Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Replicate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)	Chloro-methane (µg/L)	Vinyl chloride (µg/L)	Bromo-methane (µg/L)	Chloro-ethane (µg/L)
	GROUNDWATER SAMPLES							
PTC1A-1	1	9/3/2004	1345	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1A-2	2	9/3/2004	1345	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1B-1	1	9/7/2004	1355	<50.0	<50.0	<50.0	<50.0	<50.0
PTC1B-1	1MA	9/7/2004	1355	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	1	9/3/2004	1420	<10.0	<10.0	<10.0	<10.0	<10.0
PTC2A-1	1	9/2/2004	1330	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2A-2	2	9/2/2004	1330	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-1	1	9/7/2004	1300	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-2	2	9/7/2004	1300	<1.7	<1.7	<1.7	<1.7	<1.7
PTC2C-1	1	9/7/2004	1310	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2C-2	2	9/7/2004	1310	<1.7	<1.7	<1.7	<1.7	<1.7
PTC3A-1	1	9/3/2004	1100	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	2	9/3/2004	1100	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-1	1	9/1/2004	1150	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	2	9/1/2004	1150	<10.0	<10.0	<10.0	<10.0	<10.0
PTC3C-1	1	9/1/2004	1315	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3C-2	2	9/1/2004	1315	<25.0	<25.0	<25.0	<25.0	<25.0
PTC4A-1	1	9/7/2004	930	<100	<100	<100	<100	<100
PTC4B-1	1	9/7/2004	1020	<100	<100	<100	<100	<100
PTC4B-2	2	9/7/2004	1020	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4C-1	1	8/25/2004	1500	<100	<100	<100	<100	<100
PTC4C-2	2	8/25/2004	1500	<100	<100	<100	<100	<100
PTC5A-1	1	9/7/2004	1012	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5B-1	1	9/1/2004	1400	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5B-2	2	9/1/2004	1400	<25.0	<25.0	<25.0	<25.0	<25.0
PTC5C-1	1	9/2/2004	1000	<50.0	<50.0	<50.0	<50.0	<50.0
PTC6A-1	1	9/2/2004	1420	<10.0	<10.0	<10.0	<10.0	<10.0
PTC6B-1	1	8/27/2004	905	<100	<100	<100	<100	<100
PTC6B-2	2	8/27/2004	905	<25.0	<25.0	<25.0	<25.0	<25.0
PTC6C-1	1	8/27/2004	1030	<100	<100	<100	<100	<100
PTC6C-2	2	8/27/2004	1030	<0.5	<0.5	<0.5	<0.5	<0.5
PTC6D-1	1	8/30/2004	1000	<100	<100	<100	<100	<100
PTC6D-2	2	8/30/2004	1000	<0.5	<0.5	<0.5	<0.5	<0.5
PTC6E-1	1	8/30/2004	1200	<100	<100	<100	<100	<100
PTC6E-2	2	8/30/2004	1200	<100	<100	<100	<100	<100

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)	1,1-Dichloro-ethene (µg/L)	Methylene chloride (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethane (µg/L)	2,2-Dichloro-propane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
PTC1A-1	<10.0	<10.0	**28.2**	<10.0	<10.0	<10.0	<10.0
PTC1A-2	<10.0	<10.0	**25.6**	<10.0	<10.0	<10.0	<10.0
PTC1B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	<10.0	<10.0	**47.4**	<10.0	<10.0	<10.0	<10.0
PTC2A-1	<50.0	<50.0	**96.5**	<50.0	<50.0	<50.0	<50.0
PTC2A-2	<50.0	<50.0	**98.2**	<50.0	<50.0	<50.0	<50.0
PTC2B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-2	<1.7	<1.7	**2.6**	<1.7	<1.7	<1.7	<1.7
PTC2C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC3A-1	<50.0	<50.0	**55.2**	<50.0	<50.0	<50.0	<50.0
PTC3A-2	<50.0	<50.0	**63.4**	<50.0	<50.0	<50.0	<50.0
PTC3B-1	<50.0	<50.0	**51.5**	<50.0	<50.0	<50.0	<50.0
PTC3B-2	<10.0	<10.0	**89.6**	<10.0	<10.0	<10.0	<10.0
PTC3C-1	<50.0	<50.0	**104**	<50.0	<50.0	<50.0	<50.0
PTC3C-2	<25.0	<25.0	**95.9**	<25.0	<25.0	<25.0	<25.0
PTC4A-1	<100	<100	**152**	<100	<100	<100	<100
PTC4B-1	<100	<100	**148**	<100	<100	<100	<100
PTC4B-2	<50.0	<50.0	**164**	<50.0	<50.0	<50.0	<50.0
PTC4C-1	<100	<100	**196**	<100	<100	<100	<100
PTC4C-2	<100	<100	**221**	<100	<100	<100	<100
PTC5A-1	<50.0	<50.0	**88.7**	<50.0	<50.0	<50.0	<50.0
PTC5B-1	<50.0	<50.0	**80.2**	<50.0	<50.0	<50.0	<50.0
PTC5B-2	<25.0	<25.0	**79.8**	<25.0	<25.0	<25.0	<25.0
PTC5C-1	<50.0	<50.0	**219**	<50.0	<50.0	<50.0	<50.0
PTC6A-1	<10.0	<10.0	**40.6**	<10.0	<10.0	<10.0	<10.0
PTC6B-1	<100	<100	<100	<100	<100	<100	<100
PTC6B-2	<25.0	<25.0	**56.3**	<25.0	<25.0	<25.0	<25.0
PTC6C-1	<100	<100	<100	<100	<100	<100	<100
PTC6C-2	<0.5	<0.5	**6.6**	<0.5	<0.5	<0.5	<0.5
PTC6D-1	<100	<100	<100	<100	<100	<100	<100
PTC6D-2	<0.5	<0.5	**3.2**	<0.5	<0.5	<0.5	**0.7**
PTC6E-1	<100	<100	<100	<100	<100	<100	<100
PTC6E-2	<100	<100	<100	<100	<100	<100	<100

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)	Bromo-chloro-methane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1-Dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Benzene (µg/L)	1,2-Dichloro-ethane (µg/L)
PTC1A-1	**>5,000**	<10.0	<10.0	<10.0	**387**	<10.0	<10.0
PTC1A-2	**>5,000**	<10.0	<10.0	<10.0	**398**	<10.0	<10.0
PTC1B-1	**88.5**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC1B-1	**63.5**	<1.7	<1.7	<1.7	**9.0**	<1.7	<1.7
PTC1C-1	**>5,000**	<10.0	<10.0	<10.0	**3,880**	<10.0	<10.0
PTC2A-1	**10,500**	<50.0	<50.0	<50.0	**5,610**	<50.0	<50.0
PTC2A-2	**10,400**	<50.0	<50.0	<50.0	**5,560**	<50.0	<50.0
PTC2B-1	**182**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-2	**99.6**	<1.7	<1.7	<1.7	**3.0**	<1.7	<1.7
PTC2C-1	**59.3**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2C-2	**25.2**	<1.7	<1.7	<1.7	**2.0**	<1.7	<1.7
PTC3A-1	**4,060**	<50.0	<50.0	<50.0	**2,110**	<50.0	<50.0
PTC3A-2	**5,050**	<50.0	<50.0	<50.0	**3,050**	<50.0	<50.0
PTC3B-1	**2,420**	<50.0	<50.0	<50.0	**443**	<50.0	<50.0
PTC3B-2	**>5,000**	<10.0	<10.0	<10.0	**>5,000**	<10.0	<10.0
PTC3C-1	**7,740**	<50.0	<50.0	<50.0	**7,990**	<50.0	<50.0
PTC3C-2	**7,240**	<25.0	<25.0	<25.0	**7,250**	<25.0	<25.0
PTC4A-1	**14,400**	<100	<100	<100	**11,200**	<100	<100
PTC4B-1	**11,500**	<100	<100	<100	**10,000**	<100	<100
PTC4B-2	**13,500**	<50.0	<50.0	<50.0	**13,500**	<50.0	<50.0
PTC4C-1	**15,700**	<100	<100	<100	**18,300**	<100	<100
PTC4C-2	**16,500**	<100	<100	<100	**20,000**	<100	<100
PTC5A-1	**6,120**	<50.0	<50.0	<50.0	**2,860**	<50.0	<50.0
PTC5B-1	**5,290**	<50.0	<50.0	<50.0	**8,440**	<50.0	<50.0
PTC5B-2	**5,350**	<25.0	<25.0	<25.0	**8,540**	<25.0	<25.0
PTC5C-1	**4,680**	<50.0	<50.0	<50.0	**266**	<50.0	<50.0
PTC6A-1	**>5,000**	<10.0	<10.0	<10.0	**2,540**	<10.0	<10.0
PTC6B-1	**7,270**	<100	<100	<100	**6,040**	<100	<100
PTC6B-2	**7,390**	<25.0	<25.0	<25.0	**6,340**	<25.0	<25.0
PTC6C-1	**1,030**	<100	<100	<100	**437**	<100	<100
PTC6C-2	**>250**	<0.5	<0.5	<0.5	**>250**	<0.5	**1.1**
PTC6D-1	<100	<100	<100	<100	<100	<100	<100
PTC6D-2	**209**	<0.5	<0.5	<0.5	**73.6**	<0.5	<0.5
PTC6E-1	**2,500**	<100	<100	<100	**730**	<100	<100
PTC6E-2	**2,570**	<100	<100	<100	**730**	<100	<100

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTC1A-1	**136**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1A-2	**149**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC1B-1	**12.8**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	**4.6**
PTC1C-1	**86.8**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	**10.4**
PTC2A-1	**145**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2A-2	**131**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-2	**4.1**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC2C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2C-2	**10.8**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC3A-1	**75.0**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	**112**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-1	**50.2**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	**33.6**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC3C-1	**76.0**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3C-2	**47.5**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC4A-1	**173**	<100	<100	<100	<100	<100	<100	<100
PTC4B-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC4B-2	**98.8**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4C-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC4C-2	**101**	<100	<100	<100	<100	<100	<100	<100
PTC5A-1	**216**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5B-1	**72.5**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5B-2	**58.4**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC5C-1	**95.6**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC6A-1	**70.8**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC6B-1	**144**	<100	<100	<100	<100	<100	<100	<100
PTC6B-2	**93.1**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC6C-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6C-2	**14.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.5**
PTC6D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6D-2	**5.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC6E-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6E-2	<100	<100	<100	<100	<100	<100	<100	<100

Sample name
PTC1A-1
PTC1A-2
PTC1B-1
PTC1B-1
PTC1C-1
PTC2A-1
PTC2A-2
PTC2B-1
PTC2B-2
PTC2C-1
PTC2C-2
PTC3A-1
PTC3A-2
PTC3B-1
PTC3B-2
PTC3C-1
PTC3C-2
PTC4A-1
PTC4B-1
PTC4B-2
PTC4C-1
PTC4C-2
PTC5A-1
PTC5B-1
PTC5B-2
PTC5C-1
PTC6A-1
PTC6B-1
PTC6B-2
PTC6C-1
PTC6C-2
PTC6D-1
PTC6D-2
PTC6E-1
PTC6E-2

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)		1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTC1A-1	**959**	**B**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1A-2	**1,040**	**B**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1B-1	<50.0		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC1B-1	**7.9**		<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	**811**	**B**	<10.0	<10.0	<10.0	<10.0	**17.0**	<10.0	<10.0
PTC2A-1	**2,080**		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2A-2	**2,040**		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-1	<50.0		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-2	**6.9**		<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC2C-1	<50.0		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2C-2	**2.9**		<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC3A-1	**764**	**B**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	**1,090**	**B**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-1	<50.0		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	**278**		<10.0	<10.0	<10.0	<10.0	**15.4**	<10.0	<10.0
PTC3C-1	**528**		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3C-2	**446**		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC4A-1	**1,570**		<100	<100	<100	<100	<100	<100	<100
PTC4B-1	**926**		<100	<100	<100	<100	<100	<100	<100
PTC4B-2	**1,230**		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4C-1	**1,190**		<100	<100	<100	<100	<100	<100	<100
PTC4C-2	**1,260**		<100	<100	<100	<100	<100	<100	<100
PTC5A-1	**2,430**		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5B-1	**776**		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5B-2	**823**		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC5C-1	**349**		<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC6A-1	**1,010**		<10.0	<10.0	<10.0	<10.0	**18.6**	<10.0	<10.0
PTC6B-1	**1,290**		<100	<100	<100	<100	<100	<100	<100
PTC6B-2	**1,260**		<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC6C-1	**158**		<100	<100	<100	<100	<100	<100	<100
PTC6C-2	**160**		<0.5	<0.5	<0.5	<0.5	**3.0**	<0.5	<0.5
PTC6D-1	<100		<100	<100	<100	<100	<100	<100	<100
PTC6D-2	**12.8**		<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC6E-1	**344**		<100	<100	<100	<100	<100	<100	<100
PTC6E-2	**335**		<100	<100	<100	<100	<100	<100	<100

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)	Styrene (µg/L)	Bromo-form (µg/L)	Isopropyl-benzene (µg/L)	Bromo-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	n-Propyl-benzene (µg/L)	Penta-chloro-ethane (µg/L)
PTC1A-1	<10.0	<10.0	<10.0	<10.0	<10.0	**48.0**	<10.0	**11.2**
PTC1A-2	<10.0	<10.0	<10.0	<10.0	<10.0	**49.3**	<10.0	**13.5**
PTC1B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	**8.4**	<1.7	<1.7
PTC1C-1	<10.0	<10.0	<10.0	<10.0	<10.0	**56.8**	<10.0	**51.6**
PTC2A-1	<50.0	<50.0	<50.0	<50.0	<50.0	**78.6**	<50.0	**108**
PTC2A-2	<50.0	<50.0	<50.0	<50.0	<50.0	**65.5**	<50.0	**103**
PTC2B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC2C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC3A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	**29.5**
PTC3A-2	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	**34.2**
PTC3B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	<10.0	<10.0	<10.0	<10.0	<10.0	**36.6**	<10.0	**73.0**
PTC3C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	**77.0**
PTC3C-2	<25.0	<25.0	<25.0	<25.0	<25.0	**34.6**	<25.0	**70.3**
PTC4A-1	<100	<100	<100	<100	<100	**127**	<100	**108**
PTC4B-1	<100	<100	<100	<100	<100	<100	<100	**113**
PTC4B-2	<50.0	<50.0	<50.0	<50.0	<50.0	**116**	<50.0	**156**
PTC4C-1	<100	<100	<100	<100	<100	**123**	<100	**184**
PTC4C-2	<100	<100	<100	<100	<100	**153**	<100	**186**
PTC5A-1	<50.0	<50.0	<50.0	<50.0	<50.0	**74.1**	<50.0	**44.5**
PTC5B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	**100**
PTC5B-2	<25.0	<25.0	<25.0	<25.0	<25.0	**53.3**	<25.0	**116**
PTC5C-1	<50.0	<50.0	<50.0	<50.0	<50.0	**67.2**	<50.0	<50.0
PTC6A-1	<10.0	<10.0	<10.0	<10.0	<10.0	**52.5**	<10.0	**71.0**
PTC6B-1	<100	<100	<100	<100	<100	**121**	<100	**105**
PTC6B-2	<25.0	<25.0	<25.0	<25.0	<25.0	**70.0**	<25.0	**115**
PTC6C-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6C-2	<0.5	<0.5	<0.5	<0.5	<0.5	**7.7**	<0.5	**11.2**
PTC6D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6D-2	<0.5	<0.5	<0.5	<0.5	<0.5	**1.9**	<0.5	**1.3**
PTC6E-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6E-2	<100	<100	<100	<100	<100	<100	<100	<100

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)	1,2,3-Trichloro-propane (µg/L)	4-Chloro-toluene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	sec Butyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)
PTC1A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1A-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC2A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2A-2	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC2C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC3A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC3C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3C-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC4A-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC4B-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC4B-2	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4C-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC4C-2	<100	<100	<100	<100	<100	<100	<100	<100
PTC5A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5B-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC5C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC6A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC6B-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6B-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC6C-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6C-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC6D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6D-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC6E-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC6E-2	<100	<100	<100	<100	<100	<100	<100	<100

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)	1,4-Dichloro-benzene (µg/L)	n-Butyl-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	Hexa-chloro-ethane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2,4-Trichloro-benzene (µg/L)
PTC1A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1A-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC1B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	<10.0	<10.0	<10.0	<10.0	**252**	<10.0	<10.0
PTC2A-1	<50.0	<50.0	<50.0	<50.0	**298**	<50.0	<50.0
PTC2A-2	<50.0	<50.0	<50.0	<50.0	**288**	<50.0	<50.0
PTC2B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2B-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC2C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC3A-1	<50.0	<50.0	<50.0	<50.0	**104**	<50.0	<50.0
PTC3A-2	<50.0	<50.0	<50.0	<50.0	**146**	<50.0	<50.0
PTC3B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	<10.0	<10.0	<10.0	<10.0	**324**	<10.0	<10.0
PTC3C-1	<50.0	<50.0	<50.0	<50.0	**714**	<50.0	<50.0
PTC3C-2	<25.0	<25.0	<25.0	<25.0	**638**	<25.0	<25.0
PTC4A-1	<100	<100	<100	<100	**604**	<100	<100
PTC4B-1	<100	<100	<100	<100	**885**	<100	<100
PTC4B-2	<50.0	<50.0	<50.0	<50.0	**1,170**	<50.0	<50.0
PTC4C-1	<100	<100	<100	<100	**2,040**	<100	<100
PTC4C-2	<100	<100	<100	<100	**2,120**	<100	<100
PTC5A-1	<50.0	<50.0	<50.0	<50.0	**139**	<50.0	<50.0
PTC5B-1	<50.0	<50.0	<50.0	<50.0	**1,340**	<50.0	<50.0
PTC5B-2	<25.0	<25.0	<25.0	<25.0	**1,460**	<25.0	<25.0
PTC5C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC6A-1	<10.0	<10.0	<10.0	<10.0	**187**	<10.0	<10.0
PTC6B-1	<100	<100	<100	<100	**482**	<100	<100
PTC6B-2	<25.0	<25.0	<25.0	<25.0	**549**	<25.0	<25.0
PTC6C-1	<100	<100	<100	<100	<100	<100	<100
PTC6C-2	<0.5	<0.5	<0.5	<0.5	**36.8**	<0.5	<0.5
PTC6D-1	<100	<100	<100	<100	<100	<100	<100
PTC6D-2	<0.5	<0.5	<0.5	<0.5	**1.7**	<0.5	<0.5
PTC6E-1	<100	<100	<100	<100	<100	<100	<100
PTC6E-2	<100	<100	<100	<100	<100	<100	<100

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)	Naphthalene (µg/L)	1,2,3-Trichloro-benzene (µg/L)	
PTC1A-1	<10.0	<10.0	<10.0	
PTC1A-2	<10.0	<10.0	<10.0	
PTC1B-1	<50.0	<50.0	<50.0	
PTC1B-1	<1.7	<1.7	<1.7	
PTC1C-1	<10.0	<10.0	<10.0	
PTC2A-1	<50.0	<50.0	<50.0	
PTC2A-2	<50.0	<50.0	<50.0	
PTC2B-1	<50.0	<50.0	<50.0	
PTC2B-2	<1.7	<1.7	<1.7	
PTC2C-1	<50.0	<50.0	<50.0	
PTC2C-2	<1.7	<1.7	<1.7	
PTC3A-1	<50.0	<50.0	<50.0	
PTC3A-2	<50.0	<50.0	<50.0	
PTC3B-1	<50.0	<50.0	<50.0	
PTC3B-2	<10.0	<10.0	<10.0	
PTC3C-1	<50.0	<50.0	<50.0	
PTC3C-2	<25.0	<25.0	<25.0	
PTC4A-1	<100	<100	<100	
PTC4B-1	<100	<100	<100	
PTC4B-2	<50.0	<50.0	<50.0	
PTC4C-1	<100	<100	<100	
PTC4C-2	<100	<100	<100	
PTC5A-1	<50.0	<50.0	<50.0	
PTC5B-1	<50.0	<50.0	<50.0	
PTC5B-2	<25.0	<25.0	<25.0	
PTC5C-1	<50.0	<50.0	<50.0	
PTC6A-1	<10.0	<10.0	<10.0	
PTC6B-1	<100	<100	<100	
PTC6B-2	<25.0	<25.0	<25.0	
PTC6C-1	<100	<100	<100	x
PTC6C-2	<0.5	<0.5	<0.5	
PTC6D-1	<100	<100	<100	
PTC6D-2	<0.5	<0.5	<0.5	x
PTC6E-1	<100	<100	<100	x
PTC6E-2	<100	<100	<100	x

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)	Chloro-methane (µg/L)	Vinyl chloride (µg/L)	Bromo-methane (µg/L)	Chloro-ethane (µg/L)
PTC7A-1	1	9/1/2004	1515	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7A-2	2	9/1/2004	1515	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-1	1	9/1/2004	1610	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-2	2	9/1/2004	1610	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7C-1	1	9/3/2004	945	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7D-1	1	9/3/2004	1010	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8A-1	1	8/30/2004	1340	<100	<100	<100	<100	<100
PTC8B-1	1	8/30/2004	1200	<100	<100	<100	<100	<100
PTC8B-2	2	8/30/2004	1200	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8C-1	2	9/1/2004	845	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8D-1	1	8/27/2004	1230	<100	<100	<100	<100	<100
PTC8D-2	2	8/27/2004	1230	<0.5	<0.5	<0.5	<0.5	<0.5
PTC8E-1	1	8/27/2004	1040	<100	<100	<100	<100	<100
PTC8E-2	2	8/27/2004	1040	<100	<100	<100	<100	<100
PTC9A-1	1	9/7/2004	1120	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9B-1	1	9/7/2004	1225	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9C-1	1	8/26/2004	1120	<100	<100	<100	<100	<100
PTC9C-2	2	8/26/2004	1120	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9D-1	1	8/26/2004	1348	<100	<100	<100	<100	<100
PTC9D-2	2	8/26/2004	1348	<10.0	<10.0	<10.0	<10.0	<10.0
PTC9E-1	1	8/26/2004	1327	<100	<100	<100	<100	<100
PTC9E-2	2	8/26/2004	1327	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10A-1	1	9/1/2004	1500	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10A-2	2	9/1/2004	1500	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10B-1	1	9/1/2004	1200	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10B-2	2	9/1/2004	1200	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10C-1	1	9/1/2004	1315	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10C-2	2	9/1/2004	1315	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10D-1	1	9/1/2004	1130	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10D-2	2	9/1/2004	1130	<2.5	<2.5	<2.5	<2.5	<2.5
PTC10E-1	1	9/1/2004	830	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10E-2	2	9/1/2004	830	<33.3	<33.3	<33.3	<33.3	<33.3
PTC11A-1	1	9/7/2004	1120	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11B-1	1	9/7/2004	1158	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11B-2	2	9/7/2004	1158	<50.0	<50.0	<50.0	<50.0	<50.0
PTC11C-1	1	9/7/2004	1305	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11C-2	2	9/7/2004	1305	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11D-1	1	9/7/2004	1420	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11E-1	1	9/2/2004	1045	<50.0	<50.0	<50.0	<50.0	<50.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)	1,1-Dichloro-ethene (µg/L)	Methylene chloride (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethane (µg/L)	2,2-Dichloro-propane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
PTC7A-1	<10.0	<10.0	<10.0	**19.6**	<10.0	<10.0	<10.0
PTC7A-2	<10.0	<10.0	<10.0	**22.2**	<10.0	<10.0	<10.0
PTC7B-1	<10.0	<10.0	<10.0	**14.4**	<10.0	<10.0	<10.0
PTC7B-2	<10.0	<10.0	<10.0	**16.5**	<10.0	<10.0	<10.0
PTC7C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7D-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8A-1	<100	<100	<100	<100	<100	<100	<100
PTC8B-1	<100	<100	<100	<100	<100	<100	<100
PTC8B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8C-1	<10.0	<10.0	**12.3**	<10.0	<10.0	<10.0	<10.0
PTC8D-1	<100	<100	<100	<100	<100	<100	<100
PTC8D-2	<0.5	**1.6**	**13.6**	**3.9**	**1.6**	<0.5	**3.2**
PTC8E-1	<100	<100	<100	<100	<100	<100	<100
PTC8E-2	<100	<100	<100	<100	<100	<100	<100
PTC9A-1	<25.0	<25.0	**53.4**	<25.0	<25.0	<25.0	<25.0
PTC9B-1	<25.0	<25.0	**34.8**	<25.0	<25.0	<25.0	<25.0
PTC9C-1	<100	<100	<100	<100	<100	<100	<100
PTC9C-2	<25.0	<25.0	**40.8**	<25.0	<25.0	<25.0	<25.0
PTC9D-1	<100	<100	<100	<100	<100	<100	<100
PTC9D-2	<10.0	<10.0	**25.7**	<10.0	<10.0	<10.0	<10.0
PTC9E-1	<100	<100	<100	<100	<100	<100	<100
PTC9E-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10A-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10A-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10B-1	<33.3	<33.3	**51.4**	<33.3	<33.3	<33.3	<33.3
PTC10B-2	<25.0	<25.0	**50.2**	<25.0	<25.0	<25.0	<25.0
PTC10C-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10C-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10D-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10D-2	<2.5	<2.5	**4.2**	<2.5	<2.5	<2.5	<2.5
PTC10E-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10E-2	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC11A-1	<25.0	<25.0	**65.1**	<25.0	<25.0	<25.0	<25.0
PTC11B-1	<25.0	<25.0	**33.1**	<25.0	<25.0	<25.0	<25.0
PTC11B-2	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC11C-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11C-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11D-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)	Bromo-chloro-methane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1-Dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Benzene (µg/L)	1,2-Dichloro-ethane (µg/L)
PTC7A-1	**28.3**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7A-2	**34.6**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-1	**1,390**	<10.0	<10.0	<10.0	**216**	<10.0	<10.0
PTC7B-2	**1,390**	<10.0	<10.0	<10.0	**208**	<10.0	<10.0
PTC7C-1	**10.2**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7D-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8A-1	**2,360**	<100	<100	<100	**1,030**	<100	<100
PTC8B-1	**1,690**	<100	<100	<100	**409**	<100	<100
PTC8B-2	**1,730**	<10.0	<10.0	<10.0	**455**	<10.0	<10.0
PTC8C-1	**612**	<10.0	<10.0	<10.0	**123**	<10.0	<10.0
PTC8D-1	**3,910**	<100	<100	<100	**873**	<100	<100
PTC8D-2	**>250**	<0.5	<0.5	<0.5	**>250**	**4.1**	**4.5**
PTC8E-1	**4,530**	<100	<100	<100	**2,840**	<100	<100
PTC8E-2	**4,430**	<100	<100	<100	**2,810**	<100	<100
PTC9A-1	**9,280**	<25.0	<25.0	<25.0	**6,010**	<25.0	<25.0
PTC9B-1	**5,980**	<25.0	<25.0	<25.0	**2,560**	<25.0	<25.0
PTC9C-1	**7,370**	<100	<100	<100	**4,320**	<100	<100
PTC9C-2	**7,430**	<25.0	<25.0	<25.0	**3,830**	<25.0	<25.0
PTC9D-1	**3,430**	<100	<100	<100	**796**	<100	<100
PTC9D-2	**4,120**	<10.0	<10.0	<10.0	**1,340**	<10.0	<10.0
PTC9E-1	**6,540**	<100	<100	<100	**5,170**	<100	<100
PTC9E-2	**6,760**	<25.0	<25.0	<25.0	**5,400**	<25.0	<25.0
PTC10A-1	**4,040**	<33.3	<33.3	<33.3	**37.9**	<33.3	<33.3
PTC10A-2	**4,080**	<25.0	<25.0	<25.0	**32.9**	<25.0	<25.0
PTC10B-1	**7,360**	<33.3	<33.3	<33.3	**6,980**	<33.3	<33.3
PTC10B-2	**7,350**	<25.0	<25.0	<25.0	**7,020**	<25.0	<25.0
PTC10C-1	**103**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10C-2	**97.4**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10D-1	**128**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10D-2	**128**	<2.5	<2.5	<2.5	**30.9**	<2.5	<2.5
PTC10E-1	**5,820**	<33.3	<33.3	<33.3	**12,100**	<33.3	<33.3
PTC10E-2	**6,120**	<33.3	<33.3	<33.3	**12,400**	<33.3	<33.3
PTC11A-1	**6,060**	<25.0	<25.0	<25.0	**11,100**	<25.0	<25.0
PTC11B-1	**5,670**	<25.0	<25.0	<25.0	**>12,500**	<25.0	<25.0
PTC11B-2	**6,120**	<50.0	<50.0	<50.0	**14,300**	<50.0	<50.0
PTC11C-1	**3,760**	<25.0	<25.0	<25.0	**6,750**	<25.0	<25.0
PTC11C-2	**5,190**	<25.0	<25.0	<25.0	**11,400**	<25.0	<25.0
PTC11D-1	**5,280**	<25.0	<25.0	<25.0	**10,600**	<25.0	<25.0
PTC11E-1	**5,560**	<50.0	<50.0	<50.0	**12,400**	<50.0	<50.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTC7A-1	**206**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7A-2	**220**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-1	**259**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-2	**271**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7C-1	**11.6**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7D-1	**11.2**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8A-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8B-1	**115**	<100	<100	<100	<100	<100	<100	<100
PTC8B-2	**116**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8D-2	**36.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**5.2**
PTC8E-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8E-2	**108**	<100	<100	<100	<100	<100	<100	<100
PTC9A-1	**84.6**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9B-1	**70.0**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9C-1	**132**	<100	<100	<100	<100	<100	<100	<100
PTC9C-2	**71.7**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC9D-2	**57.5**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC9E-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC9E-2	**54.9**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10A-1	**166**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10A-2	**152**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10B-1	**150**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10B-2	**141**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10C-1	**55.0**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10C-2	**37.3**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10D-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10D-2	**5.9**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC10E-1	**113**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10E-2	**91.2**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC11A-1	**54.0**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11B-1	**91.7**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11B-2	**117**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC11C-1	**47.8**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11C-2	**92.1**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11D-1	**95.9**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11E-1	**108**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0

Sample name
PTC7A-1
PTC7A-2
PTC7B-1
PTC7B-2
PTC7C-1
PTC7D-1
PTC8A-1
PTC8B-1
PTC8B-2
PTC8C-1
PTC8D-1
PTC8D-2
PTC8E-1
PTC8E-2
PTC9A-1
PTC9B-1
PTC9C-1
PTC9C-2
PTC9D-1
PTC9D-2
PTC9E-1
PTC9E-2
PTC10A-1
PTC10A-2
PTC10B-1
PTC10B-2
PTC10C-1
PTC10C-2
PTC10D-1
PTC10D-2
PTC10E-1
PTC10E-2
PTC11A-1
PTC11B-1
PTC11B-2
PTC11C-1
PTC11C-2
PTC11D-1
PTC11E-1

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)	1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTC7A-1	**1,060**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7A-2	**1,210**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-1	**857**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-2	**889**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7C-1	**14.0 B**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7D-1	**14.6 B**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8A-1	**306**	<100	<100	<100	<100	<100	<100	<100
PTC8B-1	**362**	<100	<100	<100	<100	<100	<100	<100
PTC8B-2	**363**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8C-1	**14.7**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8D-1	**120**	<100	<100	<100	<100	<100	<100	<100
PTC8D-2	**108**	<0.5	<0.5	<0.5	<0.5	**3.9**	<0.5	<0.5
PTC8E-1	**357**	<100	<100	<100	<100	<100	<100	<100
PTC8E-2	**393**	<100	<100	<100	<100	<100	<100	<100
PTC9A-1	**925**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9B-1	**494**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9C-1	**737**	<100	<100	<100	<100	<100	<100	<100
PTC9C-2	**660**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9D-1	**221**	<100	<100	<100	<100	<100	<100	<100
PTC9D-2	**336**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC9E-1	**309**	<100	<100	<100	<100	<100	<100	<100
PTC9E-2	**290**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10A-1	**965**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10A-2	**1,030**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10B-1	**1,730**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10B-2	**1,830**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10C-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10C-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10D-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10D-2	**7.7**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC10E-1	**1,060**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10E-2	**975**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC11A-1	**809**	<25.0	<25.0	<25.0	<25.0	**27.9**	<25.0	<25.0
PTC11B-1	**1,210**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11B-2	**1,370**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC11C-1	**664**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11C-2	**1,140**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11D-1	**1,120**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11E-1	**942**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)	Styrene (µg/L)	Bromo-form (µg/L)	Isopropyl-benzene (µg/L)	Bromo-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	n-Propyl-benzene (µg/L)	Penta-chloro-ethane (µg/L)
PTC7A-1	<10.0	<10.0	<10.0	<10.0	<10.0	**22.6**	<10.0	<10.0
PTC7A-2	<10.0	<10.0	<10.0	<10.0	<10.0	**25.0**	<10.0	<10.0
PTC7B-1	<10.0	<10.0	<10.0	<10.0	<10.0	**30.7**	<10.0	<10.0
PTC7B-2	<10.0	<10.0	<10.0	<10.0	<10.0	**24.5**	<10.0	<10.0
PTC7C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7D-1	<10.0	<10.0	<10.0	<10.0	<10.0	**10.4**	<10.0	<10.0
PTC8A-1	<100	<100	<100	<100	<100	**106**	<100	<100
PTC8B-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8B-2	<10.0	<10.0	<10.0	<10.0	<10.0	**26.2**	<10.0	**10.2**
PTC8C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8D-2	<0.5	<0.5	<0.5	<0.5	<0.5	**32.0**	<0.5	**7.9**
PTC8E-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8E-2	<100	<100	<100	<100	<100	<100	<100	<100
PTC9A-1	<25.0	<25.0	<25.0	<25.0	<25.0	**89.2**	<25.0	**56.3**
PTC9B-1	<25.0	<25.0	<25.0	<25.0	<25.0	**71.6**	<25.0	**36.3**
PTC9C-1	<100	<100	<100	<100	<100	**167**	<100	<100
PTC9C-2	<25.0	<25.0	<25.0	<25.0	<25.0	**83.5**	<25.0	**52.1**
PTC9D-1	<100	<100	<100	<100	<100	**119**	<100	<100
PTC9D-2	<10.0	<10.0	<10.0	<10.0	<10.0	**58.3**	<10.0	**19.0**
PTC9E-1	<100	<100	<100	<100	<100	**116**	<100	<100
PTC9E-2	<25.0	<25.0	<25.0	<25.0	<25.0	**80.4**	<25.0	**44.4**
PTC10A-1	<33.3	<33.3	<33.3	<33.3	<33.3	**106**	<33.3	<33.3
PTC10A-2	<25.0	<25.0	<25.0	<25.0	<25.0	**101**	<25.0	<25.0
PTC10B-1	<33.3	<33.3	<33.3	<33.3	<33.3	**84.0**	<33.3	**91.9**
PTC10B-2	<25.0	<25.0	<25.0	<25.0	<25.0	**84.3**	<25.0	**88.5**
PTC10C-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10C-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10D-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10D-2	<2.5	<2.5	<2.5	<2.5	<2.5	**3.2**	<2.5	<2.5
PTC10E-1	<33.3	<33.3	<33.3	<33.3	<33.3	**101**	<33.3	**173**
PTC10E-2	<33.3	<33.3	<33.3	<33.3	<33.3	**97.5**	<33.3	**180**
PTC11A-1	<25.0	<25.0	<25.0	<25.0	<25.0	**63.3**	<25.0	**164**
PTC11B-1	<25.0	<25.0	<25.0	<25.0	<25.0	**94.0**	<25.0	**172**
PTC11B-2	<50.0	<50.0	<50.0	<50.0	<50.0	**128**	<50.0	**193**
PTC11C-1	<25.0	<25.0	<25.0	<25.0	<25.0	**72.3**	<25.0	**90.8**
PTC11C-2	<25.0	<25.0	<25.0	<25.0	<25.0	**102**	<25.0	**177**
PTC11D-1	<25.0	<25.0	<25.0	<25.0	<25.0	**99.8**	<25.0	**159**
PTC11E-1	<50.0	<50.0	<50.0	<50.0	<50.0	**95.3**	<50.0	**174**

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)	1,2,3-Trichloro-propane (µg/L)	4-Chloro-toluene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	sec Butyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)
PTC7A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7A-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7D-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8A-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8B-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8D-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC8E-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC8E-2	<100	<100	<100	<100	<100	<100	<100	<100
PTC9A-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9B-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9C-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC9C-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC9D-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC9E-1	<100	<100	<100	<100	<100	<100	<100	<100
PTC9E-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10A-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10A-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10B-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10B-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10C-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10C-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10D-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10D-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC10E-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10E-2	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC11A-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11B-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11B-2	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC11C-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11C-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11D-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC11E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)	1,4-Dichloro-benzene (µg/L)	n-Butyl-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	Hexa-chloro-ethane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2,4-Trichloro-benzene (µg/L)
PTC7A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7A-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7D-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8A-1	<100	<100	<100	<100	<100	<100	<100
PTC8B-1	<100	<100	<100	<100	<100	<100	<100
PTC8B-2	<10.0	<10.0	<10.0	<10.0	**29.7**	<10.0	<10.0
PTC8C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8D-1	<100	<100	<100	<100	<100	<100	<100
PTC8D-2	<0.5	<0.5	<0.5	<0.5	**12.6**	<0.5	<0.5
PTC8E-1	<100	<100	<100	<100	**131**	<100	<100
PTC8E-2	<100	<100	<100	<100	**141**	<100	<100
PTC9A-1	<25.0	<25.0	<25.0	<25.0	**115**	<25.0	<25.0
PTC9B-1	<25.0	<25.0	<25.0	<25.0	**151**	<25.0	<25.0
PTC9C-1	<100	<100	<100	<100	**229**	<100	<100
PTC9C-2	<25.0	<25.0	<25.0	<25.0	**214**	<25.0	<25.0
PTC9D-1	<100	<100	<100	<100	<100	<100	<100
PTC9D-2	<10.0	<10.0	<10.0	<10.0	**65.7**	<10.0	<10.0
PTC9E-1	<100	<100	<100	<100	**224**	<100	<100
PTC9E-2	<25.0	<25.0	<25.0	<25.0	**229**	<25.0	<25.0
PTC10A-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10A-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10B-1	<33.3	<33.3	<33.3	<33.3	**324**	<33.3	<33.3
PTC10B-2	<25.0	<25.0	<25.0	<25.0	**312**	<25.0	<25.0
PTC10C-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10C-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10D-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC10D-2	<2.5	<2.5	<2.5	<2.5	**2.8**	<2.5	<2.5
PTC10E-1	<33.3	<33.3	<33.3	<33.3	**1,980**	<33.3	<33.3
PTC10E-2	<33.3	<33.3	<33.3	<33.3	**1,880**	<33.3	<33.3
PTC11A-1	<25.0	<25.0	<25.0	<25.0	**1,850**	<25.0	<25.0
PTC11B-1	<25.0	<25.0	<25.0	<25.0	**1,980**	<25.0	<25.0
PTC11B-2	<50.0	<50.0	<50.0	<50.0	**2,150**	<50.0	<50.0
PTC11C-1	<25.0	<25.0	<25.0	<25.0	**1,280**	<25.0	<25.0
PTC11C-2	<25.0	<25.0	<25.0	<25.0	**2,270**	<25.0	<25.0
PTC11D-1	<25.0	<25.0	<25.0	<25.0	**1,720**	<25.0	<25.0
PTC11E-1	<50.0	<50.0	<50.0	<50.0	**1,880**	<50.0	<50.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)	Naphthalene (µg/L)	1,2,3-Trichloro-benzene (µg/L)	
PTC7A-1	<10.0	<10.0	<10.0	x
PTC7A-2	<10.0	<10.0	<10.0	
PTC7B-1	<10.0	<10.0	<10.0	
PTC7B-2	<10.0	<10.0	<10.0	x
PTC7C-1	<10.0	<10.0	<10.0	
PTC7D-1	<10.0	<10.0	<10.0	
PTC8A-1	<100	<100	<100	
PTC8B-1	<100	<100	<100	
PTC8B-2	<10.0	<10.0	<10.0	
PTC8C-1	<10.0	<10.0	<10.0	
PTC8D-1	<100	<100	<100	
PTC8D-2	<0.5	<0.5	<0.5	
PTC8E-1	<100	<100	<100	
PTC8E-2	<100	<100	<100	
PTC9A-1	<25.0	<25.0	<25.0	
PTC9B-1	<25.0	<25.0	<25.0	
PTC9C-1	<100	<100	<100	
PTC9C-2	<25.0	<25.0	<25.0	
PTC9D-1	<100	<100	<100	
PTC9D-2	<10.0	<10.0	<10.0	x
PTC9E-1	<100	<100	<100	
PTC9E-2	<25.0	<25.0	<25.0	
PTC10A-1	<33.3	<33.3	<33.3	
PTC10A-2	<25.0	<25.0	<25.0	
PTC10B-1	<33.3	<33.3	<33.3	
PTC10B-2	<25.0	<25.0	<25.0	
PTC10C-1	<33.3	<33.3	<33.3	
PTC10C-2	<25.0	<25.0	<25.0	
PTC10D-1	<33.3	<33.3	<33.3	
PTC10D-2	<2.5	<2.5	<2.5	
PTC10E-1	<33.3	<33.3	<33.3	
PTC10E-2	<33.3	<33.3	<33.3	
PTC11A-1	<25.0	<25.0	<25.0	
PTC11B-1	<25.0	<25.0	<25.0	
PTC11B-2	<50.0	<50.0	<50.0	
PTC11C-1	<25.0	<25.0	<25.0	
PTC11C-2	<25.0	<25.0	<25.0	
PTC11D-1	<25.0	<25.0	<25.0	
PTC11E-1	<50.0	<50.0	<50.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)		Chloro-methane (µg/L)		Vinyl chloride (µg/L)		Bromo-methane (µg/L)		Chloro-ethane (µg/L)	
PTC11F-1	1	8/26/2004	915	<100		<100		<100		<100		<100	
PTC11F-1	1MA	8/26/2004	915	<100		<100		<100		<100		<100	
PTC12B-1	1	9/1/2004	1140	<33.3		<33.3		<33.3		<33.3		<33.3	
PTC12B-2	2	9/1/2004	1140	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC12C-1	1	9/7/2004	1115	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12D-1	1	9/7/2004	1050	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12E-1	1	9/3/2004	1040	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12F-1	1	9/1/2004	1050	<33.3		<33.3		<33.3		<33.3		<33.3	
PTC12F-2	2	9/1/2004	1050	<33.3		<33.3		<33.3		<33.3		<33.3	
PTC12F-2a	1	9/1/2004	1105	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC13A-1	1	9/1/2004	1420	<33.3		<33.3		<33.3		<33.3		<33.3	
PTC13A-2	2	9/1/2004	1420	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC13B-1	1	9/1/2004	1500	<33.3		<33.3		<33.3		<33.3		<33.3	
PTC13B-2	2	9/1/2004	1500	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13C-1	1	9/1/2004	1540	<33.3		<33.3		<33.3		<33.3		<33.3	
PTC13C-2	2	9/1/2004	1540	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13D-1	1	9/1/2004	1555	<33.3		<33.3		<33.3		<33.3		<33.3	
PTC13D-2	2	9/1/2004	1555	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC14A-1	1	9/20/2004	1406	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14A-2	2	9/20/2004	1406	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14B-1	1	9/20/2004	1430	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14B-1	1	9/20/2004	1430	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14B-1	1MA	9/20/2004	1430	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC14B-2	2MA	9/20/2004	1430	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC14B-2	2	9/20/2004	1430	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC14C-1	1	9/20/2004	1116	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14D-1	1	9/20/2004	1155	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14E-1	1	9/20/2004	1245	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14F-1	1	9/20/2004	1315	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14G-1	1	9/20/2004	1345	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14G-2	2	9/20/2004	1345	<100		<100		<100		<100		<100	
PTC15A-1	1	9/20/2004	1250	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15A-1	1MA	9/20/2004	1250	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15A-2	2	9/20/2004	1250	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC15B-1	1	9/20/2004	1111	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15C-1	1	9/20/2004	1150	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15E-1	1	9/21/2004	840	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15E-2	2	9/21/2004	840	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC15F-1	1	9/21/2004	1255	<50.0		<50.0		<50.0		<50.0		<50.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)	1,1-Dichloro-ethene (µg/L)	Methylene chloride (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethane (µg/L)	2,2-Dichloro-propane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
PTC11F-1	<100	<100	<100	<100	<100	<100	<100
PTC11F-1	<100	<100	<100	<100	<100	<100	<100
PTC12B-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	**166**
PTC12B-2	<10.0	<10.0	<10.0	**14.6**	<10.0	<10.0	**166**
PTC12C-1	<2.5	<2.5	<2.5	**2.5**	<2.5	<2.5	**12.2**
PTC12D-1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12E-1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12F-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2a	<2.5	<2.5	<2.5	**4.8**	<2.5	<2.5	**7.0**
PTC13A-1	<33.3	<33.3	**35.0**	<33.3	<33.3	<33.3	<33.3
PTC13A-2	<2.5	<2.5	**30.0**	<2.5	<2.5	<2.5	<2.5
PTC13B-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13B-2	<10.0	<10.0	**17.2**	<10.0	<10.0	<10.0	<10.0
PTC13C-1	<33.3	<33.3	**37.8**	<33.3	<33.3	<33.3	<33.3
PTC13C-2	<10.0	<10.0	**31.1**	<10.0	<10.0	<10.0	<10.0
PTC13D-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13D-2	<10.0	<10.0	**17.1**	<10.0	<10.0	<10.0	<10.0
PTC14A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14A-2	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14B-1	<25.0 x	<25.0 x	**45.8** x	<25.0 x	<25.0 x	<25.0 x	<25.0 x
PTC14B-2	<25.0 x	<25.0 x	**43.2** x	<25.0 x	<25.0 x	<25.0 x	<25.0 x
PTC14B-2	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x
PTC14C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14D-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14F-1	<50.0	<50.0	**53.8**	<50.0	<50.0	<50.0	<50.0
PTC14G-1	<50.0	<50.0	**53.1**	<50.0	<50.0	<50.0	<50.0
PTC14G-2	<100	<100	<100	<100	<100	<100	<100
PTC15A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15A-2	<10.0	<10.0	<10.0	**10.9**	<10.0	<10.0	**17.7**
PTC15B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15C-1	<50.0	<50.0	**80.7**	<50.0	<50.0	<50.0	<50.0
PTC15E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15E-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC15F-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)	Bromo-chloro-methane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1-Dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Benzene (µg/L)	1,2-Dichloro-ethane (µg/L)
PTC11F-1	**6,010**	<100	<100	<100	**15,800**	<100	<100
PTC11F-1	**6,110**	<100	<100	<100	**15,400**	<100	<100
PTC12B-1	**1,740**	<33.3	<33.3	<33.3	**644**	<33.3	<33.3
PTC12B-2	**1,930**	<10.0	<10.0	<10.0	**787**	<10.0	<10.0
PTC12C-1	**16.8**	<2.5	<2.5	<2.5	**5.1**	<2.5	<2.5
PTC12D-1	**2.7**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12E-1	**3.0**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12F-1	**90.7**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2	**113**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2a	**108**	<2.5	<2.5	<2.5	**9.8**	<2.5	<2.5
PTC13A-1	**4,770**	<33.3	<33.3	<33.3	**6,260**	<33.3	<33.3
PTC13A-2	**>1,250**	<2.5	<2.5	<2.5	**>1,250**	**3.0**	<2.5
PTC13B-1	**1,960**	<33.3	<33.3	<33.3	**3,490**	<33.3	<33.3
PTC13B-2	**1,850**	<10.0	<10.0	<10.0	**3,110**	<10.0	<10.0
PTC13C-1	**2,450**	<33.3	<33.3	<33.3	**714**	<33.3	<33.3
PTC13C-2	**2,300**	<10.0	<10.0	<10.0	**623**	<10.0	<10.0
PTC13D-1	**2,940**	<33.3	<33.3	<33.3	**1,150**	<33.3	<33.3
PTC13D-2	**2,880**	<10.0	<10.0	<10.0	**1,060**	<10.0	<10.0
PTC14A-1	**9,990**	<50.0	<50.0	<50.0	**2,380**	<50.0	<50.0
PTC14A-2	**10,600**	<50.0	<50.0	<50.0	**2,730**	<50.0	<50.0
PTC14B-1	**6,020**	<50.0	<50.0	<50.0	**6,580**	<50.0	<50.0
PTC14B-1	**8,850**	<50.0	<50.0	<50.0	**16,900**	<50.0	<50.0
PTC14B-1	**9,480** x	<25.0 x	<25.0 x	<25.0 x	**>12,500** x	<25.0 x	<25.0 x
PTC14B-2	**8,850** x	<25.0 x	<25.0 x	<25.0 x	**>12,500** x	<25.0 x	<25.0 x
PTC14B-2	**9,170** x	<50.0 x	<50.0 x	<50.0 x	**15,800** x	<50.0 x	<50.0 x
PTC14C-1	**8,920**	<50.0	<50.0	<50.0	**18,300**	<50.0	<50.0
PTC14D-1	**9,270**	<50.0	<50.0	<50.0	**18,700**	<50.0	<50.0
PTC14E-1	**9,960**	<50.0	<50.0	<50.0	**18,700**	<50.0	<50.0
PTC14F-1	**11,800**	<50.0	<50.0	<50.0	**22,900**	<50.0	<50.0
PTC14G-1	**11,200**	<50.0	<50.0	<50.0	**24,100**	<50.0	<50.0
PTC14G-2	**11,300**	<100	<100	<100	**21,900**	<100	<100
PTC15A-1	**4,060**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15A-1	**2,220**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15A-2	**4,160**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC15B-1	**8,440**	<50.0	<50.0	<50.0	**1,490**	<50.0	<50.0
PTC15C-1	**5,140**	<50.0	<50.0	<50.0	**365**	<50.0	<50.0
PTC15E-1	**54.3**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15E-2	**65.6**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC15F-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTC11F-1	**143**	<100	<100	<100	<100	<100	<100	<100
PTC11F-1	**117**	<100	<100	<100	<100	<100	<100	<100
PTC12B-1	**544**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12B-2	**542**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC12C-1	**50.9**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12D-1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12E-1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12F-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2	**41.5**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2a	**11.2**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC13A-1	**114**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13A-2	**93.6**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC13B-1	**139**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13B-2	**103**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC13C-1	**156**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13C-2	**116**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC13D-1	**144**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13D-2	**113**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC14A-1	**90.4**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14A-2	**94.3**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14B-1	**80.8**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14B-1	**75.2** x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0
PTC14B-2	**66.3** x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0
PTC14B-2	**83.6** x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0
PTC14C-1	**78.1**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14D-1	**78.4**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14E-1	**72.4**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14F-1	**109**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14G-1	**81.1**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14G-2	<100	<100	<100	<100	<100	<100	<100	<100
PTC15A-1	**238**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15A-1	**186**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15A-2	**216**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC15B-1	**139**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15C-1	**197**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15E-2	**3.3**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC15F-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0

Sample name	
PTC11F-1	
PTC11F-1	
PTC12B-1	
PTC12B-2	
PTC12C-1	
PTC12D-1	
PTC12E-1	
PTC12F-1	
PTC12F-2	
PTC12F-2a	
PTC13A-1	
PTC13A-2	
PTC13B-1	
PTC13B-2	
PTC13C-1	
PTC13C-2	
PTC13D-1	
PTC13D-2	
PTC14A-1	
PTC14A-2	
PTC14B-1	
PTC14B-1	
PTC14B-1	x
PTC14B-2	x
PTC14B-2	x
PTC14C-1	
PTC14D-1	
PTC14E-1	
PTC14F-1	
PTC14G-1	
PTC14G-2	
PTC15A-1	
PTC15A-1	
PTC15A-2	
PTC15B-1	
PTC15C-1	
PTC15E-1	
PTC15E-2	
PTC15F-1	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)	1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTC11F-1	**1,480**	<100	<100	<100	<100	<100	<100	<100
PTC11F-1	**1,600**	<100	<100	<100	<100	<100	<100	<100
PTC12B-1	**979**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12B-2	**1,160**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC12C-1	**14.8**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12D-1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12E-1	**4.1 B**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12F-1	**39.7**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2	**33.7**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2a	**24.4**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC13A-1	**1,550**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13A-2	**>1,250**	<2.5	<2.5	<2.5	<2.5	**24.5**	<2.5	<2.5
PTC13B-1	**1,690**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13B-2	**1,420**	<10.0	<10.0	<10.0	<10.0	**13.6**	<10.0	<10.0
PTC13C-1	**1,120**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13C-2	**926**	<10.0	<10.0	<10.0	<10.0	**10.9**	<10.0	<10.0
PTC13D-1	**1,220**	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC13D-2	**1,100**	<10.0	<10.0	<10.0	<10.0	**11.8**	<10.0	<10.0
PTC14A-1	**698**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14A-2	**916**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14B-1	**419**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14B-1	**838**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14B-1	**808**	x <25.0	x <25.0	x <25.0	x <25.0	x **35.7**	x <25.0	x <25.0 x
PTC14B-2	**723**	x <25.0	x <25.0	x <25.0	x <25.0	x **35.8**	x <25.0	x <25.0 x
PTC14B-2	**774**	x <50.0	x <50.0	x <50.0	x <50.0	x <50.0	x <50.0	x <50.0 x
PTC14C-1	**941**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14D-1	**1,060**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14E-1	**923**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14F-1	**1,180**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14G-1	**1,170**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC14G-2	**1,200**	<100	<100	<100	<100	<100	<100	<100
PTC15A-1	**700**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15A-1	**365**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15A-2	**593**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC15B-1	**1,120**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15C-1	**817**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15E-2	**3.2**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC15F-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)	Styrene (µg/L)	Bromo-form (µg/L)	Isopropyl-benzene (µg/L)	Bromo-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	n-Propyl-benzene (µg/L)	Penta-chloro-ethane (µg/L)
PTC11F-1	<100	<100	<100	<100	<100	**191**	<100	**176**
PTC11F-1	<100	<100	<100	<100	<100	**136**	<100	**122**
PTC12B-1	<33.3	<33.3	<33.3	<33.3	<33.3	**57.9**	<33.3	<33.3
PTC12B-2	<10.0	<10.0	<10.0	<10.0	<10.0	**44.1**	<10.0	**34.8**
PTC12C-1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12D-1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12E-1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC12F-1	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3	<33.3
PTC12F-2a	<2.5	<2.5	<2.5	<2.5	<2.5	**3.1**	<2.5	<2.5
PTC13A-1	<33.3	<33.3	<33.3	<33.3	<33.3	**61.5**	<33.3	**160**
PTC13A-2	<2.5	<2.5	<2.5	<2.5	<2.5	**68.0**	<2.5	**158**
PTC13B-1	<33.3	<33.3	<33.3	<33.3	<33.3	**70.9**	<33.3	**104**
PTC13B-2	<10.0	<10.0	<10.0	<10.0	<10.0	**70.5**	<10.0	**102**
PTC13C-1	<33.3	<33.3	<33.3	<33.3	<33.3	**69.8**	<33.3	**42.8**
PTC13C-2	<10.0	<10.0	<10.0	<10.0	<10.0	**57.6**	<10.0	**32.9**
PTC13D-1	<33.3	<33.3	<33.3	<33.3	<33.3	**84.0**	<33.3	**64.6**
PTC13D-2	<10.0	<10.0	<10.0	<10.0	<10.0	**63.8**	<10.0	**66.8**
PTC14A-1	<50.0	<50.0	<50.0	<50.0	<50.0	**96.6**	<50.0	<50.0
PTC14A-2	<50.0	<50.0	<50.0	<50.0	<50.0	**100**	<50.0	**51.9**
PTC14B-1	<50.0	<50.0	<50.0	<50.0	<50.0	**92.7**	<50.0	**144**
PTC14B-1	<50.0	<50.0	<50.0	<50.0	<50.0	**110**	<50.0	**193**
PTC14B-1	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	**98.3** x	<25.0 x	**195** x
PTC14B-2	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	**92.1** x	<25.0 x	**176** x
PTC14B-2	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	**108** x	<50.0 x	**172** x
PTC14C-1	<50.0	<50.0	<50.0	<50.0	<50.0	**104**	<50.0	**195**
PTC14D-1	<50.0	<50.0	<50.0	<50.0	<50.0	**94.6**	<50.0	**184**
PTC14E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	**182**
PTC14F-1	<50.0	<50.0	<50.0	<50.0	<50.0	**119**	<50.0	**203**
PTC14G-1	<50.0	<50.0	<50.0	<50.0	<50.0	**97.8**	<50.0	**228**
PTC14G-2	<100	<100	<100	<100	<100	**108**	<100	**206**
PTC15A-1	<50.0	<50.0	<50.0	<50.0	<50.0	**70.8**	<50.0	<100
PTC15A-1	<50.0	<50.0	<50.0	<50.0	<50.0	**60.4**	<50.0	<100
PTC15A-2	<10.0	<10.0	<10.0	<10.0	<10.0	**61.0**	<10.0	<200
PTC15B-1	<50.0	<50.0	<50.0	<50.0	<50.0	**87.5**	<50.0	<50.0
PTC15C-1	<50.0	<50.0	<50.0	<50.0	<50.0	**57.2**	<50.0	<50.0
PTC15E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100
PTC15E-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<50.0
PTC15F-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<100

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)		1,2,3-Trichloro-propane (µg/L)		4-Chloro-toluene (µg/L)		1,3,5-Trimethyl-benzene (µg/L)		tert-Butyl-benzene (µg/L)		1,2,4-Trimethyl-benzene (µg/L)		sec Butyl-benzene (µg/L)		1,3-Dichloro-benzene (µg/L)	
PTC11F-1	<100		<100		<100		<100		<100		<100		<100		<100	
PTC11F-1	<100		<100		<100		<100		<100		<100		<100		<100	
PTC12B-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC12B-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC12C-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12E-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12F-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC12F-2	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC12F-2a	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC13A-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC13A-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC13B-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC13B-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13C-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC13C-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13D-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC13D-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC14A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14A-2	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14B-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC14B-2	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC14B-2	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC14C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14D-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14F-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC14G-2	<100		<100		<100		<100		<100		<100		<100		<100	
PTC15A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15A-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC15B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15E-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC15F-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)		1,4-Dichloro-benzene (µg/L)		n-Butyl-benzene (µg/L)		1,2-Dichloro-benzene (µg/L)		Hexa-chloro-ethane (µg/L)		1,2-Dibromo-3-chloro-propane (µg/L)		1,2,4-Trichloro-benzene (µg/L)	
PTC11F-1	<100		<100		<100		<100		**3,430**		<100		<100	
PTC11F-1	<100		<100		<100		<100		**3,320**		<100		<100	
PTC12B-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC12B-2	<10.0		<10.0		<10.0		<10.0		**35.9**		<10.0		<10.0	
PTC12C-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12E-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12F-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC12F-2	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC12F-2a	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC13A-1	<33.3		<33.3		<33.3		<33.3		**1,480**		<33.3		<33.3	
PTC13A-2	<2.5		<2.5		<2.5		<2.5		**>1,250**		<2.5		<2.5	
PTC13B-1	<33.3		<33.3		<33.3		<33.3		**1,530**		<33.3		<33.3	
PTC13B-2	<10.0		<10.0		<10.0		<10.0		**1,410**		<10.0		<10.0	
PTC13C-1	<33.3		<33.3		<33.3		<33.3		**84.6**		<33.3		<33.3	
PTC13C-2	<10.0		<10.0		<10.0		<10.0		**67.9**		<10.0		<10.0	
PTC13D-1	<33.3		<33.3		<33.3		<33.3		**295**		<33.3		<33.3	
PTC13D-2	<10.0		<10.0		<10.0		<10.0		**285**		<10.0		<10.0	
PTC14A-1	<50.0		<50.0		<50.0		<50.0		**59.2**		<50.0		<50.0	
PTC14A-2	<50.0		<50.0		<50.0		<50.0		**75.3**		<50.0		<50.0	
PTC14B-1	<50.0		<50.0		<50.0		<50.0		**672**		<50.0		<50.0	
PTC14B-1	<50.0		<50.0		<50.0		<50.0		**1,230**		<50.0		<50.0	
PTC14B-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	**1,500**	x	<25.0	x	<25.0	x
PTC14B-2	<25.0	x	<25.0	x	<25.0	x	<25.0	x	**1,080**	x	<25.0	x	<25.0	x
PTC14B-2	<50.0	x	<50.0	x	<50.0	x	<50.0	x	**1,120**	x	<50.0	x	<50.0	x
PTC14C-1	<50.0		<50.0		<50.0		<50.0		**1,500**		<50.0		<50.0	
PTC14D-1	<50.0		<50.0		<50.0		<50.0		**1,500**		<50.0		<50.0	
PTC14E-1	<50.0		<50.0		<50.0		<50.0		**1,240**		<50.0		<50.0	
PTC14F-1	<50.0		<50.0		<50.0		<50.0		**1,600**		<50.0		<50.0	
PTC14G-1	<50.0		<50.0		<50.0		<50.0		**1,910**		<50.0		<50.0	
PTC14G-2	<100		<100		<100		<100		**1,550**		<100		<100	
PTC15A-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC15A-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC15A-2	<10.0		<10.0		<10.0		<10.0		<200		<10.0		<10.0	
PTC15B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15E-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC15E-2	<2.5		<2.5		<2.5		<2.5		<50.0		<2.5		<2.5	
PTC15F-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)		Naphthalene (µg/L)		1,2,3-Trichloro-benzene (µg/L)	
PTC11F-1	<100		<100		<100	
PTC11F-1	<100		<100		<100	
PTC12B-1	<33.3		<33.3		<33.3	
PTC12B-2	<10.0		<10.0		<10.0	
PTC12C-1	<2.5		<2.5		<2.5	
PTC12D-1	<2.5		<2.5		<2.5	
PTC12E-1	<2.5		<2.5		<2.5	
PTC12F-1	<33.3		<33.3		<33.3	
PTC12F-2	<33.3		<33.3		<33.3	
PTC12F-2a	<2.5		<2.5		<2.5	
PTC13A-1	<33.3		<33.3		<33.3	
PTC13A-2	<2.5		<2.5		<2.5	
PTC13B-1	<33.3		<33.3		<33.3	
PTC13B-2	<10.0		<10.0		<10.0	
PTC13C-1	<33.3		<33.3		<33.3	
PTC13C-2	<10.0		<10.0		<10.0	
PTC13D-1	<33.3		<33.3		<33.3	
PTC13D-2	<10.0		<10.0		<10.0	
PTC14A-1	<50.0		<50.0		<50.0	
PTC14A-2	<50.0		<50.0		<50.0	
PTC14B-1	<50.0		<50.0		<50.0	
PTC14B-1	<50.0		<50.0		<50.0	
PTC14B-1	<25.0	x	<25.0	x	<25.0	
PTC14B-2	<25.0	x	<25.0	x	<25.0	
PTC14B-2	<50.0	x	<50.0	x	<50.0	
PTC14C-1	<50.0		<50.0		<50.0	
PTC14D-1	<50.0		<50.0		<50.0	
PTC14E-1	<50.0		<50.0		<50.0	
PTC14F-1	<50.0		<50.0		<50.0	
PTC14G-1	<50.0		<50.0		<50.0	
PTC14G-2	<100		<100		<100	
PTC15A-1	<50.0		<50.0		<50.0	
PTC15A-1	<50.0		<50.0		<50.0	
PTC15A-2	<10.0		<10.0		<10.0	
PTC15B-1	<50.0		<50.0		<50.0	
PTC15C-1	<50.0		<50.0		<50.0	
PTC15E-1	<50.0		<50.0		<50.0	
PTC15E-2	<2.5		<2.5		<2.5	
PTC15F-1	<50.0		<50.0		<50.0	x

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)		Chloro-methane (µg/L)		Vinyl chloride (µg/L)		Bromo-methane (µg/L)		Chloro-ethane (µg/L)	
PTC15F-2	2	9/21/2004	1255	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC15G-1	1	9/20/2004	1420	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15G-1	1MA	9/20/2004	1420	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC15G-2	2	9/20/2004	1420	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC15G-2	2MA	9/20/2004	1420	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16A-1	1	9/23/2004	1330	<3.6		<3.6		**182**		<3.6		<3.6	
PTC16B-1	1	9/22/2004	945	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16B-2	2	9/22/2004	945	<3.6		<3.6		<3.6		<3.6		<3.6	
PTC16C-1	1	9/22/2004	1240	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16C-2	2	9/22/2004	1240	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16E-1	1	9/22/2004	1047	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16E-2	2	9/22/2004	1047	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16F-1	1	9/22/2004	1005	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16F-2	2	9/22/2004	1005	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16G-1	1	9/22/2004	1020	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16G-2	2	9/22/2004	1020	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC17A-1	1	9/21/2004	950	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17A-2	2	9/21/2004	950	<3.6		<3.6		<3.6		<3.6		<3.6	
PTC17B-1	1	9/21/2004	1010	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17B-2	2	9/21/2004	1010	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC17C-1	1	9/21/2004	1040	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17C-2	2	9/21/2004	1040	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC17D-1	1	9/21/2004	1245	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17D-2	2	9/21/2004	1245	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC17E-1	1	9/22/2004	1100	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17E-2	2	9/21/2004	1300	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17E-2	2MA	9/22/2004	1100	<3.6		<3.6		<3.6		<3.6		<3.6	
PTC17F-1	1	9/22/2004	1215	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17F-2	2	9/22/2004	1215	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC17G-1	1	9/21/2004	1210	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17G-2	2	9/21/2004	1210	<50.0		<50.0		<50.0		<50.0		<50.0	
PTZ1A-1	1	8/30/2004	1100	<100		<100		<100		<100		<100	
PTZ1C-1	1	9/1/2004	1000	<10.0		<10.0		<10.0		<10.0		<10.0	
PTZ1C-2	2	9/1/2004	1000	<10.0		<10.0		<10.0		<10.0		<10.0	
PTZ1D-1	1	8/30/2004	1300	<100		<100		<100		<100		<100	
PTZ1D-2	2	8/30/2004	1300	<0.5		<0.5		<0.5		<0.5		<0.5	
PTZ2A-1	1	9/3/2004	1300	<50.0		<50.0		<50.0		<50.0		<50.0	
PTZ4A-1	1	9/7/2004	1530	<100		<100		<100		<100		<100	
PTZ4A-2	2	9/7/2004	1530	<1.7		<1.7		<1.7		<1.7		<1.7	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)		1,1-Dichloro-ethene (µg/L)		Methylene chloride (µg/L)		trans-1,2-Dichloro-ethene (µg/L)		1,1-Dichloro-ethane (µg/L)		2,2-Dichloro-propane (µg/L)		cis-1,2-Dichloro-ethene (µg/L)	
PTC15F-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC15G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15G-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC15G-2	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC15G-2	<2.5		**3.7**		<2.5		**7.2**		<2.5		<2.5		**6.5**	
PTC16A-1	<3.6		<3.6		<3.6		**5.8**		<3.6		<3.6		**312**	
PTC16B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		**140**	
PTC16B-2	<3.6		**6.4**		<3.6		**28.8**		**3.8**		<3.6		**166**	
PTC16C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		**319**	
PTC16C-2	<2.5		**3.8**		<2.5		**10.4**		<2.5		<2.5		**348**	
PTC16E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16E-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		**3.7**	
PTC16F-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16F-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		**6.4**	
PTC16G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16G-2	<2.5		<2.5		<2.5		**2.8**		<2.5		<2.5		**16.7**	
PTC17A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		**86.8**	
PTC17A-2	<3.6		**6.8**		<3.6		**28.8**		**4.4**		<3.6		**92.0**	
PTC17B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		**63.0**	
PTC17B-2	<10.0		<10.0		<10.0		**17.8**		<10.0		<10.0		**68.3**	
PTC17C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		**252**	
PTC17C-2	<10.0		<10.0		**11.2**		**33.1**		<10.0		<10.0		**248**	
PTC17D-1	<50.0		<50.0		**54.2**		<50.0		<50.0		<50.0		**178**	
PTC17D-2	<10.0		<10.0		**37.6**		**15.9**		<10.0		<10.0		**170**	
PTC17E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17E-2	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17E-2	<3.6		**4.3**		<3.6		**17.5**		<3.6		<3.6		**34.3**	
PTC17F-1	<50.0		<50.0		**205**		<50.0		<50.0		<50.0		<50.0	
PTC17F-2	<25.0		<25.0		**189**		<25.0		<25.0		<25.0		<25.0	
PTC17G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17G-2	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTZ1A-1	<100		<100		<100		<100		<100		<100		<100	
PTZ1C-1	<10.0		<10.0		**16.3**		<10.0		<10.0		<10.0		<10.0	
PTZ1C-2	<10.0		<10.0		**13.4**		<10.0		<10.0		<10.0		<10.0	
PTZ1D-1	<100		<100		<100		<100		<100		<100		<100	
PTZ1D-2	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTZ2A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTZ4A-1	<100		<100		<100		<100		<100		<100		**101**	
PTZ4A-2	<1.7		**3.7**		<1.7		**9.7**		<1.7		<1.7		**114**	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)		Bromo-chloro-methane (µg/L)		1,1,1-Trichloro-ethane (µg/L)		1,1-Dichloro-propene (µg/L)		Carbon tetra-chloride (µg/L)		Benzene (µg/L)		1,2-Dichloro-ethane (µg/L)	
PTC15F-2	**25.3**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC15G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15G-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC15G-2	**56.1**	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC15G-2	**59.5**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16A-1	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC16B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16B-2	**17.0**		<3.6		<3.6		<3.6		<3.6		**6.2**		<3.6	
PTC16C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16C-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16E-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16F-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16F-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16G-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC17A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17A-2	**49.3**		<3.6		<3.6		<3.6		**21.2**		<3.6		<3.6	
PTC17B-1	**3,270**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17B-2	**3,460**		<10.0		<10.0		<10.0		**20.4**		<10.0		<10.0	
PTC17C-1	**1,820**		<50.0		<50.0		<50.0		**504**		<50.0		<50.0	
PTC17C-2	**1,850**		<10.0		<10.0		<10.0		**594**		<10.0		<10.0	
PTC17D-1	**1,970**		<50.0		<50.0		<50.0		**528**		<50.0		<50.0	
PTC17D-2	**1,830**		<10.0		<10.0		<10.0		**587**		<10.0		<10.0	
PTC17E-1	**199**		<50.0		<50.0		<50.0		**69.9**		<50.0		<50.0	
PTC17E-2	**643**		<50.0		<50.0		<50.0		**124**		<50.0		<50.0	
PTC17E-2	**243**		<3.6		<3.6		<3.6		**113**		<3.6		<3.6	
PTC17F-1	**5,820**		<50.0		<50.0		<50.0		**94.7**		<50.0		<50.0	
PTC17F-2	**5,970**		<25.0		<25.0		<25.0		**113**		<25.0		<25.0	
PTC17G-1	**5,970**		<50.0		<50.0		<50.0		**10,100**		<50.0		<50.0	
PTC17G-2	**5,770**		<50.0		<50.0		<50.0		**8,780**		<50.0		<50.0	
PTZ1A-1	**1,200**		<100		<100		<100		<100		<100		<100	
PTZ1C-1	**4,880**		<10.0		<10.0		<10.0		**>5,000**		**10.2**		<10.0	
PTZ1C-2	**>5,000**		<10.0		<10.0		<10.0		**>5,000**		**12.2**		<10.0	
PTZ1D-1	<100		<100		<100		<100		<100		<100		<100	
PTZ1D-2	**1.3**		<0.5		<0.5		<0.5		**2.8**		<0.5		<0.5	
PTZ2A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTZ4A-1	<100		<100		<100		<100		<100		<100		<100	
PTZ4A-2	**47.2**		<1.7		<1.7		<1.7		**11.3**		**1.9**		<1.7	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTC15F-2	**30.0**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC15G-1	**63.5**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15G-1	**46.7**	x <25.0	x <25.0	x <25.0	x <25.0	x <25.0	x <25.0	x <25.0
PTC15G-2	<50.0	x <50.0	x <50.0	x <50.0	x <50.0	x <50.0	x <50.0	x <50.0
PTC15G-2	**46.2**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC16A-1	**6.2**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC16B-1	**454**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16B-2	**542**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC16C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16C-2	**17.6**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC16E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16E-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC16F-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16F-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC16G-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16G-2	**22.7**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC17A-1	**502**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17A-2	**593**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC17B-1	**408**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17B-2	**422**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC17C-1	**1,300**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17C-2	**1,350**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC17D-1	**472**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17D-2	**434**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC17E-1	**192**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17E-2	**190**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17E-2	**240**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC17F-1	**106**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17F-2	**110**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC17G-1	**86.8**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17G-2	**78.5**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTZ1A-1	**214**	<100	<100	<100	<100	<100	<100	<100
PTZ1C-1	**77.2**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ1C-2	**67.7**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ1D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTZ1D-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTZ4A-1	**151**	<100	<100	<100	<100	<100	<100	<100
PTZ4A-2	**107**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7

Sample name	
PTC15F-2	
PTC15G-1	
PTC15G-1	x
PTC15G-2	x
PTC15G-2	
PTC16A-1	
PTC16B-1	
PTC16B-2	
PTC16C-1	
PTC16C-2	
PTC16E-1	
PTC16E-2	
PTC16F-1	
PTC16F-2	
PTC16G-1	
PTC16G-2	
PTC17A-1	
PTC17A-2	
PTC17B-1	
PTC17B-2	
PTC17C-1	
PTC17C-2	
PTC17D-1	
PTC17D-2	
PTC17E-1	
PTC17E-2	
PTC17E-2	
PTC17F-1	
PTC17F-2	
PTC17G-1	
PTC17G-2	
PTZ1A-1	
PTZ1C-1	
PTZ1C-2	
PTZ1D-1	
PTZ1D-2	
PTZ2A-1	
PTZ4A-1	
PTZ4A-2	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)	1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTC15F-2	**16.9**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC15G-1	**84.7**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC15G-1	**75.1** x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0 x	<25.0 x
PTC15G-2	**73.1** x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x	<50.0 x
PTC15G-2	**57.7**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC16A-1	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC16B-1	**285**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16B-2	**300**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC16C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16C-2	**2.7**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC16E-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16E-2	**2.6**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC16F-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16F-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC16G-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC16G-2	**23.6**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC17A-1	**490**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17A-2	**513**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC17B-1	**1,190**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17B-2	**1,240**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC17C-1	**300**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17C-2	**283**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC17D-1	**166**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17D-2	**135**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC17E-1	**172**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17E-2	**195**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17E-2	**162**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC17F-1	**187**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17F-2	**248**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC17G-1	**1,040**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC17G-2	**970**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTZ1A-1	<100	<100	<100	<100	<100	<100	<100	<100
PTZ1C-1	**430**	<10.0	<10.0	<10.0	<10.0	**12.7**	<10.0	<10.0
PTZ1C-2	**435**	<10.0	<10.0	<10.0	<10.0	**12.5**	<10.0	<10.0
PTZ1D-1	<100	<100	<100	<100	<100	<100	<100	<100
PTZ1D-2	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2A-1	**5.2 B**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTZ4A-1	<100	<100	<100	<100	<100	<100	<100	<100
PTZ4A-2	**29.3**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)		Styrene (µg/L)		Bromo-form (µg/L)		Isopropyl-benzene (µg/L)		Bromo-benzene (µg/L)		1,1,2,2-Tetrachloro-ethane (µg/L)		n-Propyl-benzene (µg/L)		Penta-chloro-ethane (µg/L)	
PTC15F-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<50.0	
PTC15G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC15G-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<500	x
PTC15G-2	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<100	x
PTC15G-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<50.0	
PTC16A-1	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<71.4	
PTC16B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC16B-2	<3.6		<3.6		<3.6		<3.6		<3.6		**7.3**		<3.6		<71.4	
PTC16C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC16C-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<50.0	
PTC16E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC16E-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<50.0	
PTC16F-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC16F-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<50.0	
PTC16G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC16G-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<50.0	
PTC17A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC17A-2	<3.6		<3.6		<3.6		<3.6		<3.6		**19.6**		<3.6		<71.4	
PTC17B-1	<50.0		<50.0		<50.0		<50.0		<50.0		**89.2**		<50.0		<100	
PTC17B-2	<10.0		<10.0		<10.0		<10.0		<10.0		**65.5**		<10.0		<200	
PTC17C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC17C-2	<10.0		<10.0		<10.0		<10.0		<10.0		**29.7**		<10.0		**13.3**	
PTC17D-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC17D-2	<10.0		<10.0		<10.0		<10.0		<10.0		**24.3**		<10.0		**10.5**	
PTC17E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC17E-2	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<100	
PTC17E-2	<3.6		<3.6		<3.6		<3.6		<3.6		**5.0**		<3.6		<3.6	
PTC17F-1	<50.0		<50.0		<50.0		<50.0		<50.0		**55.7**		<50.0		<100	
PTC17F-2	<25.0		<25.0		<25.0		<25.0		<25.0		**57.8**		<25.0		<25.0	
PTC17G-1	<50.0		<50.0		<50.0		<50.0		<50.0		**98.7**		<50.0		**131**	
PTC17G-2	<50.0		<50.0		<50.0		<50.0		<50.0		**90.7**		<50.0		**113**	
PTZ1A-1	<100		<100		<100		<100		<100		<100		<100		<100	
PTZ1C-1	<10.0		<10.0		<10.0		<10.0		<10.0		**64.2**		<10.0		**45.6**	
PTZ1C-2	<10.0		<10.0		<10.0		<10.0		<10.0		**60.3**		<10.0		**45.6**	
PTZ1D-1	<100		<100		<100		<100		<100		<100		<100		<100	
PTZ1D-2	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTZ2A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTZ4A-1	<100		<100		<100		<100		<100		<100		<100		<100	
PTZ4A-2	<1.7		<1.7		<1.7		<1.7		<1.7		**2.4**		<1.7		<1.7	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)		1,2,3-Trichloro-propane (µg/L)		4-Chloro-toluene (µg/L)		1,3,5-Trimethyl-benzene (µg/L)		tert-Butyl-benzene (µg/L)		1,2,4-Trimethyl-benzene (µg/L)		sec Butyl-benzene (µg/L)		1,3-Dichloro-benzene (µg/L)	
PTC15F-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC15G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC15G-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC15G-2	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC15G-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16A-1	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC16B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16B-2	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC16C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16C-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16E-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16F-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16F-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC16G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC16G-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC17A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17A-2	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC17B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17B-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC17C-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17C-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC17D-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17D-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC17E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17E-2	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17E-2	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC17F-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17F-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC17G-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC17G-2	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTZ1A-1	<100		<100		<100		<100		<100		<100		<100		<100	
PTZ1C-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTZ1C-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTZ1D-1	<100		<100		<100		<100		<100		<100		<100		<100	
PTZ1D-2	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTZ2A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTZ4A-1	<100		<100		<100		<100		<100		<100		<100		<100	
PTZ4A-2	<1.7		<1.7		<1.7		<1.7		<1.7		<1.7		<1.7		<1.7	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)		1,4-Dichloro-benzene (µg/L)		n-Butyl-benzene (µg/L)		1,2-Dichloro-benzene (µg/L)		Hexa-chloro-ethane (µg/L)		1,2-Dibromo-3-chloro-propane (µg/L)		1,2,4-Trichloro-benzene (µg/L)	
PTC15F-2	<2.5		<2.5		<2.5		<2.5		<50.0		<2.5		<2.5	
PTC15G-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC15G-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<500	x	<25.0	x	<25.0	x
PTC15G-2	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<100	x	<50.0	x	<50.0	x
PTC15G-2	<2.5		<2.5		<2.5		<2.5		<50.0		<2.5		<2.5	
PTC16A-1	<3.6		<3.6		<3.6		<3.6		<71.4		<3.6		<3.6	
PTC16B-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC16B-2	<3.6		<3.6		<3.6		<3.6		<71.4		<3.6		<3.6	
PTC16C-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC16C-2	<2.5		<2.5		<2.5		<2.5		<50.0		<2.5		<2.5	
PTC16E-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC16E-2	<2.5		<2.5		<2.5		<2.5		<50.0		<2.5		<2.5	
PTC16F-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC16F-2	<2.5		<2.5		<2.5		<2.5		<50.0		<2.5		<2.5	
PTC16G-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC16G-2	<2.5		<2.5		<2.5		<2.5		<50.0		<2.5		<2.5	
PTC17A-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC17A-2	<3.6		<3.6		<3.6		<3.6		<71.4		<3.6		<3.6	
PTC17B-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC17B-2	<10.0		<10.0		<10.0		<10.0		<200		<10.0		<10.0	
PTC17C-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC17C-2	<10.0		<10.0		<10.0		<10.0		**44.7**		<10.0		<10.0	
PTC17D-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC17D-2	<10.0		<10.0		<10.0		<10.0		**27.5**		<10.0		<10.0	
PTC17E-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC17E-2	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC17E-2	<3.6		<3.6		<3.6		<3.6		**11.4**		<3.6		<3.6	
PTC17F-1	<50.0		<50.0		<50.0		<50.0		<100		<50.0		<50.0	
PTC17F-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC17G-1	<50.0		<50.0		<50.0		<50.0		**1,480**		<50.0		<50.0	
PTC17G-2	<50.0		<50.0		<50.0		<50.0		**1,190**		<50.0		<50.0	
PTZ1A-1	<100		<100		<100		<100		<100		<100		<100	
PTZ1C-1	<10.0		<10.0		<10.0		<10.0		**392**		<10.0		<10.0	
PTZ1C-2	<10.0		<10.0		<10.0		<10.0		**405**		<10.0		<10.0	
PTZ1D-1	<100		<100		<100		<100		<100		<100		<100	
PTZ1D-2	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTZ2A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTZ4A-1	<100		<100		<100		<100		<100		<100		<100	
PTZ4A-2	<1.7		<1.7		<1.7		<1.7		<1.7		<1.7		<1.7	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)		Naphthalene (µg/L)		1,2,3-Trichloro-benzene (µg/L)	
PTC15F-2	<2.5		<2.5		<2.5	x
PTC15G-1	<50.0		<50.0		<50.0	x
PTC15G-1	<25.0	x	<25.0	x	<25.0	
PTC15G-2	<50.0	x	<50.0	x	<50.0	
PTC15G-2	<2.5		<2.5		<2.5	
PTC16A-1	<3.6		<3.6		<3.6	
PTC16B-1	<50.0		<50.0		<50.0	
PTC16B-2	<3.6		<3.6		<3.6	
PTC16C-1	<50.0		<50.0		<50.0	
PTC16C-2	<2.5		<2.5		<2.5	
PTC16E-1	<50.0		<50.0		<50.0	
PTC16E-2	<2.5		<2.5		<2.5	
PTC16F-1	<50.0		<50.0		<50.0	
PTC16F-2	<2.5		<2.5		<2.5	
PTC16G-1	<50.0		<50.0		<50.0	x
PTC16G-2	<2.5		<2.5		<2.5	x
PTC17A-1	<50.0		<50.0		<50.0	
PTC17A-2	<3.6		<3.6		<3.6	
PTC17B-1	<50.0		<50.0		<50.0	
PTC17B-2	<10.0		<10.0		<10.0	
PTC17C-1	<50.0		<50.0		<50.0	
PTC17C-2	<10.0		<10.0		<10.0	
PTC17D-1	<50.0		<50.0		<50.0	
PTC17D-2	<10.0		<10.0		<10.0	
PTC17E-1	<50.0		<50.0		<50.0	
PTC17E-2	<50.0		<50.0		<50.0	
PTC17E-2	<3.6		<3.6		<3.6	
PTC17F-1	<50.0		<50.0		<50.0	
PTC17F-2	<25.0		<25.0		<25.0	
PTC17G-1	<50.0		<50.0		<50.0	
PTC17G-2	<50.0		<50.0		<50.0	
PTZ1A-1	<100		<100		<100	
PTZ1C-1	<10.0		<10.0		<10.0	
PTZ1C-2	<10.0		<10.0		<10.0	
PTZ1D-1	<100		<100		<100	
PTZ1D-2	<0.5		<0.5		<0.5	
PTZ2A-1	<50.0		<50.0		<50.0	
PTZ4A-1	<100		<100		<100	
PTZ4A-2	<1.7		<1.7		<1.7	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)	Chloro-methane (µg/L)	Vinyl chloride (µg/L)	Bromo-methane (µg/L)	Chloro-ethane (µg/L)
PTZ4B-1	1	9/8/2004	840	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4B-2	2	9/8/2004	840	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4C-1	1	9/7/2004	1610	<100	<100	<100	<100	<100
PTB1-B	1	11/17/2004	1200	<0.5	<0.5	<0.5	<0.5	<0.5
PTB1-C	1	11/17/2004		<0.5	**2.5**	<0.5	<0.5	<0.5
PTB2-B	1	11/17/2004		<0.5	<0.5	<0.5	<0.5	<0.5
PTB2-C	1	11/17/2004		<0.5	**1.1**	<0.5	<0.5	<0.5
PTB3-B	1	11/17/2004		<0.5	<0.5	<0.5	<0.5	<0.5
PTB3-C	1	11/17/2004		<0.5	<0.5	<0.5	<0.5	<0.5
PTB4-B	1	11/17/2004		<0.5	**1.2**	<0.5	<0.5	<0.5
PTB5-B	1	11/17/2004		<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-C	1	11/17/2004		<0.5	**3.7**	<0.5	<0.5	<0.5
PTB6-B	1	11/17/2004		<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-C	1	11/17/2004		<0.5	**1.1**	<0.5	<0.5	<0.5
PTB7-B	1	11/17/2004		<0.5	<0.5	<0.5	<0.5	<0.5
PTB7-C	1	11/17/2004		<0.5	**3.6**	<0.5	<0.5	<0.5
PTB8-B	1	11/17/2004		<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-C	1	11/17/2004		<0.5	**1.2**	<0.5	<0.5	<0.5
PTB9-B	1	11/17/2004		<0.5	<0.5	**2.6**	<0.5	<0.5
PTC1A-1	1	11/16/2004	1040	<25.0	<25.0	<25.0	<25.0	<25.0
PTC1B-1	1	11/17/2004	1100	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	1	11/16/2004	1220	<25.0	<25.0	<25.0	<25.0	<25.0
PTC2A-1	1	11/16/2004	1000	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2A-2	2	11/16/2004	1000	<10.0	<10.0	<10.0	<10.0	<10.0
PTC3A-1	1	11/16/2004	1305	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	2	11/16/2004	1305	<10.0	<10.0	<10.0	<10.0	<10.0
PTC3B-1	1	11/16/2004	1135	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	2	11/16/2004	1135	<2.5	<2.5	<2.5	<2.5	<2.5
PTC3C-1	1	11/16/2004	1035	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3C-2	2	11/16/2004	1035	<10.0	<10.0	<10.0	<10.0	<10.0
PTC4A-1	1	11/16/2004	1330	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4B-1	1	11/16/2004	1410	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4C-1	1	11/16/2004	1235	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5A-1	1	11/16/2004	1100	<25.0	<25.0	<25.0	<25.0	<25.0
PTC5B-1	1	11/16/2004	1120	<25.0	<25.0	<25.0	<25.0	<25.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)	1,1-Dichloro-ethene (µg/L)	Methylene chloride (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethane (µg/L)	2,2-Dichloro-propane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
PTZ4B-1	<1.7	<1.7	<1.7	**4.2**	<1.7	<1.7	**2.3**
PTZ4B-2	<1.7	<1.7	<1.7	**4.7**	<1.7	<1.7	**2.4**
PTZ4C-1	<100	<100	<100	<100	<100	<100	<100
PTB1-B	<0.5	<0.5	**10.5**	<0.5	<0.5	<0.5	<0.5
PTB1-C	<0.5	<0.5	**157**	<0.5	<0.5	<0.5	<0.5
PTB2-B	<0.5	<0.5	**4.1**	<0.5	<0.5	<0.5	<0.5
PTB2-C	<0.5	<0.5	**43.7**	<0.5	<0.5	<0.5	<0.5
PTB3-B	<0.5	<0.5	**1.7**	<0.5	<0.5	<0.5	<0.5
PTB3-C	<0.5	<0.5	**11.8**	<0.5	<0.5	<0.5	<0.5
PTB4-B	<0.5	<0.5	**52.6**	<0.5	<0.5	<0.5	<0.5
PTB5-B	<0.5	<0.5	**3.6**	<0.5	<0.5	<0.5	<0.5
PTB5-C	<0.5	<0.5	**108**	<0.5	<0.5	<0.5	<0.5
PTB6-B	<0.5	<0.5	**4.3**	<0.5	<0.5	<0.5	<0.5
PTB6-C	<0.5	<0.5	**43.2**	<0.5	<0.5	<0.5	<0.5
PTB7-B	<0.5	<0.5	**30.2**	<0.5	<0.5	<0.5	<0.5
PTB7-C	<0.5	<0.5	**229**	<0.5	<0.5	<0.5	<0.5
PTB8-B	<0.5	<0.5	**30.2**	<0.5	<0.5	<0.5	<0.5
PTB8-C	<0.5	<0.5	**62.9**	<0.5	<0.5	<0.5	<0.5
PTB9-B	<0.5	<0.5	**15.0**	<0.5	<0.5	<0.5	<0.5
PTC1A-1	<25.0	<25.0	**64.3**	<25.0	<25.0	<25.0	<25.0
PTC1B-1	<1.7	<1.7	**10.2**	**2.4**	<1.7	<1.7	**3.8**
PTC1C-1	<25.0	<25.0	**74.3**	<25.0	<25.0	<25.0	<25.0
PTC2A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2A-2	<10.0	<10.0	**24.1**	<10.0	<10.0	<10.0	<10.0
PTC3A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	<10.0	<10.0	**48.8**	<10.0	<10.0	<10.0	<10.0
PTC3B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	<2.5	**4.0**	**20.0**	**7.7**	<2.5	<2.5	**8.2**
PTC3C-1	<50.0	<50.0	**64.7**	<50.0	<50.0	<50.0	<50.0
PTC3C-2	<10.0	<10.0	**53.6**	<10.0	<10.0	<10.0	<10.0
PTC4A-1	<50.0	<50.0	**128**	<50.0	<50.0	<50.0	<50.0
PTC4B-1	<50.0	<50.0	**136**	<50.0	<50.0	<50.0	<50.0
PTC4C-1	<50.0	<50.0	**134**	<50.0	<50.0	<50.0	<50.0
PTC5A-1	<25.0	<25.0	**58.7**	<25.0	<25.0	<25.0	<25.0
PTC5B-1	<25.0	<25.0	**39.8**	<25.0	<25.0	<25.0	<25.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)	Bromo-chloro-methane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1-Dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Benzene (µg/L)	1,2-Dichloro-ethane (µg/L)
PTZ4B-1	**201**	<1.7	<1.7	<1.7	**19.8**	<1.7	<1.7
PTZ4B-2	**203**	<1.7	<1.7	<1.7	**20.3**	<1.7	<1.7
PTZ4C-1	**6,360**	<100	<100	<100	**5,820**	<100	<100
PTB1-B	**0.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB1-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2-B	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2-C	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-B	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7-B	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7-C	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB9-B	**1.5**	<0.5	<0.5	<0.5	<0.5	<0.5	**6.0**
PTC1A-1	**7,130**	<25.0	<25.0	<25.0	**1,240**	<25.0	<25.0
PTC1B-1	**664**	<1.7	<1.7	<1.7	**62.7**	<1.7	<1.7
PTC1C-1	**7,390**	<25.0	<25.0	<25.0	**2,370**	<25.0	<25.0
PTC2A-1	**2,560**	<50.0	<50.0	<50.0	**1,960**	<50.0	<50.0
PTC2A-2	**2,720**	<10.0	<10.0	<10.0	**2,220**	<10.0	<10.0
PTC3A-1	**4,670**	<50.0	<50.0	<50.0	**2,560**	<50.0	<50.0
PTC3A-2	**4,760**	<10.0	<10.0	<10.0	**2,740**	<10.0	<10.0
PTC3B-1	**764**	<50.0	<50.0	<50.0	**436**	<50.0	<50.0
PTC3B-2	**789**	<2.5	<2.5	<2.5	**493**	<2.5	<2.5
PTC3C-1	**4,400**	<50.0	<50.0	<50.0	**3,730**	<50.0	<50.0
PTC3C-2	**4,450**	<10.0	<10.0	<10.0	**4,030**	<10.0	<10.0
PTC4A-1	**9,820**	<50.0	<50.0	<50.0	**7,960**	<50.0	<50.0
PTC4B-1	**9,150**	<50.0	<50.0	<50.0	**9,290**	<50.0	<50.0
PTC4C-1	**8,970**	<50.0	<50.0	<50.0	**12,300**	<50.0	<50.0
PTC5A-1	**5,640**	<25.0	<25.0	<25.0	**5,320**	<25.0	<25.0
PTC5B-1	**2,030**	<25.0	<25.0	<25.0	**3,330**	<25.0	<25.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTZ4B-1	**15.5**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4B-2	**16.9**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4C-1	<100	<100	<100	<100	<100	<100	<100	<100
PTB1-B	**21.1 B**	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	**1.9**
PTB1-C	**25.9 B**	<0.5	<0.5	<0.5	<0.5	**1.4**	<0.5	**2.0**
PTB2-B	**21.0 B**	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	**2.0**
PTB2-C	**19.4 B**	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	**1.8**
PTB3-B	**12.6 B**	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**1.4**
PTB3-C	**11.2 B**	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**1.3**
PTB4-B	**1.8 B**	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5
PTB5-B	**20.5 B**	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	**1.7**
PTB5-C	**5.2 B**	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5
PTB6-B	**18.5 B**	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	**1.7**
PTB6-C	**20.2 B**	<0.5	<0.5	<0.5	<0.5	**1.3**	<0.5	**1.8**
PTB7-B	**13.7 B**	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**1.3**
PTB7-C	**9.9 B**	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	**0.6**
PTB8-B	**1.2 B**	<0.5	<0.5	<0.5	<0.5	**0.5**	<0.5	<0.5
PTB8-C	**18.2 B**	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	**1.8**
PTB9-B	**2.4 B**	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	**2.3**
PTC1A-1	**157**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC1B-1	**35.1 B**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	**117**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC2A-1	**105**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2A-2	**86.3**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC3A-1	**151**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	**131**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC3B-1	**163**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	**142**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC3C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3C-2	**33.7**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC4A-1	**102**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4B-1	**86.8**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4C-1	**92.1**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5A-1	**137**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC5B-1	**54.8**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0

Sample name
PTZ4B-1
PTZ4B-2
PTZ4C-1
PTB1-B
PTB1-C
PTB2-B
PTB2-C
PTB3-B
PTB3-C
PTB4-B
PTB5-B
PTB5-C
PTB6-B
PTB6-C
PTB7-B
PTB7-C
PTB8-B
PTB8-C
PTB9-B
PTC1A-1
PTC1B-1
PTC1C-1
PTC2A-1
PTC2A-2
PTC3A-1
PTC3A-2
PTC3B-1
PTC3B-2
PTC3C-1
PTC3C-2
PTC4A-1
PTC4B-1
PTC4C-1
PTC5A-1
PTC5B-1

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)	1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTZ4B-1	**76.8**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4B-2	**83.4**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4C-1	**360**	<100	<100	<100	<100	<100	<100	<100
PTB1-B	**26.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB1-C	**33.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2-B	**23.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2-C	**22.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3-B	**13.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3-C	**12.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4-B	**2.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-B	**27.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-C	**2.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-B	**21.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-C	**25.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7-B	**15.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7-C	**5.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-B	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-C	**21.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB9-B	**0.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC1A-1	**1,370**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC1B-1	**42.0**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	**888**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC2A-1	**1,470**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2A-2	**1,560**	<10.0	<10.0	<10.0	<10.0	**14.3**	<10.0	<10.0
PTC3A-1	**1,610**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	**1,570**	<10.0	<10.0	<10.0	<10.0	**15.1**	<10.0	<10.0
PTC3B-1	**409**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	**362**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC3C-1	**439**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3C-2	**416**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC4A-1	**1,370**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4B-1	**1,130**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4C-1	**995**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5A-1	**2,080**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC5B-1	**657**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)	Styrene (µg/L)	Bromo-form (µg/L)	Isopropyl-benzene (µg/L)	Bromo-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	n-Propyl-benzene (µg/L)	Penta-chloro-ethane (µg/L)
PTZ4B-1	<1.7	<1.7	<1.7	<1.7	<1.7	**3.0**	<1.7	<1.7
PTZ4B-2	<1.7	<1.7	<1.7	<1.7	<1.7	**3.0**	<1.7	<1.7
PTZ4C-1	<100	<100	<100	<100	<100	<100	<100	<100
PTB1-B	<0.5	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5
PTB1-C	<0.5	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5
PTB2-B	<0.5	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5
PTB2-C	<0.5	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5
PTB3-B	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5
PTB3-C	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5
PTB4-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-B	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5
PTB5-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-B	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5
PTB6-C	<0.5	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5
PTB7-B	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5
PTB7-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-C	<0.5	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5
PTB9-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC1A-1	<25.0	<25.0	<25.0	<25.0	<25.0	**53.4**	<25.0	<25.0
PTC1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	**3.5**	<1.7	<1.7
PTC1C-1	<25.0	<25.0	<25.0	<25.0	<25.0	**55.2**	<25.0	**32.1**
PTC2A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	**55.4**
PTC2A-2	<10.0	<10.0	<10.0	<10.0	<10.0	**32.0**	<10.0	**71.7**
PTC3A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	<10.0	<10.0	<10.0	<10.0	<10.0	**35.5**	<10.0	**54.1**
PTC3B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	<2.5	<2.5	<2.5	<2.5	<2.5	**13.4**	<2.5	**7.6**
PTC3C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3C-2	<10.0	<10.0	<10.0	<10.0	<10.0	**21.4**	<10.0	**36.5**
PTC4A-1	<50.0	<50.0	<50.0	<50.0	<50.0	**63.5**	<50.0	**101**
PTC4B-1	<50.0	<50.0	<50.0	<50.0	<50.0	**61.6**	<50.0	**99.5**
PTC4C-1	<50.0	<50.0	<50.0	<50.0	<50.0	**70.1**	<50.0	**110**
PTC5A-1	<25.0	<25.0	<25.0	<25.0	<25.0	**69.0**	<25.0	**79.3**
PTC5B-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	**37.7**

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)	1,2,3-Trichloro-propane (µg/L)	4-Chloro-toluene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	sec Butyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)
PTZ4B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4B-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4C-1	<100	<100	<100	<100	<100	<100	<100	<100
PTB1-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB1-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB9-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC1A-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC2A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC2A-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC3A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3A-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC3B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC3C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3C-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC4A-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC4C-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC5A-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC5B-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)	1,4-Dichloro-benzene (µg/L)	n-Butyl-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	Hexa-chloro-ethane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2,4-Trichloro-benzene (µg/L)
PTZ4B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4B-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ4C-1	<100	<100	<100	<100	**252**	<100	<100
PTB1-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB1-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8-C	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB9-B	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC1A-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC1C-1	<25.0	<25.0	<25.0	<25.0	**174**	<25.0	<25.0
PTC2A-1	<50.0	<50.0	<50.0	<50.0	**214**	<50.0	<50.0
PTC2A-2	<10.0	<10.0	<10.0	<10.0	**281**	<10.0	<10.0
PTC3A-1	<50.0	<50.0	<50.0	<50.0	**134**	<50.0	<50.0
PTC3A-2	<10.0	<10.0	<10.0	<10.0	**162**	<10.0	<10.0
PTC3B-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTC3B-2	<2.5	<2.5	<2.5	<2.5	**26.0**	<2.5	<2.5
PTC3C-1	<50.0	<50.0	<50.0	<50.0	**295**	<50.0	<50.0
PTC3C-2	<10.0	<10.0	<10.0	<10.0	**349**	<10.0	<10.0
PTC4A-1	<50.0	<50.0	<50.0	<50.0	**596**	<50.0	<50.0
PTC4B-1	<50.0	<50.0	<50.0	<50.0	**984**	<50.0	<50.0
PTC4C-1	<50.0	<50.0	<50.0	<50.0	**1,640**	<50.0	<50.0
PTC5A-1	<25.0	<25.0	<25.0	<25.0	**553**	<25.0	<25.0
PTC5B-1	<25.0	<25.0	<25.0	<25.0	**689**	<25.0	<25.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)	Naphthalene (µg/L)	1,2,3-Trichloro-benzene (µg/L)
PTZ4B-1	<1.7	<1.7	<1.7
PTZ4B-2	<1.7	<1.7	<1.7
PTZ4C-1	<100	<100	<100
PTB1-B	<0.5	<0.5	<0.5
PTB1-C	<0.5	<0.5	<0.5
PTB2-B	<0.5	<0.5	<0.5
PTB2-C	<0.5	<0.5	<0.5
PTB3-B	<0.5	<0.5	<0.5
PTB3-C	<0.5	<0.5	<0.5
PTB4-B	<0.5	<0.5	<0.5
PTB5-B	<0.5	<0.5	<0.5
PTB5-C	<0.5	<0.5	<0.5
PTB6-B	<0.5	<0.5	<0.5
PTB6-C	<0.5	<0.5	<0.5
PTB7-B	<0.5	<0.5	<0.5
PTB7-C	<0.5	<0.5	<0.5
PTB8-B	<0.5	<0.5	<0.5
PTB8-C	<0.5	<0.5	<0.5
PTB9-B	<0.5	<0.5	<0.5
PTC1A-1	<25.0	<25.0	<25.0
PTC1B-1	<1.7	<1.7	<1.7
PTC1C-1	<25.0	<25.0	<25.0
PTC2A-1	<50.0	<50.0	<50.0
PTC2A-2	<10.0	<10.0	<10.0
PTC3A-1	<50.0	<50.0	<50.0
PTC3A-2	<10.0	<10.0	<10.0
PTC3B-1	<50.0	<50.0	<50.0
PTC3B-2	<2.5	<2.5	<2.5
PTC3C-1	<50.0	<50.0	<50.0
PTC3C-2	<10.0	<10.0	<10.0
PTC4A-1	<50.0	<50.0	<50.0
PTC4B-1	<50.0	<50.0	<50.0
PTC4C-1	<50.0	<50.0	<50.0
PTC5A-1	<25.0	<25.0	<25.0
PTC5B-1	<25.0	<25.0	<25.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)		Chloro-methane (µg/L)		Vinyl chloride (µg/L)		Bromo-methane (µg/L)		Chloro-ethane (µg/L)	
PTC5C-1	1	11/17/2004	1325	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC6A-1	1	11/8/2004	1030	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6B-1	1	11/3/2004	850	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6B-2	2	11/3/2004	850	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC6C-1	1	11/4/2004	920	<3.6		<3.6		<3.6		<3.6		<3.6	
PTC6C-2	2	11/4/2004	920	<1.7		<1.7		<1.7		<1.7		<1.7	
PTC6D-1	1	11/4/2004	937	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6D-2	2	11/4/2004	937	<0.5		<0.5		<0.5		<0.5		<0.5	
PTC6E-1	1	11/9/2004	1235	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC6E-2	2	11/9/2004	1235	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC7A-1	1	11/3/2004	1200	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC7A-2	2	11/3/2004	1200	<3.6		<3.6		<3.6		<3.6		<3.6	
PTC7B-1	1	11/3/2004	1315	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC7C-1	1	11/4/2004	852	<0.5		<0.5		<0.5		<0.5		<0.5	
PTC7D-1	1	11/3/2004	1440	<0.5		<0.5		**1.1**		<0.5		<0.5	
PTC8A-1	1	11/1/2004	1230	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8B-1	1	11/1/2004	1420	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8B-2	2	11/1/2004	1420	<2.5	x	<2.5	x	<2.5	x	<2.5	x	<2.5	x
PTC8C-1	1	11/2/2004	1335	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC8C-2	2	11/2/2004	1335	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x
PTC8D-1	1	11/1/2004	1600	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8E-1	1	11/2/2004	1425	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC8E-2	2	11/2/2004	1425	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC9A-1	1	11/4/2004	900	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9A-2	2	11/4/2004	900	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9B-1	1	11/4/2004	950	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9B-2	2	11/4/2004	950	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9C-1	1	11/4/2004	1035	<0.5		<0.5		<0.5		<0.5		<0.5	
PTC9C-2	2	11/4/2004	1035	<0.5		<0.5		<0.5		<0.5		<0.5	
PTC9D-1	1	11/8/2004	1200	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9D-2	2	11/8/2004	1200	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC9E-1	1	11/8/2004	1010	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9E-2	2	11/8/2004	1010	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC10A-1	1	11/1/2004	1230	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC10B-1	1	11/1/2004	1410	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC10B-2	2	11/1/2004	1410	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC10C-1	1	11/2/2004	1200	<0.5		<0.5		<0.5		<0.5		<0.5	
PTC10C-2	2	11/2/2004	1200	<1.0		<1.0		<1.0		<1.0		<1.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)		1,1-Dichloro-ethene (µg/L)		Methylene chloride (µg/L)		trans-1,2-Dichloro-ethene (µg/L)		1,1-Dichloro-ethane (µg/L)		2,2-Dichloro-propane (µg/L)		cis-1,2-Dichloro-ethene (µg/L)	
PTC5C-1	<10.0		<10.0		**188**		<10.0		<10.0		<10.0		<10.0	
PTC6A-1	<25.0		<25.0		**43.5**		<25.0		<25.0		<25.0		<25.0	
PTC6B-1	<25.0		<25.0		**31.3**		<25.0		<25.0		<25.0		<25.0	
PTC6B-2	<10.0		<10.0		**27.0**		<10.0		<10.0		<10.0		<10.0	
PTC6C-1	<3.6		<3.6		**3.8**		<3.6		<3.6		<3.6		**12.1**	
PTC6C-2	<1.7		<1.7		**3.5**		<1.7		<1.7		<1.7		**10.4**	
PTC6D-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6D-2	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		**1.0**	
PTC6E-1	<10.0		<10.0		**33.9**		<10.0		<10.0		<10.0		<10.0	
PTC6E-2	<10.0	x	<10.0	x	**38.0**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC7A-1	<10.0		<10.0		<10.0		**17.9**		<10.0		<10.0		<10.0	
PTC7A-2	<3.6		**7.4**		**8.7**		**20.4**		<3.6		<3.6		**10.1**	
PTC7B-1	<10.0		<10.0		**11.8**		**14.8**		<10.0		<10.0		<10.0	
PTC7C-1	<0.5		<0.5		<0.5		**1.5**		<0.5		<0.5		**0.9**	
PTC7D-1	<0.5		**1.2**		**1.1**		**5.1**		<0.5		<0.5		**7.9**	
PTC8A-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8B-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8B-2	<2.5	x	<2.5	x	<2.5	x	**10.1**	x	<2.5	x	<2.5	x	**7.8**	x
PTC8C-1	<2.5		<2.5		<2.5		**3.0**		<2.5		<2.5		**3.6**	
PTC8C-2	<1.0	x	<1.0	x	<1.0	x	**2.6**	x	<1.0	x	<1.0	x	**3.2**	x
PTC8D-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8E-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC8E-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC9A-1	<25.0		<25.0		**55.8**		<25.0		<25.0		<25.0		<25.0	
PTC9A-2	<25.0		<25.0		**56.2**		<25.0		<25.0		<25.0		<25.0	
PTC9B-1	<25.0		<25.0		**55.8**		<25.0		<25.0		<25.0		<25.0	
PTC9B-2	<25.0		<25.0		**54.4**		<25.0		<25.0		<25.0		<25.0	
PTC9C-1	<0.5		**2.3**		**56.7**		**2.3**		**2.3**		<0.5		**3.7**	
PTC9C-2	<0.5		**2.1**		**55.9**		**2.2**		**2.2**		<0.5		**3.6**	
PTC9D-1	<25.0		<25.0		**27.4**		<25.0		<25.0		<25.0		<25.0	
PTC9D-2	<10.0	x	<10.0	x	**22.2**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC9E-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9E-2	<10.0	x	<10.0	x	**14.4**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC10A-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC10B-1	<25.0		<25.0		**45.7**		<25.0		<25.0		<25.0		<25.0	
PTC10B-2	<10.0		<10.0		**48.6**		<10.0		<10.0		<10.0		<10.0	
PTC10C-1	<0.5		**0.9**		**4.4**		**2.4**		**1.3**		<0.5		**8.5**	
PTC10C-2	<1.0		**1.2**		**3.4**		**3.2**		**1.4**		<1.0		**8.4**	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)		Bromo-chloro-methane (µg/L)		1,1,1-Trichloro-ethane (µg/L)		1,1-Dichloro-propene (µg/L)		Carbon tetra-chloride (µg/L)		Benzene (µg/L)		1,2-Dichloro-ethane (µg/L)	
PTC5C-1	**3,480**		<10.0		<10.0		<10.0		**15.3**		<10.0		<10.0	
PTC6A-1	**6,910**		<25.0		<25.0		<25.0		**966**		<25.0		<25.0	
PTC6B-1	**3,720**		<25.0		<25.0		<25.0		**2,760**		<25.0		<25.0	
PTC6B-2	**3,920**		<10.0		<10.0		<10.0		**3,040**		<10.0		<10.0	
PTC6C-1	**499**		<3.6		<3.6		<3.6		**112**		<3.6		<3.6	
PTC6C-2	**471**		<1.7		<1.7		<1.7		**106**		<1.7		<1.7	
PTC6D-1	**42.3**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6D-2	**21.4**		<0.5		<0.5		<0.5		**2.2**		<0.5		<0.5	
PTC6E-1	**2,220**		<10.0		<10.0		<10.0		**574**		<10.0		<10.0	
PTC6E-2	**2,350**	x	<10.0	x	<10.0	x	<10.0	x	**605**	x	<10.0	x	<10.0	x
PTC7A-1	**593**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC7A-2	**687**		<3.6		<3.6		<3.6		<3.6		**8.4**		<3.6	
PTC7B-1	**1,820**		<10.0		<10.0		<10.0		**225**		<10.0		<10.0	
PTC7C-1	**7.2**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC7D-1	**106**		<0.5		<0.5		<0.5		**2.9**		**1.2**		<0.5	
PTC8A-1	**1,570**		<10.0		<10.0		<10.0		**519**		<10.0		<10.0	
PTC8B-1	**804**		<10.0		<10.0		<10.0		**202**		<10.0		<10.0	
PTC8B-2	**978**	x	<2.5	x	<2.5	x	<2.5	x	**250**	x	**5.7**	x	<2.5	x
PTC8C-1	**198**		<2.5		<2.5		<2.5		**92.4**		<2.5		<2.5	
PTC8C-2	**237**	x	<1.0	x	<1.0	x	<1.0	x	**132**	x	**2.0**	x	<1.0	x
PTC8D-1	**1,500**		<10.0		<10.0		<10.0		**180**		<10.0		<10.0	
PTC8E-1	**2,830**		<25.0		<25.0		<25.0		**1,650**		<25.0		<25.0	
PTC8E-2	**3,290**		<10.0		<10.0		<10.0		**2,050**		<10.0		<10.0	
PTC9A-1	**9,870**		<25.0		<25.0		<25.0		**5,090**		<25.0		<25.0	
PTC9A-2	**10,200**		<25.0		<25.0		<25.0		**5,100**		<25.0		<25.0	
PTC9B-1	**6,890**		<25.0		<25.0		<25.0		**2,220**		<25.0		<25.0	
PTC9B-2	**6,480**		<25.0		<25.0		<25.0		**1,810**		<25.0		<25.0	
PTC9C-1	**>250**		<0.5		**1.1**		<0.5		**>250**		**8.1**		**7.7**	
PTC9C-2	**>250**		<0.5		**1.0**		<0.5		**>250**		**7.8**		**7.7**	
PTC9D-1	**2,860**		<25.0		<25.0		<25.0		**621**		<25.0		<25.0	
PTC9D-2	**3,080**	x	<10.0	x	<10.0	x	<10.0	x	**728**	x	<10.0	x	<10.0	x
PTC9E-1	**3,160**		<25.0		<25.0		<25.0		**2,620**		<25.0		<25.0	
PTC9E-2	**3,390**	x	<10.0	x	<10.0	x	<10.0	x	**3,100**	x	<10.0	x	<10.0	x
PTC10A-1	**470**		<10.0		<10.0		<10.0		**13.5**		<10.0		<10.0	
PTC10B-1	**4,300**		<25.0		<25.0		<25.0		**4,600**		<25.0		<25.0	
PTC10B-2	**>5,000**		<10.0		<10.0		<10.0		**>5,000**		<10.0		<10.0	
PTC10C-1	**>250**		<0.5		<0.5		<0.5		**58.7**		<0.5		**1.1**	
PTC10C-2	**282**		<1.0		<1.0		<1.0		**90.9**		<1.0		**1.1**	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTC5C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC6A-1	**114**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC6B-1	**63.6**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC6B-2	**66.0**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC6C-1	**30.4**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC6C-2	**28.3**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTC6D-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC6D-2	**6.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC6E-1	**86.6**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC6E-2	**88.6** x	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0
PTC7A-1	**183**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7A-2	**220**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTC7B-1	**228**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC7C-1	**5.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**31.7**
PTC7D-1	**37.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTC8A-1	**38.8**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8B-1	**114**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8B-2	**140** x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5 x	<2.5
PTC8C-1	**10.2**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTC8C-2	**10.5** x	<1.0 x	<1.0 x	<1.0 x	<1.0 x	<1.0 x	<1.0 x	<1.0
PTC8D-1	**27.1**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC8E-1	**57.6**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC8E-2	**62.8**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC9A-1	**85.0**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9A-2	**87.0**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9B-1	**86.8**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9B-2	**78.1**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9C-1	**80.6**	<0.5	**7.2**	<0.5	<0.5	<0.5	<0.5	**8.7**
PTC9C-2	**77.8**	<0.5	**6.9**	<0.5	<0.5	<0.5	<0.5	**9.1**
PTC9D-1	**53.6**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9D-2	**56.5** x	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0
PTC9E-1	**25.8**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC9E-2	**24.2** x	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0 x	<10.0
PTC10A-1	**50.8**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC10B-1	**101**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTC10B-2	**122**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTC10C-1	**20.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**
PTC10C-2	**25.7**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0

Sample name	
PTC5C-1	
PTC6A-1	
PTC6B-1	
PTC6B-2	
PTC6C-1	
PTC6C-2	
PTC6D-1	
PTC6D-2	
PTC6E-1	
PTC6E-2	x
PTC7A-1	
PTC7A-2	
PTC7B-1	
PTC7C-1	
PTC7D-1	
PTC8A-1	
PTC8B-1	
PTC8B-2	x
PTC8C-1	
PTC8C-2	x
PTC8D-1	
PTC8E-1	
PTC8E-2	
PTC9A-1	
PTC9A-2	
PTC9B-1	
PTC9B-2	
PTC9C-1	
PTC9C-2	
PTC9D-1	
PTC9D-2	x
PTC9E-1	
PTC9E-2	x
PTC10A-1	
PTC10B-1	
PTC10B-2	
PTC10C-1	
PTC10C-2	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)		1,3-Dichloro-propane (µg/L)		Dibromo-chloro-methane (µg/L)		1,2-Dibromo-ethane (µg/L)		Chloro-benzene (µg/L)		1,1,1,2-Tetrachloro-ethane (µg/L)		Ethyl benzene (µg/L)		m,p,-Xylenes (µg/L)	
PTC5C-1	**51.8**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC6A-1	**1,520**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6B-1	**1,010**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6B-2	**1,000**		<10.0		<10.0		<10.0		<10.0		**15.2**		<10.0		<10.0	
PTC6C-1	**66.3**		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC6C-2	**58.8**		<1.7		<1.7		<1.7		<1.7		<1.7		<1.7		<1.7	
PTC6D-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6D-2	**5.8**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC6E-1	**288**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC6E-2	**284**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC7A-1	**1,190**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC7A-2	**1,480**		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC7B-1	**1,050**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC7C-1	**2.5**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC7D-1	**30.6**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC8A-1	**214**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8B-1	**328**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8B-2	**367**	x	<2.5	x	<2.5	x	<2.5	x	<2.5	x	**2.6**	x	<2.5	x	<2.5	x
PTC8C-1	**14.4**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC8C-2	**17.9**	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x
PTC8D-1	**43.0**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8E-1	**315**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC8E-2	**360**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC9A-1	**1,030**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9A-2	**1,120**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9B-1	**864**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9B-2	**771**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9C-1	**>250**		<0.5		<0.5		<0.5		**1.4**		**11.8**		<0.5		<0.5	
PTC9C-2	**>250**		<0.5		<0.5		<0.5		**1.4**		**11.2**		<0.5		<0.5	
PTC9D-1	**299**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9D-2	**301**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC9E-1	**209**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9E-2	**194**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC10A-1	**466**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC10B-1	**1,440**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC10B-2	**1,650**		<10.0		<10.0		<10.0		<10.0		**20.3**		<10.0		<10.0	
PTC10C-1	**7.9**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC10C-2	**12.0**		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)		Styrene (µg/L)		Bromo-form (µg/L)		Isopropyl-benzene (µg/L)		Bromo-benzene (µg/L)		1,1,2,2-Tetrachloro-ethane (µg/L)		n-Propyl-benzene (µg/L)		Penta-chloro-ethane (µg/L)	
PTC5C-1	<10.0		<10.0		<10.0		<10.0		<10.0		**34.3**		<10.0		<10.0	
PTC6A-1	<25.0		<25.0		<25.0		<25.0		<25.0		**39.8**		<25.0		**37.6**	
PTC6B-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		**59.3**	
PTC6B-2	<10.0		<10.0		<10.0		<10.0		<10.0		**28.8**		<10.0		**67.8**	
PTC6C-1	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC6C-2	<1.7		<1.7		<1.7		<1.7		<1.7		**1.9**		<1.7		<1.7	
PTC6D-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6D-2	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC6E-1	<10.0		<10.0		<10.0		<10.0		<10.0		**13.9**		<10.0		<10.0	
PTC6E-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**19.6**	x	<10.0	x	<10.0	x
PTC7A-1	<10.0		<10.0		<10.0		<10.0		<10.0		**22.2**		<10.0		<10.0	
PTC7A-2	<3.6		<3.6		<3.6		<3.6		<3.6		**27.0**		<3.6		<3.6	
PTC7B-1	<10.0		<10.0		<10.0		<10.0		<10.0		**25.5**		<10.0		<10.0	
PTC7C-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC7D-1	<0.5		<0.5		<0.5		<0.5		<0.5		**1.0**		<0.5		<0.5	
PTC8A-1	<10.0		<10.0		<10.0		<10.0		<10.0		**13.6**		<10.0		<10.0	
PTC8B-1	<10.0		<10.0		<10.0		<10.0		<10.0		**16.0**		<10.0		<10.0	
PTC8B-2	<2.5	x	<2.5	x	<2.5	x	<2.5	x	<2.5	x	**17.0**	x	<2.5	x	**6.8**	x
PTC8C-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC8C-2	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x	**2.6**	x	<1.0	x	<1.0	x
PTC8D-1	<10.0		<10.0		<10.0		<10.0		<10.0		**12.7**		<10.0		<10.0	
PTC8E-1	<25.0		<25.0		<25.0		<25.0		<25.0		**26.9**		<25.0		<25.0	
PTC8E-2	<10.0		<10.0		<10.0		<10.0		<10.0		**31.3**		<10.0		**14.2**	
PTC9A-1	<25.0		<25.0		<25.0		<25.0		<25.0		**65.2**		<25.0		**58.1**	
PTC9A-2	<25.0		<25.0		<25.0		<25.0		<25.0		**71.4**		<25.0		**56.3**	
PTC9B-1	<25.0		<25.0		<25.0		<25.0		<25.0		**62.4**		<25.0		**31.5**	
PTC9B-2	<25.0		<25.0		<25.0		<25.0		<25.0		**58.4**		<25.0		**26.1**	
PTC9C-1	<0.5		<0.5		<0.5		<0.5		<0.5		**64.2**		<0.5		**39.9**	
PTC9C-2	<0.5		<0.5		<0.5		<0.5		<0.5		**63.6**		<0.5		**38.2**	
PTC9D-1	<25.0		<25.0		<25.0		<25.0		<25.0		**37.5**		<25.0		<25.0	
PTC9D-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**37.6**	x	<10.0	x	**12.5**	x
PTC9E-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9E-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**21.6**	x	<10.0	x	**21.3**	x
PTC10A-1	<10.0		<10.0		<10.0		<10.0		<10.0		**23.4**		<10.0		<10.0	
PTC10B-1	<25.0		<25.0		<25.0		<25.0		<25.0		**46.2**		<25.0		**56.6**	
PTC10B-2	<10.0		<10.0		<10.0		<10.0		<10.0		**58.3**		<10.0		**76.6**	
PTC10C-1	<0.5		<0.5		<0.5		<0.5		<0.5		**6.3**		<0.5		**0.6**	
PTC10C-2	<1.0		<1.0		<1.0		<1.0		<1.0		**6.3**		<1.0		**1.4**	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)		1,2,3-Trichloro-propane (µg/L)		4-Chloro-toluene (µg/L)		1,3,5-Trimethyl-benzene (µg/L)		tert-Butyl-benzene (µg/L)		1,2,4-Trimethyl-benzene (µg/L)		sec Butyl-benzene (µg/L)		1,3-Dichloro-benzene (µg/L)	
PTC5C-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC6A-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6B-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6B-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC6C-1	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC6C-2	<1.7		<1.7		<1.7		<1.7		<1.7		<1.7		<1.7		<1.7	
PTC6D-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6D-2	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC6E-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC6E-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC7A-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC7A-2	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC7B-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC7C-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC7D-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC8A-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8B-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8B-2	<2.5	x	<2.5	x	<2.5	x	<2.5	x	<2.5	x	<2.5	x	<2.5	x	<2.5	x
PTC8C-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC8C-2	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x
PTC8D-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8E-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC8E-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC9A-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9A-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9B-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9B-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9C-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC9C-2	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC9D-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9D-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC9E-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC9E-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC10A-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC10B-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC10B-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC10C-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC10C-2	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)		1,4-Dichloro-benzene (µg/L)		n-Butyl-benzene (µg/L)		1,2-Dichloro-benzene (µg/L)		Hexa-chloro-ethane (µg/L)		1,2-Dibromo-3-chloro-propane (µg/L)		1,2,4-Trichloro-benzene (µg/L)	
PTC5C-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC6A-1	<25.0		<25.0		<25.0		<25.0		**87.8**		<25.0		<25.0	
PTC6B-1	<25.0		<25.0		<25.0		<25.0		**393**		<25.0		<25.0	
PTC6B-2	<10.0		<10.0		<10.0		<10.0		**478**		<10.0		<10.0	
PTC6C-1	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC6C-2	<1.7		<1.7		<1.7		<1.7		<1.7		<1.7		<1.7	
PTC6D-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC6D-2	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC6E-1	<10.0		<10.0		<10.0		<10.0		**14.3**		<10.0		<10.0	
PTC6E-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**17.5**	x	<10.0	x	<10.0	x
PTC7A-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC7A-2	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC7B-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC7C-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC7D-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC8A-1	<10.0		<10.0		<10.0		<10.0		**28.8**		<10.0		<10.0	
PTC8B-1	<10.0		<10.0		<10.0		<10.0		**14.2**		<10.0		<10.0	
PTC8B-2	<2.5	x	<2.5	x	<2.5	x	<2.5	x	**18.4**	x	<2.5	x	<2.5	x
PTC8C-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC8C-2	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x	<1.0	x
PTC8D-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC8E-1	<25.0		<25.0		<25.0		<25.0		**64.9**		<25.0		<25.0	
PTC8E-2	<10.0		<10.0		<10.0		<10.0		**87.2**		<10.0		<10.0	
PTC9A-1	<25.0		<25.0		<25.0		<25.0		**129**		<25.0		<25.0	
PTC9A-2	<25.0		<25.0		<25.0		<25.0		**134**		<25.0		<25.0	
PTC9B-1	<25.0		<25.0		<25.0		<25.0		**148**		<25.0		<25.0	
PTC9B-2	<25.0		<25.0		<25.0		<25.0		**134**		<25.0		<25.0	
PTC9C-1	<0.5		<0.5		<0.5		<0.5		**211**		<0.5		<0.5	
PTC9C-2	<0.5		<0.5		<0.5		<0.5		**195**		<0.5		<0.5	
PTC9D-1	<25.0		<25.0		<25.0		<25.0		**25.9**		<25.0		<25.0	
PTC9D-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**25.2**	x	<10.0	x	<10.0	x
PTC9E-1	<25.0		<25.0		<25.0		<25.0		**130**		<25.0		<25.0	
PTC9E-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**155**	x	<10.0	x	<10.0	x
PTC10A-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC10B-1	<25.0		<25.0		<25.0		<25.0		**294**		<25.0		<25.0	
PTC10B-2	<10.0		<10.0		<10.0		<10.0		**392**		<10.0		<10.0	
PTC10C-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC10C-2	<1.0		<1.0		<1.0		<1.0		<1.0		<1.0		<1.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)		Naphthalene (µg/L)		1,2,3-Trichloro-benzene (µg/L)	
PTC5C-1	<10.0		<10.0		<10.0	
PTC6A-1	<25.0		<25.0		<25.0	
PTC6B-1	<25.0		<25.0		<25.0	
PTC6B-2	<10.0		<10.0		<10.0	
PTC6C-1	<3.6		<3.6		<3.6	
PTC6C-2	<1.7		<1.7		<1.7	
PTC6D-1	<25.0		<25.0		<25.0	
PTC6D-2	<0.5		<0.5		<0.5	x
PTC6E-1	<10.0		<10.0		<10.0	
PTC6E-2	<10.0	x	<10.0	x	<10.0	
PTC7A-1	<10.0		<10.0		<10.0	
PTC7A-2	<3.6		<3.6		<3.6	
PTC7B-1	<10.0		<10.0		<10.0	
PTC7C-1	<0.5		<0.5		<0.5	
PTC7D-1	<0.5		<0.5		<0.5	
PTC8A-1	<10.0		<10.0		<10.0	
PTC8B-1	<10.0		<10.0		<10.0	
PTC8B-2	<2.5	x	<2.5	x	<2.5	
PTC8C-1	<2.5		<2.5		<2.5	
PTC8C-2	<1.0	x	<1.0	x	<1.0	
PTC8D-1	<10.0		<10.0		<10.0	
PTC8E-1	<25.0		<25.0		<25.0	
PTC8E-2	<10.0		<10.0		<10.0	
PTC9A-1	<25.0		<25.0		<25.0	
PTC9A-2	<25.0		<25.0		<25.0	
PTC9B-1	<25.0		<25.0		<25.0	
PTC9B-2	<25.0		<25.0		<25.0	
PTC9C-1	**6.1**		<0.5		<0.5	
PTC9C-2	**5.4**		<0.5		<0.5	
PTC9D-1	<25.0		<25.0		<25.0	
PTC9D-2	<10.0	x	<10.0	x	<10.0	x
PTC9E-1	<25.0		<25.0		<25.0	x
PTC9E-2	<10.0	x	<10.0	x	<10.0	
PTC10A-1	<10.0		<10.0		<10.0	
PTC10B-1	<25.0		<25.0		<25.0	
PTC10B-2	<10.0		<10.0		<10.0	
PTC10C-1	<0.5		<0.5		<0.5	
PTC10C-2	<1.0		<1.0		<1.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)		Chloro-methane (µg/L)		Vinyl chloride (µg/L)		Bromo-methane (µg/L)		Chloro-ethane (µg/L)	
PTC10D-1	1	11/2/2004	1250	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC10E-1	1	11/2/2004	1400	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC10E-1	1MA	11/2/2004	1400	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC10E-2	2	11/2/2004	1400	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC11A-1	1	11/2/2004	1530	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC11A-1	1MA	11/2/2004	1535	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11A-2	2	11/2/2004	1530	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC11B-1	1	11/3/2004	1030	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11B-2	2	11/3/2004	1030	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11C-1	1	11/3/2004	1100	<33.3		<33.3		<33.3		<33.3		<33.3	
PTC11C-1	1MA	11/3/2004	1100	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC11C-2	2	11/3/2004	1100	<3.6		<3.6		<3.6		<3.6		<3.6	
PTC11C-2	2MA	11/3/2004	1100	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11D-1	1	11/3/2004	1230	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11E-1	1	11/3/2004	1330	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11E-2	2	11/3/2004	1330	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11F-1	1	11/3/2004	1400	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11F-2	2	11/3/2004	1400	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12A-1	1	11/8/2004	1340	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC12A-2	2	11/8/2004	1340	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC12A-2	2MA	11/8/2004	1340	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC12B-1	1	11/8/2004	1500	<50.0		<50.0		<50.0		<50.0		<50.0	
PTC12B-2	2	11/8/2004	1500	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC12C-1	1	11/9/2004	1200	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12D-1	1	11/9/2004	1410	<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12E-1	1	11/9/2004	1430	<0.5		<0.5		<0.5		<0.5		<0.5	
PTC12F-1	1	11/9/2004	1030	<0.5		<0.5		**0.7**		<0.5		<0.5	
PTC13A-1	1	11/9/2004	1125	<25.0		<25.0		<25.0		<25.0		<25.0	
PTC13A-2	2	11/9/2004	1125	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC13B-1	1	11/9/2004	1200	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13C-1	1	11/9/2004	1300	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13D-1	1	11/9/2004	1320	<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13D-2	2	11/9/2004	1320	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTN1-1	1	11/16/2004	1510	<25.0		<25.0		<25.0		<25.0		<25.0	
PTN1-2	2	11/16/2004	1510	<10.0		<10.0		<10.0		<10.0		<10.0	
PTN1-1	1	11/17/2004	1015	<10.0		<10.0		<10.0		<10.0		<10.0	
PTN1-2	2	11/17/2004	1015	<10.0		<10.0		<10.0		<10.0		<10.0	
PTN2-1	1	11/16/2004	1440	<50.0		<50.0		<50.0		<50.0		<50.0	
PTN2-2	2	11/16/2004	1440	<25.0		<25.0		<25.0		<25.0		<25.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)		1,1-Dichloro-ethene (µg/L)		Methylene chloride (µg/L)		trans-1,2-Dichloro-ethene (µg/L)		1,1-Dichloro-ethane (µg/L)		2,2-Dichloro-propane (µg/L)		cis-1,2-Dichloro-ethene (µg/L)	
PTC10D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC10E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC10E-1	<25.0	x	<25.0	x	**34.5**	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC10E-2	<10.0	x	<10.0	x	**38.1**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC11A-1	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC11A-1	<25.0		<25.0		**33.7**		<25.0		<25.0		<25.0		<25.0	
PTC11A-2	<10.0	x	<10.0	x	**30.8**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC11B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11B-2	<25.0		<25.0		**25.7**		<25.0		<25.0		<25.0		<25.0	
PTC11C-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC11C-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC11C-2	<3.6		<3.6		**24.1**		<3.6		<3.6		<3.6		**3.7**	
PTC11C-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11D-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11E-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11F-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11F-2	<2.5		<2.5		**17.3**		<2.5		<2.5		<2.5		<2.5	
PTC12A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		**220**	
PTC12A-2	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	**158**	x
PTC12A-2	<10.0	x	<10.0	x	**12.6**	x	<10.0	x	<10.0	x	<10.0	x	**141**	x
PTC12B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		**114**	
PTC12B-2	<10.0	x	<10.0	x	**12.9**	x	**13.3**	x	<10.0	x	<10.0	x	**100**	x
PTC12C-1	<2.5		<2.5		<2.5		**4.3**		<2.5		<2.5		**117**	
PTC12D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		**16.0**	
PTC12E-1	<0.5		<0.5		<0.5		**0.8**		<0.5		<0.5		**12.3**	
PTC12F-1	<0.5		<0.5		**1.7**		**3.3**		**0.8**		<0.5		**30.0**	
PTC13A-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC13A-2	<10.0	x	<10.0	x	**12.1**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC13B-1	<10.0		<10.0		**13.3**		<10.0		<10.0		<10.0		<10.0	
PTC13C-1	<10.0		<10.0		**14.5**		<10.0		<10.0		<10.0		<10.0	
PTC13D-1	<10.0		<10.0		**11.7**		<10.0		<10.0		<10.0		**11.5**	
PTC13D-2	<10.0	x	<10.0	x	**11.6**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTN1-1	<25.0		<25.0		**286**		<25.0		<25.0		<25.0		<25.0	
PTN1-2	<10.0		<10.0		**201**		<10.0		<10.0		<10.0		**12.5**	
PTN1-1	<10.0		<10.0		**184**		<10.0		<10.0		<10.0		**13.5**	
PTN1-2	<10.0		<10.0		**174**		<10.0		<10.0		<10.0		**12.5**	
PTN2-1	<50.0		<50.0		**703**		<50.0		<50.0		<50.0		<50.0	
PTN2-2	<25.0		<25.0		**684**		<25.0		<25.0		<25.0		<25.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)		Bromo-chloro-methane (µg/L)		1,1,1-Trichloro-ethane (µg/L)		1,1-Dichloro-propene (µg/L)		Carbon tetra-chloride (µg/L)		Benzene (µg/L)		1,2-Dichloro-ethane (µg/L)	
PTC10D-1	**122**		<2.5		<2.5		<2.5		**32.7**		<2.5		<2.5	
PTC10E-1	**3,430**		<50.0		<50.0		<50.0		**3,680**		<50.0		<50.0	
PTC10E-1	**3,430**	x	<25.0	x	<25.0	x	<25.0	x	**3,770**	x	<25.0	x	<25.0	x
PTC10E-2	**4,500**	x	<10.0	x	<10.0	x	<10.0	x	**>5,000**	x	<10.0	x	<10.0	x
PTC11A-1	**2,400**	x	<50.0	x	<50.0	x	<50.0	x	**4,700**	x	<50.0	x	<50.0	x
PTC11A-1	**3,410**		<25.0		<25.0		<25.0		**3,920**		<25.0		<25.0	
PTC11A-2	**3,250**	x	<10.0	x	<10.0	x	<10.0	x	**>5,000**	x	<10.0	x	<10.0	x
PTC11B-1	**3,620**		<50.0		<50.0		<50.0		**6,870**		<50.0		<50.0	
PTC11B-2	**4,460**		<25.0		<25.0		<25.0		**9,990**		<25.0		<25.0	
PTC11C-1	**1,540**		<33.3		<33.3		<33.3		**1,140**		<33.3		<33.3	
PTC11C-1	**827**	x	<25.0	x	<25.0	x	<25.0	x	**461**	x	<25.0	x	<25.0	x
PTC11C-2	**>1,790**		<3.6		<3.6		<3.6		**>1,790**		<3.6		**8.7**	
PTC11C-2	**760**		<25.0		<25.0		<25.0		**417**		<25.0		<25.0	
PTC11D-1	**3,950**		<25.0		<25.0		<25.0		**6,950**		<25.0		<25.0	
PTC11E-1	**3,990**		<50.0		<50.0		<50.0		**6,880**		<50.0		<50.0	
PTC11E-2	**4,140**		<25.0		<25.0		<25.0		**7,780**		<25.0		<25.0	
PTC11F-1	**3,620**		<50.0		<50.0		<50.0		**7,960**		<50.0		<50.0	
PTC11F-2	**>1,250**		<2.5		<2.5		<2.5		**>1,250**		<2.5		<2.5	
PTC12A-1	**5,460**		<50.0		<50.0		<50.0		**542**		<50.0		<50.0	
PTC12A-2	**3,690**	x	<25.0	x	<25.0	x	<25.0	x	**402**	x	<25.0	x	<25.0	x
PTC12A-2	**3,610**	x	<10.0	x	<10.0	x	<10.0	x	**343**	x	<10.0	x	<10.0	x
PTC12B-1	**2,420**		<50.0		<50.0		<50.0		**1,540**		<50.0		<50.0	
PTC12B-2	**2,140**	x	<10.0	x	<10.0	x	<10.0	x	**1,360**	x	<10.0	x	<10.0	x
PTC12C-1	**36.2**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12D-1	**33.1**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12E-1	**28.4**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC12F-1	**150**		<0.5		<0.5		<0.5		**3.6**		<0.5		<0.5	
PTC13A-1	**1,230**		<25.0		<25.0		<25.0		**2,400**		<25.0		<25.0	
PTC13A-2	**1,400**	x	<10.0	x	<10.0	x	<10.0	x	**2,940**	x	<10.0	x	<10.0	x
PTC13B-1	**790**		<10.0		<10.0		<10.0		**1,130**		<10.0		<10.0	
PTC13C-1	**1,280**		<10.0		<10.0		<10.0		**909**		<10.0		<10.0	
PTC13D-1	**1,500**		<10.0		<10.0		<10.0		**226**		<10.0		<10.0	
PTC13D-2	**1,590**	x	<10.0	x	<10.0	x	<10.0	x	**248**	x	<10.0	x	<10.0	x
PTN1-1	**3,110**		<25.0		<25.0		<25.0		**201**		<25.0		<25.0	
PTN1-2	**3,730**		<10.0		<10.0		<10.0		**377**		<10.0		<10.0	
PTN1-1	**4,000**		<10.0		<10.0		<10.0		**408**		<10.0		<10.0	
PTN1-2	**3,960**		<10.0		<10.0		<10.0		**389**		<10.0		**10.0**	
PTN2-1	**6,630**		<50.0		<50.0		<50.0		**104**		<50.0		<50.0	
PTN2-2	**6,370**		<25.0		<25.0		<25.0		**146**		<25.0		<25.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)		1,2-Dichloro-propane (µg/L)		Bromo-dichloro-methane (µg/L)		Dibromo-methane (µg/L)		cis-1,3-Dichloro-propene (µg/L)		Toluene (µg/L)		trans-1,3-dichloro-propene (µg/L)		1,1,2-Trichloro-ethane (µg/L)
PTC10D-1	**7.6**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5
PTC10E-1	**90.0**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0
PTC10E-1	**79.8**	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0
PTC10E-2	**81.0**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0
PTC11A-1	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0
PTC11A-1	**67.3**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0
PTC11A-2	**52.6**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0
PTC11B-1	**72.5**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0
PTC11B-2	**93.9**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0
PTC11C-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3
PTC11C-1	**27.6**	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0
PTC11C-2	**88.3**		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		**8.0**
PTC11C-2	**32.5**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0
PTC11D-1	**48.8**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0
PTC11E-1	**98.7**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0
PTC11E-2	**97.4**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0
PTC11F-1	**94.3**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0
PTC11F-2	**108**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5
PTC12A-1	**412**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0
PTC12A-2	**292**	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0
PTC12A-2	**266**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0
PTC12B-1	**487**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0
PTC12B-2	**410**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0
PTC12C-1	**57.0**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5
PTC12D-1	**15.0**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5
PTC12E-1	**8.9**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTC12F-1	**26.9**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTC13A-1	**65.0**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0
PTC13A-2	**61.3**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0
PTC13B-1	**77.0**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0
PTC13C-1	**108**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0
PTC13D-1	**93.2**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0
PTC13D-2	**102**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0
PTN1-1	**368**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0
PTN1-2	**418**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0
PTN1-1	**289**	**B**	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0
PTN1-2	**297**	**B**	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0
PTN2-1	**213**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0
PTN2-2	**240**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0

Sample name	
PTC10D-1	
PTC10E-1	
PTC10E-1	x
PTC10E-2	x
PTC11A-1	x
PTC11A-1	
PTC11A-2	x
PTC11B-1	
PTC11B-2	
PTC11C-1	
PTC11C-1	x
PTC11C-2	
PTC11C-2	
PTC11D-1	
PTC11E-1	
PTC11E-2	
PTC11F-1	
PTC11F-2	
PTC12A-1	
PTC12A-2	x
PTC12A-2	x
PTC12B-1	
PTC12B-2	x
PTC12C-1	
PTC12D-1	
PTC12E-1	
PTC12F-1	
PTC13A-1	
PTC13A-2	x
PTC13B-1	
PTC13C-1	
PTC13D-1	
PTC13D-2	x
PTN1-1	
PTN1-2	
PTN1-1	
PTN1-2	
PTN2-1	
PTN2-2	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)		1,3-Dichloro-propane (µg/L)		Dibromo-chloro-methane (µg/L)		1,2-Dibromo-ethane (µg/L)		Chloro-benzene (µg/L)		1,1,1,2-Tetrachloro-ethane (µg/L)		Ethyl benzene (µg/L)		m,p,-Xylenes (µg/L)	
PTC10D-1	**11.0**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC10E-1	**366**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC10E-1	**359**	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC10E-2	**448**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**15.9**	x	<10.0	x	<10.0	x
PTC11A-1	**540**	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC11A-1	**357**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11A-2	**732**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**15.2**	x	<10.0	x	<10.0	x
PTC11B-1	**971**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11B-2	**1,210**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11C-1	**182**		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC11C-1	**56.7**	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC11C-2	**1,160**		<3.6		<3.6		<3.6		<3.6		**22.9**		<3.6		<3.6	
PTC11C-2	**68.8**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11D-1	**907**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11E-1	**942**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11E-2	**983**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11F-1	**1,080**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11F-2	**>1,250**		<2.5		<2.5		<2.5		<2.5		**27.5**		<2.5		<2.5	
PTC12A-1	**1,690**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC12A-2	**1,220**	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC12A-2	**1,100**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC12B-1	**1,580**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC12B-2	**1,290**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**10.3**	x	<10.0	x	<10.0	x
PTC12C-1	**18.7**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12D-1	**3.3**		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12E-1	**1.3**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC12F-1	**16.4**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC13A-1	**1,210**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC13A-2	**1,390**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC13B-1	**976**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13C-1	**1,170**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13D-1	**853**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13D-2	**897**	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTN1-1	**271**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTN1-2	**392**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTN1-1	**172**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTN1-2	**199**		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTN2-1	**780**		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTN2-2	**959**		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)		Styrene (µg/L)		Bromo-form (µg/L)		Isopropyl-benzene (µg/L)		Bromo-benzene (µg/L)		1,1,2,2-Tetrachloro-ethane (µg/L)		n-Propyl-benzene (µg/L)		Penta-chloro-ethane (µg/L)	
PTC10D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC10E-1	<50.0		<50.0		<50.0		<50.0		<50.0		**62.8**		<50.0		<50.0	
PTC10E-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	**65.9**	x	<25.0	x	**61.8**	x
PTC10E-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**61.1**	x	<10.0	x	**81.7**	x
PTC11A-1	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	**50.8**	x
PTC11A-1	<25.0		<25.0		<25.0		<25.0		<25.0		**45.2**		<25.0		**56.7**	
PTC11A-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**46.1**	x	<10.0	x	**95.8**	x
PTC11B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		**89.4**	
PTC11B-2	<25.0		<25.0		<25.0		<25.0		<25.0		**73.9**		<25.0		**126**	
PTC11C-1	<33.3		<33.3		<33.3		<33.3		<33.3		**38.6**		<33.3		<33.3	
PTC11C-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC11C-2	<3.6		<3.6		<3.6		<3.6		<3.6		**88.5**		<3.6		**141**	
PTC11C-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11D-1	<25.0		<25.0		<25.0		<25.0		<25.0		**68.0**		<25.0		**83.4**	
PTC11E-1	<50.0		<50.0		<50.0		<50.0		<50.0		**96.0**		<50.0		**79.9**	
PTC11E-2	<25.0		<25.0		<25.0		<25.0		<25.0		**81.0**		<25.0		**97.0**	
PTC11F-1	<50.0		<50.0		<50.0		<50.0		<50.0		**83.2**		<50.0		**91.4**	
PTC11F-2	<2.5		<2.5		<2.5		<2.5		<2.5		**97.5**		<2.5		**119**	
PTC12A-1	<50.0		<50.0		<50.0		<50.0		<50.0		**78.5**		<50.0		<50.0	
PTC12A-2	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	**63.8**	x	<25.0	x	<25.0	x
PTC12A-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**68.4**	x	<10.0	x	**14.6**	x
PTC12B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC12B-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**46.3**	x	<10.0	x	**27.5**	x
PTC12C-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12E-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC12F-1	<0.5		<0.5		<0.5		<0.5		<0.5		**1.8**		<0.5		<0.5	
PTC13A-1	<25.0		<25.0		<25.0		<25.0		<25.0		**34.4**		<25.0		**72.3**	
PTC13A-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**33.8**	x	<10.0	x	**91.8**	x
PTC13B-1	<10.0		<10.0		<10.0		<10.0		<10.0		**39.2**		<10.0		**33.8**	
PTC13C-1	<10.0		<10.0		<10.0		<10.0		<10.0		**19.4**		<10.0		**36.1**	
PTC13D-1	<10.0		<10.0		<10.0		<10.0		<10.0		**40.8**		<10.0		**30.5**	
PTC13D-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**52.9**	x	<10.0	x	**35.5**	x
PTN1-1	<25.0		<25.0		<25.0		<25.0		<25.0		**34.8**		<25.0		<25.0	
PTN1-2	<10.0		<10.0		<10.0		<10.0		<10.0		**38.4**		<10.0		<10.0	
PTN1-1	<10.0		<10.0		<10.0		<10.0		<10.0		**43.4**		<10.0		<10.0	
PTN1-2	<10.0		<10.0		<10.0		<10.0		<10.0		**41.2**		<10.0		<10.0	
PTN2-1	<50.0		<50.0		<50.0		<50.0		<50.0		**68.8**		<50.0		<50.0	
PTN2-2	<25.0		<25.0		<25.0		<25.0		<25.0		**58.1**		<25.0		<25.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)		1,2,3-Trichloro-propane (µg/L)		4-Chloro-toluene (µg/L)		1,3,5-Trimethyl-benzene (µg/L)		tert-Butyl-benzene (µg/L)		1,2,4-Trimethyl-benzene (µg/L)		sec Butyl-benzene (µg/L)		1,3-Dichloro-benzene (µg/L)	
PTC10D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC10E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC10E-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC10E-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC11A-1	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x	<50.0	x
PTC11A-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11A-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC11B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11B-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11C-1	<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3		<33.3	
PTC11C-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC11C-2	<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6		<3.6	
PTC11C-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11D-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11E-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11E-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC11F-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC11F-2	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC12A-2	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC12A-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC12B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC12B-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC12C-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12E-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC12F-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC13A-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTC13A-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC13B-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13C-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13D-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTC13D-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTN1-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTN1-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTN1-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTN1-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTN2-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTN2-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)		1,4-Dichloro-benzene (µg/L)		n-Butyl-benzene (µg/L)		1,2-Dichloro-benzene (µg/L)		Hexa-chloro-ethane (µg/L)		1,2-Dibromo-3-chloro-propane (µg/L)		1,2,4-Trichloro-benzene (µg/L)	
PTC10D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC10E-1	<50.0				<50.0		<50.0		**640**		<50.0		<50.0	
PTC10E-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	**708**	x	<25.0	x	<25.0	x
PTC10E-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**1,060**	x	<10.0	x	<10.0	x
PTC11A-1	<50.0	x	<50.0	x	<50.0	x	<50.0	x	**958**	x	<50.0	x	<50.0	x
PTC11A-1	<25.0		<25.0		<25.0		<25.0		**730**		<25.0		<25.0	
PTC11A-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**1,830**	x	<10.0	x	<10.0	x
PTC11B-1	<50.0		<50.0		<50.0		<50.0		**1,490**		<50.0		<50.0	
PTC11B-2	<25.0		<25.0		<25.0		<25.0		**2,090**		<25.0		<25.0	
PTC11C-1	<33.3		<33.3		<33.3		<33.3		**207**		<33.3		<33.3	
PTC11C-1	<25.0	x	<25.0	x	<25.0	x	<25.0	x	**90.5**	x	<25.0	x	<25.0	x
PTC11C-2	<3.6		<3.6		<3.6		<3.6		**>1,790**		<3.6		<3.6	
PTC11C-2	<25.0		<25.0		<25.0		<25.0		**67.4**		<25.0		<25.0	
PTC11D-1	<25.0		<25.0		<25.0		<25.0		**1,440**		<25.0		<25.0	
PTC11E-1	<50.0		<50.0		<50.0		<50.0		**1,320**		<50.0		<50.0	
PTC11E-2	<25.0		<25.0		<25.0		<25.0		**1,660**		<25.0		<25.0	
PTC11F-1	<50.0		<50.0		<50.0		<50.0		**2,310**		<50.0		<50.0	
PTC11F-2	<2.5		<2.5		<2.5		<2.5		**>1,250**		<2.5		<2.5	
PTC12A-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC12A-2	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x	<25.0	x
PTC12A-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x	<10.0	x
PTC12B-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTC12B-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**38.2**	x	<10.0	x	<10.0	x
PTC12C-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12D-1	<2.5		<2.5		<2.5		<2.5		<2.5		<2.5		<2.5	
PTC12E-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC12F-1	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTC13A-1	<25.0		<25.0		<25.0		<25.0		**1,190**		<25.0		<25.0	
PTC13A-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**1,480**	x	<10.0	x	<10.0	x
PTC13B-1	<10.0		<10.0		<10.0		<10.0		**648**		<10.0		<10.0	
PTC13C-1	<10.0		<10.0		<10.0		<10.0		**159**		<10.0		<10.0	
PTC13D-1	<10.0		<10.0		<10.0		<10.0		**104**		<10.0		<10.0	
PTC13D-2	<10.0	x	<10.0	x	<10.0	x	<10.0	x	**118**	x	<10.0	x	<10.0	x
PTN1-1	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	
PTN1-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTN1-1	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTN1-2	<10.0		<10.0		<10.0		<10.0		<10.0		<10.0		<10.0	
PTN2-1	<50.0		<50.0		<50.0		<50.0		<50.0		<50.0		<50.0	
PTN2-2	<25.0		<25.0		<25.0		<25.0		<25.0		<25.0		<25.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)		Naphthalene (µg/L)		1,2,3-Trichloro-benzene (µg/L)	
PTC10D-1	<2.5		<2.5		<2.5	
PTC10E-1	<50.0		<50.0		<50.0	
PTC10E-1	<25.0	x	<25.0	x	<25.0	
PTC10E-2	<10.0	x	<10.0	x	<10.0	
PTC11A-1	<50.0	x	<50.0	x	<50.0	
PTC11A-1	<25.0		<25.0		<25.0	
PTC11A-2	**49.4**	x	<10.0	x	<10.0	
PTC11B-1	<50.0		<50.0		<50.0	
PTC11B-2	**36.2**		<25.0		<25.0	
PTC11C-1	<33.3		<33.3		<33.3	
PTC11C-1	**50.5**	x	<25.0	x	<25.0	
PTC11C-2	**76.1**		<3.6		<3.6	
PTC11C-2	<25.0		<25.0		<25.0	
PTC11D-1	<25.0		<25.0		<25.0	
PTC11E-1	<50.0		<50.0		<50.0	
PTC11E-2	<25.0		<25.0		<25.0	
PTC11F-1	<50.0		<50.0		<50.0	
PTC11F-2	<2.5		<2.5		<2.5	
PTC12A-1	<50.0		<50.0		<50.0	
PTC12A-2	<25.0	x	<25.0	x	<25.0	
PTC12A-2	<10.0	x	<10.0	x	<10.0	
PTC12B-1	<50.0		<50.0		<50.0	
PTC12B-2	<10.0	x	<10.0	x	<10.0	
PTC12C-1	<2.5		<2.5		<2.5	
PTC12D-1	<2.5		<2.5		<2.5	
PTC12E-1	<0.5		<0.5		<0.5	
PTC12F-1	<0.5		<0.5		<0.5	
PTC13A-1	<25.0		<25.0		<25.0	
PTC13A-2	**66.4**	x	<10.0	x	<10.0	
PTC13B-1	<10.0		<10.0		<10.0	
PTC13C-1	<10.0		<10.0		<10.0	
PTC13D-1	<10.0		<10.0		<10.0	
PTC13D-2	<10.0	x	<10.0	x	<10.0	
PTN1-1	<25.0		<25.0		<25.0	x
PTN1-2	<10.0		<10.0		<10.0	x
PTN1-1	<10.0		<10.0		<10.0	
PTN1-2	<10.0		<10.0		<10.0	
PTN2-1	<50.0		<50.0		<50.0	
PTN2-2	<25.0		<25.0		<25.0	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)	Chloro-methane (µg/L)	Vinyl chloride (µg/L)	Bromo-methane (µg/L)	Chloro-ethane (µg/L)
PTN3-1	1	11/16/2004	1335	<50.0	<50.0	<50.0	<50.0	<50.0
PTN3-2	2	11/16/2004	1335	<10.0	<10.0	<10.0	<10.0	<10.0
PTN4-1	1	11/17/2004	1025	<50.0	<50.0	<50.0	<50.0	<50.0
PTN4-2	2	11/17/2004	1025	<50.0	<50.0	<50.0	<50.0	<50.0
PTN5-1	1	11/16/2004	1350	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-1	1	11/17/2004	915	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-2	2	11/17/2004	915	<10.0	<10.0	<10.0	<10.0	<10.0
PTN7-1	1	11/17/2004	1050	<50.0	**75.9**	<50.0	<50.0	<50.0
PTN8-1	1	11/16/2004	1325	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-2	2	11/16/2004	1325	<25.0	<25.0	<25.0	<25.0	<25.0
PTN9-1	1	11/16/2004	1440	<25.0	<25.0	<25.0	<25.0	<25.0
PTN9-2	2	11/16/2004	1440	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ1A-1	1	11/5/2004	1205	<3.6	<3.6	<3.6	<3.6	<3.6
PTZ1A-2	2	11/5/2004	1205	<2.5	<2.5	<2.5	<2.5	<2.5
PTZ1B-1	1	11/8/2004	1240	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1C-1	1	11/8/2004	1330	<25.0	<25.0	<25.0	<25.0	<25.0
PTZ1D-1	1	11/8/2004	1500	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-1	1	11/10/2004	1155	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-2	2	11/10/2004	1155	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ2A-1	1	11/5/2004	920	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-1	1	11/5/2004	1000	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-2	2	11/5/2004	1000	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2C-1	1	11/9/2004	1530	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2D-1	1	11/5/2004	1115	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2D-2	2	11/5/2004	1115	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2E-1	1	11/10/2004	945	<2.5	<2.5	<2.5	<2.5	<2.5
PTB1B-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB1B-2	2	1/13/2005		<1.0	<1.0	<1.0	<1.0	<1.0
PTB1C-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB1C-2	2	1/13/2005		<3.6	**12.4**	<3.6	<3.6	<3.6
PTB2B-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB2B-2	2	1/13/2005		<0.5	**0.6**	<0.5	<0.5	<0.5
PTB2C-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB2C-2	2	1/13/2005		<1.7	**2.6**	<1.7	<1.7	<1.7
PTB3A-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB3A-2	2	1/13/2005		<0.5	<0.5	<0.5	<0.5	<0.5
PTB3B-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB3B-2	2	1/13/2005		<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)	1,1-Dichloro-ethene (µg/L)	Methylene chloride (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethane (µg/L)	2,2-Dichloro-propane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
PTN3-1	<50.0	<50.0	**511**	<50.0	<50.0	<50.0	<50.0
PTN3-2	<10.0	<10.0	**510**	<10.0	<10.0	<10.0	**22.6**
PTN4-1	<50.0	<50.0	**502**	<50.0	<50.0	<50.0	<50.0
PTN4-2	<50.0	<50.0	**510**	<50.0	<50.0	<50.0	<50.0
PTN5-1	<25.0	<25.0	**157**	<25.0	<25.0	<25.0	<25.0
PTN6-1	<25.0	<25.0	**531**	<25.0	<25.0	<25.0	**26.5**
PTN6-2	<10.0	<10.0	**483**	<10.0	<10.0	<10.0	**23.3**
PTN7-1	<50.0	<50.0	**1,950**	<50.0	<50.0	<50.0	<50.0
PTN8-1	<50.0	<50.0	**1,050**	<50.0	<50.0	<50.0	<50.0
PTN8-2	<25.0	<25.0	**1,060**	<25.0	<25.0	<25.0	<25.0
PTN9-1	<25.0	<25.0	**119**	<25.0	<25.0	<25.0	<25.0
PTN9-2	<10.0	<10.0	**84.2**	<10.0	<10.0	<10.0	<10.0
PTZ1A-1	<3.6	**7.1**	<3.6	**21.4**	<3.6	<3.6	**11.2**
PTZ1A-2	<2.5	**6.8**	<2.5	**20.7**	<2.5	<2.5	**11.5**
PTZ1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1C-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTZ1D-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-1	<1.7	<1.7	**9.2**	<1.7	<1.7	<1.7	<1.7
PTZ1E-2	<10.0	<10.0	**10.0**	<10.0	<10.0	<10.0	<10.0
PTZ2A-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2C-1	<1.7	<1.7	<1.7	**7.2**	<1.7	<1.7	**9.3**
PTZ2D-1	<0.5	<0.5	**4.8**	<0.5	<0.5	<0.5	<0.5
PTZ2D-2	<1.7	<1.7	**5.5**	<1.7	<1.7	<1.7	<1.7
PTZ2E-1	<2.5	<2.5	**9.6**	<2.5	<2.5	<2.5	<2.5
PTB1B-1	<10.0	<10.0	**217**	<10.0	<10.0	<10.0	<10.0
PTB1B-2	<1.0	<1.0	**199**	<1.0	<1.0	<1.0	**3.2**
PTB1C-1	<10.0	<10.0	**1,020**	<10.0	<10.0	<10.0	**30.8**
PTB1C-2	<3.6	**4.8**	**1,090**	<3.6	**4.4**	<3.6	**34.2**
PTB2B-1	<10.0	<10.0	**75.9**	<10.0	<10.0	<10.0	<10.0
PTB2B-2	<0.5	<0.5	**72.5**	<0.5	<0.5	<0.5	<0.5
PTB2C-1	<10.0	<10.0	**650**	<10.0	<10.0	<10.0	<10.0
PTB2C-2	<1.7	<1.7	**672**	<1.7	<1.7	<1.7	<1.7
PTB3A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3A-2	<0.5	<0.5	**6.0**	<0.5	<0.5	<0.5	<0.5
PTB3B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3B-2	<0.5	<0.5	**6.0**	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)	Bromo-chloro-methane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1-Dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Benzene (µg/L)	1,2-Dichloro-ethane (µg/L)
PTN3-1	**4,840**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN3-2	**4,040**	<10.0	<10.0	<10.0	**11.7**	<10.0	<10.0
PTN4-1	**10,900**	<50.0	<50.0	<50.0	**5,610**	<50.0	<50.0
PTN4-2	**10,800**	<50.0	<50.0	<50.0	**5,780**	<50.0	<50.0
PTN5-1	**11,000**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-1	**4,430**	<25.0	<25.0	<25.0	**36.0**	<25.0	<25.0
PTN6-2	**4,140**	<10.0	<10.0	<10.0	**35.6**	<10.0	<10.0
PTN7-1	**5,700**	<50.0	<50.0	<50.0	**86.7**	<50.0	<50.0
PTN8-1	**5,910**	<50.0	<50.0	<50.0	**1,070**	<50.0	<50.0
PTN8-2	**6,260**	<25.0	<25.0	<25.0	**1,150**	<25.0	<25.0
PTN9-1	**3,660**	<25.0	<25.0	<25.0	**1,700**	<25.0	<25.0
PTN9-2	**3,750**	<10.0	<10.0	<10.0	**2,390**	<10.0	<10.0
PTZ1A-1	**755**	<3.6	<3.6	<3.6	<3.6	**8.7**	<3.6
PTZ1A-2	**812**	<2.5	<2.5	<2.5	<2.5	**8.2**	**2.7**
PTZ1B-1	**1.9**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1C-1	**4,950**	<25.0	<25.0	<25.0	**5,160**	<25.0	<25.0
PTZ1D-1	**6.3**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-1	**>833**	<1.7	<1.7	<1.7	**783**	<1.7	**2.1**
PTZ1E-2	**2,090**	<10.0	<10.0	<10.0	**880**	<10.0	<10.0
PTZ2A-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-1	**68.6**	<0.5	<0.5	<0.5	**39.9**	<0.5	<0.5
PTZ2B-2	**80.0**	<0.5	<0.5	<0.5	**47.5**	<0.5	<0.5
PTZ2C-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2D-1	**>250**	<0.5	<0.5	<0.5	**>250**	<0.5	<0.5
PTZ2D-2	**337**	<1.7	<1.7	<1.7	**566**	<1.7	<1.7
PTZ2E-1	**517**	<2.5	<2.5	<2.5	**597**	<2.5	<2.5
PTB1B-1	**188**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1B-2	**180**	<1.0	<1.0	<1.0	**1.8**	<1.0	**1.4**
PTB1C-1	**1,550**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1C-2	**1,710**	<3.6	<3.6	<3.6	<3.6	**6.3**	**8.0**
PTB2B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2B-2	**3.8**	<0.5	<0.5	<0.5	**1.5**	<0.5	<0.5
PTB2C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2C-2	**6.4**	<1.7	<1.7	<1.7	<1.7	**2.0**	<1.7
PTB3A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3A-2	**1.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3B-2	**2.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTN3-1	**530**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN3-2	**479**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTN4-1	**95.3** B	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN4-2	**169** B	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN5-1	**365**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-1	**499** B	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-2	**454** B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTN7-1	**619** B	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-1	**385**	<50.0	<50.0	<50.0	<50.0	**5.2**	<50.0	<50.0
PTN8-2	**393**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN9-1	**99.5**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN9-2	**105**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ1A-1	**212**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTZ1A-2	**230**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTZ1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1C-1	**83.8**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTZ1D-1	**1.8**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-1	**13.8**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	**2.7**
PTZ1E-2	**20.6**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ2A-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2C-1	**71.4**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2D-1	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2D-2	**3.4**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2E-1	**3.7**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB1B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1B-2	<1.0	<1.0	<1.0	<1.0	<1.0	**1.8**	<1.0	<1.0
PTB1C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1C-2	**6.6**	<3.6	<3.6	<3.6	<3.6	**7.0**	<3.6	**6.4**
PTB2B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2B-2	**0.5**	<0.5	<0.5	<0.5	<0.5	**1.4**	<0.5	<0.5
PTB2C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2C-2	<1.7	<1.7	<1.7	<1.7	<1.7	**6.1**	<1.7	<1.7
PTB3A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Sample name
PTN3-1
PTN3-2
PTN4-1
PTN4-2
PTN5-1
PTN6-1
PTN6-2
PTN7-1
PTN8-1
PTN8-2
PTN9-1
PTN9-2
PTZ1A-1
PTZ1A-2
PTZ1B-1
PTZ1C-1
PTZ1D-1
PTZ1E-1
PTZ1E-2
PTZ2A-1
PTZ2B-1
PTZ2B-2
PTZ2C-1
PTZ2D-1
PTZ2D-2
PTZ2E-1
PTB1B-1
PTB1B-2
PTB1C-1
PTB1C-2
PTB2B-1
PTB2B-2
PTB2C-1
PTB2C-2
PTB3A-1
PTB3A-2
PTB3B-1
PTB3B-2

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)	1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTN3-1	**984**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN3-2	**1,120**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTN4-1	**1,210**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN4-2	**1,170**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN5-1	**1,690**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-1	**1,200**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-2	**1,200**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTN7-1	**1,160**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-1	**1,030**	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-2	**1,060**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN9-1	**898**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN9-2	**1,420**	<10.0	<10.0	<10.0	<10.0	**12.9**	<10.0	<10.0
PTZ1A-1	**793**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTZ1A-2	**861**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTZ1B-1	**1.7**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1C-1	**530**	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTZ1D-1	**2.6**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-1	**58.0**	<1.7	<1.7	<1.7	<1.7	**2.3**	<1.7	<1.7
PTZ1E-2	**85.8**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ2A-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-1	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-2	**3.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2C-1	**366**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2D-1	**39.6**	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5
PTZ2D-2	**42.2**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2E-1	**45.2**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB1B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1B-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB1C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1C-2	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTB2B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2B-2	**0.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB3A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)	Styrene (µg/L)	Bromo-form (µg/L)	Isopropyl-benzene (µg/L)	Bromo-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	n-Propyl-benzene (µg/L)	Penta-chloro-ethane (µg/L)
PTN3-1	<50.0	<50.0	<50.0	<50.0	<50.0	**70.5**	<50.0	<50.0
PTN3-2	<10.0	<10.0	<10.0	<10.0	<10.0	**58.6**	<10.0	**13.5**
PTN4-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN4-2	<50.0	<50.0	<50.0	<50.0	<50.0	**50.9**	<50.0	**86.2**
PTN5-1	<25.0	<25.0	<25.0	<25.0	<25.0	**93.9**	<25.0	<25.0
PTN6-1	<25.0	<25.0	<25.0	<25.0	<25.0	**79.7**	<25.0	<25.0
PTN6-2	<10.0	<10.0	<10.0	<10.0	<10.0	**62.7**	<10.0	**13.9**
PTN7-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-2	<25.0	<25.0	<25.0	<25.0	<25.0	**45.3**	<25.0	<25.0
PTN9-1	<25.0	<25.0	<25.0	<25.0	<25.0	**49.0**	<25.0	**47.9**
PTN9-2	<10.0	<10.0	<10.0	<10.0	<10.0	**46.0**	<10.0	**63.2**
PTZ1A-1	<3.6	<3.6	<3.6	<3.6	<3.6	**24.5**	<3.6	<3.6
PTZ1A-2	<2.5	<2.5	<2.5	<2.5	<2.5	**23.6**	<2.5	<2.5
PTZ1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1C-1	<25.0	<25.0	<25.0	<25.0	<25.0	**53.6**	<25.0	**37.9**
PTZ1D-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-1	<1.7	<1.7	<1.7	<1.7	<1.7	**8.3**	<1.7	**6.6**
PTZ1E-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ2A-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-1	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	<0.5	<0.5
PTZ2B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2C-1	<1.7	<1.7	<1.7	<1.7	<1.7	**7.6**	<1.7	<1.7
PTZ2D-1	<0.5	<0.5	<0.5	<0.5	<0.5	**1.6**	<0.5	**5.2**
PTZ2D-2	<1.7	<1.7	<1.7	<1.7	<1.7	**2.0**	<1.7	**5.1**
PTZ2E-1	<2.5	<2.5	<2.5	<2.5	<2.5	**3.0**	<2.5	**5.7**
PTB1B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1B-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB1C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1C-2	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTB2B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2B-2	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	<0.5	<0.5
PTB2C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB3A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3A-2	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5
PTB3B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3B-2	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)	1,2,3-Trichloro-propane (µg/L)	4-Chloro-toluene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	sec Butyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)
PTN3-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN3-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTN4-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN4-2	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN5-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTN7-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-2	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN9-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN9-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ1A-1	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTZ1A-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTZ1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1C-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTZ1D-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTZ2A-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2C-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2D-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2D-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2E-1	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB1B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1B-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB1C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1C-2	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTB2B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB3A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)	1,4-Dichloro-benzene (µg/L)	n-Butyl-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	Hexa-chloro-ethane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2,4-Trichloro-benzene (µg/L)
PTN3-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN3-2	<10.0	<10.0	<10.0	<10.0	**29.4**	<10.0	<10.0
PTN4-1	<50.0	<50.0	<50.0	<50.0	**469**	<50.0	<50.0
PTN4-2	<50.0	<50.0	<50.0	<50.0	**466**	<50.0	<50.0
PTN5-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-1	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0	<25.0
PTN6-2	<10.0	<10.0	<10.0	<10.0	**35.2**	<10.0	<10.0
PTN7-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-1	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0	<50.0
PTN8-2	<25.0	<25.0	<25.0	<25.0	**42.2**	<25.0	<25.0
PTN9-1	<25.0	<25.0	<25.0	<25.0	**156**	<25.0	<25.0
PTN9-2	<10.0	<10.0	<10.0	<10.0	**252**	<10.0	<10.0
PTZ1A-1	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTZ1A-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTZ1B-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1C-1	<25.0	<25.0	<25.0	<25.0	**349**	<25.0	<25.0
PTZ1D-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ1E-1	<1.7	<1.7	<1.7	<1.7	**23.4**	<1.7	<1.7
PTZ1E-2	<10.0	<10.0	<10.0	<10.0	**22.8**	<10.0	<10.0
PTZ2A-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTZ2C-1	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTZ2D-1	<0.5	<0.5	<0.5	<0.5	**57.7**	<0.5	<0.5
PTZ2D-2	<1.7	<1.7	<1.7	<1.7	**54.3**	<1.7	<1.7
PTZ2E-1	<2.5	<2.5	<2.5	<2.5	**53.7**	<2.5	<2.5
PTB1B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1B-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB1C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB1C-2	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6
PTB2B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB2C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB2C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB3A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB3B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)	Naphthalene (µg/L)	1,2,3-Trichloro-benzene (µg/L)	
PTN3-1	<50.0	<50.0	<50.0	
PTN3-2	<10.0	<10.0	<10.0	
PTN4-1	<50.0	<50.0	<50.0	
PTN4-2	<50.0	<50.0	<50.0	
PTN5-1	<25.0	<25.0	<25.0	
PTN6-1	<25.0	<25.0	<25.0	x
PTN6-2	<10.0	<10.0	<10.0	
PTN7-1	<50.0	<50.0	<50.0	
PTN8-1	<50.0	<50.0	<50.0	
PTN8-2	<25.0	<25.0	<25.0	x
PTN9-1	<25.0	<25.0	<25.0	
PTN9-2	<10.0	<10.0	<10.0	x
PTZ1A-1	<3.6	<3.6	<3.6	
PTZ1A-2	<2.5	<2.5	<2.5	
PTZ1B-1	<1.7	<1.7	<1.7	
PTZ1C-1	<25.0	<25.0	<25.0	
PTZ1D-1	<1.7	<1.7	<1.7	
PTZ1E-1	<1.7	<1.7	<1.7	
PTZ1E-2	<10.0	<10.0	<10.0	
PTZ2A-1	<0.5	<0.5	<0.5	
PTZ2B-1	<0.5	<0.5	<0.5	
PTZ2B-2	<0.5	<0.5	<0.5	
PTZ2C-1	<1.7	<1.7	<1.7	
PTZ2D-1	**2.0**	<0.5	<0.5	
PTZ2D-2	<1.7	<1.7	<1.7	
PTZ2E-1	<2.5	<2.5	<2.5	
PTB1B-1	<10.0	<10.0	<10.0	
PTB1B-2	<1.0	<1.0	<1.0	
PTB1C-1	<10.0	<10.0	<10.0	
PTB1C-2	<3.6	<3.6	<3.6	
PTB2B-1	<10.0	<10.0	<10.0	
PTB2B-2	<0.5	<0.5	<0.5	
PTB2C-1	<10.0	<10.0	<10.0	
PTB2C-2	<1.7	<1.7	<1.7	
PTB3A-1	<10.0	<10.0	<10.0	
PTB3A-2	<0.5	<0.5	<0.5	
PTB3B-1	<10.0	<10.0	<10.0	
PTB3B-2	<0.5	<0.5	<0.5	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)	Chloro-methane (µg/L)	Vinyl chloride (µg/L)	Bromo-methane (µg/L)	Chloro-ethane (µg/L)
PTB3C-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB3C-2	2	1/13/2005		<0.5	**3.4**	**1.2 H**	<0.5	<0.5
PTB4A-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB4A-2	2	1/13/2005		<0.5	<0.5	<0.5	<0.5	<0.5
PTB4B-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB4B-2	2	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-2	2	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-2	2	1/13/2005		<0.5	<0.5	<0.5	<0.5	<0.5
PTB5B-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB5B-2	2	1/13/2005		<0.5	<0.5	<0.5	<0.5	<0.5
PTB5C-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB5C-2	2	1/13/2005		<2.5	**4.8**	<2.5	<2.5	<2.5
PTB6B-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB6B-2	2	1/13/2005		<0.5	<0.5	<0.5	<0.5	<0.5
PTB6C-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB6C-2	2	1/13/2005		<1.7	**13.9**	<1.7	<1.7	<1.7
PTB7A-1	1	1/13/2005		<0.5	<0.5	<0.5	<0.5	<0.5
PTB7A-2	2	1/13/2005		<0.5	<0.5	<0.5	<0.5	<0.5
PTB7B-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB7B-2	2	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-1	1	1/13/2005		<1.0	**27.6**	**6.7**	<1.0	<1.0
PTB7C2	2	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-2	2MA	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB8A-2	2	1/13/2005		<0.5	<0.5	<0.5	<0.5	<0.5
PTB8B-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB8B-2	2	1/13/2005		<1.0	<1.0	<1.0	<1.0	<1.0
PTB8C-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB8C-2	2	1/13/2005		<2.5	<2.5	<2.5	<2.5	<2.5
PTB9B-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB9B-2	2	1/13/2005		<1.7	**16.5**	<1.7	<1.7	<1.7
PTB9C-1	1	1/13/2005		<10.0	<10.0	<10.0	<10.0	<10.0
PTB9C-2	2	1/13/2005		<3.6	**32.4**	<3.6	<3.6	<3.6

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)	1,1-Dichloro-ethene (µg/L)	Methylene chloride (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethane (µg/L)	2,2-Dichloro-propane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
PTB3C-1	<10.0	<10.0	**187**	<10.0	<10.0	<10.0	<10.0
PTB3C-2	<0.5	<0.5	**178**	<0.5	<0.5	<0.5	**0.9**
PTB4A-1	<10.0	<10.0	**62.5**	<10.0	<10.0	<10.0	<10.0
PTB4A-2	<0.5	<0.5	**57.6**	<0.5	<0.5	<0.5	**0.5**
PTB4B-1	<10.0	<10.0	**571**	<10.0	<10.0	<10.0	<10.0
PTB4B-2	<10.0	<10.0	**566**	<10.0	<10.0	<10.0	<10.0
PTB4C-1	<10.0	<10.0	**734**	<10.0	<10.0	<10.0	<10.0
PTB4C-2	<10.0	<10.0	**724**	<10.0	<10.0	<10.0	<10.0
PTB5A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-2	<0.5	<0.5	**3.9**	<0.5	<0.5	<0.5	<0.5
PTB5B-1	<10.0	<10.0	**109**	<10.0	<10.0	<10.0	<10.0
PTB5B-2	<0.5	<0.5	**103**	<0.5	<0.5	<0.5	<0.5
PTB5C-1	<10.0	<10.0	**837**	<10.0	<10.0	<10.0	<10.0
PTB5C-2	<2.5	<2.5	**839**	<2.5	<2.5	<2.5	<2.5
PTB6B-1	<10.0	<10.0	**78.0**	<10.0	<10.0	<10.0	<10.0
PTB6B-2	<0.5	<0.5	**68.9**	<0.5	<0.5	<0.5	<0.5
PTB6C-1	<10.0	<10.0	**633**	<10.0	<10.0	<10.0	<10.0
PTB6C-2	<1.7	<1.7	**653**	<1.7	<1.7	<1.7	**2.9**
PTB7A-1	<0.5	<0.5	**126**	<0.5	<0.5	<0.5	**1.1**
PTB7A-2	<0.5	<0.5	**128**	<0.5	<0.5	<0.5	**1.2**
PTB7B-1	<10.0	<10.0	**1,300**	<10.0	<10.0	<10.0	**10.0**
PTB7B-2	<10.0	<10.0	**1,310**	<10.0	<10.0	<10.0	**10.3**
PTB7C-1	<1.0	**3.5**	**>500**	<1.0	**5.4**	<1.0	**6.6**
PTB7C2	<10.0	<10.0	**1,590**	<10.0	<10.0	<10.0	**14.2**
PTB7C-2	<10.0	<10.0	**1,630**	<10.0	<10.0	<10.0	**13.0**
PTB8A-2	<0.5	<0.5	**6.4**	<0.5	<0.5	<0.5	<0.5
PTB8B-1	<10.0	<10.0	**307**	<10.0	<10.0	<10.0	<10.0
PTB8B-2	<1.0	<1.0	**317**	<1.0	<1.0	<1.0	<1.0
PTB8C-1	<10.0	<10.0	**972**	<10.0	<10.0	<10.0	<10.0
PTB8C-2	<2.5	<2.5	**1,080**	<2.5	<2.5	<2.5	<2.5
PTB9B-1	<10.0	<10.0	**673**	<10.0	<10.0	<10.0	<10.0
PTB9B-2	<1.7	<1.7	**698**	<1.7	**1.8**	<1.7	**5.7**
PTB9C-1	<10.0	<10.0	**1,570**	<10.0	<10.0	<10.0	**11.8**
PTB9C-2	<3.6	<3.6	**>1,790**	<3.6	**5.9**	<3.6	**14.2**

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)	Bromo-chloro-methane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1-Dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Benzene (µg/L)	1,2-Dichloro-ethane (µg/L)
PTB3C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3C-2	<0.5	<0.5	<0.5	<0.5	<0.5	**1.5**	**0.8**
PTB4A-1	**220**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4A-2	**212**	<0.5	<0.5	<0.5	**3.6**	<0.5	**0.7**
PTB4B-1	**2,930**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4B-2	**2,920**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-1	**3,370**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-2	**3,370**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-2	**4.0**	<0.5	<0.5	<0.5	**1.7**	<0.5	<0.5
PTB5B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5B-2	**1.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5C-1	**56.3**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5C-2	**53.4**	<2.5	<2.5	<2.5	<2.5	<2.5	**2.5**
PTB6B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6B-2	**3.4**	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**
PTB6C-1	**83.3**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6C-2	**88.0**	<1.7	<1.7	<1.7	<1.7	**2.2**	**2.6**
PTB7A-1	**178**	<0.5	<0.5	<0.5	**1.2**	<0.5	**0.8**
PTB7A-2	**180**	<0.5	<0.5	<0.5	**1.2**	<0.5	**0.8**
PTB7B-1	**2,130**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7B-2	**2,130**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-1	**>500**	<1.0	<1.0	<1.0	<1.0	**2.3**	**7.4**
PTB7C2	**2,150**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-2	**2,130**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8A-2	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8B-1	**20.6**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8B-2	**19.4**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB8C-1	**176**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8C-2	**194**	<2.5	<2.5	<2.5	<2.5	<2.5	**2.8**
PTB9B-1	**270**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9B-2	**282**	<1.7	<1.7	<1.7	<1.7	**2.0**	**4.5**
PTB9C-1	**625**	<10.0	<10.0	<10.0	<10.0	<10.0	**10.0**
PTB9C-2	**745**	<3.6	<3.6	<3.6	<3.6	**5.8**	**11.3**

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTB3C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3C-2	**0.6**	<0.5	<0.5	<0.5	<0.5	**4.7**	<0.5	<0.5
PTB4A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4A-2	**1.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**
PTB4B-1	**20.9**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4B-2	**22.8**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-1	**31.5**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-2	**28.7**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5B-2	<0.5	<0.5	<0.5	<0.5	<0.5	**1.9**	<0.5	<0.5
PTB5C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5C-2	<2.5	<2.5	<2.5	<2.5	<2.5	**7.6**	<2.5	<2.5
PTB6B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6B-2	**0.6**	<0.5	<0.5	<0.5	<0.5	**2.0**	<0.5	<0.5
PTB6C-1	<10.0	<10.0	<10.0	<10.0	<10.0	**46.0**	<10.0	<10.0
PTB6C-2	<1.7	<1.7	<1.7	<1.7	<1.7	**47.1**	<1.7	<1.7
PTB7A-1	**4.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4**
PTB7A-2	**4.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4**
PTB7B-1	**70.3**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	**12.4**
PTB7B-2	**69.8**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-1	**85.4**	<1.0	<1.0	<1.0	<1.0	**2.8**	<1.0	**6.4**
PTB7C2	**87.0**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	**14.0**
PTB7C-2	**79.6**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8B-2	**1.6**	<1.0	<1.0	<1.0	<1.0	**5.8**	<1.0	<1.0
PTB8C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8C-2	**3.3**	<2.5	<2.5	<2.5	<2.5	**6.8**	<2.5	**3.1**
PTB9B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9B-2	<1.7	<1.7	<1.7	<1.7	<1.7	**3.7**	<1.7	**2.6**
PTB9C-1	<10.0	<10.0	<10.0	<10.0	<10.0	**10.1**	<10.0	<10.0
PTB9C-2	<3.6	<3.6	<3.6	<3.6	<3.6	**11.4**	<3.6	**6.4**

Sample name
PTB3C-1
PTB3C-2
PTB4A-1
PTB4A-2
PTB4B-1
PTB4B-2
PTB4C-1
PTB4C-2
PTB5A-1
PTB5A-2
PTB5B-1
PTB5B-2
PTB5C-1
PTB5C-2
PTB6B-1
PTB6B-2
PTB6C-1
PTB6C-2
PTB7A-1
PTB7A-2
PTB7B-1
PTB7B-2
PTB7C-1
PTB7C2
PTB7C-2
PTB8A-2
PTB8B-1
PTB8B-2
PTB8C-1
PTB8C-2
PTB9B-1
PTB9B-2
PTB9C-1
PTB9C-2

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)	1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTB3C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3C-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4A-2	**0.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-1	**16.0**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-2	**16.1**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5C-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB6B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6B-2	**1.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB7A-1	**3.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7A-2	**4.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7B-1	**204**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7B-2	**195**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-1	**259**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB7C2	**258**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-2	**234**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8B-2	**1.3**	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB8C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8C-2	**2.5**	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB9B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9B-2	**1.7**	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB9C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9C-2	**3.9**	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)	Styrene (µg/L)	Bromo-form (µg/L)	Isopropyl-benzene (µg/L)	Bromo-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	n-Propyl-benzene (µg/L)	Penta-chloro-ethane (µg/L)
PTB3C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3C-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4A-2	<0.5	<0.5	<0.5	<0.5	<0.5	**1.7**	<0.5	<0.5
PTB4B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5C-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB6B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6B-2	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**	<0.5	<0.5
PTB6C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB7A-1	<0.5	<0.5	<0.5	<0.5	<0.5	**1.6**	<0.5	<0.5
PTB7A-2	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4**	<0.5	<0.5
PTB7B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-1	<1.0	<1.0	<1.0	<1.0	<1.0	**1.3**	<1.0	<1.0
PTB7C2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8A-2	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**	<0.5	<0.5
PTB8B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8B-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB8C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8C-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB9B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9B-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB9C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9C-2	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)	1,2,3-Trichloro-propane (µg/L)	4-Chloro-toluene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	sec Butyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)
PTB3C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3C-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5C-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB6B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB7A-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB7C2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8B-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB8C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8C-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB9B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9B-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB9C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9C-2	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)	1,4-Dichloro-benzene (µg/L)	n-Butyl-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	Hexa-chloro-ethane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2,4-Trichloro-benzene (µg/L)
PTB3C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB3C-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB4B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB4C-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB5C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB5C-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB6B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6B-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB6C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB6C-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB7A-1	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB7B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7B-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-1	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB7C2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB7C-2	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8A-2	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTB8B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8B-2	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
PTB8C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB8C-2	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5	<2.5
PTB9B-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9B-2	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7	<1.7
PTB9C-1	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTB9C-2	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6	<3.6

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)	Naphthalene (µg/L)	1,2,3-Trichloro-benzene (µg/L)
PTB3C-1	<10.0	<10.0	<10.0
PTB3C-2	<0.5	<0.5	<0.5
PTB4A-1	<10.0	<10.0	<10.0
PTB4A-2	<0.5	<0.5	<0.5
PTB4B-1	<10.0	<10.0	<10.0
PTB4B-2	<10.0	<10.0	<10.0
PTB4C-1	<10.0	<10.0	<10.0
PTB4C-2	<10.0	<10.0	<10.0
PTB5A-1	<10.0	<10.0	<10.0
PTB5A-2	<0.5	<0.5	<0.5
PTB5B-1	<10.0	<10.0	<10.0
PTB5B-2	<0.5	<0.5	<0.5
PTB5C-1	<10.0	<10.0	<10.0
PTB5C-2	<2.5	<2.5	<2.5
PTB6B-1	<10.0	<10.0	<10.0
PTB6B-2	<0.5	<0.5	<0.5
PTB6C-1	<10.0	<10.0	<10.0
PTB6C-2	<1.7	<1.7	<1.7
PTB7A-1	<0.5	<0.5	<0.5
PTB7A-2	<0.5	<0.5	<0.5
PTB7B-1	<10.0	<10.0	<10.0
PTB7B-2	<10.0	<10.0	<10.0
PTB7C-1	<1.0	<1.0	<1.0
PTB7C2	<10.0	<10.0	<10.0
PTB7C-2	<10.0	<10.0	<10.0
PTB8A-2	<0.5	<0.5	<0.5
PTB8B-1	<10.0	<10.0	<10.0
PTB8B-2	<1.0	<1.0	<1.0
PTB8C-1	<10.0	<10.0	<10.0
PTB8C-2	<2.5	<2.5	<2.5
PTB9B-1	<10.0	<10.0	<10.0
PTB9B-2	<1.7	<1.7	<1.7
PTB9C-1	<10.0	<10.0	<10.0
PTB9C-2	<3.6	<3.6	<3.6

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Replicate	Collection date	Collection time	Dichlorodifluoromethane (µg/L)	Chloromethane (µg/L)	Vinyl chloride (µg/L)	Bromomethane (µg/L)	Chloroethane (µg/L)
	SURFACE-WATER SAMPLES							
PTV02	1	8/25/2004	1230	<100	<100	<100	<100	<100
PTV02-B	1MA	8/25/2004	1230	<10.0	<10.0	<10.0	<10.0	<10.0
PTV04	1	8/25/2004	1430	<100	<100	<100	<100	<100
PTV04-B	1MA	8/25/2004	1430	<10.0	<10.0	<10.0	<10.0	<10.0
PTV06	1	8/25/2004	1630	<100	<100	<100	<100	<100
PTV06-B	1MA	8/25/2004	1630	<10.0	<10.0	<10.0	<10.0	<10.0
PTV08	1	8/25/2004	1830	<100	<100	<100	<100	<100
PTV08-B	1MA	8/25/2004	1830	<10.0	<10.0	<10.0	<10.0	<10.0
PTV10	1	8/25/2004	2000	<100	<100	<100	<100	<100
PTV10-B	1MA	8/25/2004	2000	<10.0	<10.0	<10.0	<10.0	<10.0
PTV12	1	8/25/2004	2200	<100	<100	<100	<100	<100
PTV12-B	1MA	8/25/2004	2200	<10.0	<10.0	<10.0	<10.0	<10.0
PTV14	1	8/25/2004	2400	<100	<100	<100	<100	<100
PTV14-B	1MA	8/25/2004	2400	<10.0	<10.0	<10.0	<10.0	<10.0
PTV16	1	8/26/2004	200	<100	<100	<100	<100	<100
PTV16-B	1MA	8/26/2004	200	<10.0	<10.0	<10.0	<10.0	<10.0
PTV18	1	8/26/2004	400	<100	<100	<100	<100	<100
PTV18-B	1MA	8/26/2004	400	<10.0	<10.0	<10.0	<10.0	<10.0
PTV20	1	8/26/2004	600	<100	<100	<100	<100	<100
PTV20-B	1MA	8/26/2004	600	<10.0	<10.0	<10.0	<10.0	<10.0
PTV22	1	8/26/2004	800	<100	<100	<100	<100	<100
PTV22-B	1MA	8/26/2004	800	<10.0	<10.0	<10.0	<10.0	<10.0
PTV24	1	8/26/2004	1000	<100	<100	<100	<100	<100
PTV24-B	1MA	8/26/2004	1000	<10.0	<10.0	<10.0	<10.0	<10.0
PTV26	1	8/26/2004	1200	<100	<100	<100	<100	<100
PTV26-B	1MA	8/26/2004	1200	<10.0	<10.0	<10.0	<10.0	<10.0
PTV28	1	8/26/2004	1400	<100	<100	<100	<100	<100
PTV28-B	1MA	8/26/2004	1400	<10.0	<10.0	<10.0	<10.0	<10.0
PTV-30	1	8/26/2004	1600	<100	<100	<100	<100	<100
PTV30-B	1MA	8/26/2004	1600	<10.0	<10.0	<10.0	<10.0	<10.0
PTV32	1	8/26/2004	1800	<100	<100	<100	<100	<100
PTV32-B	1MA	8/26/2004	1800	<10.0	<10.0	<10.0	<10.0	<10.0
PTV34	1	8/26/2004	2000	<100	<100	<100	<100	<100
PTV34-B	1MA	8/26/2004	2000	<10.0	<10.0	<10.0	<10.0	<10.0
PTV36	1	8/26/2004	2200	<100	<100	<100	<100	<100
PTV36-B	1MA	8/26/2004	2200	<10.0	<10.0	<10.0	<10.0	<10.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)	1,1-Dichloro-ethene (µg/L)	Methylene chloride (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethane (µg/L)	2,2-Dichloro-propane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
PTV02	<100	<100	<100	<100	<100	<100	<100
PTV02-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV04	<100	<100	<100	<100	<100	<100	<100
PTV04-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV06	<100	<100	<100	<100	<100	<100	<100
PTV06-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV08	<100	<100	<100	<100	<100	<100	<100
PTV08-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV10	<100	<100	<100	<100	<100	<100	<100
PTV10-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV12	<100	<100	<100	<100	<100	<100	<100
PTV12-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV14	<100	<100	<100	<100	<100	<100	<100
PTV14-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV16	<100	<100	<100	<100	<100	<100	<100
PTV16-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV18	<100	<100	<100	<100	<100	<100	<100
PTV18-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV20	<100	<100	<100	<100	<100	<100	<100
PTV20-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV22	<100	<100	<100	<100	<100	<100	<100
PTV22-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV24	<100	<100	<100	<100	<100	<100	<100
PTV24-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV26	<100	<100	<100	<100	<100	<100	<100
PTV26-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV28	<100	<100	<100	<100	<100	<100	<100
PTV28-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV-30	<100	<100	<100	<100	<100	<100	<100
PTV30-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV32	<100	<100	<100	<100	<100	<100	<100
PTV32-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV34	<100	<100	<100	<100	<100	<100	<100
PTV34-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV36	<100	<100	<100	<100	<100	<100	<100
PTV36-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)	Bromo-chloro-methane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1-Dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Benzene (µg/L)	1,2-Dichloro-ethane (µg/L)
PTV02	<100	<100	<100	<100	<100	<100	<100
PTV02-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV04	<100	<100	<100	<100	<100	<100	<100
PTV04-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV06	<100	<100	<100	<100	<100	<100	<100
PTV06-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV08	<100	<100	<100	<100	<100	<100	<100
PTV08-B	**11.1**	<10.0	<10.0	<10.0	**11.0**	<10.0	<10.0
PTV10	<100	<100	<100	<100	<100	<100	<100
PTV10-B	**12.3**	<10.0	<10.0	<10.0	**10.9**	<10.0	<10.0
PTV12	<100	<100	<100	<100	<100	<100	<100
PTV12-B	**11.3**	<10.0	<10.0	<10.0	**10.4**	<10.0	<10.0
PTV14	<100	<100	<100	<100	<100	<100	<100
PTV14-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV16	<100	<100	<100	<100	<100	<100	<100
PTV16-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV18	<100	<100	<100	<100	<100	<100	<100
PTV18-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV20	<100	<100	<100	<100	<100	<100	<100
PTV20-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV22	<100	<100	<100	<100	<100	<100	<100
PTV22-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV24	<100	<100	<100	<100	<100	<100	<100
PTV24-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV26	<100	<100	<100	<100	<100	<100	<100
PTV26-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV28	<100	<100	<100	<100	<100	<100	<100
PTV28-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV-30	<100	<100	<100	<100	<100	<100	<100
PTV30-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV32	<100	<100	<100	<100	<100	<100	<100
PTV32-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV34	<100	<100	<100	<100	<100	<100	<100
PTV34-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV36	<100	<100	<100	<100	<100	<100	<100
PTV36-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTV02	<100	<100	<100	<100	<100	<100	<100	<100
PTV02-B	**12.1**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV04	<100	<100	<100	<100	<100	<100	<100	<100
PTV04-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV06	<100	<100	<100	<100	<100	<100	<100	<100
PTV06-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV08	<100	<100	<100	<100	<100	<100	<100	<100
PTV08-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV10	<100	<100	<100	<100	<100	<100	<100	<100
PTV10-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV12	<100	<100	<100	<100	<100	<100	<100	<100
PTV12-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV14	<100	<100	<100	<100	<100	<100	<100	<100
PTV14-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV16	<100	<100	<100	<100	<100	<100	<100	<100
PTV16-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV18	<100	<100	<100	<100	<100	<100	<100	<100
PTV18-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV20	<100	<100	<100	<100	<100	<100	<100	<100
PTV20-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV22	<100	<100	<100	<100	<100	<100	<100	<100
PTV22-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV24	<100	<100	<100	<100	<100	<100	<100	<100
PTV24-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV26	<100	<100	<100	<100	<100	<100	<100	<100
PTV26-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV28	<100	<100	<100	<100	<100	<100	<100	<100
PTV28-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV-30	<100	<100	<100	<100	<100	<100	<100	<100
PTV30-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV32	<100	<100	<100	<100	<100	<100	<100	<100
PTV32-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV34	<100	<100	<100	<100	<100	<100	<100	<100
PTV34-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV36	<100	<100	<100	<100	<100	<100	<100	<100
PTV36-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

Sample name
PTV02
PTV02-B
PTV04
PTV04-B
PTV06
PTV06-B
PTV08
PTV08-B
PTV10
PTV10-B
PTV12
PTV12-B
PTV14
PTV14-B
PTV16
PTV16-B
PTV18
PTV18-B
PTV20
PTV20-B
PTV22
PTV22-B
PTV24
PTV24-B
PTV26
PTV26-B
PTV28
PTV28-B
PTV-30
PTV30-B
PTV32
PTV32-B
PTV34
PTV34-B
PTV36
PTV36-B

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)	1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTV02	<100	<100	<100	<100	<100	<100	<100	<100
PTV02-B	**11.7**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV04	<100	<100	<100	<100	<100	<100	<100	<100
PTV04-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV06	<100	<100	<100	<100	<100	<100	<100	<100
PTV06-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV08	<100	<100	<100	<100	<100	<100	<100	<100
PTV08-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV10	<100	<100	<100	<100	<100	<100	<100	<100
PTV10-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV12	<100	<100	<100	<100	<100	<100	<100	<100
PTV12-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV14	<100	<100	<100	<100	<100	<100	<100	<100
PTV14-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV16	<100	<100	<100	<100	<100	<100	<100	<100
PTV16-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV18	<100	<100	<100	<100	<100	<100	<100	<100
PTV18-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV20	<100	<100	<100	<100	<100	<100	<100	<100
PTV20-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV22	<100	<100	<100	<100	<100	<100	<100	<100
PTV22-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV24	<100	<100	<100	<100	<100	<100	<100	<100
PTV24-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV26	<100	<100	<100	<100	<100	<100	<100	<100
PTV26-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV28	<100	<100	<100	<100	<100	<100	<100	<100
PTV28-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV-30	<100	<100	<100	<100	<100	<100	<100	<100
PTV30-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV32	<100	<100	<100	<100	<100	<100	<100	<100
PTV32-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV34	<100	<100	<100	<100	<100	<100	<100	<100
PTV34-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV36	<100	<100	<100	<100	<100	<100	<100	<100
PTV36-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)	Styrene (µg/L)	Bromo-form (µg/L)	Isopropyl-benzene (µg/L)	Bromo-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	n-Propyl-benzene (µg/L)	Penta-chloro-ethane (µg/L)
PTV02	<100	<100	<100	<100	<100	<100	<100	<100
PTV02-B	<10.0	<10.0	<10.0	<10.0	<10.0	**15.5**	<10.0	<10.0
PTV04	<100	<100	<100	<100	<100	<100	<100	<100
PTV04-B	<10.0	<10.0	<10.0	<10.0	<10.0	**18.3**	<10.0	<10.0
PTV06	<100	<100	<100	<100	<100	<100	<100	<100
PTV06-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV08	<100	<100	<100	<100	<100	<100	<100	<100
PTV08-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV10	<100	<100	<100	<100	<100	<100	<100	<100
PTV10-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV12	<100	<100	<100	<100	<100	<100	<100	<100
PTV12-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV14	<100	<100	<100	<100	<100	<100	<100	<100
PTV14-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV16	<100	<100	<100	<100	<100	<100	<100	<100
PTV16-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV18	<100	<100	<100	<100	<100	<100	<100	<100
PTV18-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV20	<100	<100	<100	<100	<100	<100	<100	<100
PTV20-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV22	<100	<100	<100	<100	<100	<100	<100	<100
PTV22-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV24	<100	<100	<100	<100	<100	<100	<100	<100
PTV24-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV26	<100	<100	<100	<100	<100	<100	<100	<100
PTV26-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV28	<100	<100	<100	<100	<100	<100	<100	<100
PTV28-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV-30	<100	<100	<100	<100	<100	<100	<100	<100
PTV30-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV32	<100	<100	<100	<100	<100	<100	<100	<100
PTV32-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV34	<100	<100	<100	<100	<100	<100	<100	<100
PTV34-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV36	<100	<100	<100	<100	<100	<100	<100	<100
PTV36-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)	1,2,3-Trichloro-propane (µg/L)	4-Chloro-toluene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	sec Butyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)
PTV02	<100	<100	<100	<100	<100	<100	<100	<100
PTV02-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV04	<100	<100	<100	<100	<100	<100	<100	<100
PTV04-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV06	<100	<100	<100	<100	<100	<100	<100	<100
PTV06-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV08	<100	<100	<100	<100	<100	<100	<100	<100
PTV08-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV10	<100	<100	<100	<100	<100	<100	<100	<100
PTV10-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV12	<100	<100	<100	<100	<100	<100	<100	<100
PTV12-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV14	<100	<100	<100	<100	<100	<100	<100	<100
PTV14-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV16	<100	<100	<100	<100	<100	<100	<100	<100
PTV16-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV18	<100	<100	<100	<100	<100	<100	<100	<100
PTV18-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV20	<100	<100	<100	<100	<100	<100	<100	<100
PTV20-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV22	<100	<100	<100	<100	<100	<100	<100	<100
PTV22-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV24	<100	<100	<100	<100	<100	<100	<100	<100
PTV24-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV26	<100	<100	<100	<100	<100	<100	<100	<100
PTV26-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV28	<100	<100	<100	<100	<100	<100	<100	<100
PTV28-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV-30	<100	<100	<100	<100	<100	<100	<100	<100
PTV30-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV32	<100	<100	<100	<100	<100	<100	<100	<100
PTV32-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV34	<100	<100	<100	<100	<100	<100	<100	<100
PTV34-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV36	<100	<100	<100	<100	<100	<100	<100	<100
PTV36-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)	1,4-Dichloro-benzene (µg/L)	n-Butyl-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	Hexa-chloro-ethane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2,4-Trichloro-benzene (µg/L)
PTV02	<100	<100	<100	<100	<100	<100	<100
PTV02-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV04	<100	<100	<100	<100	<100	<100	<100
PTV04-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV06	<100	<100	<100	<100	<100	<100	<100
PTV06-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV08	<100	<100	<100	<100	<100	<100	<100
PTV08-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV10	<100	<100	<100	<100	<100	<100	<100
PTV10-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV12	<100	<100	<100	<100	<100	<100	<100
PTV12-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV14	<100	<100	<100	<100	<100	<100	<100
PTV14-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV16	<100	<100	<100	<100	<100	<100	<100
PTV16-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV18	<100	<100	<100	<100	<100	<100	<100
PTV18-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV20	<100	<100	<100	<100	<100	<100	<100
PTV20-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV22	<100	<100	<100	<100	<100	<100	<100
PTV22-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV24	<100	<100	<100	<100	<100	<100	<100
PTV24-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV26	<100	<100	<100	<100	<100	<100	<100
PTV26-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV28	<100	<100	<100	<100	<100	<100	<100
PTV28-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV-30	<100	<100	<100	<100	<100	<100	<100
PTV30-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV32	<100	<100	<100	<100	<100	<100	<100
PTV32-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV34	<100	<100	<100	<100	<100	<100	<100
PTV34-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV36	<100	<100	<100	<100	<100	<100	<100
PTV36-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)	Naphthalene (µg/L)	1,2,3-Trichloro-benzene (µg/L)
PTV02	<100	<100	<100
PTV02-B	<10.0	<10.0	<10.0
PTV04	<100	<100	<100
PTV04-B	<10.0	<10.0	<10.0
PTV06	<100	<100	<100
PTV06-B	<10.0	<10.0	<10.0
PTV08	<100	<100	<100
PTV08-B	<10.0	<10.0	<10.0
PTV10	<100	<100	<100
PTV10-B	<10.0	<10.0	<10.0
PTV12	<100	<100	<100
PTV12-B	<10.0	<10.0	<10.0
PTV14	<100	<100	<100
PTV14-B	<10.0	<10.0	<10.0
PTV16	<100	<100	<100
PTV16-B	<10.0	<10.0	<10.0
PTV18	<100	<100	<100
PTV18-B	<10.0	<10.0	<10.0
PTV20	<100	<100	<100
PTV20-B	<10.0	<10.0	<10.0
PTV22	<100	<100	<100
PTV22-B	<10.0	<10.0	<10.0
PTV24	<100	<100	<100
PTV24-B	<10.0	<10.0	<10.0
PTV26	<100	<100	<100
PTV26-B	<10.0	<10.0	<10.0
PTV28	<100	<100	<100
PTV28-B	<10.0	<10.0	<10.0
PTV-30	<100	<100	<100
PTV30-B	<10.0	<10.0	<10.0
PTV32	<100	<100	<100
PTV32-B	<10.0	<10.0	<10.0
PTV34	<100	<100	<100
PTV34-B	<10.0	<10.0	<10.0
PTV36	<100	<100	<100
PTV36-B	<10.0	<10.0	<10.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)	Chloro-methane (µg/L)	Vinyl chloride (µg/L)	Bromo-methane (µg/L)	Chloro-ethane (µg/L)
PTV38	1	8/26/2004	2400	<100	<100	<100	<100	<100
PTV38-B	1MA	8/26/2004	2400	<10.0	<10.0	<10.0	<10.0	<10.0
PTV40	1	8/27/2004	200	<100	<100	<100	<100	<100
PTV40-B	1MA	8/27/2004	200	<10.0	<10.0	<10.0	<10.0	<10.0
PTV42	1	8/27/2004	400	<100	<100	<100	<100	<100
PTV42-B	1MA	8/27/2004	400	<10.0	<10.0	<10.0	<10.0	<10.0
PTV44	1	8/27/2004	600	<100	<100	<100	<100	<100
PTV44-B	1MA	8/27/2004	600	<10.0	<10.0	<10.0	<10.0	<10.0
PTV46	1	8/27/2004	800	<100	<100	<100	<100	<100
PTV46-B	1MA	8/27/2004	800	<10.0	<10.0	<10.0	<10.0	<10.0
PTV48	1	8/27/2004	1000	<100	<100	<100	<100	<100
PTV48-B	1MA	8/27/2004	1000	<10.0	<10.0	<10.0	<10.0	<10.0
PTV02	1	10/25/2004	815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV02	1MA	10/25/2004	815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV04	1	10/25/2004	1015	<0.5	<0.5	<0.5	<0.5	<0.5
PTV06	1	10/25/2004	1215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV08	1	10/25/2004	1415	<0.5	<0.5	<0.5	<0.5	<0.5
PTV10	1	10/25/2004	1615	<0.5	<0.5	<0.5	<0.5	<0.5
PTV12	1	10/25/2004	1815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV14	1	10/25/2004	2015	<0.5	<0.5	<0.5	<0.5	<0.5
PTV16	1	10/25/2004	2215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV18	1	10/26/2004	15	<0.5	<0.5	<0.5	<0.5	<0.5
PTV20	1	10/26/2004	215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV22	1	10/26/2004	415	<0.5	<0.5	<0.5	<0.5	<0.5
PTV24	1	10/26/2004	615	<0.5	<0.5	<0.5	<0.5	<0.5
PTV26	1	10/26/2004	815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV28	1	10/26/2004	1015	<0.5	<0.5	<0.5	<0.5	<0.5
PTV30	1	10/26/2004	1215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV32	1	10/26/2004	1415	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	1	10/26/2004	1615	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	1	10/26/2004	1815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	1	10/26/2004	2015	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	1MA	10/26/2004	1615	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	1	10/26/2004	2215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	1MA	10/26/2004	2215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV42	1	10/27/2004	15	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)	1,1-Dichloro-ethene (µg/L)	Methylene chloride (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethane (µg/L)	2,2-Dichloro-propane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
PTV38	<100	<100	<100	<100	<100	<100	<100
PTV38-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV40	<100	<100	<100	<100	<100	<100	<100
PTV40-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV42	<100	<100	<100	<100	<100	<100	<100
PTV42-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV44	<100	<100	<100	<100	<100	<100	<100
PTV44-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV46	<100	<100	<100	<100	<100	<100	<100
PTV46-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV48	<100	<100	<100	<100	<100	<100	<100
PTV48-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV28	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)	Bromo-chloro-methane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1-Dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Benzene (µg/L)	1,2-Dichloro-ethane (µg/L)
PTV38	<100	<100	<100	<100	<100	<100	<100
PTV38-B	**12.8**	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV40	<100	<100	<100	<100	<100	<100	<100
PTV40-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV42	<100	<100	<100	<100	<100	<100	<100
PTV42-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV44	<100	<100	<100	<100	<100	<100	<100
PTV44-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV46	<100	<100	<100	<100	<100	<100	<100
PTV46-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV48	<100	<100	<100	<100	<100	<100	<100
PTV48-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV02	**2.2**	<0.5	<0.5	<0.5	**2.3**	<0.5	<0.5
PTV02	**2.4**	<0.5	<0.5	<0.5	**1.9**	<0.5	<0.5
PTV04	**1.8**	<0.5	<0.5	<0.5	**1.6**	<0.5	<0.5
PTV06	**2.1**	<0.5	<0.5	<0.5	**2.1**	<0.5	<0.5
PTV08	**2.8**	<0.5	<0.5	<0.5	**2.8**	<0.5	<0.5
PTV10	**2.7**	<0.5	<0.5	<0.5	**2.5**	<0.5	<0.5
PTV12	**1.0**	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5
PTV14	**1.8**	<0.5	<0.5	<0.5	**1.4**	<0.5	<0.5
PTV16	**1.8**	<0.5	<0.5	<0.5	**1.6**	<0.5	<0.5
PTV18	**1.9**	<0.5	<0.5	<0.5	**1.7**	<0.5	<0.5
PTV20	**2.0**	<0.5	<0.5	<0.5	**2.2**	<0.5	<0.5
PTV22	**2.2**	<0.5	<0.5	<0.5	**2.6**	<0.5	<0.5
PTV24	**1.3**	<0.5	<0.5	<0.5	**1.3**	<0.5	<0.5
PTV26	**2.5**	<0.5	<0.5	<0.5	**2.5**	<0.5	<0.5
PTV28	**2.3**	<0.5	<0.5	<0.5	**2.1**	<0.5	<0.5
PTV30	**2.3**	<0.5	<0.5	<0.5	**2.0**	<0.5	<0.5
PTV32	**2.3**	<0.5	<0.5	<0.5	**2.7**	<0.5	<0.5
PTV34	**3.0**	<0.5	<0.5	<0.5	**3.4**	<0.5	<0.5
PTV36	**1.9**	<0.5	<0.5	<0.5	**1.9**	<0.5	<0.5
PTV38	**1.0**	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5
PTV38	**1.2**	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5
PTV40	**1.9**	<0.5	<0.5	<0.5	**1.9**	<0.5	<0.5
PTV40	**1.9**	<0.5	<0.5	<0.5	**1.7**	<0.5	<0.5
PTV42	**2.6**	<0.5	<0.5	<0.5	**2.5**	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTV38	<100	<100	<100	<100	<100	<100	<100	<100
PTV38-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV40	<100	<100	<100	<100	<100	<100	<100	<100
PTV40-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV42	<100	<100	<100	<100	<100	<100	<100	<100
PTV42-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV44	<100	<100	<100	<100	<100	<100	<100	<100
PTV44-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV46	<100	<100	<100	<100	<100	<100	<100	<100
PTV46-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV48	<100	<100	<100	<100	<100	<100	<100	<100
PTV48-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV28	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	**0.5 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Sample name
PTV38
PTV38-B
PTV40
PTV40-B
PTV42
PTV42-B
PTV44
PTV44-B
PTV46
PTV46-B
PTV48
PTV48-B
PTV02
PTV02
PTV04
PTV06
PTV08
PTV10
PTV12
PTV14
PTV16
PTV18
PTV20
PTV22
PTV24
PTV26
PTV28
PTV30
PTV32
PTV34
PTV36
PTV38
PTV38
PTV40
PTV40
PTV42

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)	1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTV38	<100	<100	<100	<100	<100	<100	<100	<100
PTV38-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV40	<100	<100	<100	<100	<100	<100	<100	<100
PTV40-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV42	<100	<100	<100	<100	<100	<100	<100	<100
PTV42-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV44	<100	<100	<100	<100	<100	<100	<100	<100
PTV44-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV46	<100	<100	<100	<100	<100	<100	<100	<100
PTV46-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV48	<100	<100	<100	<100	<100	<100	<100	<100
PTV48-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV08	**0.5 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV10	**0.5 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV26	**0.5 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV28	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV32	**0.5 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	**0.6 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV42	**0.5 B**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)	Styrene (µg/L)	Bromo-form (µg/L)	Isopropyl-benzene (µg/L)	Bromo-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)		n-Propyl-benzene (µg/L)	Penta-chloro-ethane (µg/L)
PTV38	<100	<100	<100	<100	<100	**150**		<100	<100
PTV38-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	<10.0
PTV40	<100	<100	<100	<100	<100	<100		<100	<100
PTV40-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	<10.0
PTV42	<100	<100	<100	<100	<100	<100		<100	<100
PTV42-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	<10.0
PTV44	<100	<100	<100	<100	<100	<100		<100	<100
PTV44-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	<10.0
PTV46	<100	<100	<100	<100	<100	<100		<100	<100
PTV46-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	<10.0
PTV48	<100	<100	<100	<100	<100	<100		<100	<100
PTV48-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0		<10.0	<10.0
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<10.0
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<10.0
PTV04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<10.0
PTV06	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	**B**	<0.5	<10.0
PTV08	<0.5	<0.5	<0.5	<0.5	<0.5	**0.9**	**B**	<0.5	<10.0
PTV10	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	**B**	<0.5	<10.0
PTV12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<10.0
PTV14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<10.0
PTV16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<10.0
PTV18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<10.0
PTV20	<0.5	<0.5	<0.5	<0.5	<0.5	**1.0**	**B**	<0.5	<10.0
PTV22	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4**	**B**	<0.5	<10.0
PTV24	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**	**B**	<0.5	<10.0
PTV26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<10.0
PTV28	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	**B**	<0.5	<10.0
PTV30	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	**B**	<0.5	<10.0
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	**1.7**	**B**	<0.5	<10.0
PTV34	<0.5	<0.5	<0.5	<0.5	<0.5	**2.1**	**B**	<0.5	<10.0
PTV36	<0.5	<0.5	<0.5	<0.5	<0.5	**1.3**	**B**	<0.5	<10.0
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	**B**	<0.5	<10.0
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	**B**	<0.5	<10.0
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	**B**	<0.5	<10.0
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	**0.5**	**B**	<0.5	<10.0
PTV42	<0.5	<0.5	<0.5	<0.5	<0.5	**1.0**	**B**	<0.5	<10.0

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)	1,2,3-Trichloro-propane (µg/L)	4-Chloro-toluene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	sec Butyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)
PTV38	<100	<100	<100	<100	<100	<100	<100	<100
PTV38-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV40	<100	<100	<100	<100	<100	<100	<100	<100
PTV40-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV42	<100	<100	<100	<100	<100	<100	<100	<100
PTV42-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV44	<100	<100	<100	<100	<100	<100	<100	<100
PTV44-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV46	<100	<100	<100	<100	<100	<100	<100	<100
PTV46-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV48	<100	<100	<100	<100	<100	<100	<100	<100
PTV48-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV28	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)	1,4-Dichloro-benzene (µg/L)	n-Butyl-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	Hexa-chloro-ethane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2,4-Trichloro-benzene (µg/L)
PTV38	<100	<100	<100	<100	<100	<100	<100
PTV38-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV40	<100	<100	<100	<100	<100	<100	<100
PTV40-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV42	<100	<100	<100	<100	<100	<100	<100
PTV42-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV44	<100	<100	<100	<100	<100	<100	<100
PTV44-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV46	<100	<100	<100	<100	<100	<100	<100
PTV46-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV48	<100	<100	<100	<100	<100	<100	<100
PTV48-B	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0	<10.0
PTV02	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV02	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV04	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV06	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV08	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV10	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV12	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV14	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV16	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV18	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV20	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV22	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV24	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV26	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV28	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV30	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV32	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5
PTV42	<0.5	<0.5	<0.5	<0.5	<10.0	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)	Naphthalene (µg/L)	1,2,3-Trichloro-benzene (µg/L)
PTV38	<100	<100	<100
PTV38-B	<10.0	<10.0	<10.0
PTV40	<100	<100	<100
PTV40-B	<10.0	<10.0	<10.0
PTV42	<100	<100	<100
PTV42-B	<10.0	<10.0	<10.0
PTV44	<100	<100	<100
PTV44-B	<10.0	<10.0	<10.0
PTV46	<100	<100	<100
PTV46-B	<10.0	<10.0	<10.0
PTV48	<100	<100	<100
PTV48-B	<10.0	<10.0	<10.0
PTV02	<0.5	<0.5	<0.5
PTV02	<0.5	<0.5	<0.5
PTV04	<0.5	<0.5	<0.5
PTV06	<0.5	<0.5	<0.5
PTV08	<0.5	<0.5	<0.5
PTV10	<0.5	<0.5	<0.5
PTV12	<0.5	<0.5	<0.5
PTV14	<0.5	<0.5	<0.5
PTV16	<0.5	<0.5	<0.5
PTV18	<0.5	<0.5	<0.5
PTV20	<0.5	<0.5	<0.5
PTV22	<0.5	<0.5	<0.5
PTV24	<0.5	<0.5	<0.5
PTV26	<0.5	<0.5	<0.5
PTV28	<0.5	<0.5	<0.5
PTV30	<0.5	<0.5	<0.5
PTV32	<0.5	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5
PTV38	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5
PTV40	<0.5	<0.5	<0.5
PTV42	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)		Chloro-methane (µg/L)		Vinyl chloride (µg/L)		Bromo-methane (µg/L)		Chloro-ethane (µg/L)	
PTV42	1MA	10/27/2004	15	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV44	1	10/27/2004	215	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV46	1	10/27/2004	415	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV48	1	10/27/2004	615	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV-02	1MA	11/11/2004	1015	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-04	1MA	11/11/2004	1215	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-06	1MA	11/11/2004	1415	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-08	1MA	11/11/2004	1615	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-10	1MA	11/11/2004	1815	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-12	1MA	11/11/2004	2015	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-14	1MA	11/11/2004	2215	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-16	1MA	11/12/2004	15	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-18	1MA	11/12/2004	215	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-20	1MA	11/12/2004	415	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-22	1MA	11/12/2004	615	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-24	1MA	11/12/2004	815	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-26	1MA	11/12/2004	1015	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-28	1MA	11/12/2004	1215	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-30	1MA	11/12/2004	1415	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-32	1MA	11/12/2004	1615	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-34	1MA	11/12/2004	1815	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-36	1MA	11/12/2004	2015	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-38	1MA	11/12/2004	2215	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV02	1	11/30/2004	1345	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV04	1	11/30/2004	1545	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV06	1	11/30/2004	1745	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV08	1	11/30/2004	1945	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV10	1	11/30/2004	2145	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV14	1	12/1/2004	145	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV16	1	12/1/2004	345	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV18	1	12/1/2004	545	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV20	1	12/1/2004	745	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV22	1	12/1/2004	945	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV24	1	12/1/2004	1145	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV26	1	12/1/2004	1345	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV28	1	12/1/2004	1545	<0.5		<0.5		<0.5		<0.5		<0.5	
PTV30	1	12/1/2004	1745	<0.5		<0.5		<0.5		<0.5		<0.5	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)		1,1-Dichloro-ethene (µg/L)		Methylene chloride (µg/L)		trans-1,2-Dichloro-ethene (µg/L)		1,1-Dichloro-ethane (µg/L)		2,2-Dichloro-propane (µg/L)		cis-1,2-Dichloro-ethene (µg/L)	
PTV42	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV44	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV46	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV48	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV-02	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-04	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-06	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	**1.0**	x
PTV-08	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	**0.8**	x
PTV-10	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-12	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-14	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-16	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-18	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-20	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	**0.5**	x
PTV-22	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	**0.6**	x
PTV-24	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	**0.5**	x
PTV-26	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-28	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-30	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-32	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	**0.6**	x
PTV-34	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	**0.7**	x
PTV-36	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-38	<0.5	x	<0.5	x	<10.0	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV02	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV04	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV06	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV08	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		**0.6**	
PTV10	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV14	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV16	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV18	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV20	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV22	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV24	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV26	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV28	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV30	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)		Bromo-chloro-methane (µg/L)		1,1,1-Trichloro-ethane (µg/L)		1,1-Dichloro-propene (µg/L)		Carbon tetra-chloride (µg/L)		Benzene (µg/L)		1,2-Dichloro-ethane (µg/L)	
PTV42	**2.5**		<0.5		<0.5		<0.5		**2.4**		<0.5		<0.5	
PTV44	**3.2**		<0.5		<0.5		<0.5		**3.4**		<0.5		<0.5	
PTV46	**4.2**		<0.5		<0.5		<0.5		**4.7**		<0.5		<0.5	
PTV48	**3.5**		<0.5		<0.5		<0.5		**3.1**		<0.5		<0.5	
PTV-02	**11.9**	x	<0.5	x	<0.5	x	<0.5	x	**8.8**	x	<0.5	x	<0.5	x
PTV-04	**13.5**	x	<0.5	x	<0.5	x	<0.5	x	**10.2**	x	<0.5	x	<0.5	x
PTV-06	**63.4**	x	<0.5	x	<0.5	x	<0.5	x	**56.3**	x	<0.5	x	<0.5	x
PTV-08	**26.2**	x	<0.5	x	<0.5	x	<0.5	x	**22.0**	x	<0.5	x	<0.5	x
PTV-10	**4.4**	x	<0.5	x	<0.5	x	<0.5	x	**3.6**	x	<0.5	x	<0.5	x
PTV-12	**1.3**	x	<0.5	x	<0.5	x	<0.5	x	**1.0**	x	<0.5	x	<0.5	x
PTV-14	**1.5**	x	<0.5	x	<0.5	x	<0.5	x	**1.2**	x	<0.5	x	<0.5	x
PTV-16	**3.6**	x	<0.5	x	<0.5	x	<0.5	x	**2.6**	x	<0.5	x	<0.5	x
PTV-18	**9.0**	x	<0.5	x	<0.5	x	<0.5	x	**6.5**	x	<0.5	x	<0.5	x
PTV-20	**16.6**	x	<0.5	x	<0.5	x	<0.5	x	**12.4**	x	<0.5	x	<0.5	x
PTV-22	**6.9**	x	<0.5	x	<0.5	x	<0.5	x	**4.9**	x	<0.5	x	<0.5	x
PTV-24	**3.1**	x	<0.5	x	<0.5	x	<0.5	x	**2.0**	x	<0.5	x	<0.5	x
PTV-26	**5.4**	x	<0.5	x	<0.5	x	<0.5	x	**3.7**	x	<0.5	x	<0.5	x
PTV-28	**10.2**	x	<0.5	x	<0.5	x	<0.5	x	**8.1**	x	<0.5	x	<0.5	x
PTV-30	**16.6**	x	<0.5	x	<0.5	x	<0.5	x	**13.3**	x	<0.5	x	<0.5	x
PTV-32	**22.3**	x	<0.5	x	<0.5	x	<0.5	x	**19.5**	x	<0.5	x	<0.5	x
PTV-34	**6.8**	x	<0.5	x	<0.5	x	<0.5	x	**5.3**	x	<0.5	x	<0.5	x
PTV-36	**1.5**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-38	**1.6**	x	<0.5	x	<0.5	x	<0.5	x	**1.1**	x	<0.5	x	<0.5	x
PTV02	**6.8**		<0.5		<0.5		<0.5		**6.3**		<0.5		<0.5	
PTV04	**8.1**		<0.5		<0.5		<0.5		**7.4**		<0.5		<0.5	
PTV06	**8.2**		<0.5		<0.5		<0.5		**7.4**		<0.5		<0.5	
PTV08	**3.8**		<0.5		<0.5		<0.5		**3.1**		<0.5		<0.5	
PTV10	**1.2**		<0.5		<0.5		<0.5		**0.9**		<0.5		<0.5	
PTV14	**3.9**		<0.5		<0.5		<0.5		**3.3**		<0.5		<0.5	
PTV16	**3.5**		<0.5		<0.5		<0.5		**2.7**		<0.5		<0.5	
PTV18	**3.2**		<0.5		<0.5		<0.5		**2.8**		<0.5		<0.5	
PTV20	**3.2**		<0.5		<0.5		<0.5		**2.7**		<0.5		<0.5	
PTV22	**1.1**		<0.5		<0.5		<0.5		**0.8**		<0.5		<0.5	
PTV24	**1.5**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV26	**2.0**		<0.5		<0.5		<0.5		**1.8**		<0.5		<0.5	
PTV28	**1.4**		<0.5		<0.5		<0.5		**1.3**		<0.5		<0.5	
PTV30	**1.6**		<0.5		<0.5		<0.5		**1.6**		<0.5		<0.5	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)		1,2-Dichloro-propane (µg/L)		Bromo-dichloro-methane (µg/L)		Dibromo-methane (µg/L)		cis-1,3-Dichloro-propene (µg/L)		Toluene (µg/L)		trans-1,3-dichloro-propene (µg/L)		1,1,2-Trichloro-ethane (µg/L)
PTV42	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV44	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV46	**0.5**	**B**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV48	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV-02	**1.0**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-04	**1.0**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-06	**2.6**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-08	**1.7**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-10	**0.8**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-12	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-14	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-16	**0.6**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-18	**0.8**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-20	**1.4**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-22	**1.0**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-24	**0.6**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-26	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-28	**1.2**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-30	**1.3**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-32	**1.9**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-34	**1.3**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-36	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV-38	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5
PTV02	**0.8**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV04	**0.8**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV06	**0.9**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV08	**0.8**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV10	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV14	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV16	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV18	**0.6**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV20	**0.7**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV22	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV24	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV26	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV28	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5
PTV30	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5

Sample name	
PTV42	
PTV44	
PTV46	
PTV48	
PTV-02	x
PTV-04	x
PTV-06	x
PTV-08	x
PTV-10	x
PTV-12	x
PTV-14	x
PTV-16	x
PTV-18	x
PTV-20	x
PTV-22	x
PTV-24	x
PTV-26	x
PTV-28	x
PTV-30	x
PTV-32	x
PTV-34	x
PTV-36	x
PTV-38	x
PTV02	
PTV04	
PTV06	
PTV08	
PTV10	
PTV14	
PTV16	
PTV18	
PTV20	
PTV22	
PTV24	
PTV26	
PTV28	
PTV30	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)		1,3-Dichloro-propane (µg/L)		Dibromo-chloro-methane (µg/L)		1,2-Dibromo-ethane (µg/L)		Chloro-benzene (µg/L)		1,1,1,2-Tetrachloro-ethane (µg/L)		Ethyl benzene (µg/L)		m,p,-Xylenes (µg/L)	
PTV42	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV44	**0.5**	**B**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV46	**0.7**	**B**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV48	**0.6**	**B**	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV-02	**2.1**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-04	**2.4**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-06	**8.5**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-08	**4.5**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-10	**1.4**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-12	**1.1**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-14	**0.9**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-16	**1.2**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-18	**1.8**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-20	**3.6**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-22	**1.7**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-24	**1.3**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-26	**1.4**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-28	**2.3**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-30	**2.9**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-32	**4.4**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-34	**1.7**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-36	**1.1**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-38	**1.3**	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV02	**1.3**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV04	**1.4**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV06	**1.6**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV08	**0.8**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV10	**0.5**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV14	**1.1**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV16	**1.2**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV18	**1.3**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV20	**1.0**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV22	**0.8**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV24	**0.7**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV26	**0.9**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV28	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV30	**0.6**		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)		Styrene (µg/L)		Bromo-form (µg/L)		Isopropyl-benzene (µg/L)		Bromo-benzene (µg/L)		1,1,2,2-Tetrachloro-ethane (µg/L)		n-Propyl-benzene (µg/L)		Penta-chloro-ethane (µg/L)	
PTV42	<0.5		<0.5		<0.5		<0.5		<0.5		**0.9**	**B**	<0.5		<10.0	
PTV44	<0.5		<0.5		<0.5		<0.5		<0.5		**2.0**	**B**	<0.5		<10.0	
PTV46	<0.5		<0.5		<0.5		<0.5		<0.5		**2.9**	**B**	<0.5		<10.0	
PTV48	<0.5		<0.5		<0.5		<0.5		<0.5		**2.3**	**B**	<0.5		<10.0	
PTV-02	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**3.4**	x	<0.5	x	<0.5	x
PTV-04	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**4.3**	x	<0.5	x	<0.5	x
PTV-06	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**5.2**	x	<0.5	x	**0.6**	x
PTV-08	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**4.3**	x	<0.5	x	<0.5	x
PTV-10	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**2.8**	x	<0.5	x	<0.5	x
PTV-12	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**1.1**	x	<0.5	x	<0.5	x
PTV-14	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**0.8**	x	<0.5	x	<0.5	x
PTV-16	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**2.1**	x	<0.5	x	<0.5	x
PTV-18	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**3.5**	x	<0.5	x	<0.5	x
PTV-20	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**3.7**	x	<0.5	x	<0.5	x
PTV-22	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**3.6**	x	<0.5	x	<0.5	x
PTV-24	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**2.5**	x	<0.5	x	<0.5	x
PTV-26	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**3.0**	x	<0.5	x	<0.5	x
PTV-28	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**3.8**	x	<0.5	x	<0.5	x
PTV-30	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**4.1**	x	<0.5	x	<0.5	x
PTV-32	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**4.2**	x	<0.5	x	<0.5	x
PTV-34	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**4.0**	x	<0.5	x	<0.5	x
PTV-36	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**1.5**	x	<0.5	x	<0.5	x
PTV-38	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**0.6**	x	<0.5	x	<0.5	x
PTV02	<0.5		<0.5		<0.5		<0.5		<0.5		**2.8**		<0.5		<0.5	
PTV04	<0.5		<0.5		<0.5		<0.5		<0.5		**2.9**		<0.5		<0.5	
PTV06	<0.5		<0.5		<0.5		<0.5		<0.5		**2.9**		<0.5		<0.5	
PTV08	<0.5		<0.5		<0.5		<0.5		<0.5		**2.8**		<0.5		<0.5	
PTV10	<0.5		<0.5		<0.5		<0.5		<0.5		**0.9**		<0.5		<0.5	
PTV14	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV16	<0.5		<0.5		<0.5		<0.5		<0.5		**0.7**		<0.5		<0.5	
PTV18	<0.5		<0.5		<0.5		<0.5		<0.5		**1.5**		<0.5		<0.5	
PTV20	<0.5		<0.5		<0.5		<0.5		<0.5		**2.0**		<0.5		<0.5	
PTV22	<0.5		<0.5		<0.5		<0.5		<0.5		**0.9**		<0.5		<0.5	
PTV24	<0.5		<0.5		<0.5		<0.5		<0.5		**0.7**		<0.5		<0.5	
PTV26	<0.5		<0.5		<0.5		<0.5		<0.5		**1.1**		<0.5		<0.5	
PTV28	<0.5		<0.5		<0.5		<0.5		<0.5		**0.8**		<0.5		<0.5	
PTV30	<0.5		<0.5		<0.5		<0.5		<0.5		**0.7**		<0.5		<0.5	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)		1,2,3-Trichloro-propane (µg/L)		4-Chloro-toluene (µg/L)		1,3,5-Trimethyl-benzene (µg/L)		tert-Butyl-benzene (µg/L)		1,2,4-Trimethyl-benzene (µg/L)		sec Butyl-benzene (µg/L)		1,3-Dichloro-benzene (µg/L)	
PTV42	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV44	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV46	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV48	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV-02	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-04	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-06	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-08	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-10	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-12	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-14	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-16	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-18	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-20	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-22	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-24	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-26	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-28	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-30	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-32	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-34	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-36	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-38	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV02	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV04	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV06	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV08	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV10	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV14	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV16	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV18	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV20	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV22	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV24	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV26	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV28	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV30	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)		1,4-Dichloro-benzene (µg/L)		n-Butyl-benzene (µg/L)		1,2-Dichloro-benzene (µg/L)		Hexa-chloro-ethane (µg/L)		1,2-Dibromo-3-chloro-propane (µg/L)		1,2,4-Trichloro-benzene (µg/L)	
PTV42	<0.5		<0.5		<0.5		<0.5		<10.0		<0.5		<0.5	
PTV44	<0.5		<0.5		<0.5		<0.5		<10.0		<0.5		<0.5	
PTV46	<0.5		<0.5		<0.5		<0.5		<10.0		<0.5		<0.5	
PTV48	<0.5		<0.5		<0.5		<0.5		<10.0		<0.5		<0.5	
PTV-02	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-04	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**1.1**	x	<0.5	x	<0.5	x
PTV-06	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**6.7**	x	<0.5	x	<0.5	x
PTV-08	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**2.8**	x	<0.5	x	<0.5	x
PTV-10	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-12	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-14	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-16	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-18	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**0.7**	x	<0.5	x	<0.5	x
PTV-20	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**1.2**	x	<0.5	x	<0.5	x
PTV-22	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**0.5**	x	<0.5	x	<0.5	x
PTV-24	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-26	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-28	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**0.8**	x	<0.5	x	<0.5	x
PTV-30	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**1.2**	x	<0.5	x	<0.5	x
PTV-32	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**2.0**	x	<0.5	x	<0.5	x
PTV-34	<0.5	x	<0.5	x	<0.5	x	<0.5	x	**0.5**	x	<0.5	x	<0.5	x
PTV-36	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV-38	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x	<0.5	x
PTV02	<0.5		<0.5		<0.5		<0.5		**0.6**		<0.5		<0.5	
PTV04	<0.5		<0.5		<0.5		<0.5		**0.7**		<0.5		<0.5	
PTV06	<0.5		<0.5		<0.5		<0.5		**0.6**		<0.5		<0.5	
PTV08	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV10	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV14	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV16	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV18	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV20	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV22	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV24	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV26	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV28	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	
PTV30	<0.5		<0.5		<0.5		<0.5		<0.5		<0.5		<0.5	

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)		Naphthalene (µg/L)		1,2,3-Trichloro-benzene (µg/L)
PTV42	<0.5		<0.5		<0.5
PTV44	<0.5		<0.5		<0.5
PTV46	<0.5		<0.5		<0.5
PTV48	<0.5		<0.5		<0.5
PTV-02	<0.5	x	<0.5	x	<0.5
PTV-04	<0.5	x	<0.5	x	<0.5
PTV-06	<0.5	x	<0.5	x	<0.5
PTV-08	<0.5	x	<0.5	x	<0.5
PTV-10	<0.5	x	<0.5	x	<0.5
PTV-12	<0.5	x	<0.5	x	<0.5
PTV-14	<0.5	x	<0.5	x	<0.5
PTV-16	<0.5	x	<0.5	x	<0.5
PTV-18	<0.5	x	<0.5	x	<0.5
PTV-20	<0.5	x	<0.5	x	<0.5
PTV-22	<0.5	x	<0.5	x	<0.5
PTV-24	<0.5	x	<0.5	x	<0.5
PTV-26	<0.5	x	<0.5	x	<0.5
PTV-28	<0.5	x	<0.5	x	<0.5
PTV-30	<0.5	x	<0.5	x	<0.5
PTV-32	<0.5	x	<0.5	x	<0.5
PTV-34	<0.5	x	<0.5	x	<0.5
PTV-36	<0.5	x	<0.5	x	<0.5
PTV-38	<0.5	x	<0.5	x	<0.5
PTV02	<0.5		<0.5		<0.5
PTV04	<0.5		<0.5		<0.5
PTV06	<0.5		<0.5		<0.5
PTV08	<0.5		<0.5		<0.5
PTV10	<0.5		<0.5		<0.5
PTV14	<0.5		<0.5		<0.5
PTV16	<0.5		<0.5		<0.5
PTV18	<0.5		<0.5		<0.5
PTV20	<0.5		<0.5		<0.5
PTV22	<0.5		<0.5		<0.5
PTV24	<0.5		<0.5		<0.5
PTV26	<0.5		<0.5		<0.5
PTV28	<0.5		<0.5		<0.5
PTV30	<0.5		<0.5		<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)	Chloro-methane (µg/L)	Vinyl chloride (µg/L)	Bromo-methane (µg/L)	Chloro-ethane (µg/L)
PTV32	1	12/1/2004	1945	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	1	12/1/2004	2145	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	1	12/1/2004	2345	<0.5	<0.5	<0.5	<0.5	<0.5
PTV46	1	12/2/2004	945	<0.5	<0.5	<0.5	<0.5	<0.5
PTV48	1	12/2/2004	1145	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-02	1	1/11/2005	1015	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-04	1	1/11/2005	1215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-06	1	1/11/2005	1415	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-08	1	1/11/2005	1615	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-10	1	1/11/2005	1815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-12	1	1/11/2005	2015	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-14	1	1/11/2005	2215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-16	1	1/12/2005	15	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-18	1	1/12/2005	215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-20	1	1/12/2005	415	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-22	1	1/12/2005	615	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-24	1	1/12/2005	815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-26	1	1/12/2005	1015	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-28	1	1/12/2005	1215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-30	1	1/12/2005	1415	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-32	1	1/12/2005	1615	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-34	1	1/12/2005	1815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-36	1	1/12/2005	2015	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-38	1	1/12/2005	2215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	1	1/13/2005	15	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	1MA	1/13/2005	15	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	1	1/13/2005	215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	1MA	1/13/2005	215	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-44	1	1/13/2005	415	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-44	1MA	1/13/2005	415	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48	1	1/13/2005	815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48	1MA	1/13/2005	815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	1	1/13/2005	815	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	1MA	1/13/2005	815	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-fluoro-methane (µg/L)	1,1-Dichloro-ethene (µg/L)	Methylene chloride (µg/L)	trans-1,2-Dichloro-ethene (µg/L)	1,1-Dichloro-ethane (µg/L)	2,2-Dichloro-propane (µg/L)	cis-1,2-Dichloro-ethene (µg/L)
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV46	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.7**
PTV48	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**
PTV-02	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-04	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-06	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	**1.1**
PTV-08	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	**0.7**
PTV-10	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-12	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-14	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-16	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-18	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-20	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-22	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	**0.7**
PTV-24	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-26	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	**0.5**
PTV-28	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	**0.6**
PTV-30	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	**0.8**
PTV-32	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-34	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-36	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-38	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-42	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-42	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-44	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-44	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-48	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-48	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<10.0	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Chloro-form (µg/L)	Bromo-chloro-methane (µg/L)	1,1,1-Trichloro-ethane (µg/L)	1,1-Dichloro-propene (µg/L)	Carbon tetra-chloride (µg/L)	Benzene (µg/L)	1,2-Dichloro-ethane (µg/L)
PTV32	**2.6**	<0.5	<0.5	<0.5	**2.4**	<0.5	<0.5
PTV34	**4.0**	<0.5	<0.5	<0.5	**3.3**	<0.5	<0.5
PTV36	**5.3**	<0.5	<0.5	<0.5	**4.6**	<0.5	<0.5
PTV46	**22.9**	<0.5	<0.5	<0.5	**19.1**	<0.5	<0.5
PTV48	**26.5**	<0.5	<0.5	<0.5	**24.3**	<0.5	<0.5
PTV-02	**10.0**	<0.5	<0.5	<0.5	**7.4**	<0.5	<0.5
PTV-04	**11.3**	<0.5	<0.5	<0.5	**8.6**	<0.5	<0.5
PTV-06	**53.6**	<0.5	<0.5	<0.5	**47.5**	<0.5	<0.5
PTV-08	**23.0**	<0.5	<0.5	<0.5	**20.1**	<0.5	<0.5
PTV-10	**4.1**	<0.5	<0.5	<0.5	**3.5**	<0.5	<0.5
PTV-12	**1.2**	<0.5	<0.5	<0.5	**1.0**	<0.5	<0.5
PTV-14	**1.4**	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5
PTV-16	**3.4**	<0.5	<0.5	<0.5	**2.8**	<0.5	<0.5
PTV-18	**8.2**	<0.5	<0.5	<0.5	**6.8**	<0.5	<0.5
PTV-20	**15.5**	<0.5	<0.5	<0.5	**12.8**	<0.5	<0.5
PTV-22	**6.6**	<0.5	<0.5	<0.5	**5.1**	<0.5	<0.5
PTV-24	**3.1**	<0.5	<0.5	<0.5	**2.2**	<0.5	<0.5
PTV-26	**5.1**	<0.5	<0.5	<0.5	**3.9**	<0.5	<0.5
PTV-28	**10.3**	<0.5	<0.5	<0.5	**8.4**	<0.5	<0.5
PTV-30	**16.2**	<0.5	<0.5	<0.5	**14.1**	<0.5	<0.5
PTV-32	**20.1 V**	<0.5	<0.5	<0.5	**19.6 V**	<0.5	<0.5
PTV-34	**6.8**	<0.5	<0.5	<0.5	**5.7**	<0.5	<0.5
PTV-36	**1.5**	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5
PTV-38	**1.5**	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5
PTV-40	**2.7**	<0.5	<0.5	<0.5	**2.0**	<0.5	<0.5
PTV-40	**2.8**	<0.5	<0.5	<0.5	**1.9**	<0.5	<0.5
PTV-42	**4.7**	<0.5	<0.5	<0.5	**4.0**	<0.5	<0.5
PTV-42	**4.7**	<0.5	<0.5	<0.5	**3.6**	<0.5	<0.5
PTV-44	**14.2**	<0.5	<0.5	<0.5	**11.1**	<0.5	<0.5
PTV-44	**14.2**	<0.5	<0.5	<0.5	**11.0**	<0.5	<0.5
PTV-48	**5.6**	<0.5	<0.5	<0.5	**4.3**	<0.5	<0.5
PTV-48	**5.5**	<0.5	<0.5	<0.5	**3.9**	<0.5	<0.5
PTV-48-DUP	**1.6**	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5
PTV-48-DUP	**1.5**	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Trichloro-ethene (µg/L)	1,2-Dichloro-propane (µg/L)	Bromo-dichloro-methane (µg/L)	Dibromo-methane (µg/L)	cis-1,3-Dichloro-propene (µg/L)	Toluene (µg/L)	trans-1,3-dichloro-propene (µg/L)	1,1,2-Trichloro-ethane (µg/L)
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV46	**1.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV48	**1.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-02	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-04	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-06	**2.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-08	**1.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-10	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-18	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-20	**1.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-22	**1.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-24	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-26	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-28	**0.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-30	**1.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-32	**1.5 V**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-34	**1.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	**0.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-44	**1.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-44	**1.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48	**0.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	**1.0**

Sample name
PTV32
PTV34
PTV36
PTV46
PTV48
PTV-02
PTV-04
PTV-06
PTV-08
PTV-10
PTV-12
PTV-14
PTV-16
PTV-18
PTV-20
PTV-22
PTV-24
PTV-26
PTV-28
PTV-30
PTV-32
PTV-34
PTV-36
PTV-38
PTV-40
PTV-40
PTV-42
PTV-42
PTV-44
PTV-44
PTV-48
PTV-48
PTV-48-DUP
PTV-48-DUP

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Tetra-chloro-ethene (µg/L)	1,3-Dichloro-propane (µg/L)	Dibromo-chloro-methane (µg/L)	1,2-Dibromo-ethane (µg/L)	Chloro-benzene (µg/L)	1,1,1,2-Tetrachloro-ethane (µg/L)	Ethyl benzene (µg/L)	m,p,-Xylenes (µg/L)
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV46	**5.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV48	**6.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-02	**1.9**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-04	**2.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-06	**9.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-08	**4.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-10	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-12	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-14	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-16	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-18	**1.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-20	**3.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-22	**1.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-24	**1.2**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-26	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-28	**2.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-30	**4.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-32	**5.8 V**	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6 V**	<0.5
PTV-34	**1.7**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-36	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-38	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	**1.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	**1.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	**1.3**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	**2.0**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-44	**2.5**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-44	**2.4**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48	**1.6**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48	**1.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	**0.8**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	**1.1**	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	o-Xylene (µg/L)	Styrene (µg/L)	Bromo-form (µg/L)	Isopropyl-benzene (µg/L)	Bromo-benzene (µg/L)	1,1,2,2-Tetrachloro-ethane (µg/L)	n-Propyl-benzene (µg/L)	Penta-chloro-ethane (µg/L)
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	<0.5	**0.8**	<0.5	<0.5
PTV46	<0.5	<0.5	<0.5	<0.5	<0.5	**1.9**	<0.5	<0.5
PTV48	<0.5	<0.5	<0.5	<0.5	<0.5	**2.7**	<0.5	<0.5
PTV-02	<0.5	<0.5	<0.5	<0.5	<0.5	**3.1**	<0.5	<0.5
PTV-04	<0.5	<0.5	<0.5	<0.5	<0.5	**3.8**	<0.5	<0.5
PTV-06	<0.5	<0.5	<0.5	<0.5	<0.5	**4.0**	<0.5	**0.5**
PTV-08	<0.5	<0.5	<0.5	<0.5	<0.5	**4.6**	<0.5	<0.5
PTV-10	<0.5	<0.5	<0.5	<0.5	<0.5	**3.2**	<0.5	<0.5
PTV-12	<0.5	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5
PTV-14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-16	<0.5	<0.5	<0.5	<0.5	<0.5	**2.2**	<0.5	<0.5
PTV-18	<0.5	<0.5	<0.5	<0.5	<0.5	**3.4**	<0.5	<0.5
PTV-20	<0.5	<0.5	<0.5	<0.5	<0.5	**3.9**	<0.5	<0.5
PTV-22	<0.5	<0.5	<0.5	<0.5	<0.5	**3.8**	<0.5	<0.5
PTV-24	<0.5	<0.5	<0.5	<0.5	<0.5	**2.6**	<0.5	<0.5
PTV-26	<0.5	<0.5	<0.5	<0.5	<0.5	**3.0**	<0.5	<0.5
PTV-28	<0.5	<0.5	<0.5	<0.5	<0.5	**4.1**	<0.5	<0.5
PTV-30	<0.5	<0.5	<0.5	<0.5	<0.5	**5.3 V**	<0.5	<0.5
PTV-32	<0.5	<0.5	<0.5	**0.7 V**	<0.5	**5.2 V**	**1.0 V**	<0.5
PTV-34	<0.5	<0.5	<0.5	<0.5	<0.5	**5.1 V**	<0.5	<0.5
PTV-36	<0.5	<0.5	<0.5	<0.5	<0.5	**1.5 V**	<0.5	<0.5
PTV-38	<0.5	<0.5	<0.5	<0.5	<0.5	**0.6 V**	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5	<0.5	<0.5	**1.1 V**	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5	<0.5	<0.5	**1.2 V**	<0.5	<0.5
PTV-42	<0.5	<0.5	<0.5	<0.5	<0.5	**2.7 V**	<0.5	<0.5
PTV-42	<0.5	<0.5	<0.5	<0.5	<0.5	**2.6 V**	<0.5	<0.5
PTV-44	<0.5	<0.5	<0.5	<0.5	<0.5	**3.3 V**	<0.5	<0.5
PTV-44	<0.5	<0.5	<0.5	<0.5	<0.5	**3.4 V**	<0.5	<0.5
PTV-48	<0.5	<0.5	<0.5	<0.5	<0.5	**1.8 V**	<0.5	<0.5
PTV-48	<0.5	<0.5	<0.5	<0.5	<0.5	**1.9 V**	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5	<0.5	<0.5	**1.2 V**	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5	<0.5	<0.5	**1.4 V**	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	2-Chloro-toluene (µg/L)	1,2,3-Trichloro-propane (µg/L)	4-Chloro-toluene (µg/L)	1,3,5-Trimethyl-benzene (µg/L)	tert-Butyl-benzene (µg/L)	1,2,4-Trimethyl-benzene (µg/L)	sec Butyl-benzene (µg/L)	1,3-Dichloro-benzene (µg/L)
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV46	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV48	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-02	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-04	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-06	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-08	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-20	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-28	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-30	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-32	<0.5	**31.3 V**	<0.5	<0.5	<0.5	**0.9 V**	**0.5 V**	**1.3 V**
PTV-34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-44	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-44	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	p-Isopropyl-toluene (µg/L)	1,4-Dichloro-benzene (µg/L)	n-Butyl-benzene (µg/L)	1,2-Dichloro-benzene (µg/L)	Hexa-chloro-ethane (µg/L)	1,2-Dibromo-3-chloro-propane (µg/L)	1,2,4-Trichloro-benzene (µg/L)
PTV32	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5	<0.5	**0.5**	<0.5	<0.5
PTV46	<0.5	<0.5	<0.5	<0.5	**2.1**	<0.5	<0.5
PTV48	<0.5	<0.5	<0.5	<0.5	**3.1**	<0.5	<0.5
PTV-02	<0.5	<0.5	<0.5	<0.5	**1.0**	<0.5	<0.5
PTV-04	<0.5	<0.5	<0.5	<0.5	**1.1**	<0.5	<0.5
PTV-06	<0.5	<0.5	<0.5	<0.5	**7.5**	<0.5	<0.5
PTV-08	<0.5	<0.5	<0.5	<0.5	**2.8**	<0.5	<0.5
PTV-10	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-12	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-14	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-16	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-18	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-20	<0.5	<0.5	<0.5	<0.5	**1.6**	<0.5	<0.5
PTV-22	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-24	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-26	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-28	<0.5	<0.5	<0.5	<0.5	**1.0**	<0.5	<0.5
PTV-30	<0.5	<0.5	<0.5	<0.5	**2.3**	<0.5	<0.5
PTV-32	**1.5 V**	**1.3 V**	**2.0 V**	**0.8 V**	**2.8 V**	<0.5	**2.0 V**
PTV-34	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-36	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-38	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-42	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-44	<0.5	<0.5	<0.5	<0.5	**1.2**	<0.5	<0.5
PTV-44	<0.5	<0.5	<0.5	<0.5	**0.9**	<0.5	<0.5
PTV-48	<0.5	<0.5	<0.5	<0.5	**0.6**	<0.5	<0.5
PTV-48	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005-Continued

Sample name	Hexachloro-butadiene (µg/L)	Naphthalene (µg/L)	1,2,3-Trichloro-benzene (µg/L)
PTV32	<0.5	<0.5	<0.5
PTV34	<0.5	<0.5	<0.5
PTV36	<0.5	<0.5	<0.5
PTV46	<0.5	<0.5	<0.5
PTV48	<0.5	<0.5	<0.5
PTV-02	<0.5	<0.5	<0.5
PTV-04	<0.5	<0.5	<0.5
PTV-06	<0.5	<0.5	<0.5
PTV-08	<0.5	<0.5	<0.5
PTV-10	<0.5	<0.5	<0.5
PTV-12	<0.5	<0.5	<0.5
PTV-14	<0.5	<0.5	<0.5
PTV-16	<0.5	<0.5	<0.5
PTV-18	<0.5	<0.5	<0.5
PTV-20	<0.5	<0.5	<0.5
PTV-22	<0.5	<0.5	<0.5
PTV-24	<0.5	<0.5	<0.5
PTV-26	<0.5	<0.5	<0.5
PTV-28	<0.5	<0.5	<0.5
PTV-30	<0.5	<0.5	<0.5
PTV-32	**1.2 V**	**0.5 V**	**1.3**
PTV-34	<0.5	<0.5	<0.5
PTV-36	<0.5	<0.5	<0.5
PTV-38	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5
PTV-40	<0.5	<0.5	<0.5
PTV-42	<0.5	<0.5	<0.5
PTV-42	<0.5	<0.5	<0.5
PTV-44	<0.5	<0.5	<0.5
PTV-44	<0.5	<0.5	<0.5
PTV-48	<0.5	<0.5	<0.5
PTV-48	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5
PTV-48-DUP	<0.5	<0.5	<0.5

Appendix 3A. Organic constituents from groundwater and surface-water samples from seep 3-4W reactive mat pilot test area, West Branch Canal Creek, Aberdeen Proving Ground, Maryland, August 2004-January 2005

[µg/L, micrograms per liter; <, less than; > greater than; see bottom of file for list of qualifiers and explanations of sample names]

Sample name	Repli-cate	Collection date	Collection time	Dichloro-difluoro-methane (µg/L)	Chloro-methane (µg/L)	Vinyl chloride (µg/L)	Bromo-methane (µg/L)	Chloro-ethane (µg/L)

List of qualifiers and explanation of sample names

"µg/L" represents concentration units of micrograms per liter.
">" indicates a value greater than the value shown
"<" indicates a value less than the value shown
"B" code indicates the compound was detected in an associated field or trip blank. Concentrations may be biased high based on the analyte concentration in the blank.
"E" code indicates estimated concentration.
"H" code indicates possible positive bias based on an unacceptably high response for this compound in one or more calibration checks for this batch of samples.
"L" code indicates possible negative bias based on an unacceptably low response for this compound in one or more calibration checks for this batch of samples.
"V" code indicates possible positive bias due to suspected laboratory contamination.
"x" code indicates that the recommended 14-day holding time was exceeded for this sample, which could result in losses for some or all compounds.
"MA" in replicate number indicates a multiple analysis from the same sample vial.
"PTB" samples are groundwater samples collected from in-mat passive diffusion samplers
"PTC" samples are groundwater samples collected from multi-level piezometers
"PTN" samples are groundwater samples collected from below-mat mini sand-pack screens
"PTV" samples are West Branch Canal Creek surface-water samples collected with an automated refrigerated VOC sampler
"PTZ" samples are groundwater samples collected from individual piezometers