WEEKLY PROGRESS UPDATE
FOR MARCH 20 – MARCH 24, 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 March 20 to March 24, 2000.

1. SUMMARY OF ACTIONS TAKEN

Drilling progress as of March 24 is summarized in Table 1.

Table 1. Drilling progress as of March 24, 2000

Boring Number	Purpose of Boring/Well	Total Depth (ft bgs)	Saturated Depth (ft bwt)	Completed Well Screens (ft bgs)
MW-90	Impact Area Response Well (P-8)	200	80	118-128 145-155
MW-91	Impact Area Response Well (P-7)	205	79	
MW-92	Impact Area Response Well (P-1)	221	80	

bgs = below ground surface
bwt = below water table

Drilling and well installation was completed at MW-90 (Impact Area response well P-8). Drilling was completed on MW-91 (Impact Area response well P-7) and on MW-92 (Impact Area response well P-1). UXO clearance was completed on the Mortar Target 5 drill pad and continued for the Mortar Target 9 access road and pad. Continue the development of newly installed wells. No work occurred on Thursday due to the shut down for the controlled burn in the Impact Area. The 102nd FW EOD identified UXO located during the reconnaissance of J-2 as two 66mm M-72 Series LAW rockets (HE) and one 81mm M374 Series mortar round (HE).

Samples collected during the reporting period are summarized in Table 2. Groundwater sampling continued on round three of the Group 2 far field wells. Groundwater profile samples were collected from MW-90 (P-8), MW-91 (P-7), and MW-92 (P-1). Deep soil samples were collected during drilling at the boring for MW-92. Shallow soil samples were collected from MW-90 and MW-91. Soil samples were also collected from the soil cuttings at MW-88 through MW-92.

The Guard, EPA, and MADEP had a meeting on March 23 to discuss technical issues, including the following:

- Jacobs presented an update of the CS-19 investigation. A 3-page update and a 2-page schedule were distributed. The field investigation is on schedule. The well installation and development are done. Synoptic water level map will be ready next week. Surface soil sampling is done and the results are back from the lab and subsurface soil results are due in a few weeks. EPA asked if the surface soil VOC detections have been validated. Jacobs indicated that they have been validated. The resample results are due on Friday. Foothills suggested that Jacobs look at the sparging history to see if it may have effected the samples. The draft data report is due on April 19th. Jacobs proposed to discuss the content of the report at the April 13th tech meeting.

- There was no update of the Water Supply Study. EPA asked if there was a date scheduled to receive data. Ogden indicated that there was not. EPA requested that the Guard suggest to JPO that it is important to get the data soon.

- Ogden presented an update of the Rapid Response Action. There was a poster presentation before the SMB last night. Comment period on the RRA Plan ends April 6th. EPA will receive all public comments and send them to the Guard as they are received. EPA indicated that they would have their comments ready by Monday 3/27. The DEP indicated that there were lots of questions on the MCP in regards to the RRA. DEP requested that a presentation on the basics of the MCP at one of the IART meetings to help members with their questions. Ogden suggested that cleanup numbers be agreed upon prior to the presentation. DEP indicated that they would need a meeting next week to resolve their comments.

- An update of the Munitions Survey was presented by Tetra Tech. There are 5 to 6 more grids in Demo 1 for vegetation and UXO clearance. Geophysics started in Demo 1 on Monday and should be done by April 15th. The Guard is reviewing the J-Range plan and the surveyor is scheduled for next week. The surveying of the ponds has started. Continue to post process the Gun and Mortar position geophysical data. Vegetation and UXO clearance have been completed in the Slit Trench and the survey starts today. The survey has started on the HUTA and the work plan is being prepared for submittal next week. EPA asked the status of the revisions to Appendix C. Tetra Tech indicated that the Guard is currently reviewing the final version.

- Ogden presented an update of the Groundwater investigation. Currently setting wells on MW-90 (P-8), waiting for profile results for MW-91 (P-7), and MW-92 (P-1) will complete drilling on Friday. The drill rigs will move to Mortar Target 5 location, P-6 and P-3. Groundwater sampling the third round of the Group 2 far field wells. Developing the newly installed wells.

- DEP comments on the Lab SOW for modeling were discussed. DEP's general comment was that there needs to be more specific detail. Ogden indicated that this would be sent to the labs and the lab would provide detail and a layout. DEP would like a plan to be technically reviewed by the agencies and others. The EPA indicated that TOSC would provide comments by April 5th. EPA will request a meeting before the IART meeting to discuss their comments. DEP specific comments were to extract and pre-concentrate samples to ensure measurable levels of explosive are present. DEP would like more specifics in terms of analytical methods and experimental design detail.

- The draft agenda for the IART meeting was discussed.
  - DEP requested the status of the facilitator. EPA indicated that discussions are ongoing and will not be resolved until the team has commented. The facilitator status will be added to the agenda.
  - ETC will not be involved and Ogden will include this discussion in the comments to the RRA plan.
  - Tetra Tech will be added to the agenda items. Tetra Tech requested what is desired for their presentation. EPA suggested an overview of the investigation and technology at the Gun and Mortar positions and Demo 1.

- DEP requested an update on Mr. Zanis' concern on the steel lined pit. EPA indicated that he presented a photograph of a popper kettle adjacent to the steel lined pit. DEP suggested that a meeting be held with the agencies and Mr. Zanis to determine his concerns. EPA suggested that the Archive search report be reviewed prior to any meeting because his concerns have already been addressed there. Ogden suggested that the CWR needs to be finalized because it addressed some of these concerns. The Guard indicated that they would review the ASR to pull together a punch list of Mr. Zanis' concerns and determine what has been and what will be addressed.

- JPO/SMB request on CS-19 will not be a presentation but a fact sheet available at the next IART meeting. The Guard indicated that they would request this from AFCEE.

- The DEP requested more information on the concern that Mr. Hugus addressed in his e-mail. The EPA indicated that he does not have confidential information submitted by Textron. Mr. Hugus indicated that he would like to have Textron do a presentation. The EPA indicated that the Air Force and EPA have requested that Textron narrow down or eliminate the confidential requirement. The DEP requested copies of the original information request to Textron and any other non-confidential information.

- The EPA indicated that they sent a letter indicating the need to sample around the tank targets on Tank Alley. Ogden indicated that they just received the letter and would need to discuss it with the Guard before they could comment. EPA indicated that they could discuss it next week but that they would have to determine requirement dates for this work soon.

- The IART Action Items were discussed:
    1. The Guard is still working on the ASP inventory.
    2. The EPA will inform Mr. Zanis of the Technical Meeting discussion on the inclusion of a high use range on Greenway Road.
    3. The Guard will look into what ranges were used on February 27-28
    4. The Guard will look into what was done with the scrap drums located on the J-2 Range.
    5. EPA indicated that it need to be pointed out to the team that additional information will be required at Demo 1 and that the agencies believe that there is sufficient information at this time to define the plume.
    6. The Guard will look into the records to determine the use history of Mortar Target 9.
    7. The EPA indicated that they are waiting for the well installation and sampling and report before they determine the adequacy of the investigation of the Mortar Targets. EPA also indicated that AO3 has a provision that allows additional area to be added to the RRA.
    8. EPA suggested that Ogden prepare a chronology for the next IART meeting and weekly report. DEP indicated that they would inform AFCEE that this would be discussed at the next IART meeting.
    9. Covered by number 6.

- The Guard distributed a 1-page table of the disposition of the last two UXO detonations. The Guard also indicated that they and USA visited the J-2 Range and determined that there was an 81mm mortar and two LAW rockets. They would attempt to get the 102nd FW EOD to take a look at them. The Guard distributed a 1-page handout of the inventory of the magazine at five corners.

- The EPA requested the list of the J-2 Range operators.

- The EPA and DEP indicated that a member of the PIT would like to present at the next IART meeting to indicate what they could do to help the Team.

- The DEP asked when the Community Involvement Plan was due. EPA indicated that it was due on March 28 but they indicated that the deadline would be extended 1 to 2 weeks to ensure that everything is addressed. DEP also suggested that the plan include the steps involved in becoming a member of the IART Team.

- The DEP also requested an update on the CDC chamber. EPA indicated that they provided a RCRA outline to address in the plan. The DEP was confused on this issue and EPA indicated that they would call the DEP to fix the confusion.

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 groundwater profile samples from MW-90 had detections of 4-amino-2,6-dinitrotoluene (4 intervals), RDX (5 intervals), nitroglycerine (7 intervals), HMX (2 intervals), 1,3,5-trinitrobenzene (1 interval, TNT (1 interval) and 3-nitrotoluene (1 interval). The 4-amino-2,6-dinitrotoluene, RDX, HMX, and TNT were verified by PDA spectra.

- The groundwater profile samples from MW-91 had detections of 4-amino-2,6-dinitrotoluene (3 intervals), RDX (8 intervals), nitroglycerine (5 intervals), HMX (3 intervals), 1,3,5-trinitrobenzene (5 intervals, 2-amino-4,6-dinitrotoluene (1 interval) and 3-nitrotoluene (1 interval). The 4-amino-2,6-dinitrotoluene, 2-amino-4,6-dinitrotoluene, RDX, and HMX were verified by PDA spectra.

- The duplicate sample of the overhang sample from Mortar Target 8 had a detection of RDX, which was verified by PDA. RDX was also detected and verified in the original sample.

3. DELIVERABLES SUBMITTED

There were no deliverables submitted during this reporting period:

4. SCHEDULED ACTIONS

Scheduled actions for the week of March 27 include the construction of monitoring wells at MW-92; continued drilling of Impact Area response wells at locations P-6 and P-13; commencement of the drilling of the Mortar Target 5 well; the continued development of newly installed wells; and the detonation of UXO located on the J-2 Range.

5. SUMMARY OF ACTIVITIES FOR DEMO 1

Crews will continue the Munitions Survey work in Demo 1, which includes brush clearing and UXO survey. The geophysical survey of Demo 1 commenced this week.

TABLE 2
SAMPLING PROGRESS
3/20/00-3/24/00

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
G90DCE	FIELDQC	03/20/2000	FIELDQC	0.00	0.00		
G91DEE	FIELDQC	03/21/2000	FIELDQC	0.00	0.00		
G92DBE	FIELDQC	03/22/2000	FIELDQC	0.00	0.00		
G92DIE	FIELDQC	03/24/2000	FIELDQC	0.00	0.00		
S90DAE	FIELDQC	03/24/2000	FIELDQC	0.00	0.00		
S90DAT	FIELDQC	03/24/2000	FIELDQC	0.00	0.00		
S92DIE	FIELDQC	03/20/2000	FIELDQC	0.00	0.00		
S92DOE	FIELDQC	03/21/2000	FIELDQC	0.00	0.00		
W48SST	FIELDQC	03/21/2000	FIELDQC	0.00	0.00		
W56SST	FIELDQC	03/20/2000	FIELDQC	0.00	0.00		
W57M2T	FIELDQC	03/22/2000	FIELDQC	0.00	0.00		
W48SSA	MW-48	03/21/2000	GROUNDWATER	99.00	109.00	-3.93	6.07
W56DDA	MW-56	03/21/2000	GROUNDWATER	176.00	186.00	96.84	106.84
W56M2A	MW-56	03/20/2000	GROUNDWATER	131.00	141.00	51.85	61.85
W56M3A	MW-56	03/20/2000	GROUNDWATER	106.00	116.00	27.56	37.56
W56SSA	MW-56	03/20/2000	GROUNDWATER	76.00	86.00	-2.88	7.12
W57M2A	MW-57	03/22/2000	GROUNDWATER	148.00	158.00	59.41	69.41
W57SSA	MW-57	03/22/2000	GROUNDWATER	85.00	95.00	-3.75	6.25
W57SSD	MW-57	03/22/2000	GROUNDWATER	85.00	95.00	-3.75	6.25
DW8920	GAC WATER	03/22/2000	IDW				
GAC15	GAC WATER	03/21/2000	IDW				
SC8801	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
SC8802	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
SC8901	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
SC8902	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
SC9001	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
SC9002	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
SC9101	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
SC9102	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
SC9201	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
SC9202	SOIL CUTTINGS	03/24/2000	IDW	0.00	0.25		
G90DCA	MW-90	03/20/2000	PROFILE	140.00	140.00	20.00	20.00
G90DDA	MW-90	03/20/2000	PROFILE	150.00	150.00	30.00	30.00
G90DEA	MW-90	03/20/2000	PROFILE	160.00	160.00	40.00	40.00
G90DED	MW-90	03/20/2000	PROFILE	160.00	160.00	40.00	40.00
G90DFA	MW-90	03/20/2000	PROFILE	170.00	170.00	50.00	50.00
G90DGA	MW-90	03/20/2000	PROFILE	180.00	180.00	60.00	60.00
G90DHA	MW-90	03/20/2000	PROFILE	190.00	190.00	70.00	70.00
G90DHD	MW-90	03/20/2000	PROFILE	190.00	190.00	70.00	70.00
G90DIA	MW-90	03/20/2000	PROFILE	200.00	200.00	80.00	80.00
G91DAA	MW-91	03/20/2000	PROFILE	125.00	125.00	-0.80	-0.80
G91DBA	MW-91	03/20/2000	PROFILE	130.00	130.00	4.20	4.20
G91DCA	MW-91	03/20/2000	PROFILE	140.00	140.00	14.20	14.20
G91DDA	MW-91	03/21/2000	PROFILE	150.00	150.00	24.20	24.20

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
3/20/00-3/24/00

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED	BWTS	BWTE
G91DDB	MW-91	03/20/2000	PROFILE	150.00	150.00	24.20	24.20
G91DDD	MW-91	03/21/2000	PROFILE	150.00	150.00	24.20	24.20
G91DEA	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20
G91DEB	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20
G91DFA	MW-91	03/21/2000	PROFILE	170.00	170.00	44.20	44.20
G91DGA	MW-91	03/21/2000	PROFILE	180.00	180.00	54.20	54.20
G91DHA	MW-91	03/21/2000	PROFILE	190.00	190.00	64.20	64.20
G91DHD	MW-91	03/21/2000	PROFILE	190.00	190.00	64.20	64.20
G91DIA	MW-91	03/22/2000	PROFILE	200.00	200.00	74.20	74.20
G91DJA	MW-91	03/22/2000	PROFILE	205.00	205.00	79.20	79.20
G92DAA	MW-92	03/21/2000	PROFILE	145.00	145.00	4.35	4.35
G92DBA	MW-92	03/21/2000	PROFILE	150.00	150.00	9.35	9.35
G92DCA	MW-92	03/22/2000	PROFILE	160.00	160.00	19.35	19.35
G92DDA	MW-92	03/22/2000	PROFILE	170.00	170.00	29.35	29.35
G92DDD	MW-92	03/22/2000	PROFILE	170.00	170.00	29.35	29.35
G92DEA	MW-92	03/22/2000	PROFILE	180.00	180.00	39.35	39.35
G92DFA	MW-92	03/22/2000	PROFILE	190.00	190.00	49.35	49.35
G92DGA	MW-92	03/22/2000	PROFILE	200.00	200.00	59.35	59.35
G92DHA	MW-92	03/22/2000	PROFILE	210.00	210.00	69.35	69.35
G92DIA	MW-92	03/24/2000	PROFILE	220.00	220.00	79.35	79.35
G92DID	MW-92	03/24/2000	PROFILE	220.00	220.00	79.35	79.35
S90DAA	MW-90	03/24/2000	SOIL BORING	0.00	0.50		
S90DBA	MW-90	03/24/2000	SOIL BORING	1.50	2.00		
S91DAA	MW-91	03/24/2000	SOIL BORING	0.00	0.50		
S91DBA	MW-91	03/24/2000	SOIL BORING	1.50	2.00		
S92DHA	MW-92	03/20/2000	SOIL BORING	62.00	66.00		
S92DHD	MW-92	03/20/2000	SOIL BORING	60.00	66.00		
S92DIA	MW-92	03/20/2000	SOIL BORING	70.00	74.00		
S92DJA	MW-92	03/20/2000	SOIL BORING	82.00	84.00		
S92DKA	MW-92	03/20/2000	SOIL BORING	90.00	94.00		
S92DLA	MW-92	03/20/2000	SOIL BORING	100.00	104.00		
S92DMA	MW-92	03/20/2000	SOIL BORING	110.00	114.00		
S92DNA	MW-92	03/20/2000	SOIL BORING	120.00	124.00		
S92DOA	MW-92	03/21/2000	SOIL BORING	130.00	134.00		
S92DOD	MW-92	03/21/2000	SOIL BORING	130.00	134.00		

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 3/20/00-3/24/00

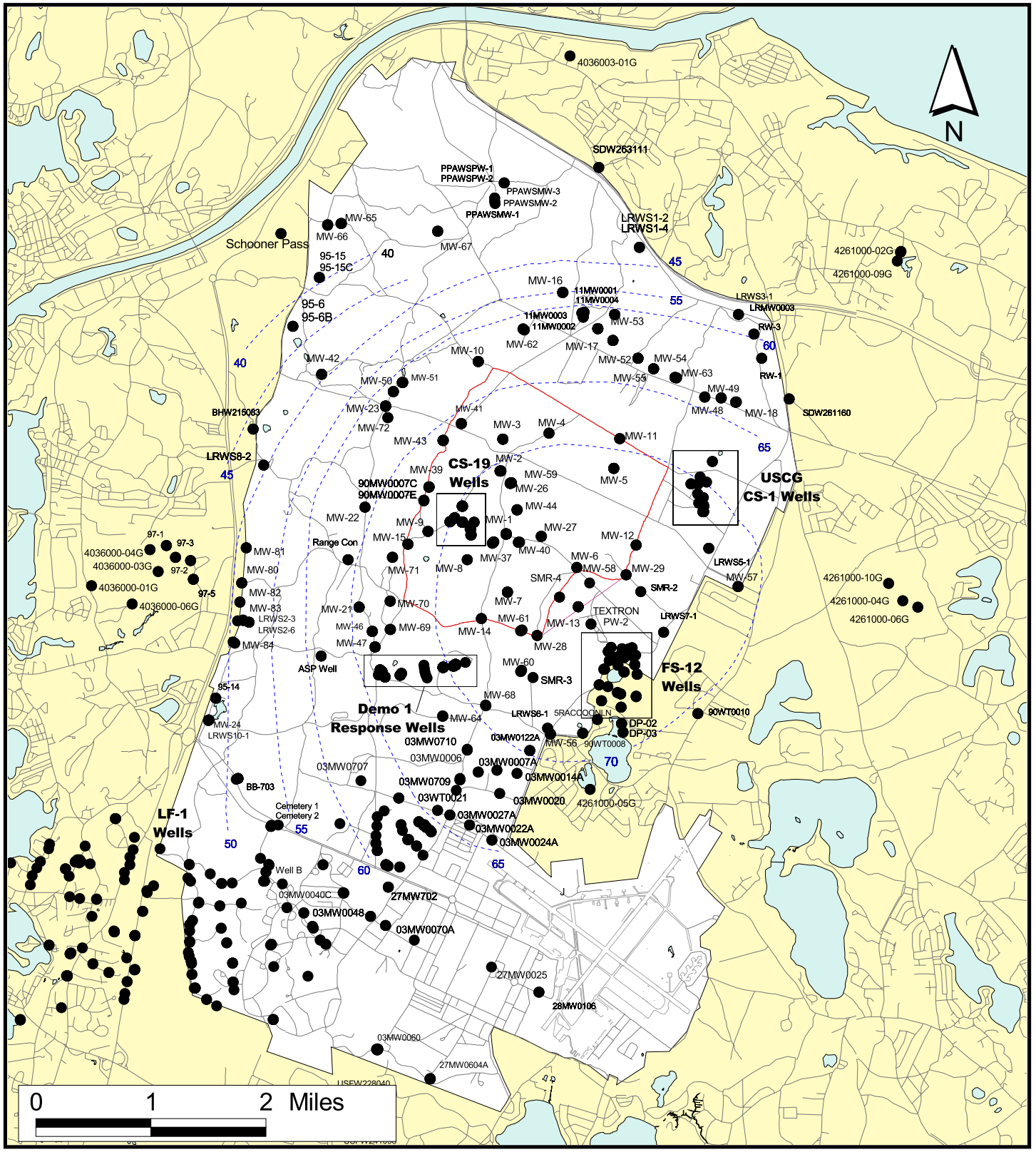
OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G90DAA	MW-90	03/16/2000	PROFILE	124.00	124.00	4.00	4.00	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
G90DAA	MW-90	03/16/2000	PROFILE	124.00	124.00	4.00	4.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G90DAA	MW-90	03/16/2000	PROFILE	124.00	124.00	4.00	4.00	8330N	NITROGLYCERIN	NO
G90DAA	MW-90	03/16/2000	PROFILE	124.00	124.00	4.00	4.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
G90DBA	MW-90	03/16/2000	PROFILE	130.00	130.00	10.00	10.00	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
G90DBA	MW-90	03/16/2000	PROFILE	130.00	130.00	10.00	10.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G90DBA	MW-90	03/16/2000	PROFILE	130.00	130.00	10.00	10.00	8330N	NITROGLYCERIN	NO
G90DBA	MW-90	03/16/2000	PROFILE	130.00	130.00	10.00	10.00	8330N	OCTAHYDRO-1,3,5,7-TETRANITR	YES
G90DCA	MW-90	03/20/2000	PROFILE	140.00	140.00	20.00	20.00	8330N	1,3,5-TRINITROBENZENE	NO
G90DCA	MW-90	03/20/2000	PROFILE	140.00	140.00	20.00	20.00	8330N	2,4,6-TRINITROTOLUENE	YES
G90DCA	MW-90	03/20/2000	PROFILE	140.00	140.00	20.00	20.00	8330N	3-NITROTOLUENE	NO
G90DCA	MW-90	03/20/2000	PROFILE	140.00	140.00	20.00	20.00	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
G90DCA	MW-90	03/20/2000	PROFILE	140.00	140.00	20.00	20.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G90DCA	MW-90	03/20/2000	PROFILE	140.00	140.00	20.00	20.00	8330N	NITROGLYCERIN	NO
G90DDA	MW-90	03/20/2000	PROFILE	150.00	150.00	30.00	30.00	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
G90DDA	MW-90	03/20/2000	PROFILE	150.00	150.00	30.00	30.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G90DDA	MW-90	03/20/2000	PROFILE	150.00	150.00	30.00	30.00	8330N	NITROGLYCERIN	NO
G90DEA	MW-90	03/20/2000	PROFILE	160.00	160.00	40.00	40.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G90DEA	MW-90	03/20/2000	PROFILE	160.00	160.00	40.00	40.00	8330N	NITROGLYCERIN	NO
G90DED	MW-90	03/20/2000	PROFILE	160.00	160.00	40.00	40.00	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G90DED	MW-90	03/20/2000	PROFILE	160.00	160.00	40.00	40.00	8330N	NITROGLYCERIN	NO
G90DFA	MW-90	03/20/2000	PROFILE	170.00	170.00	50.00	50.00	8330N	NITROGLYCERIN	NO
G90DHA	MW-90	03/20/2000	PROFILE	190.00	190.00	70.00	70.00	8330N	NITROGLYCERIN	NO
G90DHD	MW-90	03/20/2000	PROFILE	190.00	190.00	90.00	90.00	8330N	NITROGLYCERIN	NO
G91DAA	MW-91	03/20/2000	PROFILE	125.00	125.00	-0.80	-0.80	8330N	1,3,5-TRINITROBENZENE	NO
G91DAA	MW-91	03/20/2000	PROFILE	125.00	125.00	-0.80	-0.80	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DAA	MW-91	03/20/2000	PROFILE	125.00	125.00	-0.80	-0.80	8330N	NITROGLYCERIN	NO
G91DBA	MW-91	03/20/2000	PROFILE	130.00	130.00	4.20	4.20	8330N	1,3,5-TRINITROBENZENE	NO
G91DBA	MW-91	03/20/2000	PROFILE	130.00	130.00	4.20	4.20	8330N	2-AMINO-4,6-DINITROTOLUENE	YES
G91DBA	MW-91	03/20/2000	PROFILE	130.00	130.00	4.20	4.20	8330N	3-NITROTOLUENE	NO
G91DBA	MW-91	03/20/2000	PROFILE	130.00	130.00	4.20	4.20	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
G91DBA	MW-91	03/20/2000	PROFILE	130.00	130.00	4.20	4.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DBA	MW-91	03/20/2000	PROFILE	130.00	130.00	4.20	4.20	8330N	NITROGLYCERIN	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

TABLE 3
DETECTED COMPOUNDS-UNVALIDATED
SAMPLES COLLECTED 3/20/00-3/24/00

OGDEN_ID	LOCID OR WELL ID	SAMPLED	SAMP_TYPE	SBD	SED	BWTS	BWTE	METHOD	OGDEN_ANALYTE	PDA
G91DBA	MW-91	03/20/2000	PROFILE	130.00	130.00	4.20	4.20	8330N	OCTAHYDRO-1,3,5,7-TETRANITF	YES
G91DCA	MW-91	03/20/2000	PROFILE	140.00	140.00	14.20	14.20	8330N	1,3,5-TRINITROBENZENE	NO
G91DCA	MW-91	03/20/2000	PROFILE	140.00	140.00	14.20	14.20	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
G91DCA	MW-91	03/20/2000	PROFILE	140.00	140.00	14.20	14.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DCA	MW-91	03/20/2000	PROFILE	140.00	140.00	14.20	14.20	8330N	NITROGLYCERIN	NO
G91DDA	MW-91	03/21/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	1,3,5-TRINITROBENZENE	NO
G91DDA	MW-91	03/21/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DDA	MW-91	03/21/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	NITROGLYCERIN	NO
G91DDB	MW-91	03/20/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	1,3,5-TRINITROBENZENE	NO
G91DDB	MW-91	03/20/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DDB	MW-91	03/20/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	NITROGLYCERIN	NO
G91DDD	MW-91	03/21/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	1,3,5-TRINITROBENZENE	NO
G91DDD	MW-91	03/21/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	3-NITROTOLUENE	NO
G91DDD	MW-91	03/21/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DDD	MW-91	03/21/2000	PROFILE	150.00	150.00	24.20	24.20	8330N	NITROGLYCERIN	NO
G91DEA	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20	8330N	1,3,5-TRINITROBENZENE	NO
G91DEA	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
G91DEA	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DEA	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20	8330N	NITROGLYCERIN	NO
G91DEB	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20	8330N	1,3,5-TRINITROBENZENE	NO
G91DEB	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20	8330N	4-AMINO-2,6-DINITROTOLUENE	YES
G91DEB	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DEB	MW-91	03/21/2000	PROFILE	160.00	160.00	34.20	34.20	8330N	NITROGLYCERIN	NO
G91DFA	MW-91	03/21/2000	PROFILE	170.00	170.00	44.20	44.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DFA	MW-91	03/21/2000	PROFILE	170.00	170.00	44.20	44.20	8330N	OCTAHYDRO-1,3,5,7-TETRANITF	YES
G91DGA	MW-91	03/21/2000	PROFILE	180.00	180.00	54.20	54.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DGA	MW-91	03/21/2000	PROFILE	180.00	180.00	54.20	54.20	8330N	OCTAHYDRO-1,3,5,7-TETRANITF	YES
G91DHA	MW-91	03/21/2000	PROFILE	190.00	190.00	64.20	64.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DHD	MW-91	03/21/2000	PROFILE	190.00	190.00	64.20	64.20	8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES
G91DHD	MW-91	03/21/2000	PROFILE	190.00	190.00	64.20	64.20	8330N	NITROGLYCERIN	NO
HCOHT8AAD	86Z	03/08/2000	SOIL GRID	0.00	0.25			8330N	HEXAHYDRO-1,3,5-TRINITRO-1,3	YES

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



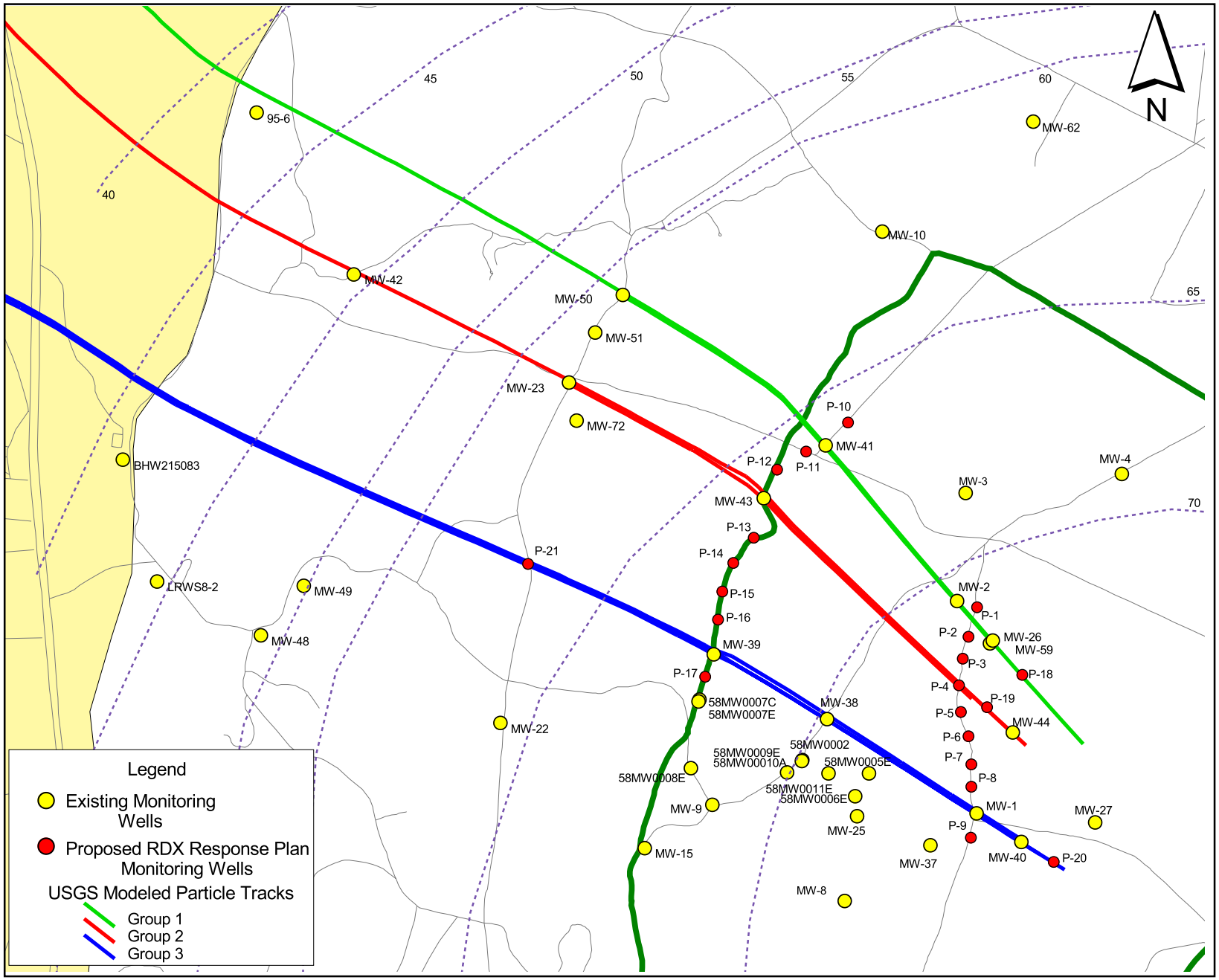
Sources & Notes

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



Proposed RDX Response Plan Wells In The Impact Area

Figure 6