WEEKLY PROGRESS UPDATE FOR AUGUST 2-AUGUST 6, 1999

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 for August 2 to August 6, 1999.

1. SUMMARY OF ACTIONS TAKEN

Drilling was completed on MW-80 (Bourne water supply far field monitoring well) and achieved a total depth of 235 feet below ground surface (bgs). Drilling was completed on MW-61 (KD Range secondary target) and achieved a total depth of 200 feet bgs. Monitoring wells were completed at MW-80 at depths of 43' to 53' bgs, 70' to 80' bgs, and 100' to 110' bgs. A monitoring well was completed at MW-61 at a depth of 98' to 108' bgs. Drilling commenced on MW-80b and achieved a total depth of 155 feet below ground surface at the end of the week. Samples collected during the reporting period are summarized in Table 1. Air samples were collected during and after detonation of UXO at three locations. Groundwater samples were collected from MW-36 and MW-72, which were resampled for all parameters except explosives and metals. Profile samples were collected from MW-80 and MW-61. Soil samples were collected from seven UXO detonation craters, and from four locations in the Grand Oaks neighborhood.

The Guard, EPA, and MADEP had a meeting on August 5 to discuss technical issues, including the following:

- The detonation operation to dispose of UXO on 8/3 was discussed. Air monitoring samples were collected and are currently being analyzed. Soil samples were collected from the craters at the Avery Road and J-1 Range locations. The craters at Turpentine Road and Tank Alley will be sampled prior to 10 am Friday (8/6) in accordance with the sampling plan, unless the presence of UXO at the Armored Personnel Carrier (APC) prevents access, in which case a request for extension will be submitted to EPA.
- The UXO recently inventoried at the APC are currently being evaluated to determine if these are HE rounds. The Guard expects to complete its evaluation by Friday (8/6) morning. EPA requested an explanation of why UXO avoidance is not appropriate for these rounds or the recently detonated rounds. The Guard will provide a letter describing the UXO avoidance issue by Monday (8/9). A complete report on the items identified at the APC will be provided within approximately one week.
- The Guard requested that EPA provide comments on the excavation plan for the high use target areas (Appendix C of the Munitions Survey Plan). Tetra Tech (the munitions survey contractor) will be onsite next week to begin work, with LTC FitzPatrick coordinating for the Guard.
- The profile data, boring log, and screen depths for MW-80 were discussed. Explosive compounds were detected in the upper two intervals but were determined to be false positives based on PDA spectra. A monitoring well will be screened at this depth (0-10 feet below water table). No other explosive compounds were detected in the available data, which is for 0-110 feet below water table. Chloroform was detected at most intervals, and acetone was detected in the upper two intervals. Trace levels of toluene were detected in the 4th and 8th intervals. Monitoring wells will be screened at the depths of the toluene detections, which also are near the proposed default depths for the Bourne far field wells. The screen depths will be 25-35 feet bwt, and 55-65 feet bwt.

EPA asked for information regarding the depth of the screen at Bourne supply well PS-3, which is downgradient of MW-80. A call was made to USGS who indicated the screen is at 50-60 feet bgs, although the depth to water table at this site was unknown. The boring log for MW-80 indicates

finer-grained material starting near 110 feet bwt. Deeper screens for MW-80 will be selected when the results of the remaining profile samples are available. EPA asked if USGS could indicate where they already have 5-foot screens and where they would like more, for age dating.

- EPA confirmed that 5 far field monitoring well clusters should be installed for the Bourne supply wells, as indicated in a previous telephone conversation with the Guard. Positions were illustrated in a map provided by the Guard. The depth of profiling was discussed. The proposed depth was 140 feet bwt, which would be 185 feet bgs at MW-80. This boring was continued to bedrock, encountered at 233 feet bgs. It was agreed to extend the northernmost and southernmost borings to bedrock. The other two borings may be terminated at 140 feet bwt pending a review of stratigraphy and profile results for all borings.
- It was agreed that the Bourne supply wells should be monitored quarterly for explosive compounds, in lieu of the sentinel wells that do not cover all of the supply wells. Ogden will contact Bourne to begin this sampling, and to determine their current monitoring program and recent results, which need to be reported to EPA under the IAGS. Ogden will provide a letter to the agencies requesting this change to the approved Workplan for Completion of Phase I Activities.
- There was a discussion of the proposal for the J Well far field monitoring well. EPA suggests that the Guard consider two well locations, near the north end of the ZOC as proposed by the Guard, and slightly northwest or north of the J Well inside the MMR boundary. This second location is near current well "102" that is being used for monitoring by the 102nd FW. The Guard will review the current monitoring well depths for the "102" location and provide a response regarding the proposed southern location.
- There was a discussion of the proposal for the Sandwich far field monitoring wells. No map was available at the meeting showing the Sandwich ZOCs. Ogden will try to obtain a copy of this map from EarthTech or IRP, so that the ZOCs can be overlaid on the historic range use information. Ogden has not yet completed the draft Phase IIb Supplemental Workplan that would address the need for groundwater monitoring in the vicinity of the current P Range (former K Range), which is in this same area. This information will be assembled as soon as possible to complete selection of the Sandwich well locations.
- There is a meeting Monday with AFCEE regarding the chemical monitoring well plans for proposed future supply well 95-15.
- EPA did not yet have a decision on the 7/29 request to reconsider location of the proposed U Range well. The Guard will request an extension to the schedule, if needed with respect to the proposed August 30 completion date.
- EPA indicated that the groundwater modeling proposal of 7/22/99 was being reviewed. Comments are expected within a month.
- The Guard asked if EPA had a schedule for comments on the Training Area or Gun/Mortar Workplans. EPA indicated it would like to discuss the Gun Position sample locations at the next meeting. The Guard will have LTC FitzPatrick available to discuss the typical artillery procedures and gun locations.
- EPA indicated that its munitions expert had identified two 5-inch rockets and there was some concern regarding the fuze types. MAARNG will check whether these items were identified in EOD's inventory.
- EPA asked whether the Guard was seeking comment on the current draft of TM 99-1 describing explosive data for the KD and U Range. Ogden indicated that the document was to be revised in a few weeks to include the results for other analytes, and it was not necessary to comment on the current draft.
- EPA asked for additional information for its review of the draft soil sampling plan for MW-26/59. A
 map of soil sample locations was needed, and a summary of the profile data for these two borings.
 Ogden will prepare this map and summary.

- EPA requested that Ogden provide a summary of the results for the Small Arms Range groundwater investigation, for discussion at next week's meeting.
- The Guard indicated that the excavation of magnetic anomalies was completed for the Grand Oaks neighborhood. No new fragments of munitions were discovered. Soil samples were collected at locations where previous detections were found.
- Ogden provided a memo regarding the filtration procedure that was used for the recent drive point
 profile samples. The procedure did not appear to be effective for reducing interferents. The memo
 also describes earlier attempts at centrifugation and filtration, also not effective. EPA will review this
 information.

2. SUMMARY OF DATA RECEIVED

Preliminary non-validated detections of explosive and volatile organic compounds (VOCs) are summarized in Table 2 for samples collected during the preceding three-week period. The status of the explosive detections with respect to confirmation using Photo Diode Array (PDA) spectra is also indicated in this table. Where the PDA status is "YES" in Table 2, the detected compound has been confirmed to be present in the sample. Where the status is "NO", the identification of an explosive has been confirmed 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.

Some of the detections in Table 2 were discussed in last week's progress report. The range of sample dates included in Table 2 overlaps from week-to-week due to the method of reporting and extracting these data. New detections in Table 2 that were not discussed in last week's report include:

- Three air samples and a laboratory control sample from UXO detonations had detections of 2,6-DNT, PETN, and tetryl. No PDA spectra were available at this time.
- Three Field Quality Control (QC) samples from boring 63 had a detection of acetone and MEK. Field QC samples for 03MW0040C, PAVE PAWS MW-2, a UXO crater soil sample, and two MW-60 soil profile samples had nitroglycerin detected. PDA was only available for one of the MW-60 soil profile samples and determined that the detection was a false positive.
- Groundwater profile samples from MW-60 had nitroglycerin detections (11 intervals), nitrotoluenes (9 intervals), picric acid (9 intervals), PETN (2 intervals), TNT (2 intervals), tetryl (1 interval), nitrobenzene (1 interval), and 2,6-DNT (1 interval). No PDA spectra were available at this time.
- Groundwater profile samples from MW-61 had detections of nitrotoluenes (7 intervals), nitroglycerin (7 intervals), PETN (3 intervals), 2,6-DNT (2 intervals), acetone (11 intervals), MEK (7 intervals), chloroform (7 intervals), chloromethane (1 interval), chloroethane (1 interval), and 2-hexanone (1 interval). No PDA spectra were available for the explosive compounds at this time.
- Groundwater profile samples from MW-80 had detections of toluene in four samples. Picric acid and nitroglycerin detected in one sample but the PDA spectra determined these to be false positives.

3. DELIVERABLES SUBMITTED

Deliverables submitted during the reporting period include the following:

Weekly Progress Report (7/19/99 to 7/23/99) Draft Tech Memo 99-3, Brick-lined Pit Soil Results Weekly Progress Report (7/26/99 to 7/30/99)

4. SCHEDULED ACTIONS

Scheduled actions for the week of August 9 include completion of drilling at MW-80b, commence drilling of MW-81, sampling a third monitoring well at the PAVE PAW Radar Station, and sampling water supply wells in Bourne.

TABLE 1 SAMPLING PROGRESS 8/1-8/7

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED
AS37/40	AS37/40	8/3/1999	AIR	0.00	0.00
ASAVERYRD	ASAVERYRD	8/3/1999	AIR	0.00	0.00
ASJ2RANGE	ASJ2RANGE	8/3/1999	AIR	0.00	0.00
PUFBLK	PUFLCSD	8/3/1999	AIR	0.00	0.00
PUFLCS	PUFLCS	8/3/1999	AIR	0.00	0.00
PUFLCSD	PUFLCSD	8/3/1999	AIR	0.00	0.00
G61MKT	FIELDQC	8/2/1999	FIELDQC	0.00	0.00
G80DME	FIELDQC	8/3/1999	FIELDQC	0.00	0.00
G80DPT	FIELDQC	8/3/1999	FIELDQC	0.00	0.00
G80DQE	FIELDQC	8/4/1999	FIELDQC	0.00	0.00
G80DTT	FIELDQC	8/4/1999	FIELDQC	0.00	0.00
HD105MMTRMW37E	FIELDQC	8/6/1999	FIELDQC	0.00	0.00
HD105MMTRMW37T	FIELDQC	8/6/1999	FIELDQC	0.00	0.00
W72SST	FIELDQC	8/5/1999	FIELDQC	0.00	0.00
W36SSA	MW-36	8/3/1999	GROUNDWATER	0.00	10.00
W72SSA	MW-72	8/5/1999	GROUNDWATER	0.00	10.00
DW8003	GAC WATER	8/3/1999	IDW	0.00	0.00
DW8004	GAC WATER	8/4/1999	IDW	0.00	0.00
G61MHA	MW-61	8/2/1999	PROFILE	170.00	170.00
G61MIA	MW-61	8/2/1999	PROFILE	180.00	180.00
G61MJA	MW-61	8/2/1999	PROFILE	190.00	190.00
G61MKA	MW-61	8/2/1999	PROFILE	200.00	200.00
G80DLA	MW-80	8/2/1999	PROFILE	150.00	155.00
G80DMA	MW-80	8/3/1999	PROFILE	160.00	165.00
G80DNA	MW-80	8/3/1999	PROFILE	170.00	175.00
G80DOA	MW-80	8/3/1999	PROFILE	180.00	185.00
G80DPA	MW-80	8/3/1999	PROFILE	190.00	195.00
G80DPD	MW-80	8/4/1999	PROFILE	190.00	195.00
G80DQA	MW-80	8/4/1999	PROFILE	200.00	205.00
G80DRA	MW-80	8/4/1999	PROFILE	210.00	215.00
G80DSA	MW-80	8/4/1999	PROFILE	220.00	225.00
G80DTA	MW-80	8/4/1999	PROFILE	228.00	223.00
HC105/155TAMW40	HC105/155TAMW40	8/6/1999	SOIL BORING	0.00	3.00
HC105MMTAMW40	HC105MMTAMW40	8/6/1999	SOIL BORING	0.00	3.00
HC105MMTRMW37	HC105MMTRMW37	8/6/1999	SOIL BORING	0.00	3.00
HC155MMTAW40	HC155MMTAW40	8/6/1999	SOIL BORING	0.00	3.00
HC37MMHEAVERY	HC37MMHEAVERY	8/5/1999	SOIL BORING	0.00	3.00
HC4.2INTRMW37	HC4.2INTRMW37	8/6/1999	SOIL BORING	0.00	3.00
HC60WPTAUXOPT	HC60WPTAUXOPT	8/5/1999	SOIL BORING	0.00	3.00
HD105/155TAMW40	HD105/155TAMW40	8/6/1999	SOIL BORING	0.00	3.00

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 for profile and soil boring, and feet below water table for groundwater SED = Sample End Depth, measured in feet bgs for profile and soil boring, and feet below water table for groundwater

TABLE 1 SAMPLING PROGRESS 8/1-8/7

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMPLE TYPE	SBD	SED
HD105MMTAW40	HD105MMTAW40	8/6/1999	SOIL BORING	0.00	3.00
HD105MMTRMW37	HD105MMTRMW37	8/6/1999	SOIL BORING	0.00	3.00
HD155MMTAMW40	HD155MMTAMW40	8/6/1999	SOIL BORING	0.00	3.00
HD37MMHEAVERY	HD37MMHEAVERY	8/5/1999	SOIL BORING	0.00	3.00
HD4.2INTRMW37	HD4.2INTRMW37	8/6/1999	SOIL BORING	0.00	3.00
HD60WPTAUXOPT	HD60WPTAUXOPT	8/5/1999	SOIL BORING	0.00	3.00
MA-13R	MA-13R	8/4/1999	SOIL BORING	6.00	12.00
MA-13RD	MA-13R	8/4/1999	SOIL BORING	6.00	12.00
MA-19R	MA-19R	8/4/1999	SOIL BORING	6.00	12.00
MA-4R	MA-4R	8/4/1999	SOIL BORING	6.00	12.00

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
AS37/40	AS37/40	8/3/1999	AIR	0.00	0.00	8330N	2,6-DINITROTOLUENE	
AS37/40	AS37/40	8/3/1999	AIR	0.00	0.00	8330N	PENTAERYTHRITOL TETRANITRATE	
AS37/40	AS37/40	8/3/1999	AIR	0.00	0.00	8330N	TETRYL	
ASAVERYRD	ASAVERYRD	8/3/1999	AIR	0.00	0.00	8330N	2,6-DINITROTOLUENE	
ASAVERYRD	ASAVERYRD	8/3/1999	AIR	0.00	0.00	8330N	PENTAERYTHRITOL TETRANITRATE	
ASAVERYRD	ASAVERYRD	8/3/1999	AIR	0.00	0.00	8330N	TETRYL	
ASJ2RANGE	ASJ2RANGE	8/3/1999	AIR	0.00	0.00	8330N	2,6-DINITROTOLUENE	
ASJ2RANGE	ASJ2RANGE	8/3/1999	AIR	0.00	0.00	8330N	PENTAERYTHRITOL TETRANITRATE	
ASJ2RANGE	ASJ2RANGE	8/3/1999	AIR	0.00	0.00	8330N	TETRYL	
PUFBLK	PUFLCSD	8/3/1999	AIR	0.00	0.00	8330N	2,6-DINITROTOLUENE	
PUFBLK	PUFLCSD	8/3/1999	AIR	0.00	0.00	8330N	PENTAERYTHRITOL TETRANITRATE	
PUFBLK	PUFLCSD	8/3/1999	AIR	0.00	0.00	8330N	TETRYL	
03MW0040CE	FIELDQC	7/22/1999	FIELDQC	0.00	0.00	8330N	NITROGLYCERIN	
G63MBE	FIELDQC	7/20/1999	FIELDQC	0.00	0.00	OC21V	ACETONE	
G63MBE	FIELDQC	7/20/1999	FIELDQC	0.00	0.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G63MJE	FIELDQC	7/21/1999	FIELDQC	0.00	0.00	OC21V	ACETONE	
G63MJE	FIELDQC	7/21/1999	FIELDQC	0.00	0.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G63MPE	FIELDQC	7/22/1999	FIELDQC	0.00	0.00	OC21V	ACETONE	
G63MPE	FIELDQC	7/22/1999	FIELDQC	0.00	0.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
HD105MMTRMW	FIELDQC	8/6/1999	FIELDQC	0.00	0.00	8330N	NITROGLYCERIN	
PPAWSMW-2E	FIELDQC	7/22/1999	FIELDQC	0.00	0.00	8330N	NITROGLYCERIN	
S60MAE	FIELDQC	7/20/1999	FIELDQC	0.00	0.00	8330N	NITROGLYCERIN	NO
S60MIE	FIELDQC	7/21/1999	FIELDQC	0.00	0.00	8330N	NITROGLYCERIN	
G60MAA	MW-60	7/21/1999	PROFILE	100.00	100.00	8330N	NITROGLYCERIN	
G60MAA	MW-60	7/21/1999	PROFILE	100.00	100.00	OC21V	ACETONE	
G60MAA	MW-60	7/21/1999	PROFILE	100.00	100.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
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OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
G60MAA	MW-60	7/21/1999	PROFILE	100.00	100.00	OC21V	TOLUENE	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	8330N	3-NITROTOLUENE	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	8330N	NITROBENZENE	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	8330N	NITROGLYCERIN	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	8330N	PICRIC ACID	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	8330N	TETRYL	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	OC21V	ACETONE	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	OC21V	METHYLENE CHLORIDE	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	OC21V	STYRENE	
G60MBA	MW-60	7/22/1999	PROFILE	110.00	110.00	OC21V	TOLUENE	
G60MCA	MW-60	7/22/1999	PROFILE	120.00	120.00	8330N	3-NITROTOLUENE	
G60MCA	MW-60	7/22/1999	PROFILE	120.00	120.00	8330N	NITROGLYCERIN	
G60MCA	MW-60	7/22/1999	PROFILE	120.00	120.00	8330N	PENTAERYTHRITOL TETRANITRATE	
G60MCA	MW-60	7/22/1999	PROFILE	120.00	120.00	8330N	PICRIC ACID	
G60MCA	MW-60	7/22/1999	PROFILE	120.00	120.00	OC21V	ACETONE	
G60MCA	MW-60	7/22/1999	PROFILE	120.00	120.00	OC21V	METHYLENE CHLORIDE	
G60MCA	MW-60	7/22/1999	PROFILE	120.00	120.00	OC21V	TOLUENE	
G60MDA	MW-60	7/22/1999	PROFILE	130.00	130.00	8330N	3-NITROTOLUENE	
G60MDA	MW-60	7/22/1999	PROFILE	130.00	130.00	8330N	NITROGLYCERIN	
G60MDA	MW-60	7/22/1999	PROFILE	130.00	130.00	OC21V	ACETONE	
G60MDA	MW-60	7/22/1999	PROFILE	130.00	130.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G60MDA	MW-60	7/22/1999	PROFILE	130.00	130.00	OC21V	TOLUENE	
G60MEA	MW-60	7/22/1999	PROFILE	140.00	140.00	8330N	2,4,6-TRINITROTOLUENE	
G60MEA	MW-60	7/22/1999	PROFILE	140.00	140.00	8330N	4-NITROTOLUENE	
G60MEA	MW-60	7/22/1999	PROFILE	140.00	140.00	8330N	NITROGLYCERIN	
					11	11		4

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
G60MEA	MW-60	7/22/1999	PROFILE	140.00	140.00	8330N	PENTAERYTHRITOL TETRANITRATE	
G60MEA	MW-60	7/22/1999	PROFILE	140.00	140.00	8330N	PICRIC ACID	
G60MEA	MW-60	7/22/1999	PROFILE	140.00	140.00	OC21V	ACETONE	
G60MEA	MW-60	7/22/1999	PROFILE	140.00	140.00	OC21V	CHLOROFORM	
G60MEA	MW-60	7/22/1999	PROFILE	140.00	140.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G60MEA	MW-60	7/22/1999	PROFILE	140.00	140.00	OC21V	TOLUENE	
G60MFA	MW-60	7/22/1999	PROFILE	150.00	150.00	8330N	3-NITROTOLUENE	
G60MFA	MW-60	7/22/1999	PROFILE	150.00	150.00	8330N	NITROGLYCERIN	
G60MFA	MW-60	7/22/1999	PROFILE	150.00	150.00	8330N	PICRIC ACID	
G60MFA	MW-60	7/22/1999	PROFILE	150.00	150.00	OC21V	ACETONE	
G60MFA	MW-60	7/22/1999	PROFILE	150.00	150.00	OC21V	CHLOROFORM	
G60MFA	MW-60	7/22/1999	PROFILE	150.00	150.00	OC21V	TOLUENE	
G60MGA	MW-60	7/22/1999	PROFILE	160.00	160.00	8330N	NITROGLYCERIN	
G60MGA	MW-60	7/22/1999	PROFILE	160.00	160.00	8330N	PICRIC ACID	
G60MGA	MW-60	7/22/1999	PROFILE	160.00	160.00	OC21V	ACETONE	
G60MGA	MW-60	7/22/1999	PROFILE	160.00	160.00	OC21V	CHLOROFORM	
G60MGA	MW-60	7/22/1999	PROFILE	160.00	160.00	OC21V	TOLUENE	
G60MHA	MW-60	7/22/1999	PROFILE	170.00	170.00	8330N	3-NITROTOLUENE	
G60MHA	MW-60	7/22/1999	PROFILE	170.00	170.00	8330N	4-NITROTOLUENE	
G60MHA	MW-60	7/22/1999	PROFILE	170.00	170.00	8330N	NITROGLYCERIN	
G60MHA	MW-60	7/22/1999	PROFILE	170.00	170.00	8330N	PICRIC ACID	
G60MHA	MW-60	7/22/1999	PROFILE	170.00	170.00	OC21V	ACETONE	
G60MHA	MW-60	7/22/1999	PROFILE	170.00	170.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G60MHA	MW-60	7/22/1999	PROFILE	170.00	170.00	OC21V	TOLUENE	
G60MHD	MW-60	7/22/1999	PROFILE	170.00	170.00	8330N	3-NITROTOLUENE	
G60MHD	MW-60	7/22/1999	PROFILE	170.00	170.00	8330N	4-NITROTOLUENE	

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
G60MHD	MW-60	7/22/1999	PROFILE	170.00	170.00	8330N	NITROGLYCERIN	
G60MHD	MW-60	7/22/1999	PROFILE	170.00	170.00	8330N	PICRIC ACID	
G60MHD	MW-60	7/22/1999	PROFILE	170.00	170.00	OC21V	ACETONE	
G60MHD	MW-60	7/22/1999	PROFILE	170.00	170.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G60MHD	MW-60	7/22/1999	PROFILE	170.00	170.00	OC21V	TOLUENE	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	8330N	2,6-DINITROTOLUENE	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	8330N	3-NITROTOLUENE	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	8330N	4-NITROTOLUENE	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	8330N	NITROGLYCERIN	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	8330N	PICRIC ACID	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	OC21V	ACETONE	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	OC21V	CHLOROFORM	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	OC21V	STYRENE	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	OC21V	TOLUENE	
G60MIA	MW-60	7/22/1999	PROFILE	180.00	180.00	OC21V	XYLENES, TOTAL	
G60MJA	MW-60	7/22/1999	PROFILE	190.00	190.00	8330N	2,4,6-TRINITROTOLUENE	
G60MJA	MW-60	7/22/1999	PROFILE	190.00	190.00	8330N	3-NITROTOLUENE	
G60MJA	MW-60	7/22/1999	PROFILE	190.00	190.00	8330N	4-NITROTOLUENE	
G60MJA	MW-60	7/22/1999	PROFILE	190.00	190.00	8330N	NITROGLYCERIN	
G60MJA	MW-60	7/22/1999	PROFILE	190.00	190.00	8330N	PICRIC ACID	
G60MJA	MW-60	7/22/1999	PROFILE	190.00	190.00	OC21V	ACETONE	
G60MJA	MW-60	7/22/1999	PROFILE	190.00	190.00	OC21V	CHLOROFORM	
G60MJA	MW-60	7/22/1999	PROFILE	190.00	190.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G60MJA	MW-60	7/22/1999	PROFILE	190.00	190.00	OC21V	TOLUENE	
G60MKA	MW-60	7/23/1999	PROFILE	200.00	200.00	8330N	3-NITROTOLUENE	

G60MKA	MW-60	7/00/4000				LAB_METHOD		PDA
		7/23/1999	PROFILE	200.00	200.00	8330N	4-NITROTOLUENE	
G60MKA	MW-60	7/23/1999	PROFILE	200.00	200.00	8330N	NITROGLYCERIN	
G60MKA	MW-60	7/23/1999	PROFILE	200.00	200.00	8330N	PICRIC ACID	
G60MKA	MW-60	7/23/1999	PROFILE	200.00	200.00	OC21V	ACETONE	
G60MKA	MW-60	7/23/1999	PROFILE	200.00	200.00	OC21V	CHLOROFORM	
G60MKA	MW-60	7/23/1999	PROFILE	200.00	200.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G60MKA	MW-60	7/23/1999	PROFILE	200.00	200.00	OC21V	STYRENE	
G60MKA	MW-60	7/23/1999	PROFILE	200.00	200.00	OC21V	TOLUENE	
G60MKA	MW-60	7/23/1999	PROFILE	200.00	200.00	OC21V	XYLENES, TOTAL	
G61MAA	MW-61	7/29/1999	PROFILE	105.00	105.00	OC21V	ACETONE	
G61MAA	MW-61	7/29/1999	PROFILE	105.00	105.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G61MBA	MW-61	7/30/1999	PROFILE	110.00	110.00	8330N	2,6-DINITROTOLUENE	
G61MBA	MW-61	7/30/1999	PROFILE	110.00	110.00	8330N	3-NITROTOLUENE	
G61MBA	MW-61	7/30/1999	PROFILE	110.00	110.00	8330N	4-NITROTOLUENE	
G61MBA	MW-61	7/30/1999	PROFILE	110.00	110.00	8330N	NITROGLYCERIN	
G61MBA	MW-61	7/30/1999	PROFILE	110.00	110.00	OC21V	ACETONE	
G61MBA	MW-61	7/30/1999	PROFILE	110.00	110.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G61MCA	MW-61	7/30/1999	PROFILE	120.00	120.00	8330N	3-NITROTOLUENE	
G61MCA	MW-61	7/30/1999	PROFILE	120.00	120.00	8330N	4-NITROTOLUENE	
G61MCA	MW-61	7/30/1999	PROFILE	120.00	120.00	8330N	NITROGLYCERIN	
G61MCA	MW-61	7/30/1999	PROFILE	120.00	120.00	8330N	PENTAERYTHRITOL TETRANITRATE	
G61MCA	MW-61	7/30/1999	PROFILE	120.00	120.00	OC21V	ACETONE	
G61MCA	MW-61	7/30/1999	PROFILE	120.00	120.00	OC21V	CHLOROETHANE	
G61MCA	MW-61	7/30/1999	PROFILE	120.00	120.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G61MDA	MW-61	7/30/1999	PROFILE	130.00	130.00	OC21V	ACETONE	
G61MDA	MW-61	7/30/1999	PROFILE	130.00	130.00	OC21V	CHLOROFORM	

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
G61MEA	MW-61	7/30/1999	PROFILE	140.00	140.00	8330N	2,6-DINITROTOLUENE	
G61MEA	MW-61	7/30/1999	PROFILE	140.00	140.00	8330N	3-NITROTOLUENE	
G61MEA	MW-61	7/30/1999	PROFILE	140.00	140.00	8330N	4-NITROTOLUENE	
G61MEA	MW-61	7/30/1999	PROFILE	140.00	140.00	OC21V	ACETONE	
G61MEA	MW-61	7/30/1999	PROFILE	140.00	140.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G61MFA	MW-61	7/30/1999	PROFILE	150.00	150.00	8330N	3-NITROTOLUENE	
G61MFA	MW-61	7/30/1999	PROFILE	150.00	150.00	8330N	4-NITROTOLUENE	
G61MFA	MW-61	7/30/1999	PROFILE	150.00	150.00	8330N	NITROGLYCERIN	
G61MFA	MW-61	7/30/1999	PROFILE	150.00	150.00	8330N	PENTAERYTHRITOL TETRANITRATE	
G61MFA	MW-61	7/30/1999	PROFILE	150.00	150.00	OC21V	ACETONE	
G61MFA	MW-61	7/30/1999	PROFILE	150.00	150.00	OC21V	CHLOROFORM	
G61MGA	MW-61	7/30/1999	PROFILE	160.00	160.00	8330N	3-NITROTOLUENE	
G61MGA	MW-61	7/30/1999	PROFILE	160.00	160.00	8330N	4-NITROTOLUENE	
G61MGA	MW-61	7/30/1999	PROFILE	160.00	160.00	8330N	NITROGLYCERIN	
G61MGA	MW-61	7/30/1999	PROFILE	160.00	160.00	8330N	PENTAERYTHRITOL TETRANITRATE	
G61MGA	MW-61	7/30/1999	PROFILE	160.00	160.00	OC21V	ACETONE	
G61MGA	MW-61	7/30/1999	PROFILE	160.00	160.00	OC21V	CHLOROFORM	
G61MGA	MW-61	7/30/1999	PROFILE	160.00	160.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G61MHA	MW-61	8/2/1999	PROFILE	170.00	170.00	8330N	3-NITROTOLUENE	
G61MHA	MW-61	8/2/1999	PROFILE	170.00	170.00	8330N	4-NITROTOLUENE	
G61MHA	MW-61	8/2/1999	PROFILE	170.00	170.00	OC21V	2-HEXANONE	
G61MHA	MW-61	8/2/1999	PROFILE	170.00	170.00	OC21V	ACETONE	
G61MHA	MW-61	8/2/1999	PROFILE	170.00	170.00	OC21V	CHLOROFORM	
G61MHA	MW-61	8/2/1999	PROFILE	170.00	170.00	OC21V	CHLOROMETHANE	
G61MHA	MW-61	8/2/1999	PROFILE	170.00	170.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G61MIA	MW-61	8/2/1999	PROFILE	180.00	180.00	8330N	3-NITROTOLUENE	

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
G61MIA	MW-61	8/2/1999	PROFILE	180.00	180.00	8330N	4-NITROTOLUENE	
G61MIA	MW-61	8/2/1999	PROFILE	180.00	180.00	8330N	NITROGLYCERIN	
G61MIA	MW-61	8/2/1999	PROFILE	180.00	180.00	OC21V	ACETONE	
G61MIA	MW-61	8/2/1999	PROFILE	180.00	180.00	OC21V	CHLOROFORM	
G61MIA	MW-61	8/2/1999	PROFILE	180.00	180.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G61MJA	MW-61	8/2/1999	PROFILE	190.00	190.00	8330N	NITROGLYCERIN	
G61MJA	MW-61	8/2/1999	PROFILE	190.00	190.00	OC21V	ACETONE	
G61MJA	MW-61	8/2/1999	PROFILE	190.00	190.00	OC21V	CHLOROFORM	
G61MKA	MW-61	8/2/1999	PROFILE	200.00	200.00	8330N	NITROGLYCERIN	
G61MKA	MW-61	8/2/1999	PROFILE	200.00	200.00	OC21V	ACETONE	
G61MKA	MW-61	8/2/1999	PROFILE	200.00	200.00	OC21V	CHLOROFORM	
G63MAA	MW-63	7/20/1999	PROFILE	150.00	155.00	OC21V	ACETONE	
G63MAA	MW-63	7/20/1999	PROFILE	150.00	155.00	OC21V	CHLOROFORM	
G63MBA	MW-63	7/20/1999	PROFILE	160.00	165.00	8330N	4-NITROTOLUENE	NO
G63MBA	MW-63	7/20/1999	PROFILE	160.00	165.00	8330N	NITROGLYCERIN	NO
G63MBA	MW-63	7/20/1999	PROFILE	160.00	165.00	OC21V	ACETONE	
G63MBA	MW-63	7/20/1999	PROFILE	160.00	165.00	OC21V	CHLOROFORM	
G63MBA	MW-63	7/20/1999	PROFILE	160.00	165.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G63MCA	MW-63	7/20/1999	PROFILE	170.00	175.00	OC21V	CHLOROFORM	
G63MDA	MW-63	7/20/1999	PROFILE	180.00	185.00	OC21V	CHLOROFORM	
G63MDA	MW-63	7/20/1999	PROFILE	180.00	185.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G63MDA	MW-63	7/20/1999	PROFILE	180.00	185.00	OC21V	TOLUENE	
G63MEA	MW-63	7/20/1999	PROFILE	190.00	195.00	OC21V	CHLOROFORM	
G63MEA	MW-63	7/20/1999	PROFILE	190.00	195.00	OC21V	METHYL ETHYL KETONE (2-BUTANONE	
G63MEA	MW-63	7/20/1999	PROFILE	190.00	195.00	OC21V	TOLUENE	
G63MFA	MW-63	7/20/1999	PROFILE	200.00	205.00	OC21V	CHLOROFORM	
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OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
G63MGA	MW-63	7/20/1999	PROFILE	210.00	215.00	OC21V	CHLOROFORM	
G63MGD	MW-63	7/20/1999	PROFILE	210.00	215.00	OC21V	CHLOROFORM	
G63MHA	MW-63	7/21/1999	PROFILE	220.00	225.00	OC21V	CHLOROFORM	
G63MHA	MW-63	7/21/1999	PROFILE	220.00	225.00	OC21V	CHLOROMETHANE	
G63MIA	MW-63	7/21/1999	PROFILE	230.00	235.00	OC21V	CHLOROFORM	
G63MIA	MW-63	7/21/1999	PROFILE	230.00	235.00	OC21V	CHLOROMETHANE	
G63MJA	MW-63	7/21/1999	PROFILE	240.00	245.00	OC21V	CHLOROFORM	
G63MJA	MW-63	7/21/1999	PROFILE	240.00	245.00	OC21V	CHLOROMETHANE	
G63MKA	MW-63	7/21/1999	PROFILE	250.00	255.00	OC21V	CHLOROFORM	
G63MKA	MW-63	7/21/1999	PROFILE	250.00	255.00	OC21V	CHLOROMETHANE	
G63MLA	MW-63	7/21/1999	PROFILE	260.00	265.00	OC21V	CHLOROFORM	
G63MLA	MW-63	7/21/1999	PROFILE	260.00	265.00	OC21V	CHLOROMETHANE	
G63MMA	MW-63	7/21/1999	PROFILE	270.00	275.00	OC21V	CHLOROFORM	
G63MMA	MW-63	7/21/1999	PROFILE	270.00	275.00	OC21V	CHLOROMETHANE	
G63MNA	MW-63	7/21/1999	PROFILE	280.00	285.00	OC21V	CHLOROFORM	
G63MNA	MW-63	7/21/1999	PROFILE	280.00	285.00	OC21V	CHLOROMETHANE	
G63MOA	MW-63	7/22/1999	PROFILE	290.00	295.00	OC21V	CHLOROFORM	
G63MPA	MW-63	7/22/1999	PROFILE	300.00	305.00	OC21V	CHLOROFORM	
G63MPA	MW-63	7/22/1999	PROFILE	300.00	305.00	OC21V	CHLOROMETHANE	
G80DAA	MW-80	7/29/1999	PROFILE	40.00	45.00	8330N	3-NITROTOLUENE	NO
G80DAA	MW-80	7/29/1999	PROFILE	40.00	45.00	8330N	NITROGLYCERIN	NO
G80DAA	MW-80	7/29/1999	PROFILE	40.00	45.00	8330N	PICRIC ACID	NO
G80DAA	MW-80	7/29/1999	PROFILE	40.00	45.00	OC21V	ACETONE	
G80DAA	MW-80	7/29/1999	PROFILE	40.00	45.00	OC21V	CHLOROFORM	
G80DBA	MW-80	7/29/1999	PROFILE	50.00	55.00	8330N	3-NITROTOLUENE	NO
G80DBA	MW-80	7/29/1999	PROFILE	50.00	55.00	8330N	4-NITROTOLUENE	NO

OGDEN_ID	LOCID OR WELL ID	DATE SAMPLED	SAMP_TYPE	SBD	SED	LAB_METHOD	OGDEN_ANALYTE	PDA
G80DBA	MW-80	7/29/1999	PROFILE	50.00	55.00	8330N	NITROGLYCERIN	NO
G80DBA	MW-80	7/29/1999	PROFILE	50.00	55.00	OC21V	ACETONE	
G80DBA	MW-80	7/29/1999	PROFILE	50.00	55.00	OC21V	CHLOROFORM	
G80DCA	MW-80	7/30/1999	PROFILE	60.00	65.00	OC21V	CHLOROFORM	
G80DCD	MW-80	7/30/1999	PROFILE	60.00	65.00	OC21V	CHLOROFORM	
G80DDA	MW-80	7/30/1999	PROFILE	70.00	75.00	OC21V	CHLOROFORM	
G80DDA	MW-80	7/30/1999	PROFILE	70.00	75.00	OC21V	TOLUENE	
G80DEA	MW-80	7/30/1999	PROFILE	80.00	85.00	OC21V	CHLOROFORM	
G80DFA	MW-80	7/30/1999	PROFILE	90.00	95.00	OC21V	CHLOROFORM	
G80DGA	MW-80	7/30/1999	PROFILE	100.00	105.00	OC21V	CHLOROFORM	
G80DHA	MW-80	7/30/1999	PROFILE	110.00	115.00	OC21V	CHLOROFORM	
G80DHA	MW-80	7/30/1999	PROFILE	110.00	115.00	OC21V	TOLUENE	
G80DIA	MW-80	7/30/1999	PROFILE	120.00	125.00	OC21V	CHLOROFORM	
G80DJA	MW-80	7/30/1999	PROFILE	130.00	135.00	OC21V	CHLOROFORM	
G80DKA	MW-80	7/30/1999	PROFILE	140.00	145.00	OC21V	CHLOROFORM	
G80DMA	MW-80	8/3/1999	PROFILE	160.00	165.00	OC21V	TOLUENE	
G80DPA	MW-80	8/3/1999	PROFILE	190.00	195.00	OC21V	TOLUENE	
G80DPD	MW-80	8/4/1999	PROFILE	190.00	195.00	OC21V	TOLUENE	
G80DRA	MW-80	8/4/1999	PROFILE	210.00	215.00	8330N	NITROGLYCERIN	NO
G80DRA	MW-80	8/4/1999	PROFILE	210.00	215.00	8330N	PICRIC ACID	NO
G80DRA	MW-80	8/4/1999	PROFILE	210.00	215.00	OC21V	TOLUENE	