comment period. EPA suggested that extensions are automatic under MEPA. The Guard will ask JPO to verify.

- Tetra Tech presented an update of the Munitions Survey. A 1-page handout of the update was distributed. The HUTA grids have been cleared of vegetation. Have identified 800 objects greater than three inches. Logged 60 items into the database in one day. Will begin clearance of non-testable items after all the items are logged. A 3-page handout of the UXO incident report from the database was distributed. Excavation equipment is arriving. The preliminary data from the aerial geophysical

survey will be presented after the Tech Meeting. The final data set is being prepared. Continue to work on finalizing the work plan. J-2 Range brush cutting continues. Land survey of J1/J3 to start. Continue to work on the Radiological Work Plan. The Guard indicated that Textron is willing to move items on the J1/J3 Ranges if they are in the way.

- Ogden presented an update of the Rapid Response Action. A 1-page handout of the update was distributed. Received agency comments on the Public Comment Responsiveness Summary. Received DEP comments on the FEC comment responses. Agency comments will be addressed and included as an attachment to the final work plan. The DEP RAM Plan will be submitted before the end of the week. Awaiting the Order of Conditions from the Sandwich Conservation Commission on the J-3 Wetland. The third round of delineation samples from the KD Range were non detect. Currently working on the delineation sampling and analysis report. The draft soil washing report will be ready for internal review by the end of the week. The report indicates that there is the opportunity for substantial volume reduction. The containment pad design should be ready by the end of the week.

- Ogden provided an update of the Groundwater Investigation. A 1-page handout of the update was distributed. A map of the CIA well locations was distributed. Continue drilling on MW-112 (P-24) and MW-113 (P-25) which will require screen selection next week. The next scheduled locations are P-23 and Demo 1 response well. Completed the third round of groundwater sampling of the Demo 1 response wells and commenced the August LTM round. Continue to develop newly installed wells. Continue to UXO clear the J-2 Range drill pads. Commenced soil sampling the Tank Alley and Turpentine Road Targets and the L Range grids. Scheduled to collect air samples from another M-16 firing event this weekend. EPA asked how many rounds would be fired. Ogden indicated that it was unsure at this time but would not perform the monitoring unless 4,000 rounds were scheduled to be fired.

- A 1-page handout of photos of the J-2 Range Melt Pour Building was distributed. Ogden indicated that the original well proposed was a water table well installed with an auger rig. EPA comments requested that the boring in this location be profiled which would require the boring be drilled with a Barber rig. Because this location is in a kettle hole there is insufficient room to set up a Barber rig and associated support equipment. Ogden indicated that if the melt pour building was knocked down then there would be sufficient room. The laboratory indicated that the preliminary data from the wipe samples of the melt pour building indicated explosives were detected. EPA suggested a site walk after the Tech Meeting to relocate the well. During the site walk after the Tech Meeting, it was agreed to use the auger rig and set a water table well for now.

- A 2-page handout of a table of the CHPPM and 8330 analysis was distributed for review. 8321 data were not available yet.

- EPA indicated that Richard Hugus requested another soil sample from the Popper Kettle location. During the site walk after the Tech Meeting a location for the soil sample was identified.

- EPA requested the status of the wood chip sample and sample collection method.

- EPA stated that Paul Zanis indicated that the J-1 Range berms had some slag material. EPA suggested that this needs to be revisited.

- EPA requested an update of the ASR schedule from the Guard.

After the Technical Meeting there was a presentation by Tetra Tech of the preliminary Impact Area Aerial Geophysical Survey data and an update of the groundwater model by the USGS.

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 VOC analyses for groundwater profile samples, are conducted in this timeframe. 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 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. Most explosive detections verified by PDA are confirmed to be present upon completion of validation. Table 3 includes the following detections:

- The composite soil sample from the detonation crater from the 155 mm projectile #2 at the J-2 Range had a detection of RDX, which was verified by PDA spectra.

- The composite and discrete soil samples from the detonation crater from the 155 mm projectile #3 at the J-2 Range had detections of RDX, which were verified by PDA spectra.

- The discrete soil sample from the detonation crater from the 81 mm mortar #8 at the J-2 Range had a detection of TNT, which was verified by the PDA spectra.

- The composite and discrete soil samples from the detonation crater from the 81 mm mortar #21 at the J-2 Range had detections of RDX, which were verified by PDA spectra.

- The composite and discrete soil samples from the detonation crater from the 81 mm mortar #22 at the J-2 Range had detections of RDX, which were verified by PDA spectra.

- The discrete and composite soil samples from the detonation crater from the 81 mm mortar #23 at the J-2 Range had detections of RDX. The composite sample also had a detection of HMX. The RDX and HMX were verified by the PDA spectra.

- The groundwater profile samples from MW-112 had detections of picric acid (3 intervals), RDX (3 intervals), nitroglycerin (1 interval), 2-amino-4,6-dinitrotoluene (1 interval). The RDX was verified by the PDA spectra.

- The groundwater profile samples from MW-113 had detections of 2,6-dinitrotoluene (1 interval) and picric acid (2 intervals), which were not verified by PDA spectra.

3. DELIVERABLES SUBMITTED

The following deliverables were submitted during the reporting period.

Final J-2 Range Work Plan	08/01/00
Draft Mortar Targets TM 00-4	08/02/00
Draft Phase II (b) FSP for Grenade Courts	08/03/00
Draft Phase II (b) FSP for Former K Range	08/03/00
Final SAR Firing Investigation Plan	08/04/00

4. SCHEDULED ACTIONS

Scheduled actions for the week of August 7 include the well installation at MW-112 (P-24); continued drilling and well installation at MW-113 (P-25); the continued UXO clearance of the drilling pads and soil grids in the J-2 Range; continued groundwater sampling of the August LTM wells; and development of newly installed wells.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

EPA provided comments on the draft FS Workplan for AO3 (including Demo 1). The regulatory agencies and other stakeholders are reviewing the draft technical memorandum for the Demo 1 response actions submitted 6/8/00. The Guard is awaiting the results of the soil sampling of the nine additional deep soil borings.

TABLE 2
SAMPLING PROGRESS
07/30/2000-08/5/2000

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
G112DGE	FIELDQC	8/3/00	FIELDQC	0.00	0.00		
G113DAE	FIELDQC	8/1/00	FIELDQC	0.00	0.00		
G113DDE	FIELDQC	8/3/00	FIELDQC	0.00	0.00		
G113DEE	FIELDQC	8/4/00	FIELDQC	0.00	0.00		
HC103AA1AAE	FIELDQC	8/3/00	FIELDQC	0.00	0.00		
HC103AD1AAE	FIELDQC	8/4/00	FIELDQC	0.00	0.00		
HC104A1AAE	FIELDQC	8/1/00	FIELDQC	0.00	0.00		
HC104A1AAT	FIELDQC	8/1/00	FIELDQC	0.00	0.00		
HC104B1AAE	FIELDQC	8/2/00	FIELDQC	0.00	0.00		
S112DNE	FIELDQC	8/1/00	FIELDQC	0.00	0.00		
S113DLE	FIELDQC	7/31/00	FIELDQC	0.00	0.00		
S113DLT	FIELDQC	7/31/00	FIELDQC	0.00	0.00		
W02DDT	FIELDQC	8/2/00	FIELDQC	0.00	0.00		
W05DDT	FIELDQC	8/3/00	FIELDQC	0.00	0.00		
W05M1T	FIELDQC	8/3/00	FIELDQC	0.00	0.00		
W16DDT	FIELDQC	8/4/00	FIELDQC	0.00	0.00		
4036003-01G	4036003-01G	8/3/00	GROUNDWATER				
W01DDA	MW-1	7/31/00	GROUNDWATER	290.00	300.00	170.19	180.19
W01M1A	MW-1	7/31/00	GROUNDWATER	220.00	225.00	101.65	106.65
W01M2A	MW-1	7/31/00	GROUNDWATER	160.00	165.00	40.42	45.42
W01SSA	MW-1	7/31/00	GROUNDWATER	114.00	124.00	-5.67	4.33
W02DDA	MW-2	8/2/00	GROUNDWATER	355.00	360.00	212.80	217.80
W02DDD	MW-2	8/2/00	GROUNDWATER	355.00	360.00	212.80	217.80
W02M1A	MW-2	8/2/00	GROUNDWATER	212.00	217.00	70.16	75.16
W02M2A	MW-2	8/2/00	GROUNDWATER	170.00	175.00	28.20	33.20
W03DDA	MW-3	8/3/00	GROUNDWATER	257.00	267.00	207.40	217.40
W03M1A	MW-3	8/2/00	GROUNDWATER	240.00	245.00	189.85	194.85
W03M1D	MW-3	8/2/00	GROUNDWATER	240.00	245.00	189.85	194.85
W03M2A	MW-3	8/2/00	GROUNDWATER	180.00	185.00	129.78	134.78
W03SSA	MW-3	8/2/00	GROUNDWATER	44.00	54.00	-5.75	4.25
W05DDA	MW-5	8/3/00	GROUNDWATER	330.00	340.00	212.36	222.36
W05M1A	MW-5	8/3/00	GROUNDWATER	205.00	215.00	87.39	97.39
W05M2A	MW-5	8/3/00	GROUNDWATER	165.00	175.00	47.56	57.56
W05SSA	MW-5	8/3/00	GROUNDWATER	119.00	129.00	1.35	11.35
W15DDA	MW-15	8/4/00	GROUNDWATER	324.00	334.00	213.18	223.18
W15SSA	MW-15	8/4/00	GROUNDWATER	105.00	115.00	0.00	10.00
W16DDA	MW-16	8/3/00	GROUNDWATER	355.00	360.00	212.80	217.80
W16SSA	MW-16	8/3/00	GROUNDWATER	128.00	138.00	-6.80	3.20
W17M1A	MW-17	8/4/00	GROUNDWATER	220.00	230.00	93.00	103.00
W17M2A	MW-17	8/4/00	GROUNDWATER	190.00	200.00	63.00	73.00
W17M3A	MW-17	8/3/00	GROUNDWATER	160.00	170.00	33.00	43.00
W18M2A	MW-18	8/4/00	GROUNDWATER	107.00	112.00	62.00	67.00
W74M1A	MW-74	8/1/00	GROUNDWATER	170.00	180.00	73.00	83.00

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
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

TABLE 2
SAMPLING PROGRESS
07/30/2000-08/5/2000

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
W74M2A	MW-74	8/1/00	GROUNDWATER	125.00	135.00	28.06	38.06
W74M3A	MW-74	8/1/00	GROUNDWATER	100.00	110.00	3.05	13.05
W75M1A	MW-75	8/1/00	GROUNDWATER	140.00	150.00	56.30	66.30
W75M2A	MW-75	8/2/00	GROUNDWATER	115.00	125.00	30.90	40.90
W75SSA	MW-75	8/1/00	GROUNDWATER	81.00	91.00	-3.10	6.90
W76M1A	MW-76	8/1/00	GROUNDWATER	125.00	135.00	53.00	63.00
W76M2A	MW-76	8/2/00	GROUNDWATER	105.00	115.00	34.82	44.82
W76SSA	MW-76	8/1/00	GROUNDWATER	85.00	95.00	13.20	23.20
W77M1A	MW-77	8/1/00	GROUNDWATER	180.00	190.00	94.39	104.39
W77M2A	MW-77	8/1/00	GROUNDWATER	120.00	130.00	34.33	44.33
W77SSA	MW-77	8/1/00	GROUNDWATER	83.00	93.00	-2.60	7.40
W78M1A	MW-78	8/2/00	GROUNDWATER	135.00	145.00	54.37	64.37
W78M2A	MW-78	8/3/00	GROUNDWATER	114.00	124.00	33.60	43.60
W78M3A	MW-78	8/2/00	GROUNDWATER	85.00	95.00	4.29	14.29
W79M1A	MW-79	8/1/00	GROUNDWATER	156.00	166.00	64.25	74.25
W79M2A	MW-79	8/1/00	GROUNDWATER	116.00	126.00	24.27	34.27
W79SSA	MW-79	8/1/00	GROUNDWATER	89.00	99.00	-2.72	7.28
DW0801	GAC WATER	8/1/00	IDW				
G112DAA	MW-112	8/1/00	PROFILE	140.00	140.00	0.00	0.00
G112DBA	MW-112	8/1/00	PROFILE	150.00	150.00	10.00	10.00
G112DCA	MW-112	8/1/00	PROFILE	160.00	160.00	20.00	20.00
G112DDA	MW-112	8/2/00	PROFILE	170.00	170.00	30.00	30.00
G112DDD	MW-112	8/2/00	PROFILE	170.00	170.00	30.00	30.00
G112DEA	MW-112	8/2/00	PROFILE	180.00	180.00	40.00	40.00
G112DFA	MW-112	8/2/00	PROFILE	190.00	190.00	50.00	50.00
G112DGA	MW-112	8/2/00	PROFILE	200.00	200.00	60.00	60.00
G112DHA	MW-112	8/2/00	PROFILE	210.00	210.00	70.00	70.00
G112DIA	MW-112	8/3/00	PROFILE	220.00	222.00	80.00	82.00
G112DJA	MW-112	8/3/00	PROFILE	230.00	232.00	90.00	92.00
G112DKA	MW-112	8/3/00	PROFILE	240.00	242.00	100.00	102.00
G113DAA	MW-113	8/1/00	PROFILE	145.00	145.00	2.20	2.20
G113DBA	MW-113	8/1/00	PROFILE	150.00	150.00	7.20	7.20
G113DDA	MW-113	8/3/00	PROFILE	170.00	172.00	27.20	29.20
G113DEA	MW-113	8/4/00	PROFILE	180.00	180.00	37.20	37.20
G113DFA	MW-113	8/4/00	PROFILE	190.00	190.00	47.20	47.20
S112DLA	MW-112	7/31/00	SOIL BORING	100.00	102.00		
S112DMA	MW-112	7/31/00	SOIL BORING	110.00	112.00		
S112DNA	MW-112	8/1/00	SOIL BORING	120.00	122.00		
S112DOA	MW-112	8/1/00	SOIL BORING	130.00	132.00		
S112DPA	MW-112	8/1/00	SOIL BORING	140.00	142.00		
S113DLA	MW-113	7/31/00	SOIL BORING	100.00	102.00		
S113DMA	MW-113	7/31/00	SOIL BORING	110.00	112.00		
S113DNA	MW-113	7/31/00	SOIL BORING	120.00	122.00		
S113DOA	MW-113	7/31/00	SOIL BORING	130.00	132.00		

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
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

TABLE 2
SAMPLING PROGRESS
07/30/2000-08/5/2000

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
S113DPA	MW-113	7/31/00	SOIL BORING	140.00	142.00		
HC103AA1AAA	103A	8/3/00	SOIL GRID	0.00	0.25		
HC103AA1AAD	103A	8/3/00	SOIL GRID	0.00	0.25		
HC103AA1BAA	103A	8/3/00	SOIL GRID	0.25	0.50		
HC103AA1CAA	103A	8/3/00	SOIL GRID	0.50	1.00		
HC103AB1AAA	103A	8/3/00	SOIL GRID	0.00	0.25		
HC103AB1BAA	103A	8/3/00	SOIL GRID	0.25	0.50		
HC103AB1CAA	103A	8/3/00	SOIL GRID	0.00	0.50		
HC103AC1AAA	103A	8/3/00	SOIL GRID	0.00	0.25		
HC103AC1BAA	103A	8/3/00	SOIL GRID	0.25	0.50		
HC103AC1CAA	103A	8/3/00	SOIL GRID	0.50	1.00		
HC103AD1AAA	103A	8/3/00	SOIL GRID	0.00	0.25		
HC103AD1BAA	103A	8/3/00	SOIL GRID	0.25	0.50		
HC103AD1CAA	103A	8/3/00	SOIL GRID	0.50	1.00		
HC104A1AAA	104A	8/1/00	SOIL GRID	0.00	0.25		
HC104A1AAD	104A	8/1/00	SOIL GRID	0.00	0.25		
HC104A1BAA	104A	8/1/00	SOIL GRID	0.25	0.50		
HC104A1CAA	104A	8/2/00	SOIL GRID	0.50	1.00		
HC104B1AAA	104B	8/2/00	SOIL GRID	0.00	0.25		
HC104B1BAA	104B	8/2/00	SOIL GRID	0.25	0.50		
HC104B1CAA	104B	8/2/00	SOIL GRID	0.50	1.00		
HD104A1AAA	104A	8/1/00	SOIL GRID	0.00	0.25		
HD104A1BAA	104A	8/1/00	SOIL GRID	0.25	0.50		
HD104A1CAA	104A	8/2/00	SOIL GRID	0.50	1.00		
HD104A3AAA	104A	8/1/00	SOIL GRID	0.00	0.25		
HD104A3BAA	104A	8/1/00	SOIL GRID	0.25	0.50		
HD104A3CAA	104A	8/2/00	SOIL GRID	0.50	1.00		
HD104A5AAA	104A	8/1/00	SOIL GRID	0.00	0.25		
HD104A5BAA	104A	8/1/00	SOIL GRID	0.25	0.50		
HD104A5CAA	104A	8/2/00	SOIL GRID	0.50	1.00		
HD104A7AAA	104A	8/1/00	SOIL GRID	0.00	0.25		
HD104A7BAA	104A	8/1/00	SOIL GRID	0.25	0.50		
HD104A7CAA	104A	8/2/00	SOIL GRID	0.50	1.00		
HD104B1AAA	104B	8/2/00	SOIL GRID	0.00	0.25		
HD104B1AAD	104B	8/2/00	SOIL GRID	0.00	0.25		
HD104B1BAA	104B	8/2/00	SOIL GRID	0.25	0.50		
HD104B1CAA	104B	8/2/00	SOIL GRID	0.50	1.00		
HD104B3AAA	104B	8/2/00	SOIL GRID	0.00	0.25		
HD104B3BAA	104B	8/2/00	SOIL GRID	0.25	0.50		
HD104B3CAA	104B	8/2/00	SOIL GRID	0.50	1.00		
HD104B5AAA	104B	8/2/00	SOIL GRID	0.00	0.25		
HD104B5BAA	104B	8/2/00	SOIL GRID	0.25	0.50		
HD104B5CAA	104B	8/2/00	SOIL GRID	0.50	1.00		
HD104B7AAA	104B	8/2/00	SOIL GRID	0.00	0.25		

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
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

TABLE 2
SAMPLING PROGRESS
07/30/2000-08/5/2000

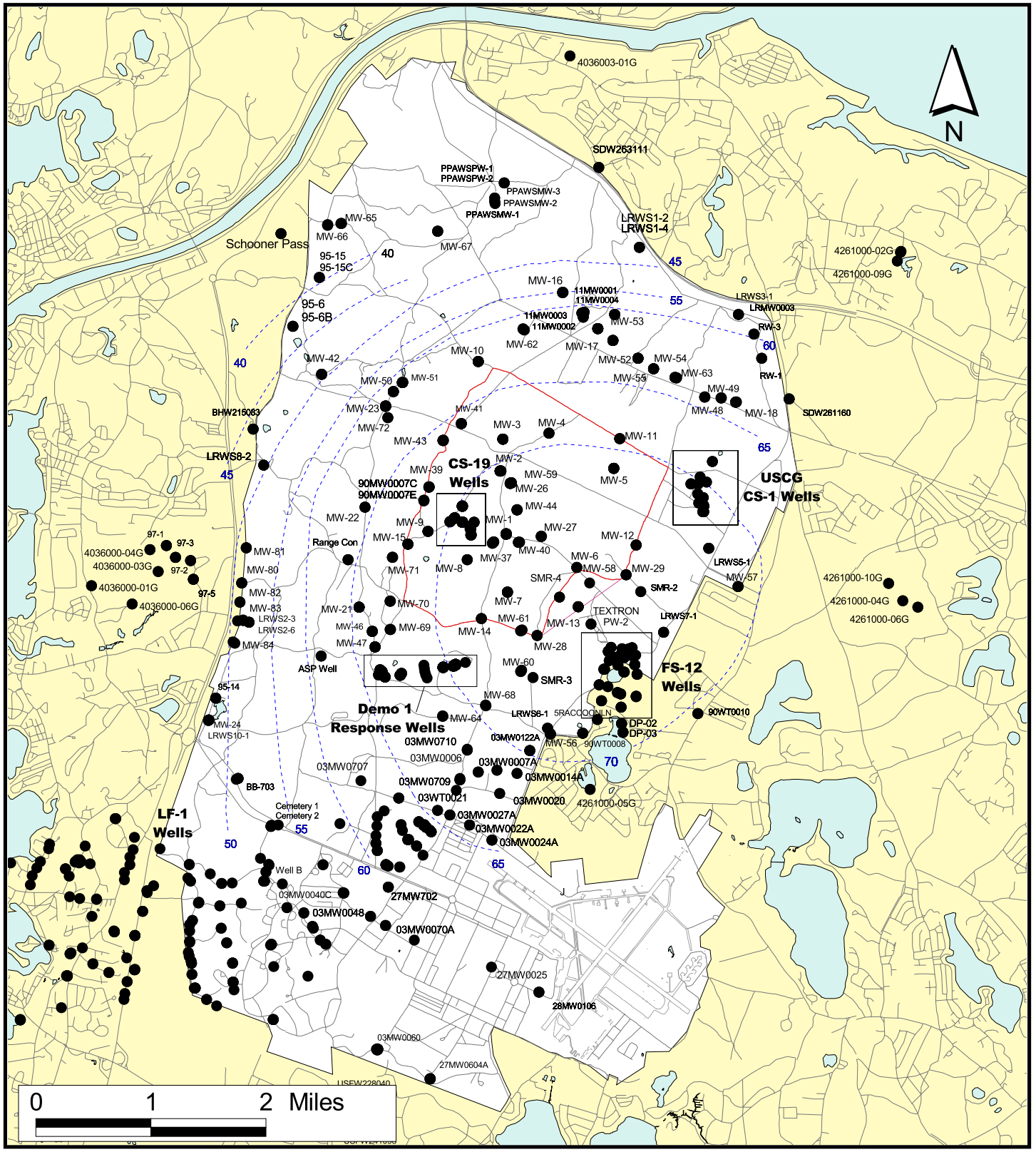
OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
HD104B7BAA	104B	8/2/00	SOIL GRID	0.25	0.50		
HD104B7CAA	104B	8/2/00	SOIL GRID	0.50	1.00		

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
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

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 7/30/00-8/5/00

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
HCJ2155MM02	HDJ2155MM02	7/28/00	CRATER GRAB	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
HCJ2155MM03	HDJ2155MM03	7/28/00	CRATER GRAB	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
HCJ281MM21	HDJ281MM21	7/28/00	CRATER GRAB	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
HCJ281MM22	HDJ281MM22	7/28/00	CRATER GRAB	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
HCJ281MM23	HCJ281MM23	7/28/00	CRATER GRAB	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
HCJ281MM23	HCJ281MM23	7/28/00	CRATER GRAB	0.00	0.25			8330N	OCTAHYDRO-1,3,5,7-TETRANITF	YES
HDJ2155MM03	HDJ2155MM03	7/28/00	CRATER GRAB	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
HDJ281MM08	HDJ281MM08	7/28/00	CRATER GRAB	0.00	0.25			8330N	2,4,6-TRINITROTOLUENE	YES
HDJ281MM21	HDJ281MM21	7/28/00	CRATER GRAB	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
HDJ281MM22	HDJ281MM22	7/28/00	CRATER GRAB	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
HDJ281MM23	HDJ281MM23	7/28/00	CRATER GRAB	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G112DAA	MW-112	8/1/00	PROFILE	140.00	140.00	0.00	0.00	8330N	PICRIC ACID	NO
G112DCA	MW-112	8/1/00	PROFILE	160.00	160.00	20.00	20.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G112DCA	MW-112	8/1/00	PROFILE	160.00	160.00	20.00	20.00	8330N	PICRIC ACID	NO
G112DDA	MW-112	8/2/00	PROFILE	170.00	170.00	30.00	30.00	8330N	PICRIC ACID	NO
G112DDD	MW-112	8/2/00	PROFILE	170.00	170.00	30.00	30.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G112DDD	MW-112	8/2/00	PROFILE	170.00	170.00	30.00	30.00	8330N	PICRIC ACID	NO
G112DGA	MW-112	8/2/00	PROFILE	200.00	200.00	60.00	60.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G112DJA	MW-112	8/3/00	PROFILE	230.00	232.00	90.00	90.00	8330N	2-AMINO-4,6-DINITROTOLUENE	NO
G112DJA	MW-112	8/3/00	PROFILE	230.00	232.00	90.00	90.00	8330N	NITROGLYCERIN	NO
G113DAA	MW-113	8/1/00	PROFILE	145.00	145.00	2.20	2.20	8330N	2,6-DINITROTOLUENE	NO
G113DAA	MW-113	8/1/00	PROFILE	145.00	145.00	2.20	2.20	8330N	PICRIC ACID	NO
G113DBA	MW-113	8/1/00	PROFILE	150.00	150.00	7.20	7.20	8330N	PICRIC ACID	NO

DATA REPORTED REFLECT CURRENT DATABASE FOR SAMPLES COLLECTED IN SPECIFIED TIMEFRAME. NOT ALL RESULTS ARE COMPLETE.
SBD = SAMPLE COLLECTION BEGIN DEPTH IN FEET BGS
SED = SAMPLE COLLECTION END DEPTH IN FEET BGS
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



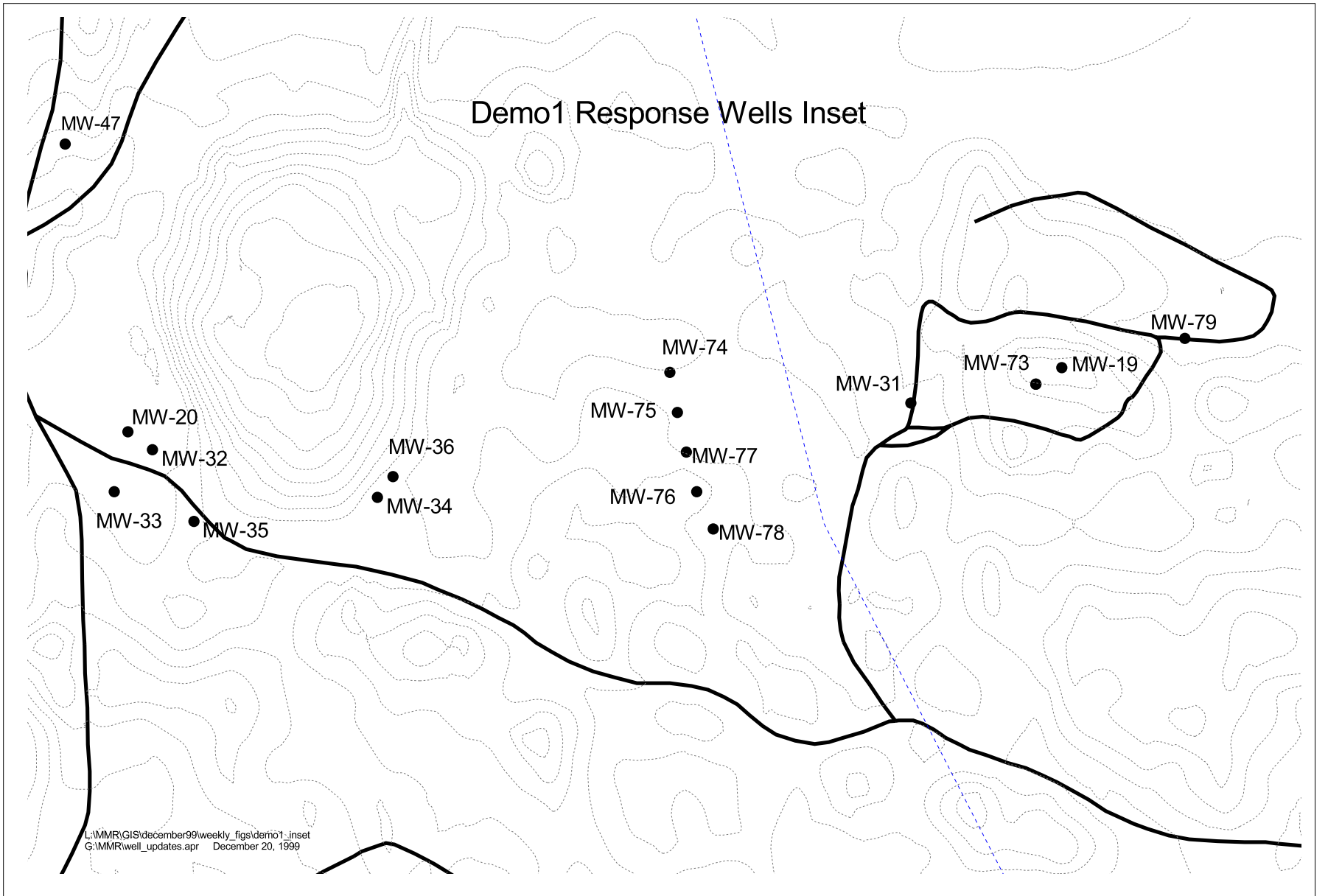
Sources & Notes

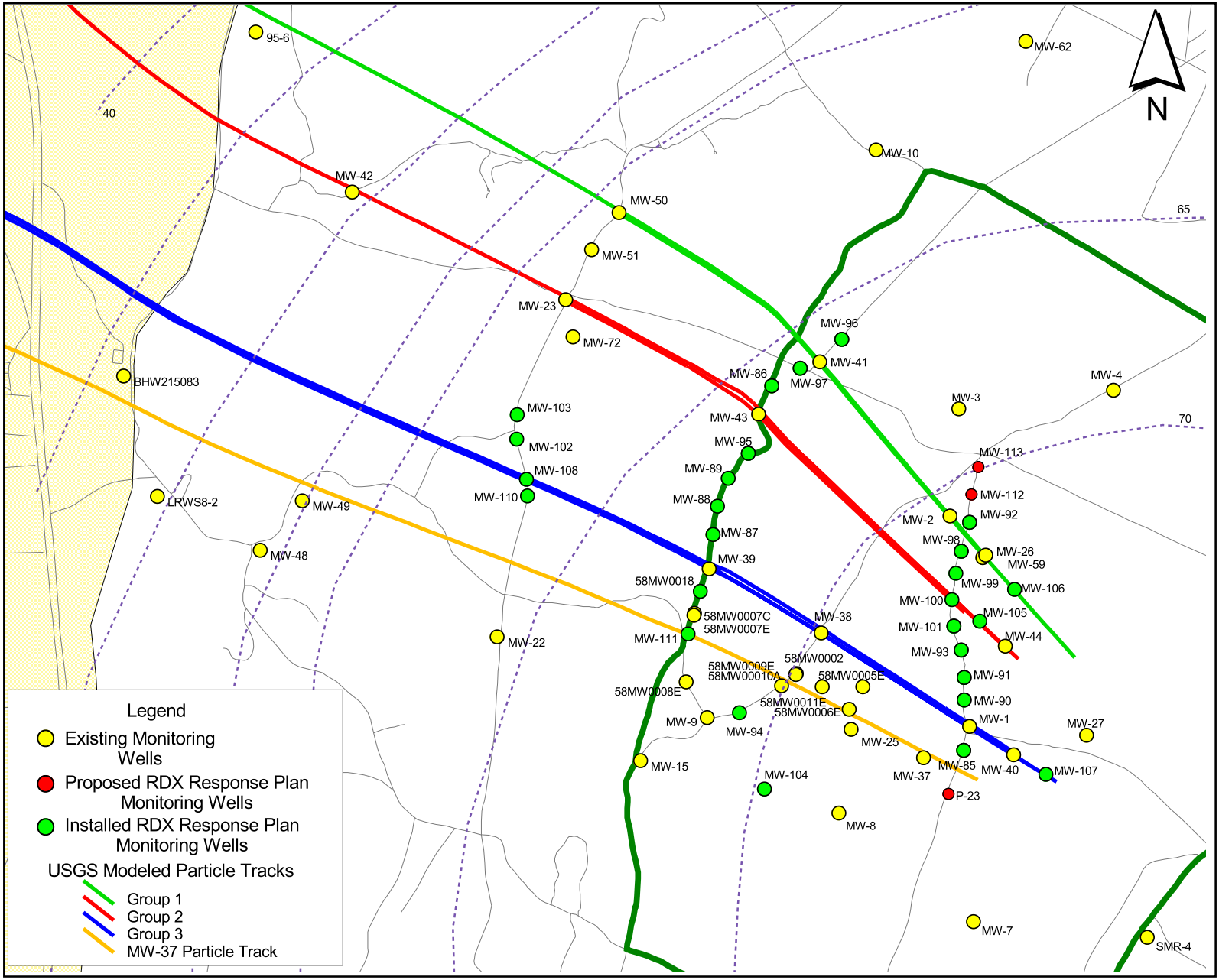
Map Coordinates: Stateplane,
NAD83, Zone 4151, Meters
Source: MASSGIS

Location of Existing and Proposed Groundwater Monitoring Wells As Of 12/16/99

L:\MMR\GIS\december99\weekly_figs\dec1699_wells
G:\MMR\well_updates.apr December 20, 1999

December 16, 1999 DRAFT


Demo1 Response Wells Inset
MW-47
MW-79
MW-74
MW-73
MW-19
MW-31
MW-75
MW-20
MW-32
MW-36
MW-77
MW-34
MW-76
MW-33
MW-35
MW-78
L:\MMR\GIS\december99\weekly_figs\demo1_inset
G:\MMR\well_updates.apr December 20, 1999



L:/MMR/GIS/weeklies_figures/Aug_02_00_RDX_response_updates
G:\MMR\rdx_response_maps_weeklies.apr
August 2, 2000

Proposed RDX Response Plan Wells In The Impact Area

Figure A